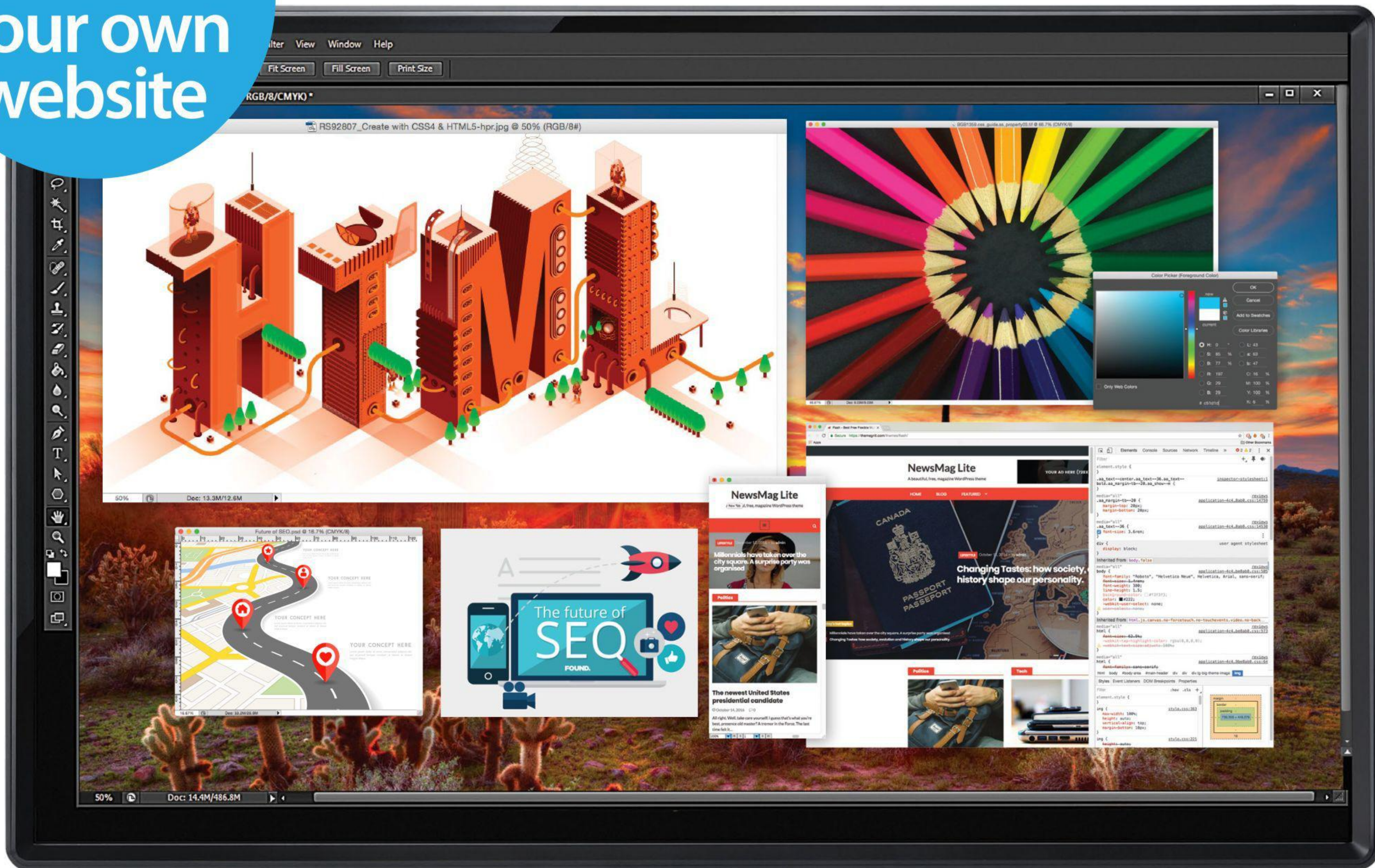


NEW

FREE 90 MINUTES OF VIDEO TUTORIALS

Web Design for Beginners

Design and create your own website



Digital Edition

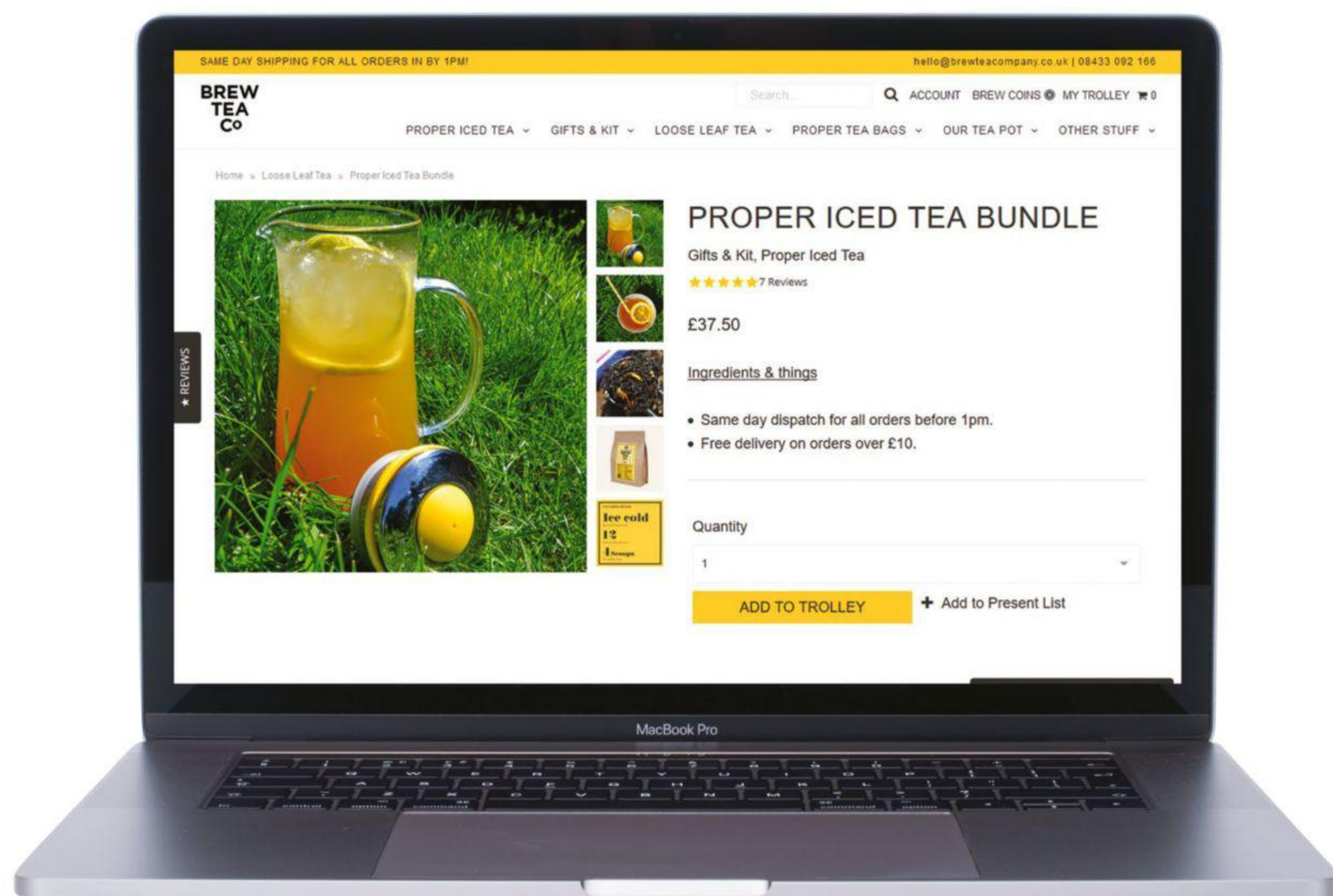
FUTURE THIRTEENTH EDITION

- ✔ Master HTML & CSS
- ✔ Get to grips with SEO

- ✔ Customise your website
- ✔ Make the most of WordPress

Welcome to Web Design for Beginners™

The Internet is ubiquitous across so many aspects of our lives that it's difficult to imagine living without it. As a platform for consuming media, connecting with others and discovering new ideas and information, the web is unparalleled, and as such web design is a more prevalent and more important skill than ever. While some may be deterred by the seeming complexity of the web design process, first timers will find this newly revised edition of Web Design for Beginners to be an essential handbook. Spelling out all the basics, it will teach you how to use HTML and CSS to create and style your website, before honing the user experience with more advanced techniques. You will also discover how to use Photoshop to produce graphics, SEO to get your website recognised, and social media buttons to boost your site's interactivity. In no time, you will see your website flourish into a fully fleshed-out online venue capable of gaining and retaining visitors over time. Who knows, once you've mastered these simple steps, your website idea may have the potential to be the next big thing!



┌ FUTURE ─┐
└──────────┘

Web Design for Beginners

Future PLC Richmond House, 33 Richmond Hill,
Bournemouth, Dorset, BH2 6EZ

Editorial

Editor **Katharine Marsh**
Senior Designer **Adam Markiewicz**
Editorial Director **Jon White**
Senior Art Editor **Andy Downes**

Photography

All copyrights and trademarks are recognised and respected

Advertising

Media packs are available on request
Commercial Director **Clare Dove**
clare.dove@futurenet.com

International

Head of Print Licensing **Rachel Shaw**
licensing@futurenet.com

Circulation

Head of Newstrade **Tim Mathers**

Production

Head of Production **Mark Constance**
Production Project Manager **Clare Scott**
Advertising Production Manager **Joanne Crosby**
Digital Editions Controller **Jason Hudson**
Production Managers **Keely Miller, Nola Cokely,**
Vivienne Calvert, Fran Twentyman

Management

Chief Content Officer **Aaron Asadi**
Commercial Finance Director **Dan Jotcham**
Head of Art & Design **Greg Whitaker**

Printed by William Gibbons, 26 Planetary Road,
Willenhall, West Midlands, WV13 3XT

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU
www.marketforce.co.uk Tel: 0203 787 9001

Web Design for Beginners Thirteenth Edition

© 2019 Future Publishing Limited

We are committed to only using magazine paper which is derived from responsibly managed, certified forestry and chlorine-free manufacture. The paper in this magazine was sourced and produced from sustainable managed forests, conforming to strict environmental and socioeconomic standards. The manufacturing paper mill holds full FSC (Forest Stewardship Council) certification and accreditation

All contents © 2019 Future Publishing Limited or published under licence. All rights reserved. No part of this magazine may be used, stored, transmitted or reproduced in any way without the prior written permission of the publisher. Future Publishing Limited (company number 2008885) is registered in England and Wales. Registered office: Quay House, The Ambury, Bath BA1 1UA. All information contained in this publication is for information only and is, as far as we are aware, correct at the time of going to press. Future cannot accept any responsibility for errors or inaccuracies in such information. You are advised to contact manufacturers and retailers directly with regard to the price of products/services referred to in this publication. Apps and websites mentioned in this publication are not under our control. We are not responsible for their contents or any other changes or updates to them. This magazine is fully independent and not affiliated in any way with the companies mentioned herein.

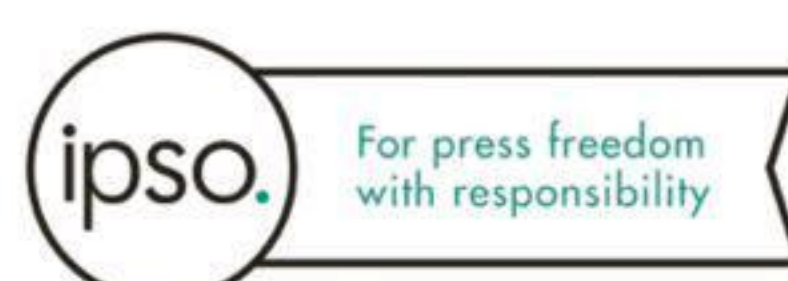


Future plc is a public
company quoted on the
London Stock Exchange
(symbol: FUTR)
www.futureplc.com

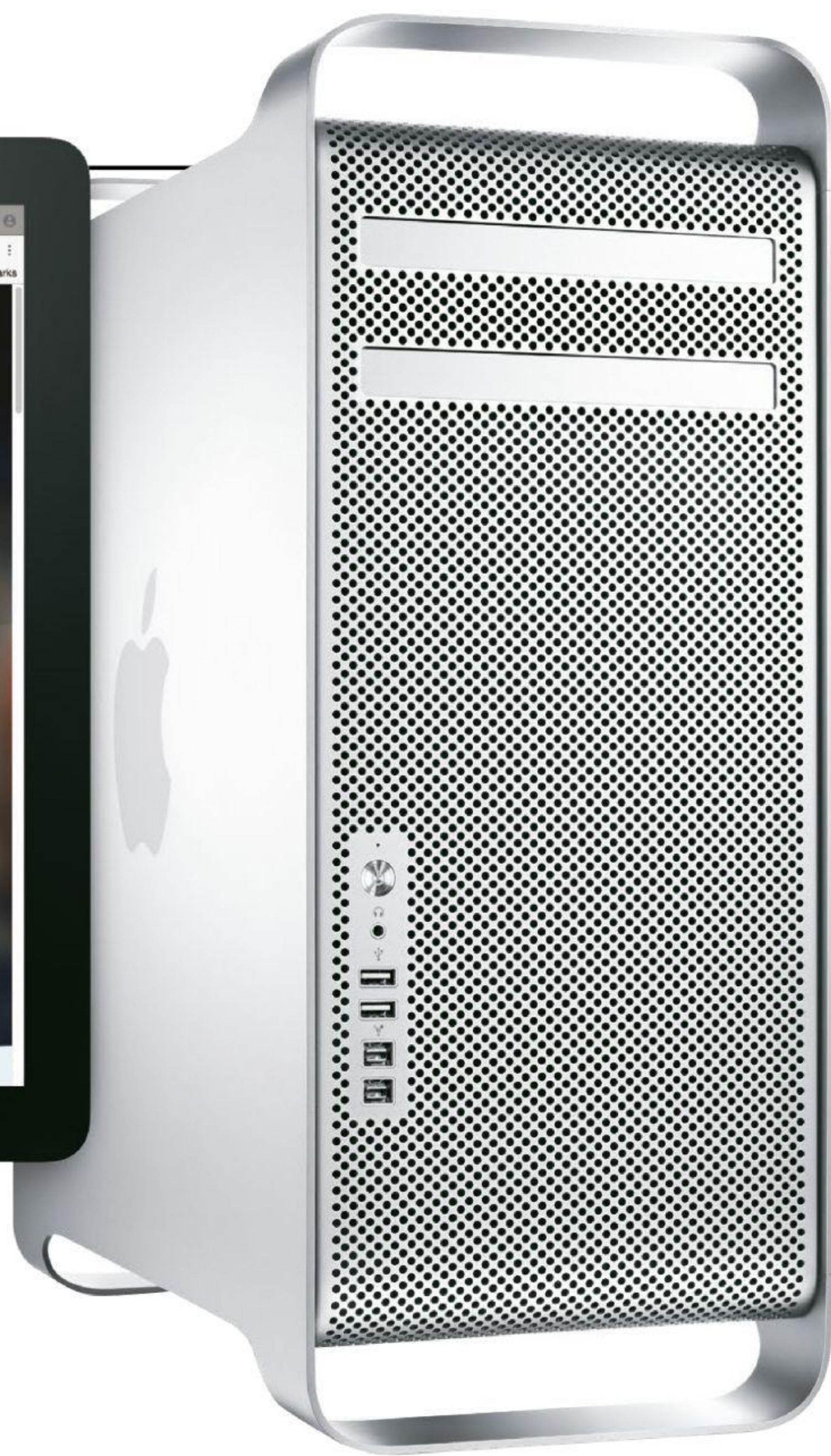
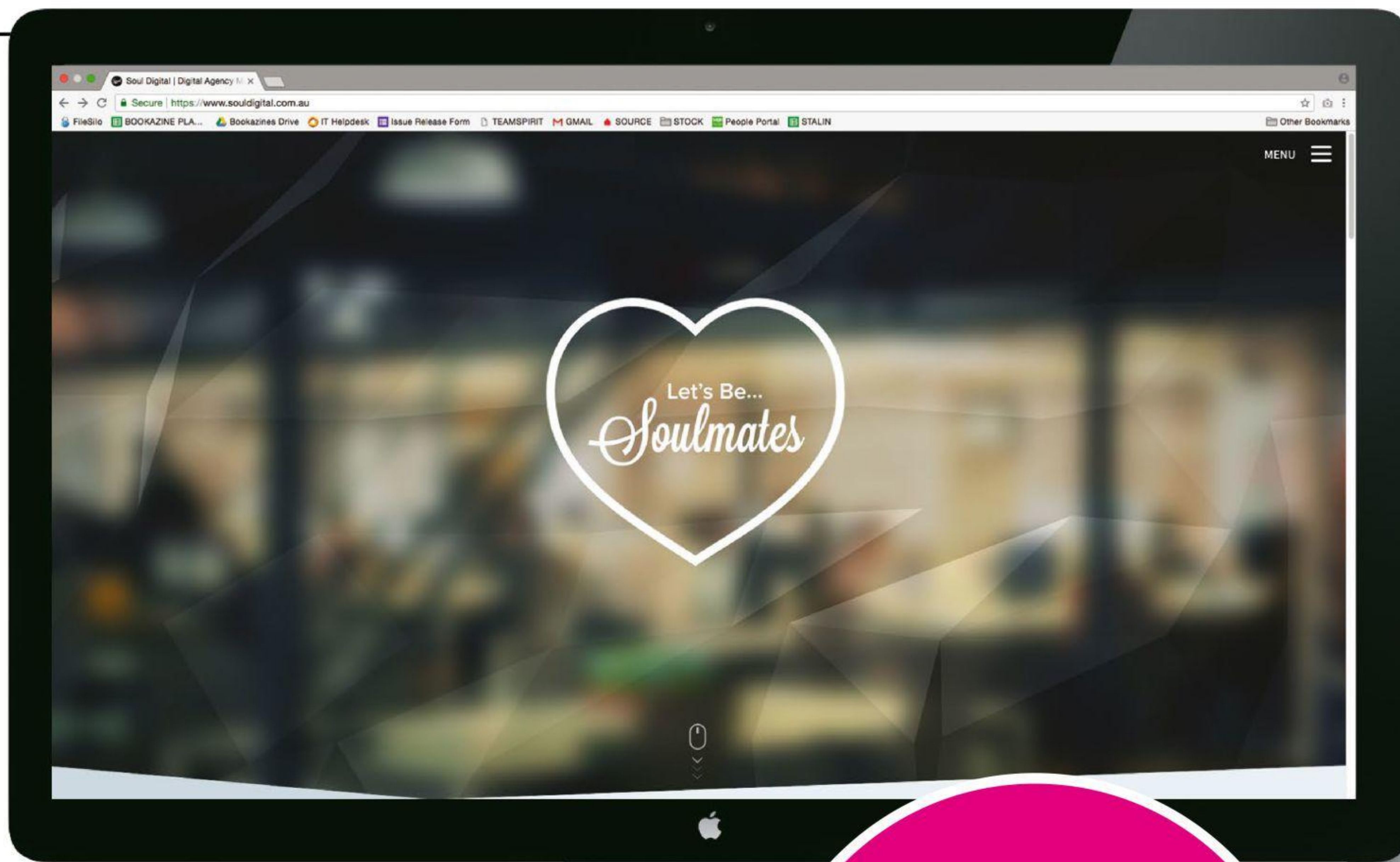
Chief executive **Zillah Byng-Thorne**
Non-executive chairman **Richard Huntingford**
Chief financial officer **Penny Ladkin-Brand**

Tel +44 (0)1225 442 244

Part of the
**web
designer**
bookazine series



Contents



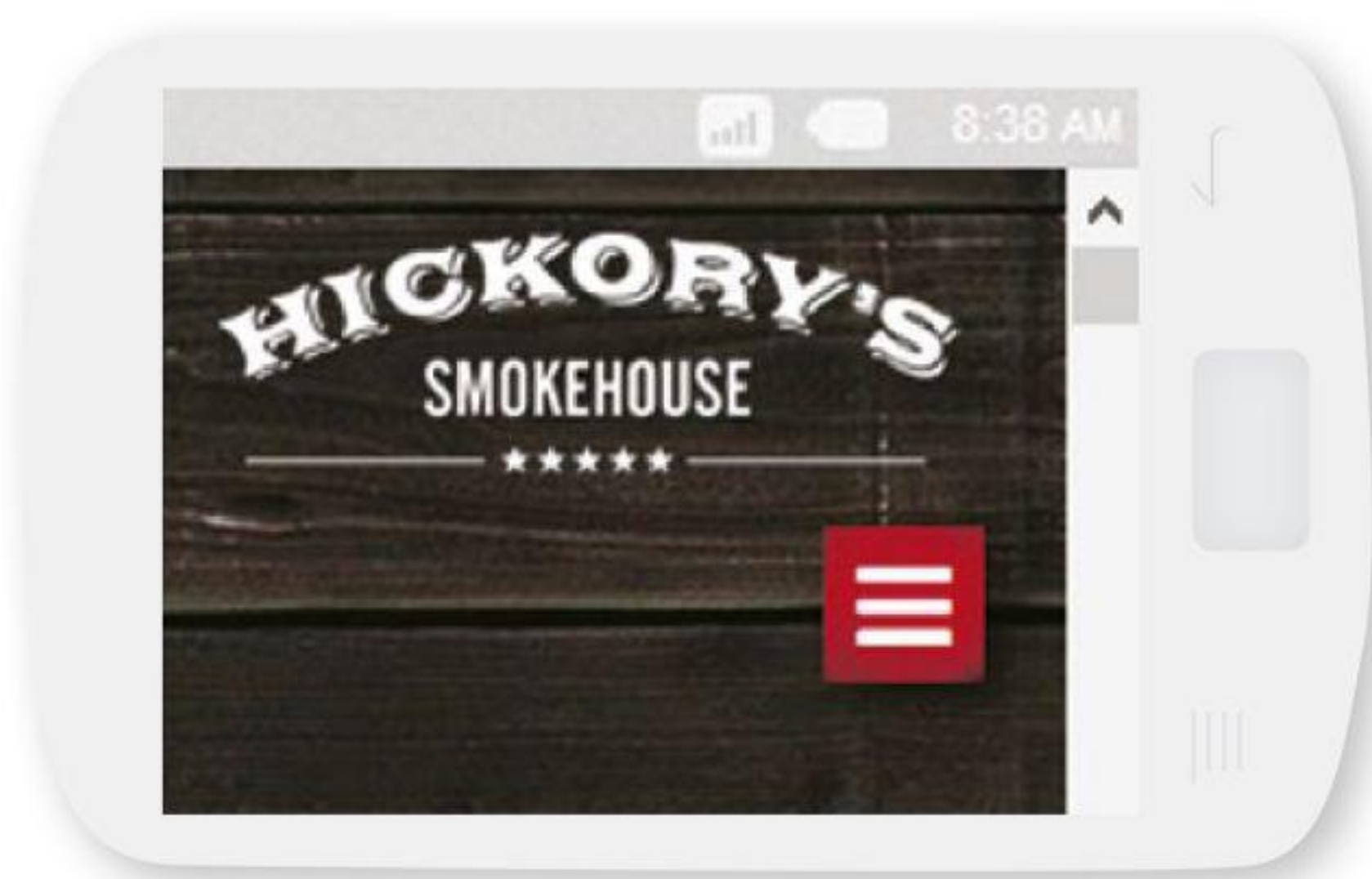
Build a site

- 22 An introduction to HTML
- 28 Create a basic layout
- 30 Code a link
- 32 Create lists in your website
- 34 Learn to use div tags
- 36 Create a three-column layout
- 40 An introduction to CSS
- 46 Centre your page
- 48 Define text & heading styles
- 50 Style your lists to stand out
- 52 Turn lists into navigation bars
- 54 Format images using CSS
- 56 Create a header
- 60 Create a sidebar
- 64 Add content to your website
- 68 Add content to your footer

Essential
guide to web
design
page 8

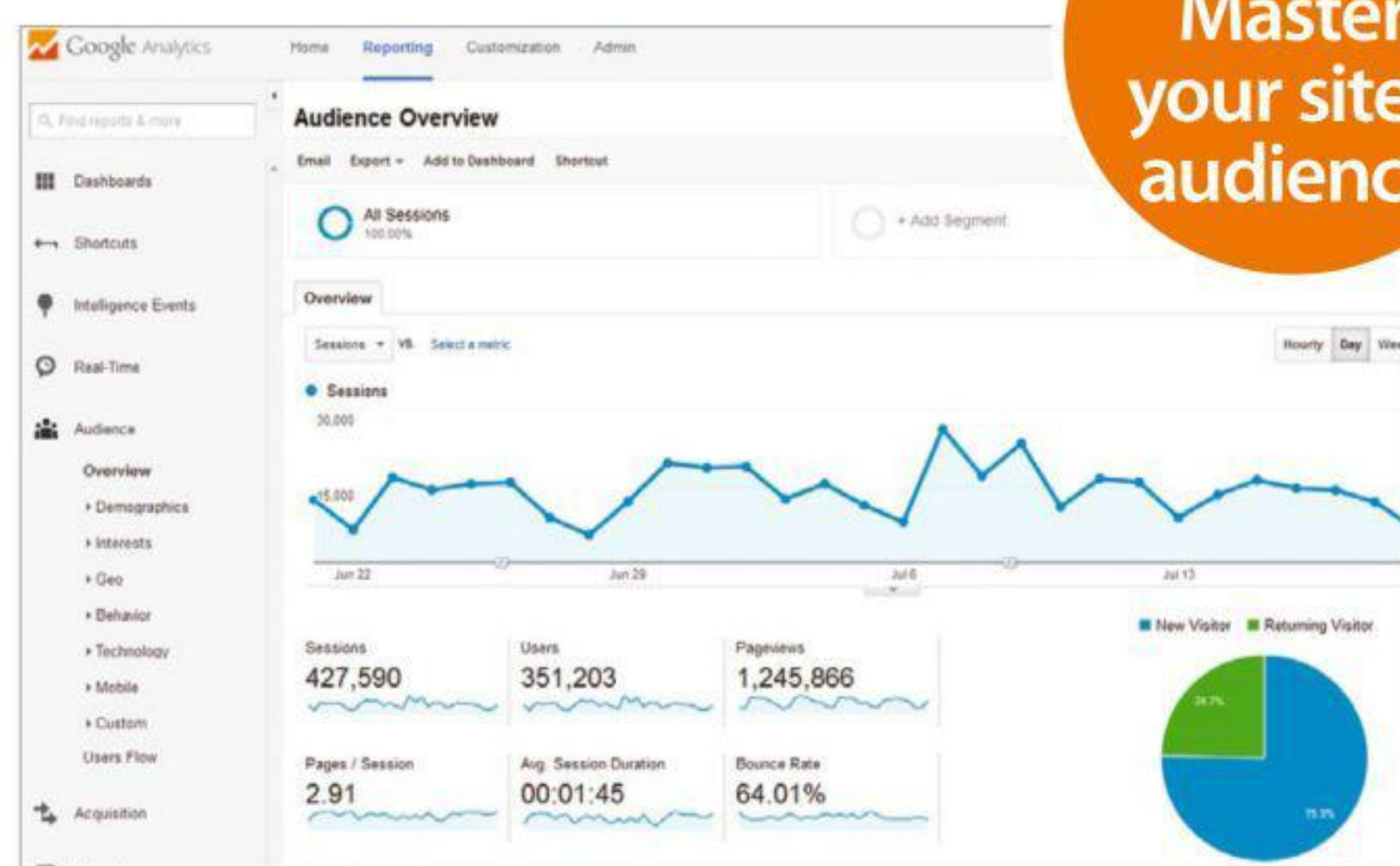
WordPress

- 72 What's new in WordPress 5.0?
- 78 Download, install and set up a self-hosted site
- 82 View and organise WordPress dashboard modules
- 84 Create a WordPress blog
- 88 8 WordPress security secrets



Understanding SEO

- 94 SEO today
- 102 How to strip back SEO to boost your rankings
- 106 Use Google Analytics to understand your audience



106
Master your site's audience

"Promote your work for all to see"

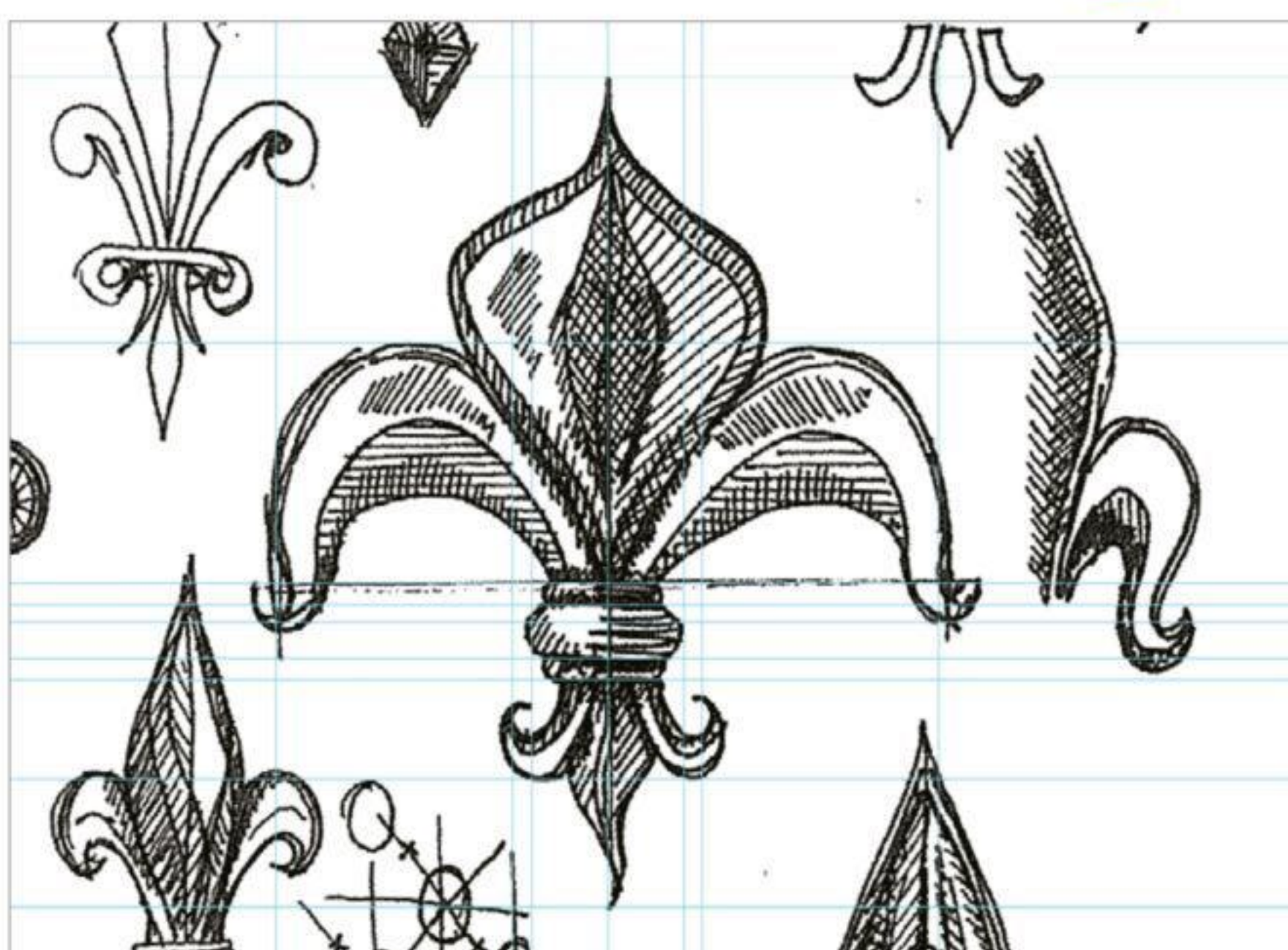
Photoshop & Graphics

- 112 New ways to work with Photoshop
- 118 Create great backgrounds
- 122 Design header and footer graphics in Photoshop
- 126 Create a bright, neon text effect

112
New Photoshop top tips



132
The perception of colour



Customise your site

- 132 The perception of colour
- 138 Make an expanding navigation menu
- 142 Get background colour to match content
- 146 Develop a three-step animated web form
- 150 Create email newsletters and let people subscribe
- 152 Code contemporary CSS text



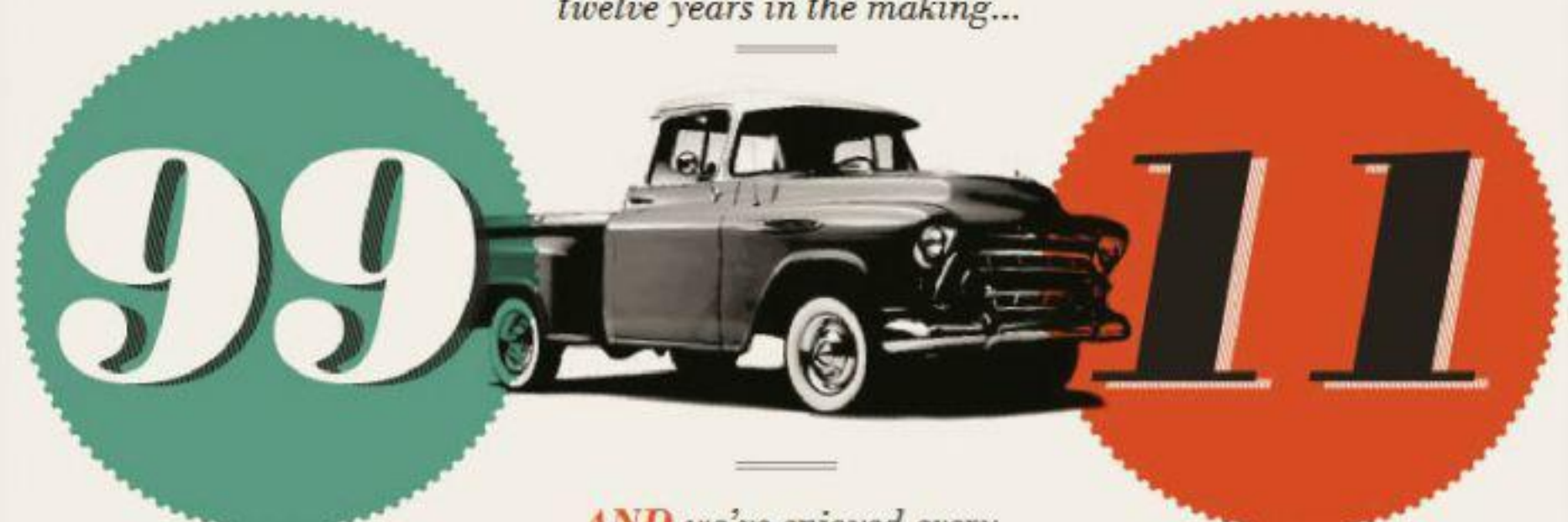
Glossary
Understand web designer terms
page 156

Essential guide

News Popular Easynews

WORK HISTORY

twelve years in the making...



AND we've enjoyed every minute of it!

BLOOD, SWEAT & TEARS

In 1999, Nick Hower and Kory Kapfer there was a need in this world for more design and creative work. So they laun Sink Studios in Nick's garage on a sho budget.

"If we were going to do we were going to do it And that's carried over everything we do..."



2001- LAUNCH
nTacio Digital Partner is bo



KULER

About Browse Create

Highest Rated All Time

- PIE PARTY FOR ...
- Feeling Etsy
- Pear Lemon Fizz
- View over the to...
- Phaedra
- Honey Pot
- Times Changing
- Japanese lanterns
- London Undergr...
- Milan Week
- neutral indoor
- Saffron umbrella
- sun splash
- Saltillo
- Vines for Wines
- Dogwoods on a ...

SAY IT WITH FLOURS

I iced a dummy cake today, it's imperfect, but I'm happy with how it turned out. <http://t.co/x7A2jyvf> - 30 mins ago

Home Blog Gallery Prices About Me Contact Me FAQ



About Me

I'm a Home baker based in L19, Liverpool. My kitchen is registered with the Liverpool City Council and has been given the seal of approval from the Environmental Health...

[Read More...](#)

Recent Blog Posts

Fishing Birthday Cake
Bullies Out Charity Fashion Show.
Cupcakes Take The Cake
Valentine's Day
An Introduction

Freshly Baked

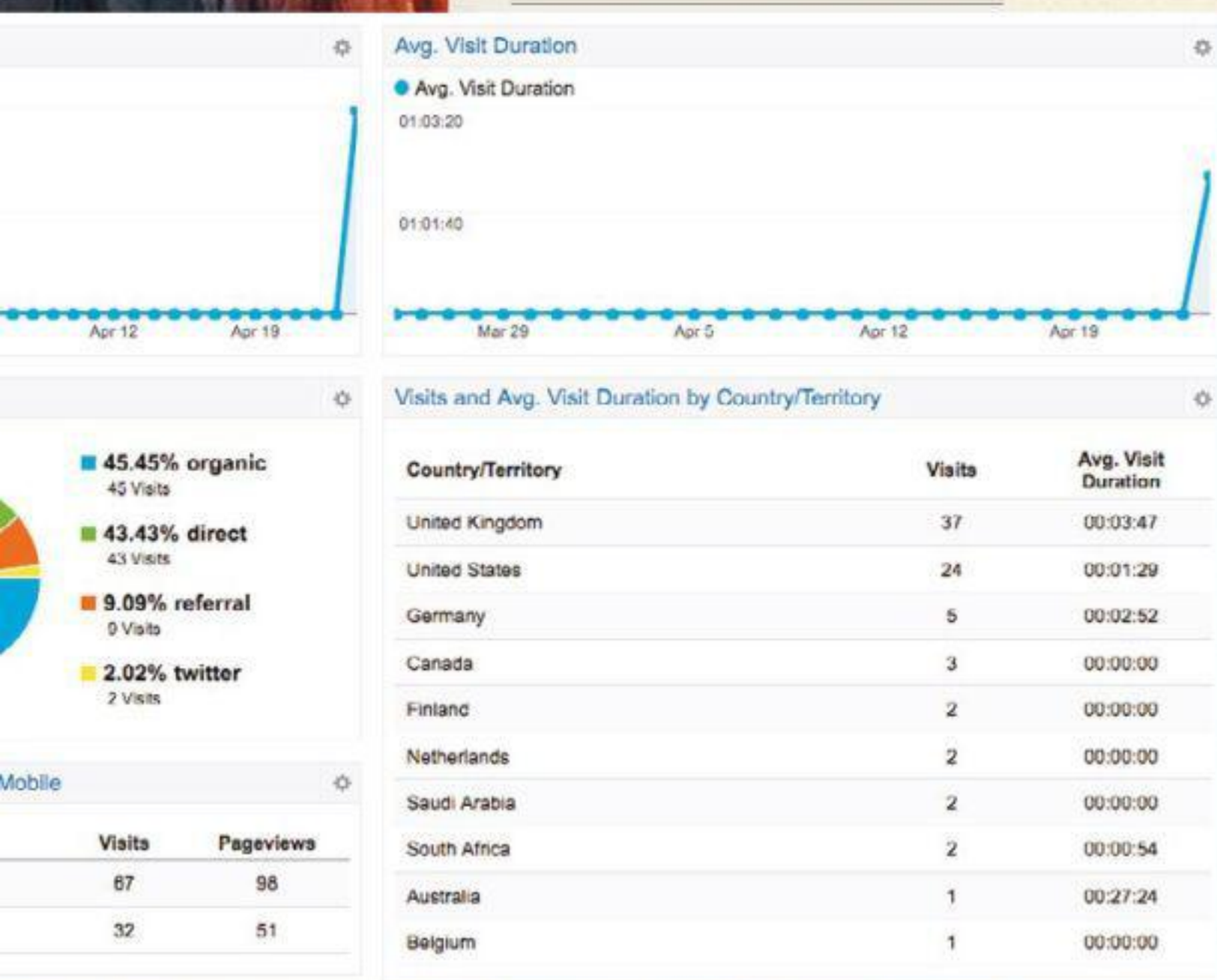


Say It With Flours on Facebook

169 people like Say It With Flours.



Facebook social plugin



© 2012 Say it With Flours | All Rights Reserved | Say it With Flours is a Registered Food Business





<h1>

Essential guide to web design

Discover why now is the time to start building your first website

</h1>

The web made its debut back in 1991, adding a graphical user interface to the internet. As such, web design was born. In its infancy, web design was heavily restricted by technology and hardware, with a web presence being little more than black text on a white background. Thankfully, technology and web design have reached a far more creative and imaginative stage in their evolutions. Skipping past frames, tables and animated GIFs, web design has become far more sophisticated and will continue to grow and develop. Look back a couple of years and take note of what was 'on trend' and how the underlying infrastructure helped shape a website.

The progression of web design has always gone hand-in-hand with technology, and technology never takes a backward step, which in turn means

that web design and the web are always going to be informative, inspirational and essential.

Think about what you use the web for and how you would achieve these tasks without it. In the couple of decades that the web has been around it's gone from a plain text, email-checking entity to the key communication and information tool of governments, businesses and individuals. And, what is it that makes the web such a crucial tool? Web pages and websites. Whatever information, service or product you need it will be wrapped up in a web page just waiting for you to say hello.

Why build a website?

It's a simple question, but why build a website? There is no single answer to what is undoubtedly a very broad question. However, the answer could

Essential guide

be something as simple as 'because everyone else has got one'. And, to a certain extent, this simple answer reaches the crux of the matter very succinctly. The world wide web is a global phenomenon that's awash with millions, if not billions, of websites covering every subject you can possibly imagine. There is no better place to be seen and get your message heard. A website can be viewed from England to Australia, while astronauts have even tweeted from the International Space Station! A 24/7 online global presence is one very powerful reason to build a website.

it also acts as a reference point or calling card, where a user can promote themselves. If it's not a personal platform for opinion and promotion a site can be great a way to stay in contact and tell friends and family what you're up to. An online diary can include the latest activities and a host of photos, much like a personal Facebook. This could be another reason, for those not interested in being part of the Facebook revolution, and want greater control, then a personal site is a great alternative. The web also provides the perfect platform for those looking to build a business. The outlay is

“Websites cover every aspect of life, whether it's personal or business”

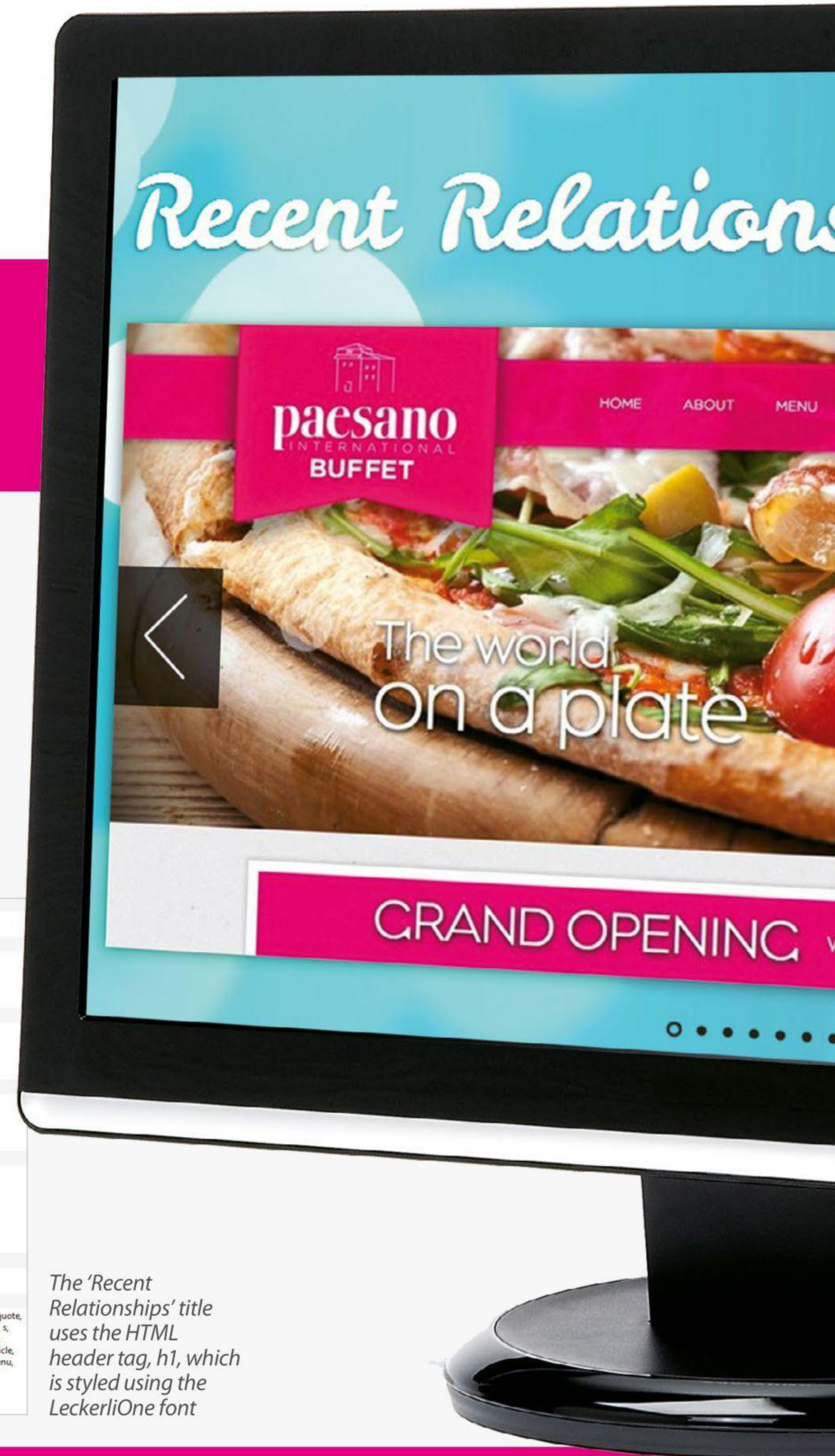
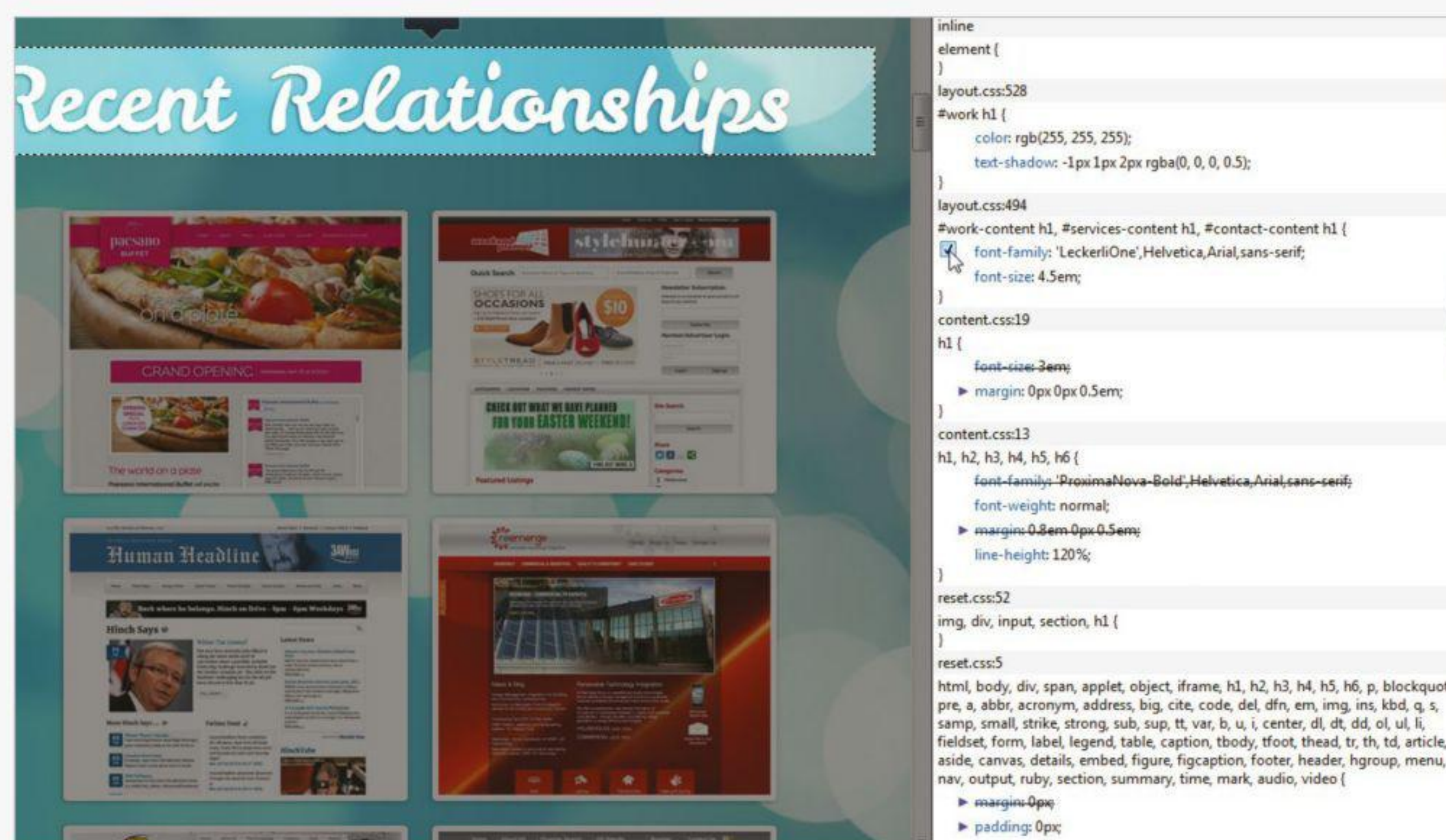
There is no doubt that websites cover every aspect of life, whether it's personal or business. On a personal level, everyone has an interest or hobby that they love and many simply want to tell the world what they do. A website is the perfect platform for getting across personal opinion and

minimal and the potential audience is huge. No need to rent premises, no need to keep a huge pile of stock, and customers will come from miles around to pay a visit. Provide the right product, promote in the right way and the number of visits will shoot through the roof.

What are HTML & CSS?

HTML and CSS are the key components for building web pages and sites – without them the web as we know it simply would not exist. In a nutshell, HTML provides the building blocks and structure while CSS provides the styling.

HTML is made up of a whole host of tags which all have their own identity. These consist of an opening and closing tag with all the relevant content in between. For example, '<header>web page content goes here</header>'. HTML defines a whole series of tags, for example header, nav, footer, video, etc, which all have a semantic title making them easy to identify. Custom tags, or div tags as they are known, are created when a standard HTML tag cannot be used. Again these have their own individual identities. CSS is the language applied to an HTML tag to style it. Cascading Style Sheets, CSS, will take the name of a HTML tag, <header> and define properties such as its height, width, colour, borders, padding and margins for example. CSS3 now offers a completely new generation of styling options to use. Rounder corners, text shadows, box shadows and gradients are just a few of the properties styling today's websites.



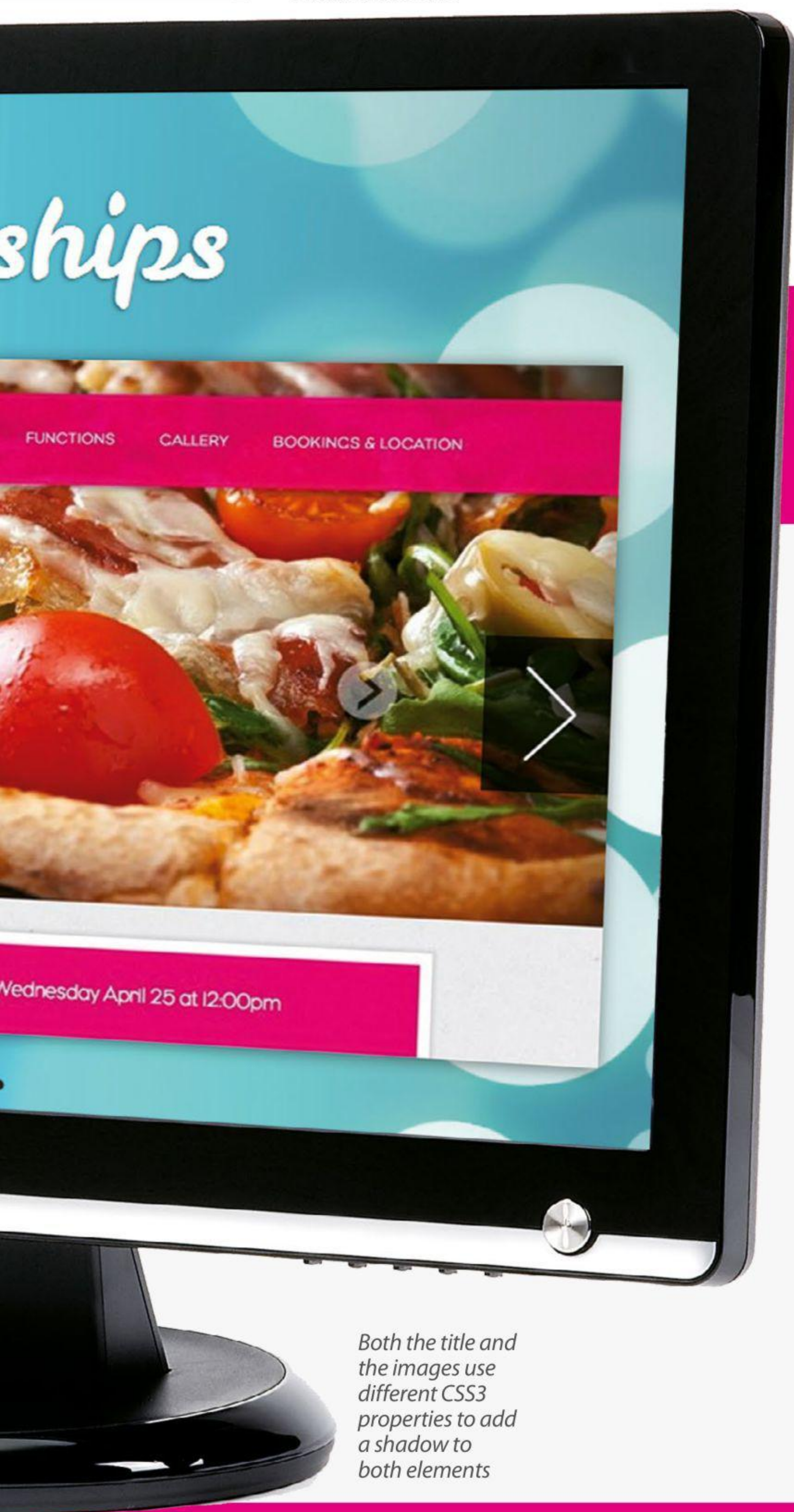
The 'Recent Relationships' title uses the HTML header tag, h1, which is styled using the LeckerliOne font



TAKE CONTROL – YOUR WEB, YOUR LOGO

HTML5 is the web language you need to learn to build a site from scratch

Combine HTML5 and CSS3 to create interactive and standout websites



Both the title and the images use different CSS3 properties to add a shadow to both elements

Beyond personal opinion and comment, a website can have a more commercial use. Web designers instantly have the perfect platform for presenting their work. What better reason does a web designer need to build a website? A portfolio site is a great shop window for their work and a constant point of reference, allowing web users to visit at any time of day or night. As already mentioned, if you're looking to build a business the web is a great starting point. A report from www.eMarketer.com shows that 150 million users across the United States are buying online. This is a staggering 73 per cent of all web users demonstrating exactly how important an online business could be. Another interesting snippet of information reinforced in the report was that people like to shop online for convenience and to save money.

An online shop is the most probable and popular purpose for business, but another and less obvious reason is affiliate marketing. This is a website specifically set up to promote affiliate products, where money is made via commission.

What are websites used for?

The internet is very much influenced by what is happening outside of the web. Remember it's people that build websites and people always want information, people always need to go shopping, people will always need to go to the bank, people will always want to stay in contact – the web provides the ideal platform to replace more traditional services.

So what do people use websites for? In a nutshell: pretty much everything! But to be more concise, the purpose of a website is to relay a message or offer a service. To get a more immediate picture of what websites are used for, take a look at some of the most popular sites on the web. Facebook, YouTube, Google, Wikipedia, Twitter, Amazon, iTunes, eBay, BBC, Sky, WordPress, PayPal, Skype, Flickr, Walmart, Lastminute and Microsoft to name but a few. This brief selection of sites pretty much covers the spectrum of what websites are used for. Facebook is a huge social networking site and epitomises what people like to do on the web – stay in contact and tell others what they are up to. YouTube allows web users to stream and watch videos from a vast library of variety. Sitting along the same lines are services such as Netflix and LoveFilm, which take the online streaming and viewing experience to a new level. Google, a service that nearly everyone in the world has heard of, presents a different tool for the web, but search engines are key to finding websites. Good luck if you're thinking of building a website to take on one of the search giants!

The online encyclopaedia Wikipedia is a fountain of knowledge. It's one of the first online locations web users will hit when looking for an answer to a

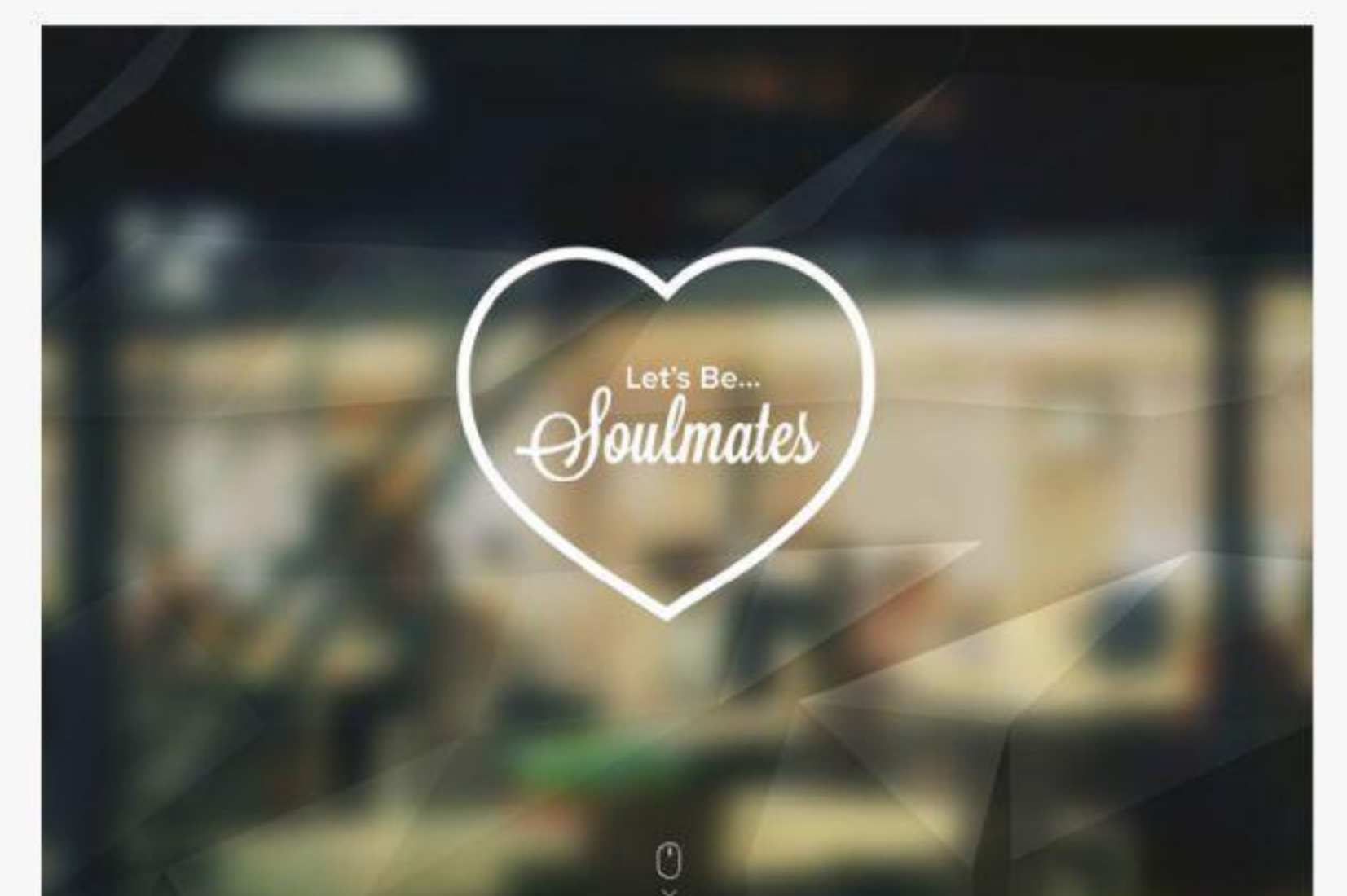
What makes a good site?

A well-conceived website is not only aesthetically pleasing, but also works under the hood as well. Soul Media (www.soulmedia.com.au) is a Melbourne-based digital agency that has put together a striking and well-constructed site that demonstrates the traits of good design. The home page makes an immediate impact with a big, bold image and relays the company message without too many distractions. The main image is a background image that scales with the browser window, ensuring that it works with all screen sizes. The site is also 'responsive', which means that it responds to the size of a screen and restyles to fit. This ensures that a site will work for smartphones, tablets and desktops.

The site itself uses the popular one-page scrolling design. This negates the need to link to other pages and wait for them to load. It is

“A responsive site responds to the size of a screen and restyles to fit”

simply a matter of scrolling down the page or using the fixed position menu to jump, in an elegant manner, to the requested section. The fixed nature of the navigation system means that it is always visible and ready to use. Alongside the HTML there is good use of web fonts and CSS3 techniques – text shadows and box shadows are all here in abundance.



Soul Media is a great example of web design working in harmony for a great visual experience

Essential guide

Anatomy of a website

Websites by their very nature are made up of a few constituent parts that are arranged in a manner to suit the content. Typical websites are either two- or three-column layouts with a header and footer. What sets sites apart is the imagination and variations used in the construction of the

constituent parts. Characteristically, the header of a website appears at the top of the page, the footer at the bottom of a page and the main content in between.

Background images or colour will be used to create a canvas for the page. This applies to

the best and worst of websites found on the web. Take a look at your favourite site and it is almost guaranteed to fit into the standard type of template. The key to a great site is bringing all the constituent parts together in a coherent and cohesive manner that suits the content.

Logo

The logo is crucial, it presents the site brand and it is a key navigation point. It should always take the user back to the home page

Content

The main area of any website is its content. This will typically appear under the header element and will be arranged in a variety of styles, such as two columns, an image slider and three columns

Footer

The footer, as its name suggests, resides at the bottom of the page. This typically offers contact information, links to social media and a repeat of the navigation menu

Header

The top of the page is prime real estate on a web page and typically includes the site logo and the navigation menu and often some advertising

Image slider

A popular addition to websites is an image slider. This allows for multiple content to occupy the same space. Images, with text, slide across to reveal new content

Sidebar

Sidebars are predominately placed to the right, as this makes the content easier to access, with less mouse travel. A sidebar can contain an array of related information and interesting links



question. If Wikipedia doesn't have the answer then it will be a surprise. Again, this is a vast undertaking and the knowledge base has been built up over years by the general public, but it provides a great blueprint for anyone looking to build a credible knowledge site.

Another big name on the web is Amazon, this is one of the pioneers of the online shopping experience and the site has developed to such a level that it is often first in the queue when a product needs to be purchased. A similar online experience sits in the hands of eBay, this is an online shopping experience, but users get to bid in an online auction rather than buy a product at a fixed price. The auction has a few imitators, but none can match its capacity and completeness. The BBC website covers a vast swathe of subjects, but it has one primary, and very popular, purpose and that is to bring the news to the masses. No matter if it's local news, international news or sports news, the BBC will have it covered.

WordPress is the most popular web publishing platform on the internet and provides the basis for over a million websites. Typically seen as a blogging platform, it has matured into something much more complete. What it also provides is a brilliant platform for people who want to produce their own website without the degree or knowledge in web design and development. Plus, it offers the user more than just one incarnation of website; almost any type of site (blog, ecommerce shop, information-based and more) can be built from the WordPress platform.

Sitting amongst the giants is Flickr, a photo storage and sharing site that provides a platform for professional photographers and amateurs alike. The Flickr platform can act as a shop window or, in the true spirit of the internet, act as a source where images are freely available for others to use. When it comes to music there are few that can match the massive entity known as iTunes. The Apple-powered store provides a shop front for a million

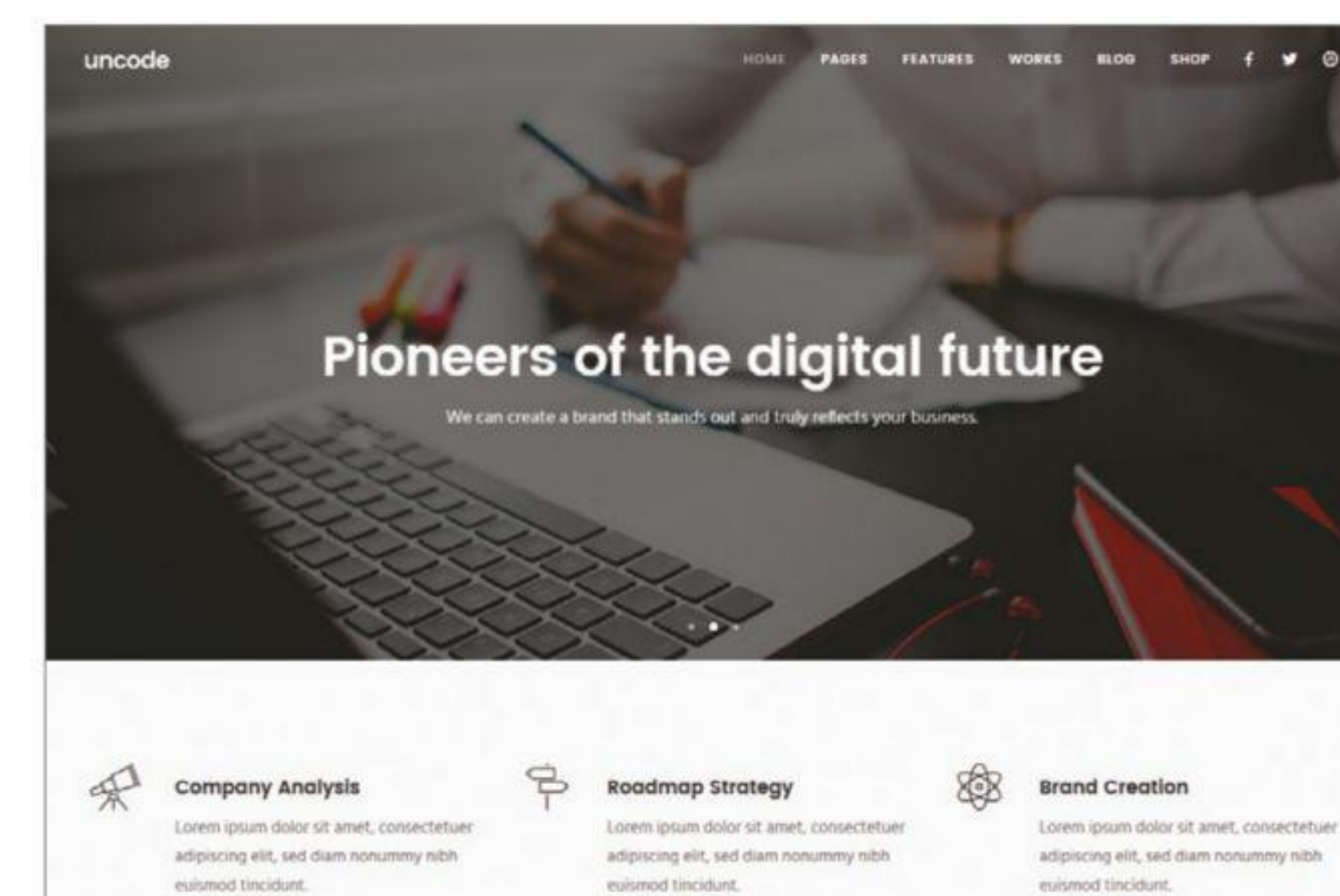
musicians and in turn allows for an intuitive online buying experience.

The above does not cover every single use of a website – for example, we've not mentioned online banking – but it does offer a great representation of the scope of purpose of exactly what a website can achieve.

Where are websites stored?

The web to some degree is a mystical entity that just exists out there somewhere, but obviously this is not the case, all the information does have a home. The web is part of the internet, which is effectively a collection of connected computers that create a mass of routes around the globe. This provides the infrastructure for one computer to connect to another and view any website that exists on the web.

A web page is a file that is typically stored on a local/home computer hard drive. A collection of web pages becomes a website. However, before



Websites tend to follow a similar layout formula



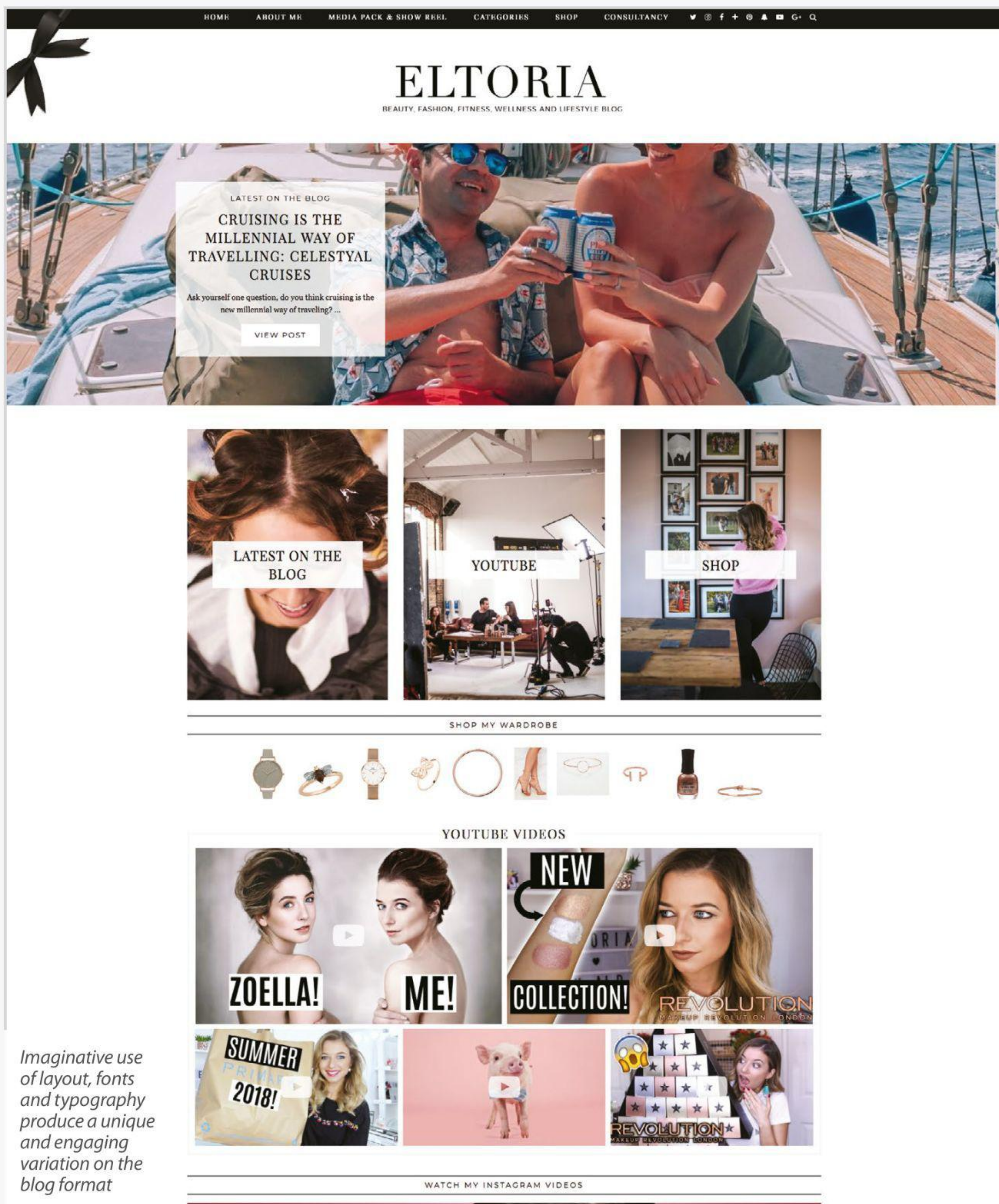
Use exciting patterns to catch the eye

Employ clever tricks on your site to entice the reader to stay around

What makes a good blog or social website?

Blog sites can be bland and boring. But there are hundreds, if not thousands, of blogs that have stepped outside the standard template to bring a splash of creativity and originality. Eltoria (www.eltoria.com) is an award-winning blog that is run by Simone Partner a 23 year old law graduate from the University of Reading who lives near Bath. The purpose of the blog is to express Simone's interests and talk about some of the amazing brands she has worked with.

The blog is a simple selection of posts, but the combination of fonts, typography, images, layout and effects make the blog a compelling, imaginative and engaging presence. The layout makes an immediate impression. The big image slider uses well shot lifestyle photography to add personality and pizzazz. The social media channels are given prominent placing, but it's past the home page that the site reveals its true self. The gorgeous use of fonts means that the blog instantly oozes class and sophistication. The imagery complements perfectly and the inclusion of author pictures adds more personality to the pages.



Imaginative use of layout, fonts and typography produce a unique and engaging variation on the blog format

any website can be seen it needs to be transferred from a local/home computer to a web server where the website is 'hosted'. A web host provides the service that gets a website out onto the internet for all to see. Web servers are like a desktop PC in the fact that they have similar hardware, but they are much more powerful and run different software.

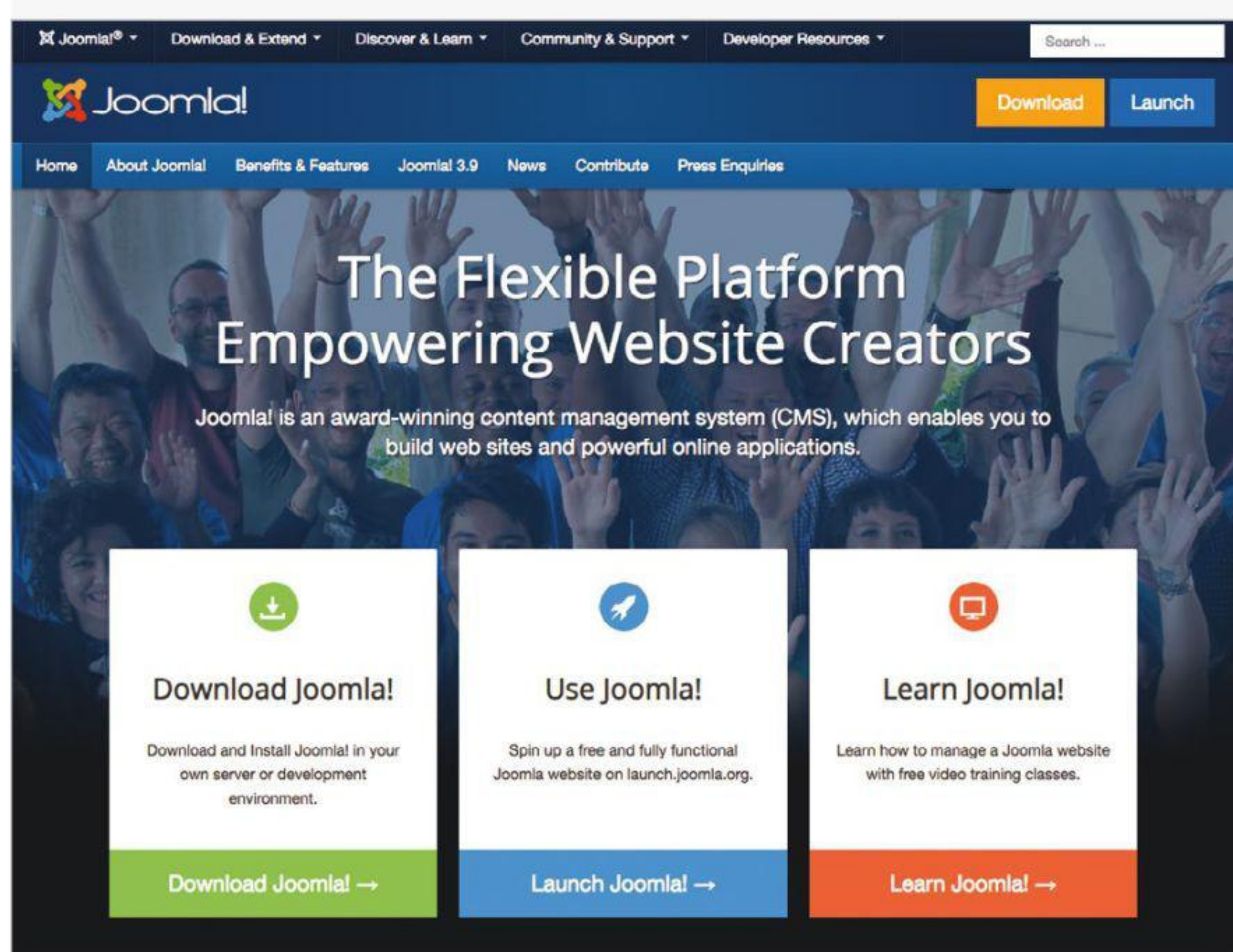
A web host provider such as Fasthosts (www.fasthosts.co.uk), 1&1 (www.1and1.co.uk), Heart Internet (www.heartinternet.co.uk), Host Papa (www.hostpapa.co.uk) and PlusNet (www.plus.net) all provide a wealth of services including web space, monthly bandwidth, domain names, email accounts, databases, platforms and typically a host of web building tools. All of these services are included with a web hosting package, but each web host will have different hosting plans. The different plans provide everything from starter plans through to powerful plans for business. What type of plan is needed depends very much on what type of website is being set up. If it's a simple blog site that gets updated once a week and has an audience of around 500 visitors a month then a cheap starter plan would be ideal. If it is a company website with much more content and a lot more visitors expected then a more professional plan will be needed.

So what does all the jargon mean? The more important considerations are web space and bandwidth. Web space is storage space, the same as a hard drive. How much is needed obviously varies dependent on the content, but if it's a blog with standard text and images then it's unlikely that more than 1GB of web space will be needed. If more than text and images are going to be displayed, for example video, photos, music, then 1GB of web space can be filled very quickly. Ten gigabytes or more is a better option for such a site. It is a good idea to estimate how much web space you will need before embarking on choosing a hosting plan. Don't worry too much though, because web space can be upgraded easily and typically within 24 hours.

The other major factor is bandwidth, which is usually measured by the month. Bandwidth is the traffic, or the amount of data that is transferred to or from a website. A quick method for estimating monthly bandwidth is the sizes of the pages on a website multiplied by how many visitors are expected. For example, if a website has a total page size of 1MB and the expected visits are 500, a bandwidth of around half a gigabyte is sufficient. However, if there is a spike in visitors due to sudden interest then this could easily be doubled. Again, there is no need to worry as the bandwidth can be increased when needed.

Other considerations are databases, if setting up a WordPress blog then at least one database will be needed. If building a static brochure site that just consists of text and images then a database

An introduction to blogs and social media



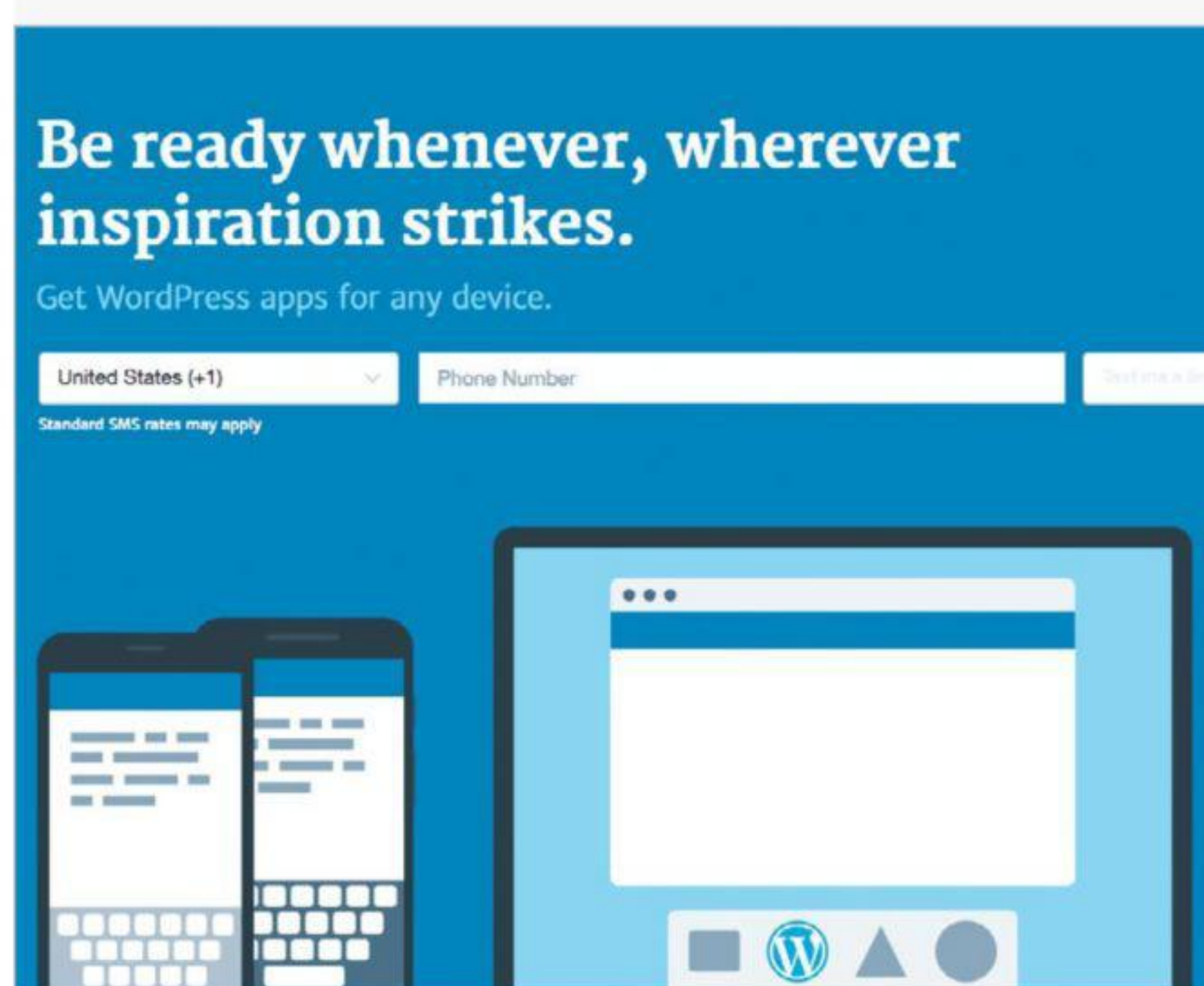
Joomla is an alternative to the WordPress web publishing platform, check out all your options before choosing the one you go with

Blogs and social media websites are now an integral part of the online experience for many people. WordPress and Twitter are synonymous with web publishing and micro-blogging. WordPress has become the most popular web publishing platform because it is freely available, websites using it can be either self-hosted or hosted on **wordpress.com**, and it has a whole selection of supporting tools and themes.

WordPress is the power behind millions of websites, it is easy to install, even for newcomers, and easy to customise and navigate around. There are thousands of themes on the market, which can instantly give a website a completely new appearance with a single click. There is

also a vast array of plug-ins that allow users to add special widgets that perform specific tasks, for example adding polls, image sliders, tweets, featured content and so on. The beauty of blogging platforms such as WordPress is that they provide a platform for users to get their opinions, thoughts and personality online. While WordPress is the most popular web publishing platform it is by no means the only one out there. Joomla and Drupal are similar content management systems, but at the other end of the scale there are easy to set up, hosted platforms such as Tumblr and Flavors.me.

More instant web publishing is provided by the social media/micro-blogging platform Twitter. This allows users to communicate with short, concise, 140-character or less, messages (tweets). Messages are sent to all those who choose to follow you but more importantly the addition of a hashtag (#) makes a tweet subject specific. This immediately expands the reader base to include thousands more readers of a tweet. As a promotional tool Twitter is key on the web. Web sites typically include social media links encouraging visitors to follow. Conversely, it provides the perfect platform to create interest amongst followers and beyond. A well-constructed tweet will engage readers and more importantly drive traffic to a website.



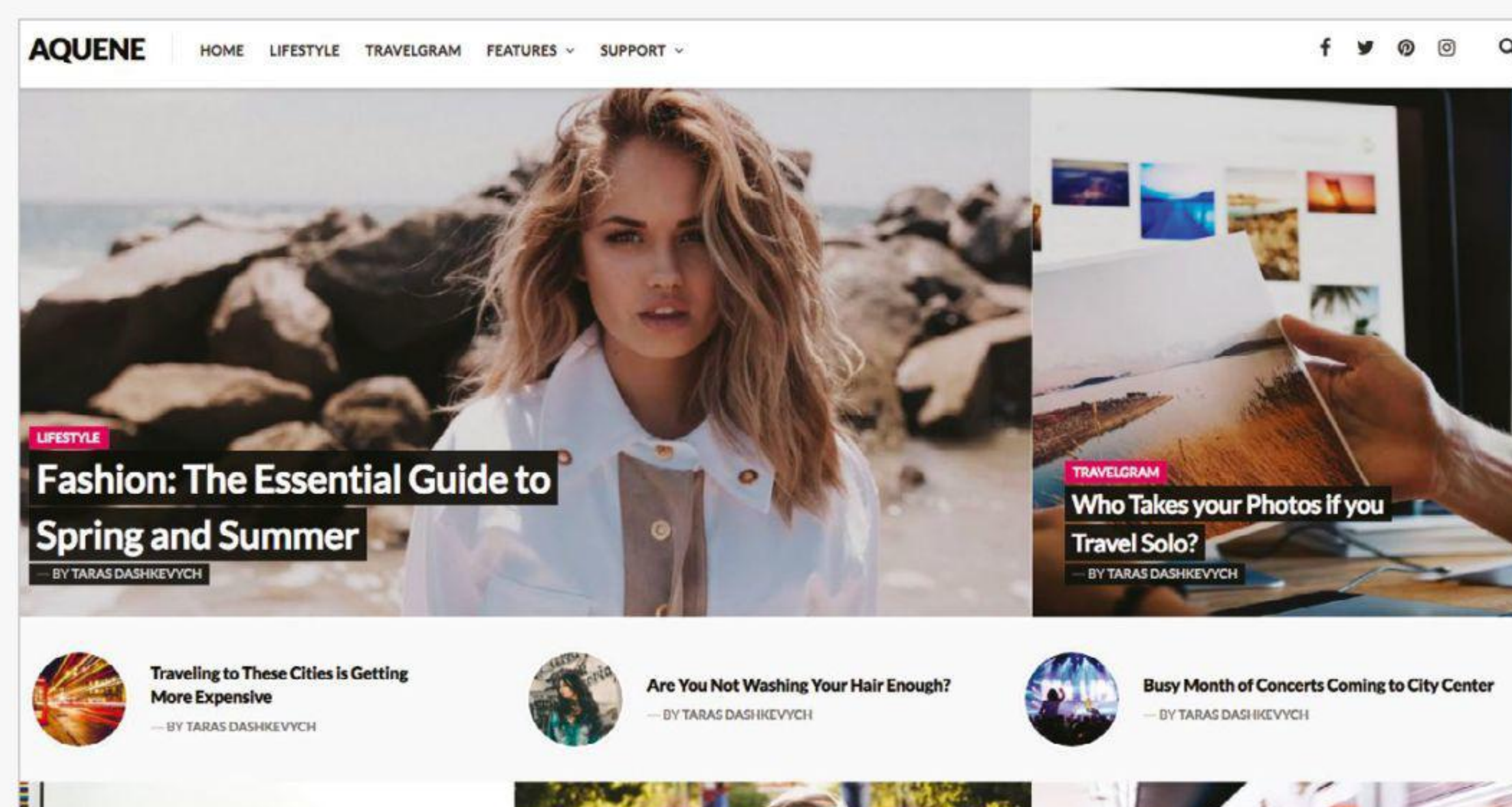
The WordPress platform has become so popular that it has spawned a range of related merchandise



Twitter is a good example of a micro-blogging platform that complements more traditional blogging platforms such as WordPress



At the time of going to press, the latest incarnation of WordPress has reached over 30 million downloads, and it's still going strong



Themes not only make a WordPress site look great, but they can be tailored to your particular business or personality and can be changed in seconds

Essential guide

is unlikely to be required. If setting up a site with a shop then a database is likely to be needed. As a general rule it's always worth getting a hosting plan with at least one database included. Email accounts are an obligatory addition to any hosting plan and even the most basic package will include more than are usually needed. As an example, the 1&1 Starter plan provides 1,000 email accounts. The other major web hosting consideration is the operating system

tools that a web designer/developer will need to know to get a website up and running. The most immediate is HTML and CSS, these are the most important elements of any website, as without them the web simply would not exist as we know it. HTML (Hypertext Markup Language) provides the base from which every website is built. Anyone looking to build a website will need to know at the very least the basics of HTML. The latest incarnation

“Building a website is like building a house – you need a host of tools”

(OS), typically Windows or Linux. This is not dictated by the OS your computer is running; it relates to OS that the web server is running. It only matters if you're going to build a basic HTML and CSS site. However, if a certain technology is to be used, it may only run on a certain operating system.

Tools of the trade

Building a website is much like building a house; a host of tools are needed to make sure that the job gets done. There are a few essential techniques and

of HTML is HTML5 and newcomers to web design will need to make sure that, along with all the standard HTML tags, they also add HTML5 tags to the learning list.

Sitting alongside HTML in the web design hierarchy is Cascading Style Sheets, which is commonly known as CSS and it is just as important that website builders know at least the basics. CSS adds style to the front end of a website and defines the layout, whatever it may be, style fonts, borders, images, and create a background canvas

for a webpage. In fact, any aesthetic seen on a web page has almost certainly been in contact with CSS. The latest incarnation of CSS is CSS3, which adds a host of new effects and styles that are slowly being adopted and supported by all the major browsers. Outside of the key technologies there is a trio of development platforms that are typically used in a website build. JQuery is the programming language that gives added dynamics to web pages. The JQuery language is a JavaScript library and is added to a web page to create effects that typically add movement. What can JQuery do? Typical examples include tabbed panels, image sliders, slide shows, sliding panels, expanding and collapsing accordions and tool tips to name a few.

Getting to grips with JQuery is not an essential element of design, but it is something that should be put on any web designer's to-do list when they've mastered HTML & CSS. Other backend technologies that power many websites are PHP and MySQL. PHP is a programming language that plays a big part in the makeup of the WordPress publishing platform. Typically, PHP is embedded into an HTML page and produces dynamic results. MySQL is a database application, which means it stores information entered into a site. It is often combined with PHP and a typical example of the two in action are WordPress posts where the content is stored in a MySQL database.

Getting all the essential technologies onto a page is the work of a selection of tools. An HTML editor is critical and one of the most popular software packages on the market is Dreamweaver. Part of the Adobe Creative Suite, it offers a user-friendly interface and an impressive set of tools that assist any web designer with what they need. The alternatives are explained elsewhere. An HTML editor needs to be accompanied by an image-editing package to make sure that a website is beautiful while functional. The popular choice is Photoshop, which provides powerful tools that are perfectly capable of creating any web graphic in the right format.

Beyond page building there is the web designer's favourite web publishing platform: WordPress.

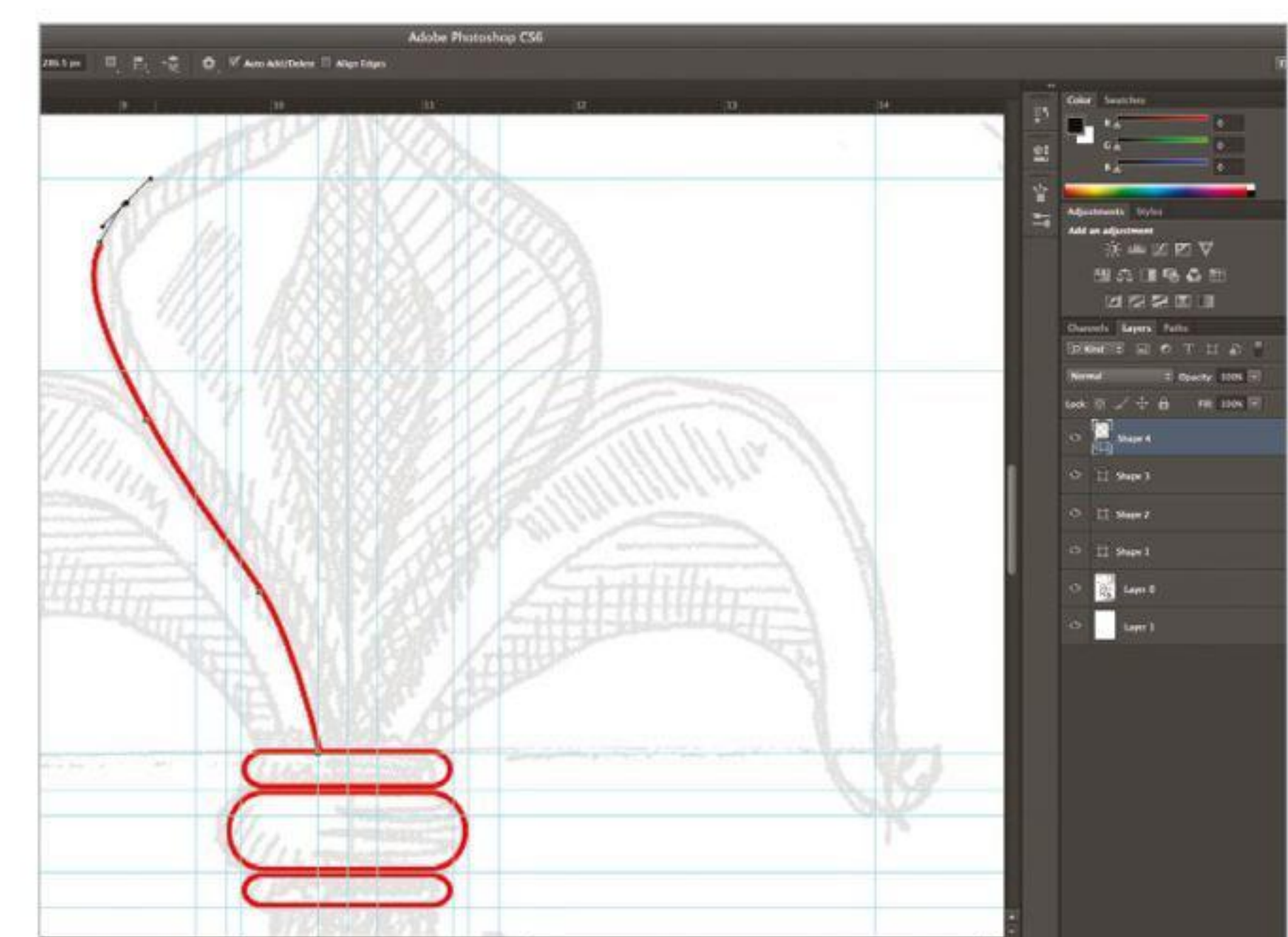
Keeping it safe

Security is an often forgotten issue when it comes to a website, and there are a few simple rules that need to be followed to ensure that a website's security is not breached. Passwords are the most popular form of securing access to a website, whether it's via an online login page, such as WordPress, or an FTP package used for transferring files from a local computer to a server where a site is hosted. One quick tip is not to use the password 'password'! As obvious as it may seem, the default password is often left and not changed. Try and choose a username that is not too obvious and ensure that a password uses upper and lower case characters and numbers. If it's hard to remember try not to write down and leave it next to your computer.

If using a web publishing platform, ie WordPress, some simple commonsense precautions are to update to the latest version. In addition, update any plug-ins and themes and also remove any inactive themes and plug-ins. Other security measures are more generic but just as important. Make sure that any OS updates are installed and make sure that any anti-virus and firewall software is kept up-to-date.



Login screens provide the typical point of access, needing a username and password to gain entry



You can create great backgrounds for your website by creating stunning graphics

The beauty of the platform lies in its ability to build a complete site in minutes. The framework is provided and then it is just a matter of selecting a theme for the desired finish. The user adds content while WordPress provides the structure.

Web sites are viewed in web browsers and the four major web browsers – Internet Explorer, Firefox, Google Chrome and Safari – all offer different levels of support to HTML and CSS. And for this very reason they are an essential part of the web design process. All sites need to be tested in each browser to make sure that they work as intended, so it's always a good idea to find out a little about what browsers support when building a site. Finally, while not really tools of the trade in the traditional sense, services such as YouTube and Twitter are still key players. Both offer the opportunity to embed or integrate elements into a web page with code supplied via the mother site.

Different ways to build a website

The tools needed to build a site are all integrated into a website in different ways. A website is by its definition a web presence, and how it gets built is almost irrelevant – users want to see a functional site in action, very few care how it was built, apart from web designers of course!

The options for building a website range from the simple to the specially made. At one end of the scale there are instant, no-nonsense, no-knowledge services such as **Wix.com**. These are services that appeal to those who want to get online quickly, or those who want an elegant, easy-to-customise web presence. Users build a page from predefined layout elements and styles and draw content from existing services such as WordPress, Twitter, Flickr.

Template builders sit very closely in the building process and are often found with many web hosting plans such as 1&1. These provide predefined elements, pages, images and so on in a logical step-by-step process and need no web design knowledge. Stepping up the ante is WordPress, which in principle is another quick and easy website building tool. There are two versions available; **wordpress.com**, where a site is hosted on the

1&1 IONOS – TAILORED SERVICE WITH A PERSONAL CONSULTANT [Learn more](#)

1&1 IONOS Products Solutions More [Sign in](#)

.co.uk Domain + Personal Consultant
first year £1 incl. VAT
then £12/year incl. VAT

Enter your desired web address

Web Hosting
Fast. Trusted. Flexible.
+ Personal Consultant
12 months from
£1 /month
then £5/month excl. VAT
[View offer](#)

Website Builder
Quick. Simple. Yours.
+ Personal Consultant
12 months from
£1 /month
then £12/month incl. VAT
[View offer](#)

1&1 Hosting (1and1.co.uk) offer several different hosting plans and packages. Pick the one that suits your needs

Top tools of the trade

There are effectively three tools needed for the construction of a website. A knowledge of HTML and CSS, an HTML editor and a graphics editor. Sounds simple and in essence it is, but finding the right tool that suits requirements and personality is important. The first, most important tool is a HTML editor, and there are hundreds of choices available, free and paid for (see What's the best software on page 19). CSS is another text-based language and a text editor would suffice, but again a good knowledge of the language is needed. A good alternative is a CSS editor such as Rapid CSS (www.rapidcsseditor.com) or Notepad++ (<https://notepad-plus-plus.org>). A graphics editor is crucial for any web designer and the popular choice is Photoshop. This is a great package but expensive. The popular alternative is GIMP (www.gimp.org).

Beyond software packages there are some great in-browser tools. Firefox includes some great developer tools that help deconstruct a page. Add-ons such as Firebug (www.getfirebug.com) extend the browser's capabilities making the Mozilla browser the web designer's choice. There is an Aladdin's cave of online tools that will help with every aspect of the web design process. Aviairy (www.aviary.com) is a suite of powerful creative applications, that includes an image editor,

screen capture and vector editor. CSS Click Chart (www.css3clickchart.com) is a great tool that creates code for the latest CSS3 specification. Initializr (www.initializr.com) is a tool that helps create a basic HTML5 template. For those looking for colour inspiration, Color Wizard (colorsontheweb.com/Color-Tools/Color-Wizard) offers an intuitive tool for creating complementary colour palettes.



CSS Click Chart

common stuff cutting-edge

box sizing border radius opacity 2d transforms multiple columns
backgrounds multiple backgrounds gradients border images text overflow
text shadow keyframe animations #font-face media queries selection color
transitions transform origin calc() background clip space and round
rem units background size pointer events overflow wrap
box shadow 3d transforms flexbox cursors background origin

Box Sizing
Used to alter the default CSS box model for calculating width and height of the element, which includes border and padding in its total, usually an undesirable result.

Specification
Box Sizing on W3C

Example Code [select code] [disable auto-size]

```

<element {
width: 200px;
padding: 5 30px;
border: 10px solid #ccc;
border-box: /* context-box */
}

```

Live Demonstration **Browser Support** [view mobile]

CSS3 Click Chart provides sample code for popular and cutting-edge CSS techniques

1c80c7

Color Schemes

Analogous: Complementary: Split Complementary:

#1c80c7	#f180c7	#f180c7
#1c80c7	#f180c7	#f180c7
#1c80c7	#f180c7	#f180c7
#60609	#272727	#727272
#1c80c7	#f180c7	#f180c7

Add a base colour and create a complementary colour palette for a website

Essential guide

WordPress servers, and a self-hosted version. The .com option is created online and offers a simplified version of the platform. The self-hosted version is the full package where the user needs to provide their own web space to install the web publishing platform. Once installed users can change a theme, add plug-ins, customise the code base and completely restyle the look.

Finally, at the top end of the scale is the bespoke or custom website that is built from scratch using all the latest web technologies and tools. This gives over total control of the build to the designer, with the only restriction being the designer's own imagination and knowledge.

What to do next

Once a site has been built and hosted on the web, what happens next? What more can you do with your site? Looking past the practical considerations

– blogs, photographs, ecommerce and so on – a site needs to be seen. It doesn't matter how aesthetically pleasing, innovative and intuitive a site is, if no one gets to see it, it's worthless.

Any new website exists in a vast labyrinth of online experiences and promotion is the key to getting a site seen. The methodology and techniques to achieving a starring role on the web are wide and varied. The first and maybe most important is the domain name. This is the address people will type into the browser (for example www.iloveshopping.com).

This should reflect the name of the site. There is little point calling a site 'I Love Shopping' and using the domain name www.shoppinglove.com – the two should match for brand completeness. And, if possible, get the .com version.

Google is the top search engine across the globe that is used by over 80 per cent of internet users,

which equates to billions of people, so your site needs to be made Google-friendly. There are a host of elements that add value to a page: meta tags, sitemaps, alt tags and more. The best way to get Google-friendly is to call on Google themselves. Try out their Search Engine Optimization Starter Guide at <http://bit.ly/KGzh07>.

You shouldn't ignore social networks, either. Outside influences such as Twitter and Facebook are great communication channels with potentially huge audiences. Every time something on a site is updated, you should be sure to tell your followers and friends. If nothing new is happening then make it happen!

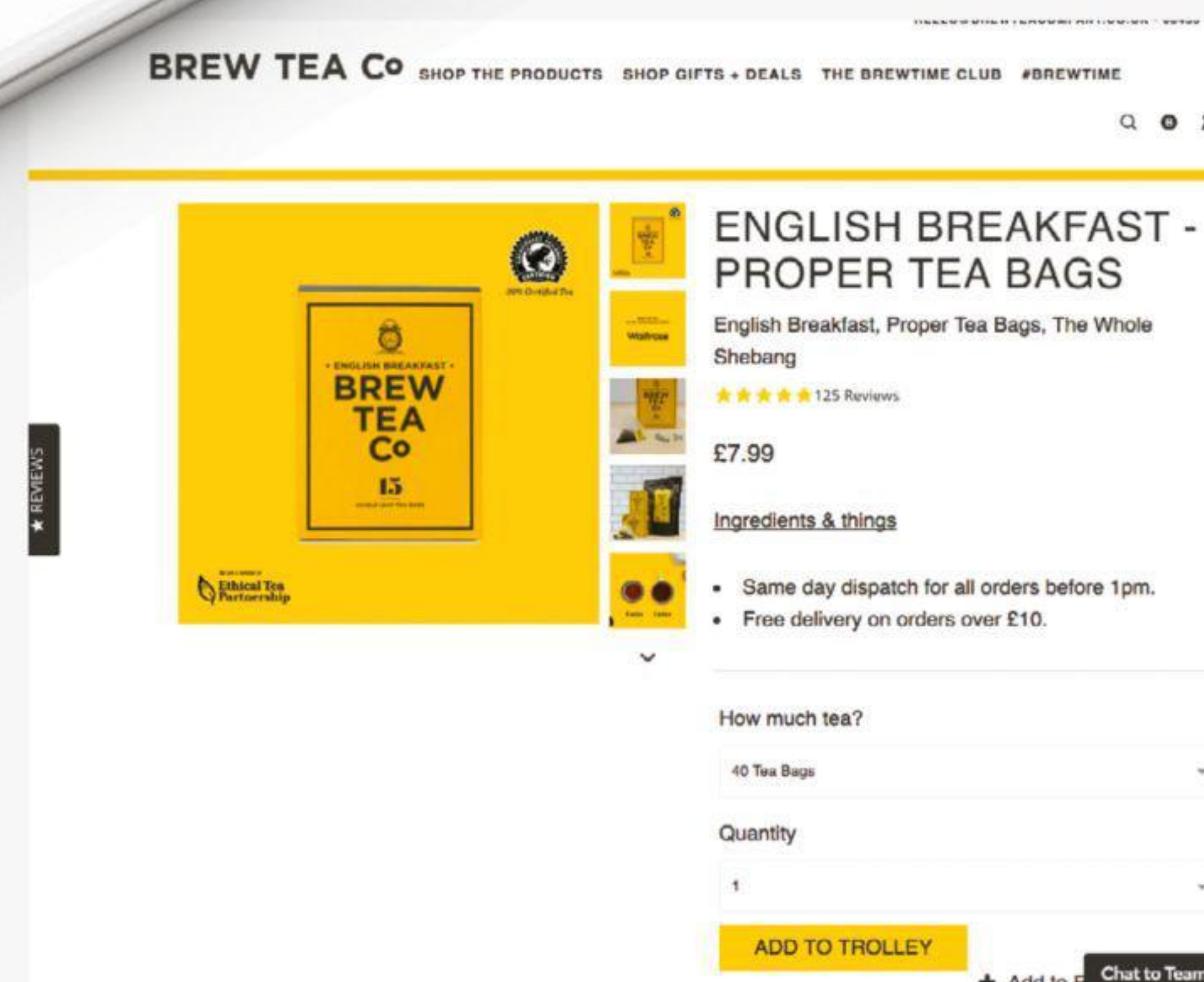
Finally, make sure your website content is consistent, error free, current and regularly updated with new and exciting content. Nobody wants to visit a website that hardly ever has anything new to give its readers.

The mobile web

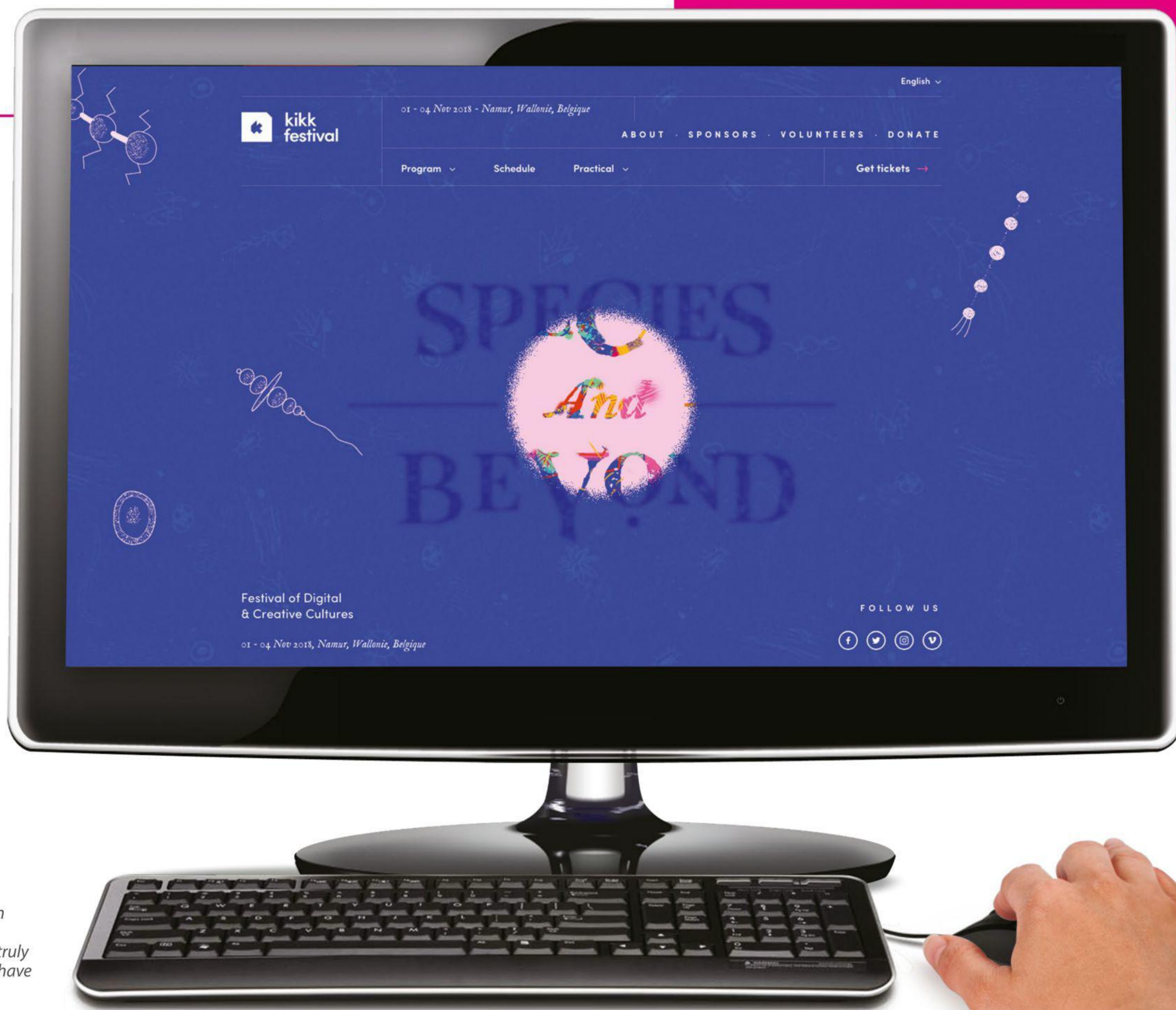
Smartphones and tablets are now as much part of the web browsing experience as the desktop. With the adoption of mobile devices comes a new set of resolutions and rules for web designers. Smartphones typically have a screen width of 320 pixels in portrait mode and 480 pixels in landscape mode. Tablets are a more diverse bunch, but as a typical example, the iPad has a width of 768 pixels in portrait and 1024 pixels in landscape. Desktops vary from 1024 pixels up to around 1900 pixels.

The variation in sizes demonstrates the issue of designing for mobile and desktop. One option is to build a mobile-specific version of a desktop website, but this not only adds to the

workflow of a designer but also adds to the development cost for a company. The current solution is 'responsive design', which looks to cater for all screen resolutions and ultimately all devices and desktops, in turn future-proofing any website design. Responsive design uses CSS3 media queries, which recognise the width of a device and then switches the content to the appropriate version of the website to ensure the best on-screen display.

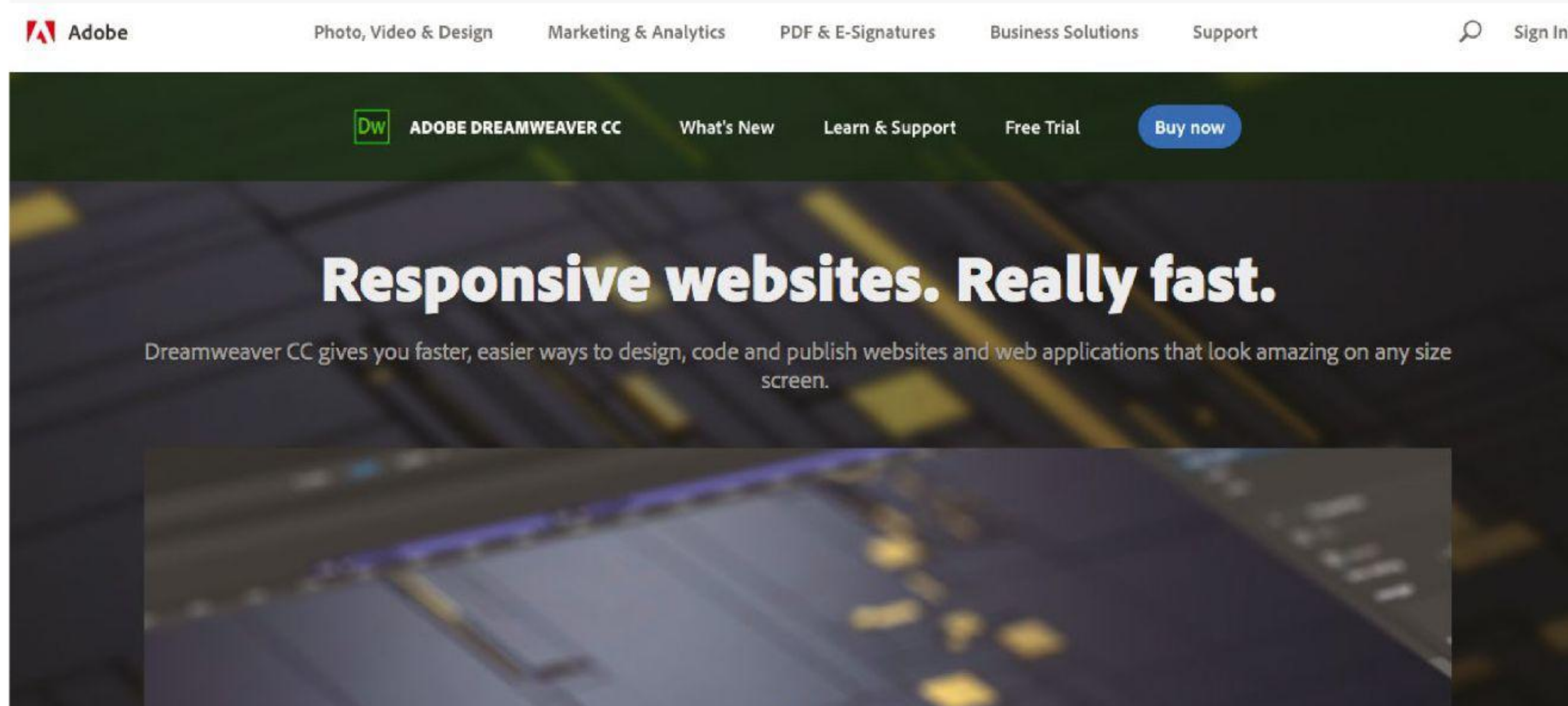


The {Brew Tea Co} (www.brewteacompany.co.uk) website is a great example of responsive design in action. Great on mobile and desktop



Make a splash with your website and create something truly stunning that will have visitors returning

What's the best software?



Writing code, typically HTML and CSS, is nothing more than a collection of alphanumeric characters, so really nothing more complicated than a text editor is needed for creating code. Notepad (PC) and TextEdit (Mac) are free text editors that are perfectly capable of producing good code, however they offer no assistance in the way that you choose to write it. So, a plain

text editor is generally for the more experienced coders out there.

However, while beginners and newcomers may struggle with the language to begin with, this approach will reap rich rewards down the line. Mastering HTML and CSS via hand-coding will mean that clean, semantic and lightweight code will be the eventual outcome.

Beyond the plain text editor, the next steps you'll need to conquer are the HTML editors. These are more specific text editors which incorporate related coding features. They provide an environment that offers assistance and help create a code base. These are less expensive than high-end packages and provide enough tools to assist with the page building process.

At the top end of the scale are feature-heavy packages such as Adobe Dreamweaver, which are comparatively expensive. As you might expect, high-end packages do not simply offer a plain text interface. They offer a whole host of tools, such as pre-built templates, useful code widgets, colour-coded code, multiple views and instant code creation. Choosing an HTML editor is very much a subjective choice and web designers will all have their favourites that they prefer to build with. The simple solution is to try a few of the free HTML editors that are available on the market and familiarise yourself with how they operate. It is almost guaranteed that one will fit your method of working.

Build a site

22 An introduction to HTML
Get to know HyperText Markup Language

28 Create a basic layout
Use HTML to code your very first layout

30 Code a link
Learn how to put different pages together

32 Create lists in your website
Ordered or unordered – your choice!

34 Learn about div tags
One of the most important tags there is

36 Create a three-column layout
Take the next step with a three-column page

40 An introduction to CSS
Learn about how to make your site stand out

46 Centre your page
Get more control with wrappers

48 Define text & heading styles
Use CSS rules to add some style

50 Style your lists to stand out
Spice up boring lists with CSS

52 Turn lists into navigation bars
Create your first navigation bar

54 Format images using CSS
Add drop shadows and more

56 Create a header
Make it clean, clear and effective

60 Create a sidebar
Produce a navigation system to be proud of

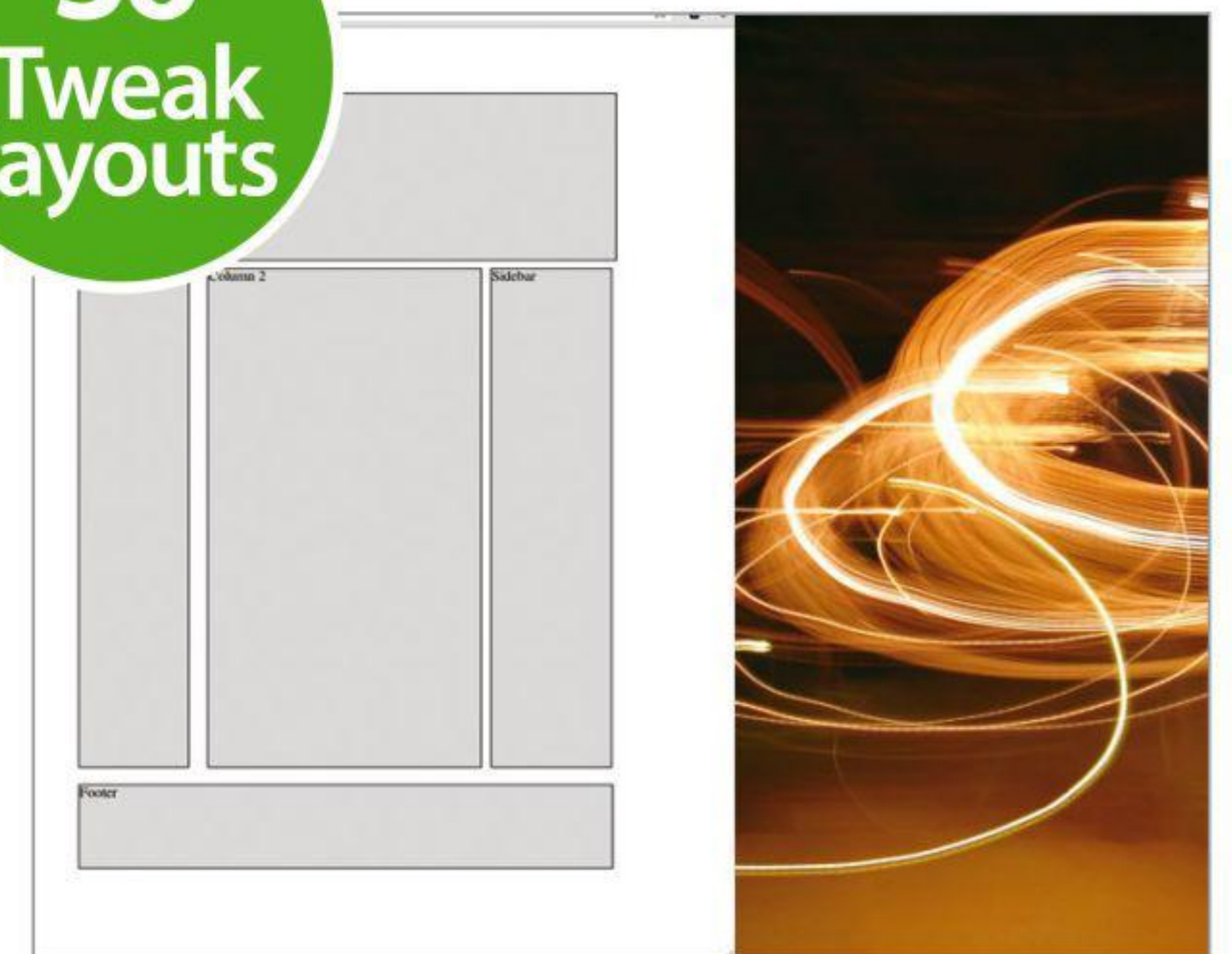
64 Add content to the main area
How to add what people want to see

68 Add content to your footer
Make the most of an underrated feature

22
Master
HTML



36
Tweak
layouts



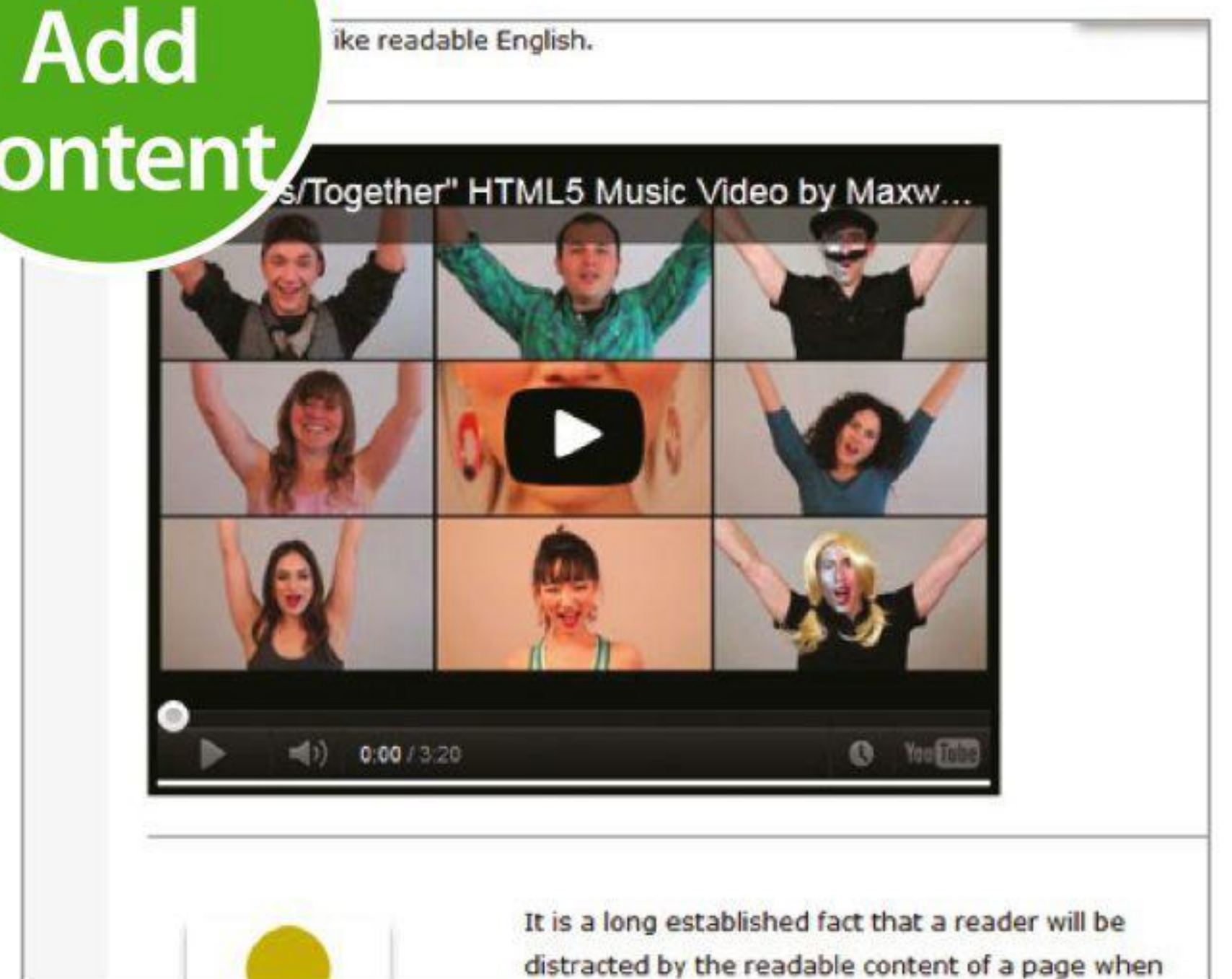
40
Learn
CSS



54
Add an
image



64
Add
content



“HTML is the core building block of a web page – it's the first thing you should learn”

WHAT YOU'LL LEARN

Throughout the Build a site section you'll be learning how to code your first webpage using HTML and CSS, all in preparation to get it on the internet. The coding tutorials work with popular layouts such as two-column and three-column, while our introductory guides to HTML and CSS teach you about some of the popular tags and properties and how they are used. So, what are you waiting for? Get building your site today.

EFFECTIVE HEADER

Create a clean and clear header with our tutorial

Say Hello



LIFESTYLE PHOTOGRAPHER

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore.

Subscribe & Follow



Categories

Fashion

Life Style

Music

GREAT CONTENT

Add the meat to your website with our guide inside



TRAVEL

Noel Gallagher to Host New Radio Show

Proin eros est, a

In eget sem et do

viverra elit. Duis odio augue, blandit ut risus sit amet, aliquet faucibus urna. Vivamus at justo neque. Maecenas

estie sem eros, at imperdiet lacus cursus vitae.

commodo id odio molestie volutpat. Nullam tempus

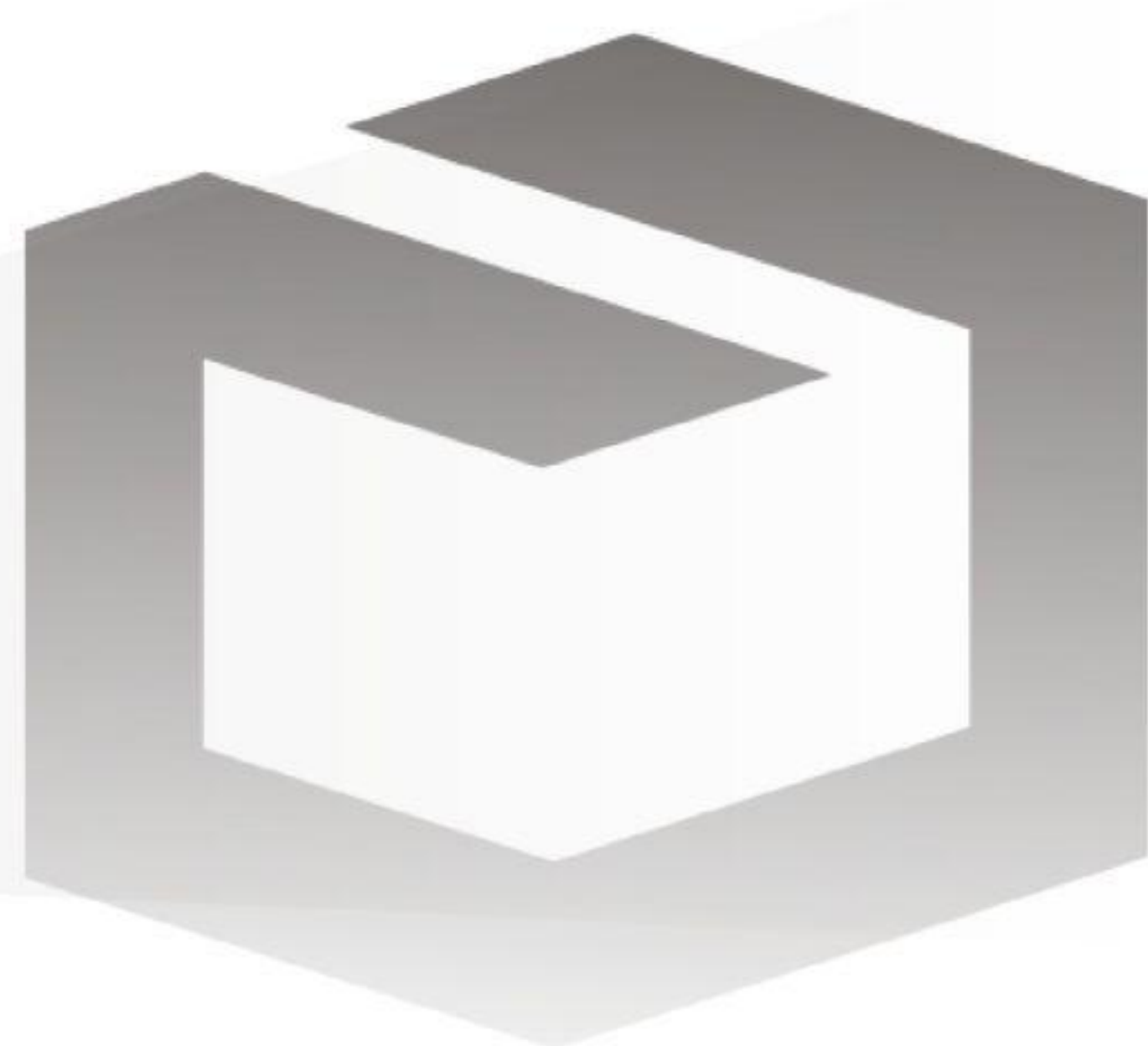
Vivamus at justo neque. Maecenas

MacBook Pro

SIDEBAR

Learn how you can not only create but use a sidebar to its full potential





An introduction to HTML

HyperText Markup Language, more commonly know as HTML, is the basic building block of the web. It provides the structure, content and connection between pages, allowing web designers to create interactive experiences. Easy to learn, it offers limitless possibilities...

The majority of web pages are made up of one or more files that are downloaded to a computer, which in turn are interpreted by a web browser and finally rendered out to screen. At its simplest, a web page is a plain text file that contains special instructions about what kind of content is contained within. These instructions are written in HTML – the language used on the world wide web.

HTML, or HyperText Markup Language to give it the full name, is the core building block of a web page. HTML is a markup-based, human-readable language that's designed to be simple to write, and easy to understand. A markup language is one where bits of data are literally marked as being of a particular type. So, for example, a piece

of data that you want to render as a paragraph would be 'marked up' with a paragraph marker.

Marking up

Markers are referred to as tags, and they have less-than and greater-than symbols around them. This paragraph would be marked up with a `<p>` tag at the start to denote a paragraph, and a matching `</p>` tag at the end to signify the end of the paragraph. HTML offers many tags for marking up content, and browsers are programmed to interpret these tags, formatting the contents of each tag according to a set of preset rules. This allows the `` tag to render text in bold, and the `` (for emphasis) tag to render in italics. One of the major benefits

of this system of marking up content is that it's easy to read – you don't need any special software to either write or read HTML documents, as they're just plain text. This makes it easy to create a functioning web page using nothing more complex than a text editor.

What exactly is HyperText?

Why is the language called HyperText Markup? Because the key thing that makes the World Wide Web a web, rather than a series of disconnected pockets of content, is the ability to link one document to another – these links are HyperText because clicking on them takes you somewhere else in the vast web of pages! As well as a basic HTML (text) document, web pages can call in

Build a site



Chrome



Firefox



Microsoft Edge



Konqueror



Opera



Safari

HTML is the basic language of the web, and works no matter which browser you use, or what server provides the page



All websites are built using HTML, CSS and JavaScript

external files (or 'assets') that include style sheets, images, audio files, video, flash and scripts. The web browser looks at the HTML document when it downloads it, and looks for any external files that are called into the page. If it finds any files called in, the browser will send a message back to the web server asking for those files. The final result you see in your web browser window may be the result of more than 20 individual files, brought together by the web browser and rendered as a single web page!

Recognising an HTML document

You'll notice as you browse around the web that different pages have different names, and more importantly they have different extensions at the end of the filename. Some end with .htm or .html, which are obviously HTML documents, but others might end with .cfm, .php, .asp or .aspx. What are these file types?

As far as the web browser is concerned, they're just normal HTML documents like every other on the web. What these different extensions signify is that some sort of processing has happened on the server before the page was sent to your

browser, allowing the website to generate some unique-to-you content.

All the examples we've noted above have similar characteristics. They're scripts, or small computer programs, that run on the server and make some decisions about what content to show. This might be as simple as including your name at the top of the page when you're logged in, or as complex as a fully loaded e-commerce web store, but all these 'server-side languages' output the same final result – plain HTML. It's important that the web works this way, as every web browser only has to support one kind of page structural language, which makes it easier for both web designers and browser vendors, not to mention for users of the web who know that all they need to access any website is a web browser and an internet connection.

Who invented HTML?

In the Eighties and Nineties the internet already existed, but didn't have any simple way of navigating between computers and content. Each server had different software, different protocols and methods for sharing data. Tim

What is HTML5?



HTML5 makes adding content to your web pages a much simpler process

HTML5 is the latest version of the HTML specification, which is managed by the World Wide Web Consortium (W3C). This latest iteration of the standard introduces new features and support for multimedia directly inside an HTML document. One of the key considerations for the W3C is maintaining backwards compatibility, however, and HTML5 remains backwardly compatible with all web browsers and renderers.

The most exciting aspect of the HTML5 specification is the semantic approach to marking up content. For the first time, web designers can mark up an article as such – especially useful given the nature of blogs, news websites and the like.

“The most exciting aspect of HTML5 is the semantic approach to marking up content”

Over the past decade, video on the web has exploded. As bandwidth has increased, and more people have access to high-speed internet connections, the likes of YouTube and Vimeo have gripped the imagination of web users across the globe. Until HTML5, the most reliable and common method for including video on a web page was to render it using Adobe Flash. Both YouTube and Vimeo previously used this approach by default, but both sites have now switched over to the more accessible and standards-friendly HTML5 version as the browser vendors have updated their software to support the all-new `<video>` tag.

Berners-Lee was working in a computer services section at CERN – the European Laboratory for Particle Physics in Geneva, Switzerland. Tim realised that it would be useful to have a simple method for sharing information remotely, and rather than invent a completely new system from scratch, he developed a markup language based on the popular SGML format. He developed a straightforward protocol – HTTP (which stands for HyperText Transfer Protocol) – for retrieving other documents’ text via hypertext links. The text format for HTTP was named HTML, for HyperText Markup Language. By keeping it simple, Tim encouraged others to build upon his ideas and to design further software for displaying HTML, and for setting up their own HTML documents ready for access. This was the birth of the web as we

user-friendly web pages that incorporate all three technologies.

Apple decided to promote the use of semantic, standard HTML, CSS and JavaScript, rather than support Adobe’s rich media plug-in, Flash. Adobe argued that Flash was a good solution for presenting rich content on mobile devices, while Apple insisted that open technologies with proper semantic meaning and no need for a plug-in was preferable. Time has favoured Apple’s approach, in no short part due to the huge success of its iPhone and iPad products!

What are these semantics?

The HTML format is very accommodating; beyond the required elements of `<html>`, `<head>` and `<body>` you can arrange your

“Every web browser only has to support one kind of page structural language, which is easier for web designers”

know it today, and led to an explosion in use of the internet. HTML itself has been further developed over time, and we’re now up to its latest version – version 5.

All new and improved: HTML5

You can’t fail to have noticed the talk of HTML5 in recent years. Even non-web-savvy users have come across the term, largely thanks to Steve Jobs and the iPhone. HTML5 is the latest iteration of the HTML language, and looks very much the same as the previous versions. New tags that provide greater semantic meaning to the content being marked up have been introduced, along with native support for rich media such as audio and video. The ability to make a document self-describing offers numerous benefits, but it’s worth pointing out that when the term HTML5 is used – especially in the press – it often refers to a trilogy of technologies rather than just the HTML language itself. The press interpretation of HTML5 includes both CSS3 and JavaScript in addition to the HTML5 language, and is often used to describe the experience of interactive,

content any way you like. This is both a benefit and a potential issue as the flexibility to present (and mark up) content in any way also means that you can quickly end up with a confusing mess! A movement to present information in a semantic fashion existed at the birth of the language, and has seen a resurgence in recent years.

The general idea is that content should be marked up according to its type and importance. `<h1>` heading tags, for example, should only be used to mark up the most important piece of info on a page, `<h2>` for the second most important and so on. If you think about the analogy of a book, the `<h1>` tag might be the book or chapter name, `<h2>` would be a section header and so on. By using this approach, the HTML describes the importance of each piece of info which helps search engines identify what your page is about, and more importantly special software, such as screen readers that translate web pages into audio for people with sight problems, can make more sense of the document.

In the past, content has been marked up using heading and paragraph tags, but content has



Once you know HTML you can create both websites and web apps for the likes of iPhone, Android and even Facebook!



Apple’s website typifies what can be achieved with just HTML and some scripts and styles

HTML & mobile browsing

When you access the web from your mobile phone or tablet, you’ll often notice special pages that have been formatted especially for these devices, rather than the full desktop version of a website. You might have wondered whether these pages use a special language especially for mobile devices? The good news is that, just like the rest of the web, they use standard HTML. The only real difference between a page optimised for a mobile device and one orientated towards a desktop computer is the CSS styles that have been applied. The content, and often the structure, of the page remains plain HTML and there’s no need to learn special skills or additional languages to be able to create sites that on these devices. That’s not to say that you shouldn’t consider how your users are accessing the web page and what information they might need!

Typically, a mobile-optimised website will be presented in one of two ways: either it will be the full website presented to render nicely on the smaller screen size that you find on phones and tablets, or it will be a special version of the website that doesn’t contain the same information as the full website. This latter approach supposes that a mobile visitor to your site is likely to be more goal-orientated than a desktop visitor, and aims to present the key information quickly, such as ‘how to find us’, or ‘our contact details’.



Web pages for mobile devices still use HTML, it’s just the CSS styles that are different



The new HTML5 specification has been drawn up by the W3C, an organisation set up to act as the gatekeeper for web standards

been grouped using the same single nondescript tag, `<div>`. This tag is, by itself, nothing more than a method for delimiting different pieces of information so that it might be used around a navigation bar, or just as likely around an article on a web page. As HTML5 has been introduced, new semantically orientated tags have been introduced that allow designers to mark up navigation with a `<nav>` tag, headers with a `<header>` area and articles with `<article>`. There are more of these semantic tags available, but some browsers are still implementing HTML5 so we're in a period of transition where you'll still see a huge number of plain old `<div>` tags used.

What about Flash?

Up until the launch of the iPhone, the de facto method for presenting interactive rich content (with animated elements, video and audio) was Adobe Flash. This is a plug-in that sits inside an HTML document, but runs as a separate program within the web browser. When Apple released the iPhone it decided not to support Flash, largely because of the problems Flash had with crashing browsers, and the lack of support for touch screens. This decision helped kick-start a movement away from the plug-in towards the combination of HTML, CSS and JavaScript.

Whereas five or six years ago most interactive image galleries were created using Flash, today the majority are rendered using standard HTML and either CSS, JavaScript or most commonly both. Flash is still useful for certain types of content – it's a very popular method for showing video on the web (although this will change as HTML5 is fully implemented by browsers), and games are currently easier to code in Flash.

Flash isn't nearly as accessible as HTML, either from a developer point of view or from a user perspective, especially with regard to disability access. Adobe has worked to improve this over the years, but the technology isn't ever going to be as accessible as a plain-text-based system such as HTML.

HTML: function, not form

In the early days of the internet, HTML included a large variety of methods for changing the way



The new features in HTML5 allow you to embed video and audio directly in your pages, and when combined with CSS can provide amazing special effects

content displayed. For example, an early option was the `` tag which allowed you to specify the typeface that you'd like the content and information to be rendered in. This allowed designers to very precisely choose how their content was displayed, but when a website consisted of 50 pages and the designer wanted to

What's next for HTML?

HTML has come a long way since its invention in a computer lab in Switzerland, and it's continuing to develop. The HTML5 specification is already partially implemented in browsers, but other elements of the language are still being discussed, and there's a good probability that

“HTML has come a long way since its invention in a Swiss lab”

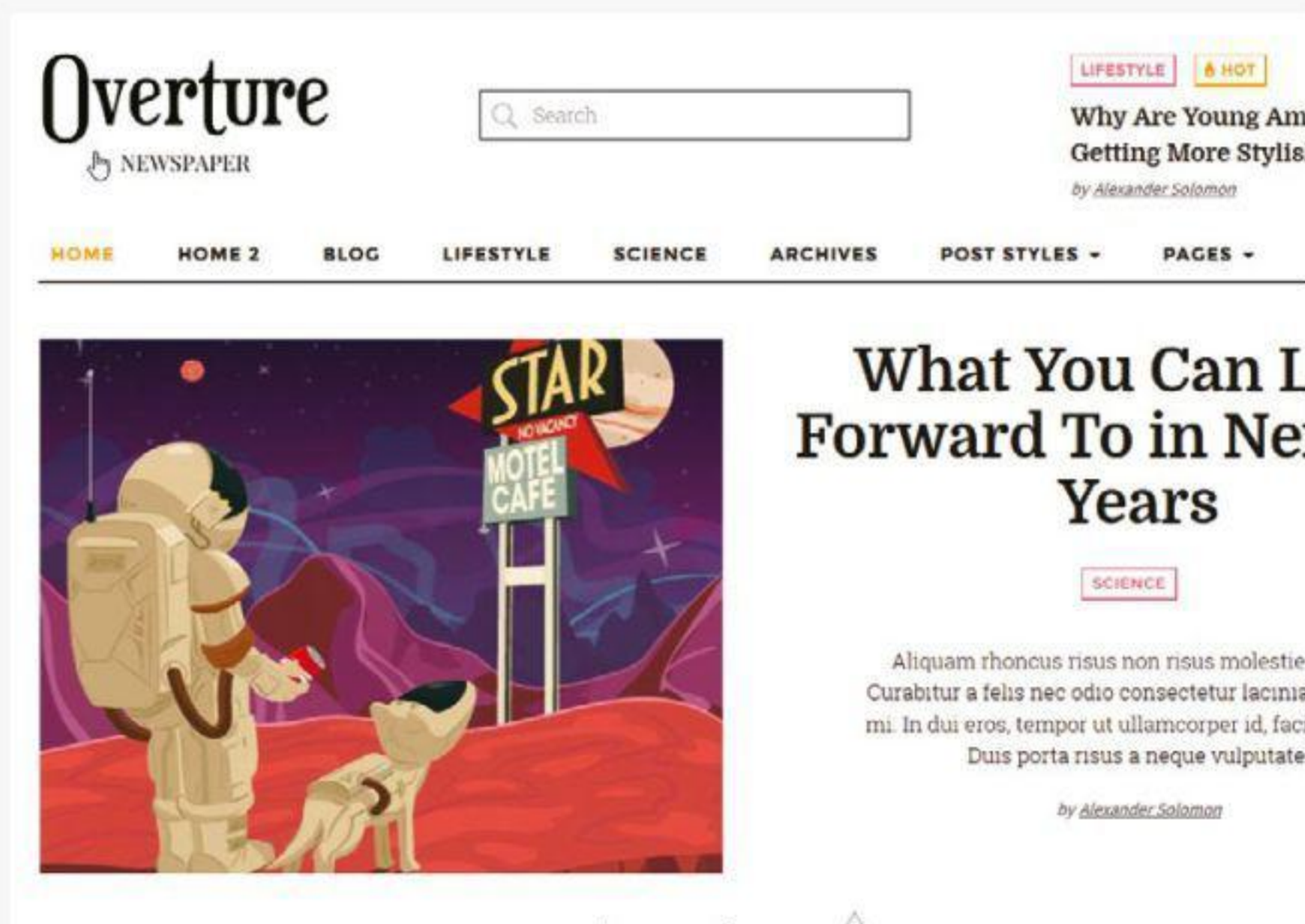
change the font, it was a mammoth task to work through every page and replace every single reference to the choice of font.

As a solution, CSS was introduced. CSS, as you'll see elsewhere in this book, is a system for applying styles – defining the form and aesthetic of a page. This means that now we can treat HTML as a structural language only – we don't define the way a web page looks using HTML, just how it's structured and content arranged in a semantic hierarchy. The net result is that by separating form and function we can now change a font that's used throughout a big website with just a single change to the CSS style sheet, saving time and ensuring design consistency throughout.

we'll see further enhancements in the coming years such as the ability to specify different resolution images to be downloaded to desktop computers from those sent to mobile devices.

There's been an explosion in smartphone use over the past few years which has led increasingly to the web being accessed on the move. These devices have a different screen orientation to the traditional computer, often have less bandwidth and computing power, but expect to have a fantastic browsing experience. The HTML language, through HTML5, is already adapting to meet this challenge, but as the specification matures you can expect to see further enhancements with this usage scenario in mind. It's an exciting time to be a web designer!

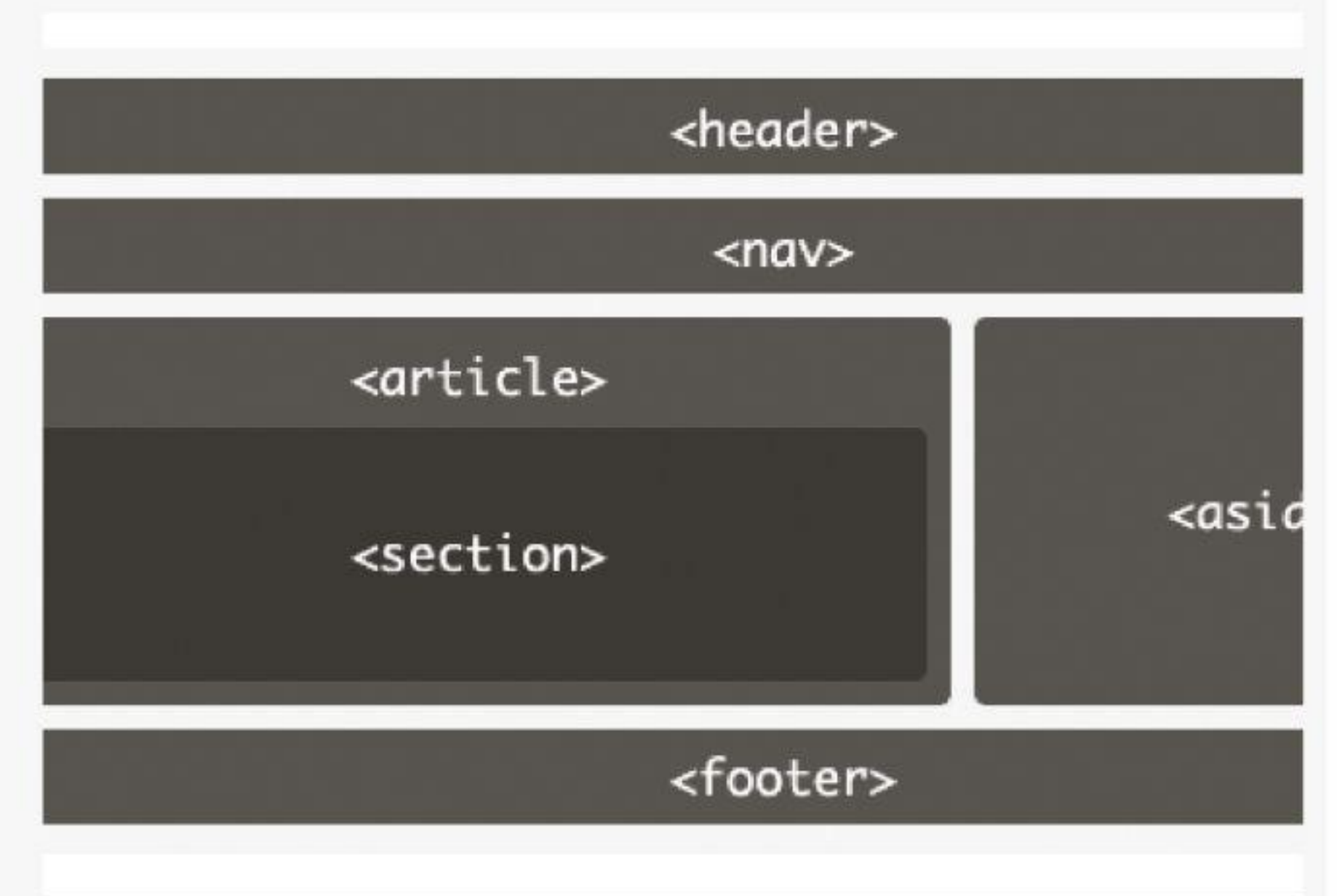
Common HTML tags



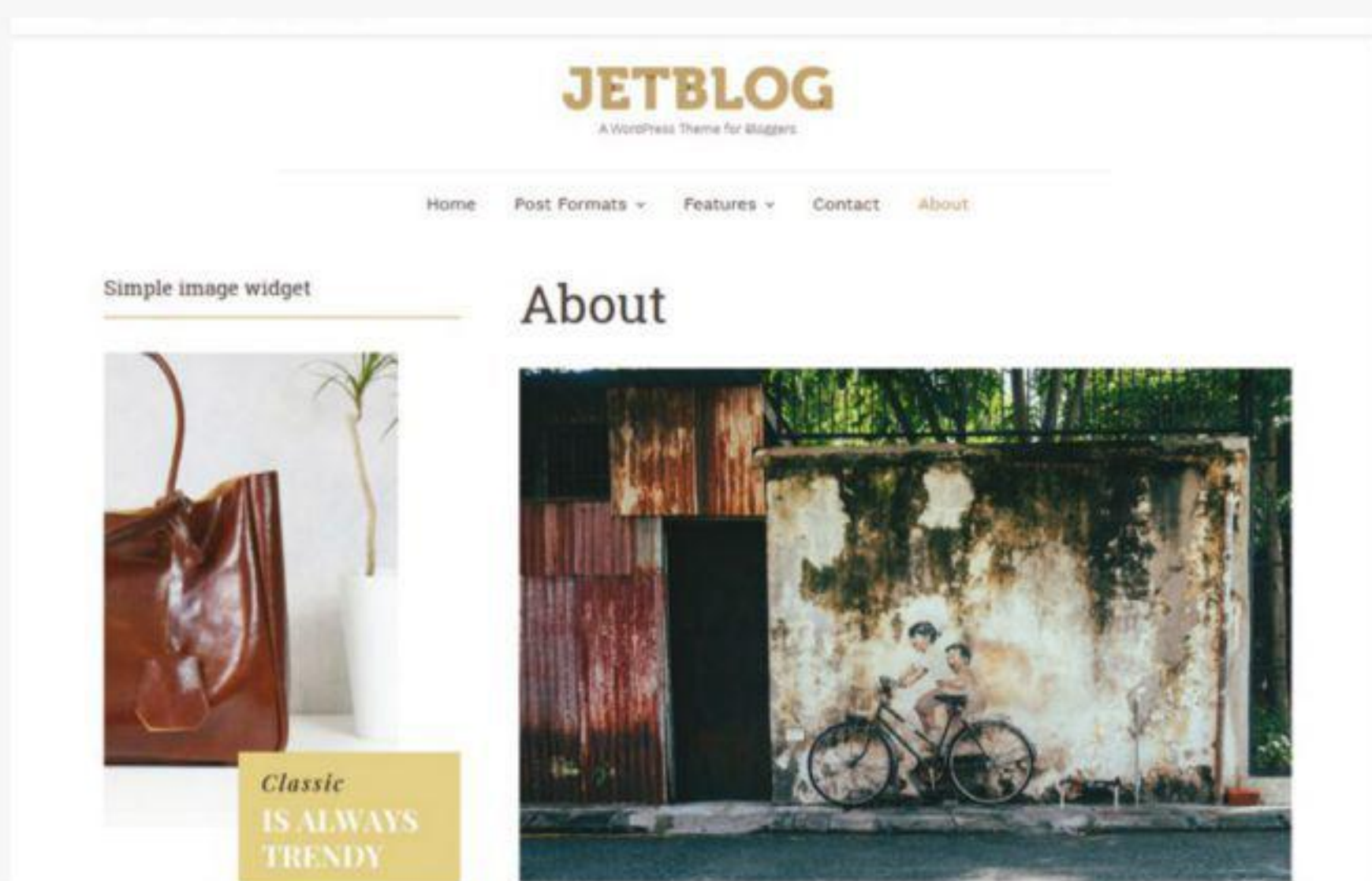
The `<h1>` tag is one of six different heading tags (ranging from `<h1>` to `<h6>`). This signifies the most important piece of information on your page, or in the section, and is akin to a chapter name or book title.



The `<p>` tag has to be the most common in use on the web. It marks up a piece of text as being a paragraph. Individual paragraphs can also be grouped into articles with another tag as you will soon see...



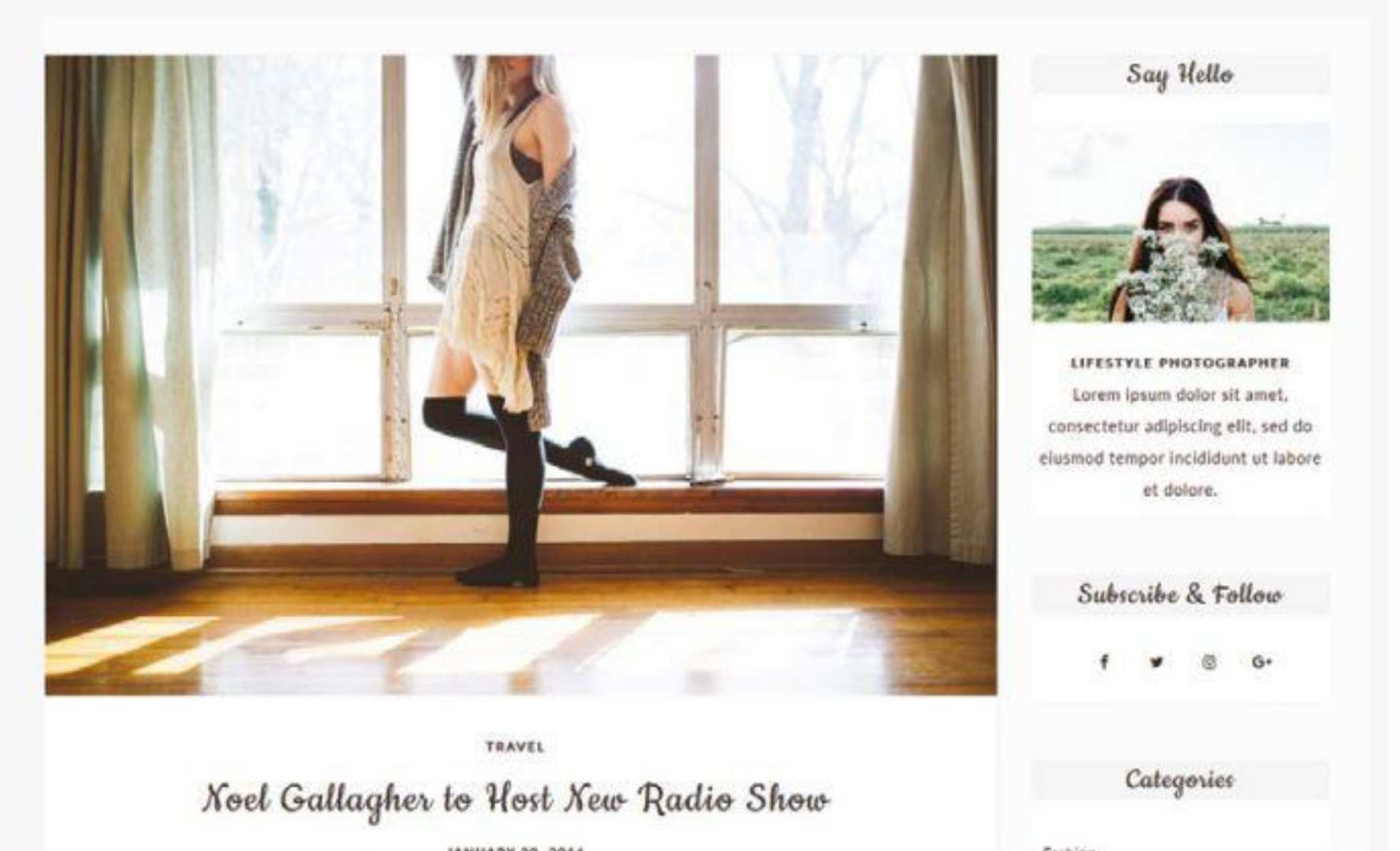
The `<article>` tag is brand new to HTML5. This handy tag enables you to mark a set of content as being part of one story. An article can contain many heading, paragraphs, images and other assets.



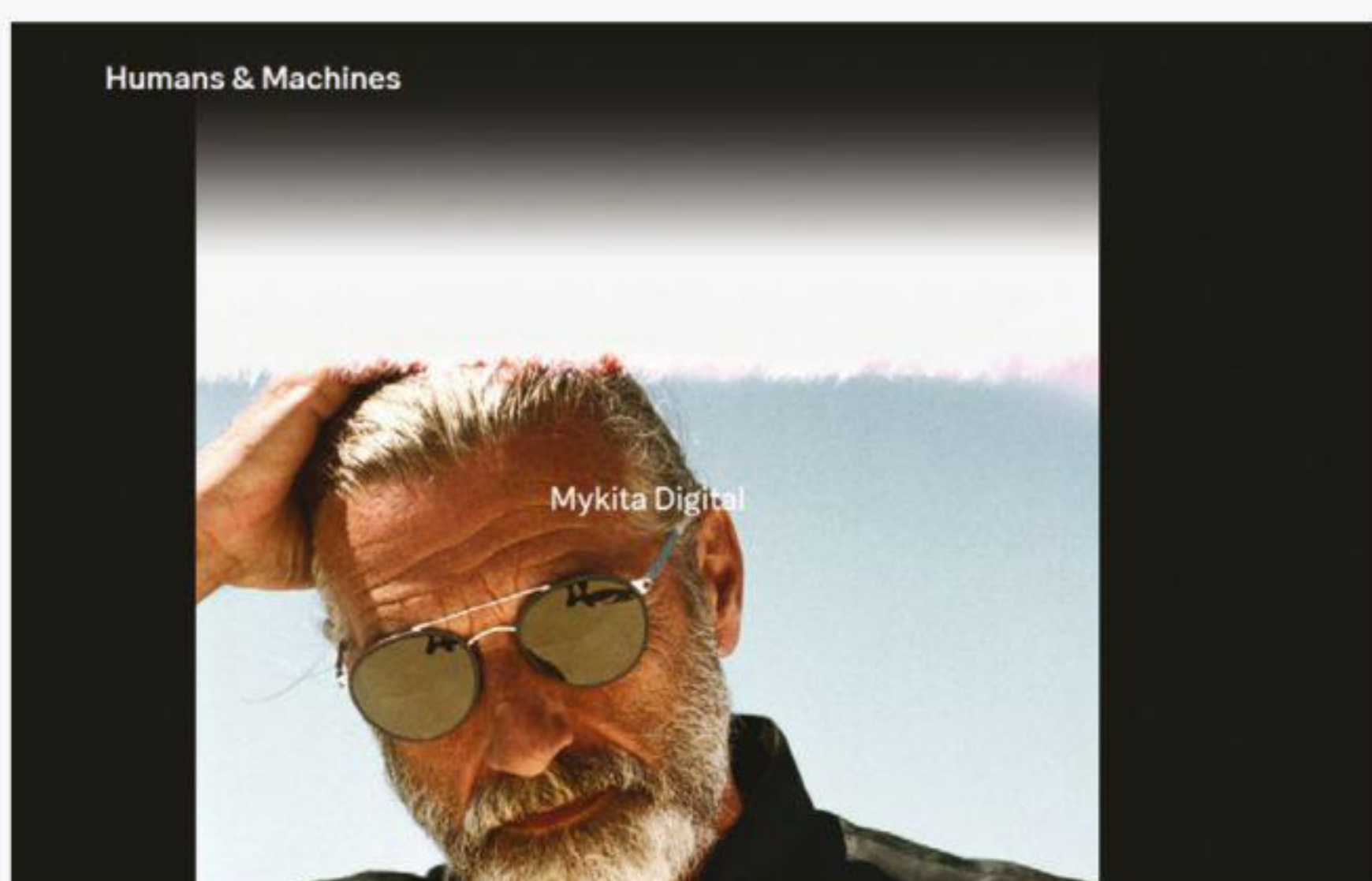
The `<section>` tag is also new to HTML5 and allows you to mark up content into sections. Each section can contain a single item, or a collection of related items. This tag is designed to allow you to mark up semantically, while still providing hooks for CSS.



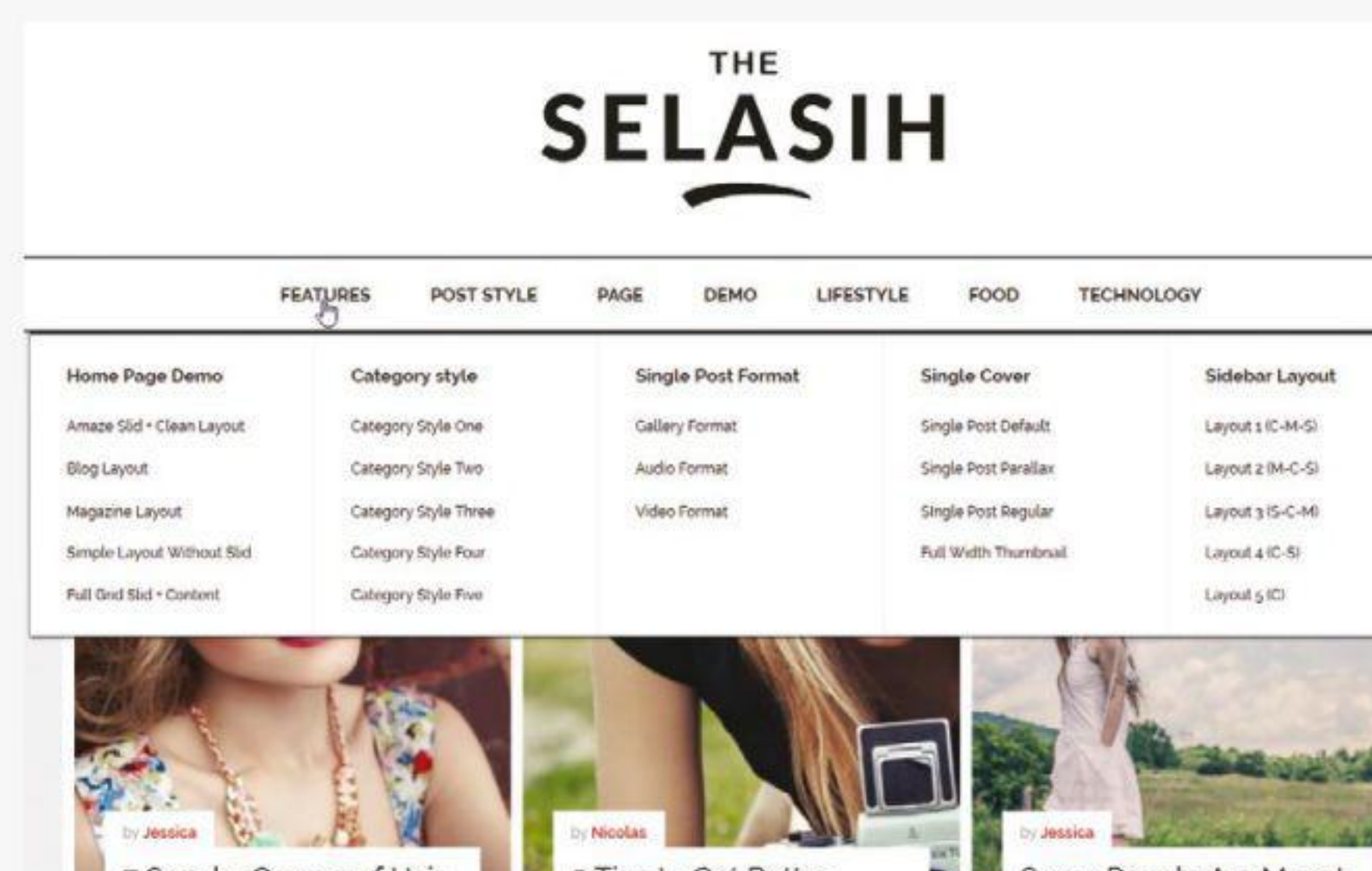
The `<a>` tag is perhaps the most important tag of all. This anchor tag enables you to connect different web pages together with a link. Without the `<a>` tag, there wouldn't be a web so much as a collection of isolated pages that you'd need to remember the addresses for.



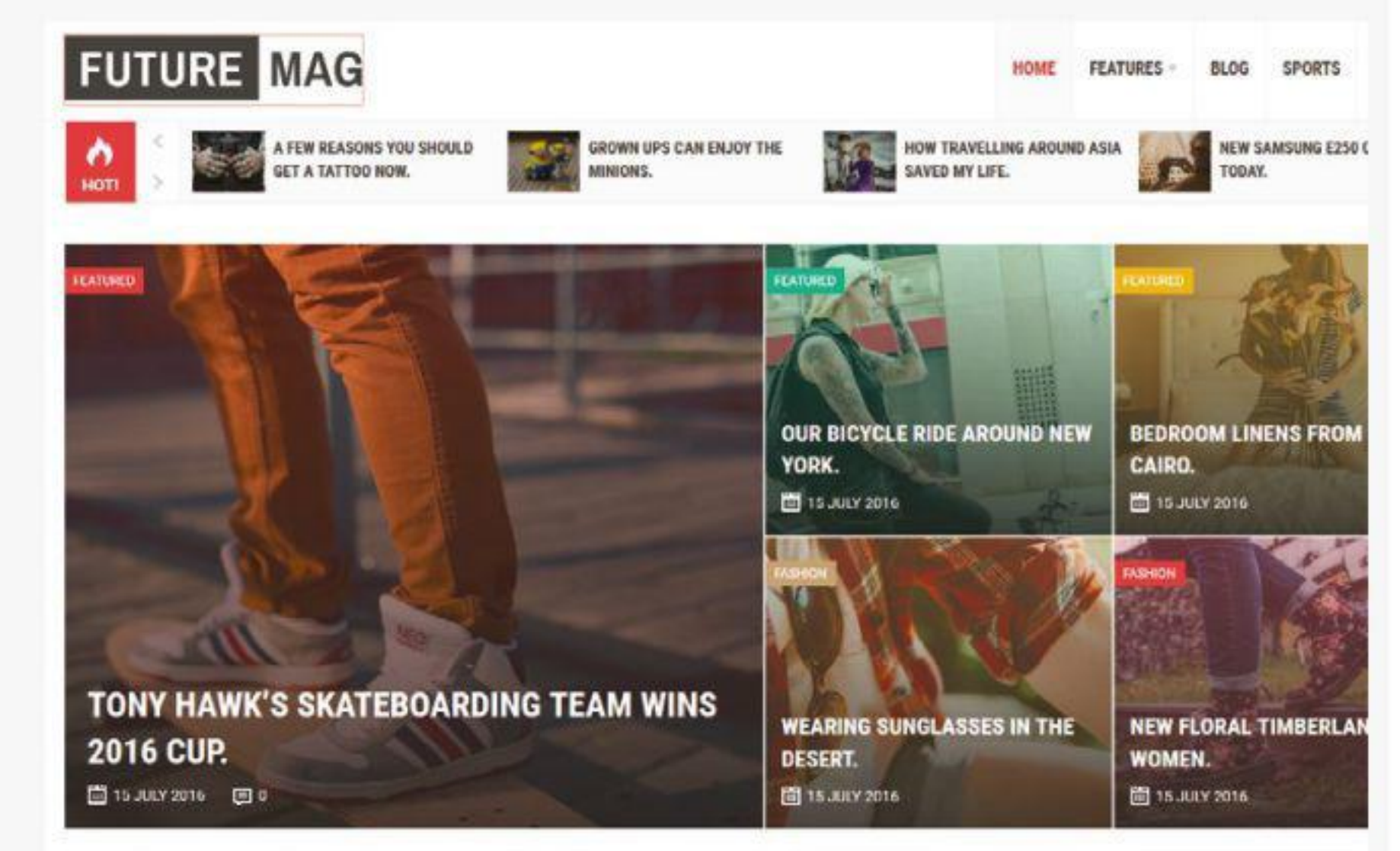
The `<aside>` tag is a great addition to the HTML5 specification. It allows you to mark up content as being not wholly related to the main content of your page, section or article. This is typically used for sidebars and other nonessential, but interesting, information.



The `<header>` tag allows you to mark up a section of your page, section or article as containing the masthead or header information for that content. For an article, this would be a heading and perhaps an image, while for a page it might be your logo and page navigation.



The `<nav>` tag simply marks up an area that is responsible for the navigation on your page. Typically it will contain many `<a>` tags, separated by an unordered list (using the `` tag) and individual list items.



The `` tag allows you to call in images into your page. It accepts a series of attributes that specify the location of the image on the web, the width, height and some alternative text for screen readers or to be shown in the event the image can't be found.

Create a basic layout

Code up your first basic skeleton for a two-column webpage using HTML5

In this tutorial we'll make an HTML5 layout for a simple webpage. While initially HTML may look confusing, there's a relatively small amount of code that you'll need to remember. There are a few basic building blocks such as `<div>` which you will find yourself using regularly, then others such as `<caption>` which you will use much less often.

If you have made pages before in the past using HTML4 then you should feel at home, just be aware of the new tags. If you've not written any HTML before then good news, as it's now easier to understand! HTML5 has added in a lot of new

elements which help the browser interpret the layout of the page easier. `<header>` and `<footer>` are two examples, and describe common top and bottom elements of a page respectively.

When starting out in web design it's important to remember to 'open' and then 'close' tags correctly. Opening a tag looks like `<example>` while closing

with `</example>`. Note the `/`. Any thing within those two elements will be considered its children; they are contained within the element. This is important to remember when you later use CSS and then JavaScript. So open your text editor of choice – be it NotePad on Windows, TextEdit on Mac, or something more high-end – and let's get started!

“There's a relatively small amount of code that you'll need to remember”

A simple two-column page

The parts of the skeleton of an elementary webpage

The head tag

While usually invisible to the website visitor, the head tag contains important information for the browser, such as CSS styles as well as search engine information

Header tag

The header differs from the head, as it's contained within the body of the HTML page, meaning it gets displayed in the browser. The header usually contains company insignia, navigation and possibly an introductory image

Footer

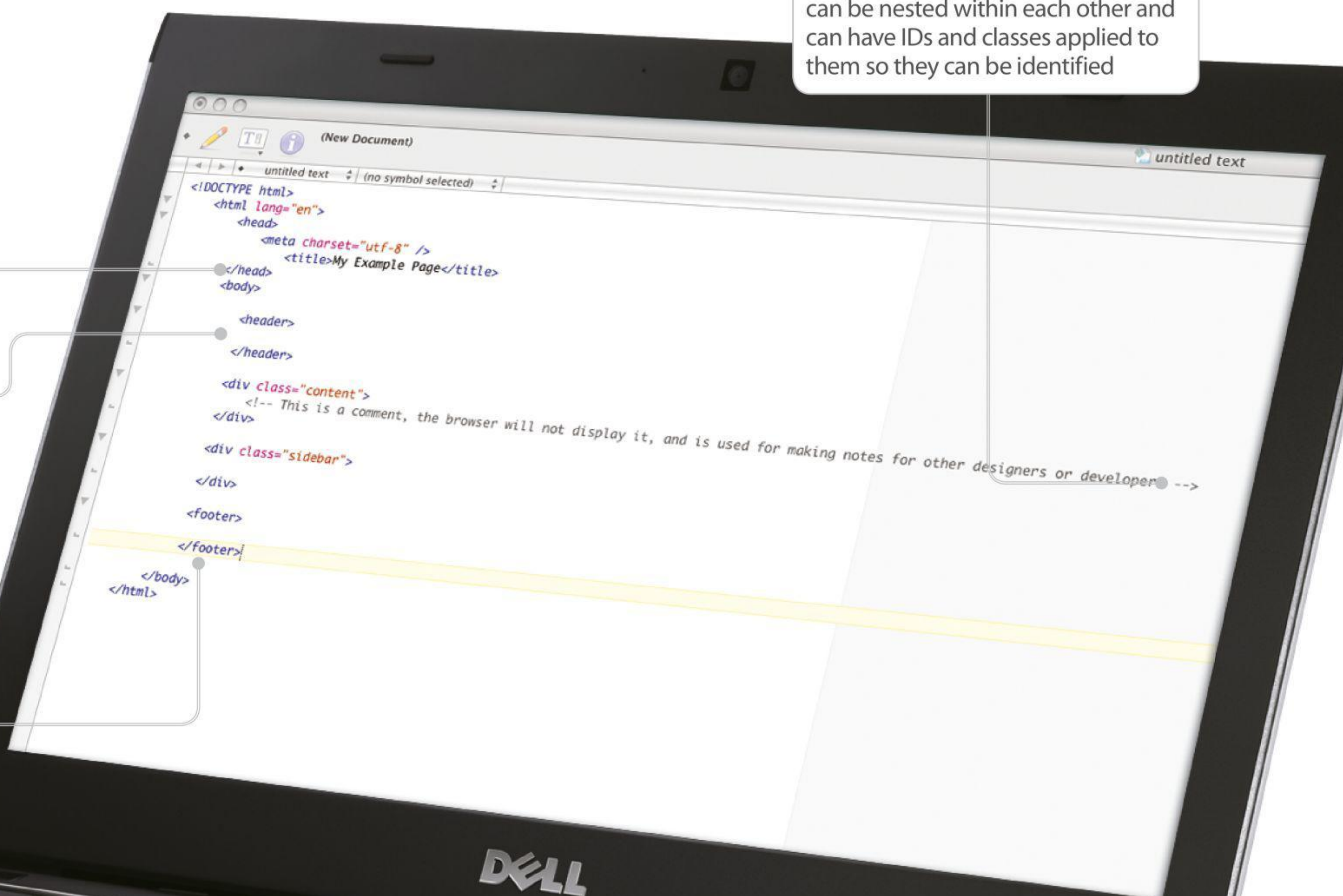
The footer tag denotes an element that usually goes at the bottom of the content, and contains items such as author, contact info, telephone numbers etc

Div tag

A div is used to group content together, in this case we use it to display our content and sidebar. Divs can be nested within each other and can have IDs and classes applied to them so they can be identified

NEW ELEMENTS IN HTML5

In this tutorial we use a few tags that were only introduced in the HTML5 specification. Elements such as 'header' and 'footer' in HTML4 would be defined solely by a class or ID applied to a div. It's important to remember that some older browsers may not recognise these new elements correctly. A remedy to this is to use JavaScript solutions such as Modernizr or HTML5Shiv.



```
<!DOCTYPE html>
<html lang="en">
</html>
```

01 The HTML base

First up, the doctype tells the browser what kind of content to expect. In HTML5 it's simple: `<!DOCTYPE html><html lang="en"></html>`.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
</html>
```

02 Create the head

Next up is the `<head>` element, where we place all the files we wish to include within our page, eg CSS style sheets, which we'll learn about later.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
  </body>
</html>
```

03 Add the body

The `<body>` is where all the viewable page content goes. In it we'll add the header, the main content area, sidebar and a footer perhaps for a sitemap.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
  </body>
</html>
```

04 Add the header

The `<header>` is typically used to hold the main site image, with a title and possibly site navigation. You can have multiple `<header>` tags on a page.

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
    </div>
    <div class="sidebar">
    </div>
  </body>
</html>
```

05 Sidebar and content

The main content can be placed within a 'div', then a class applied to it: `<div class='content'> </div>`. The sidebar can be placed after it, also with a class.

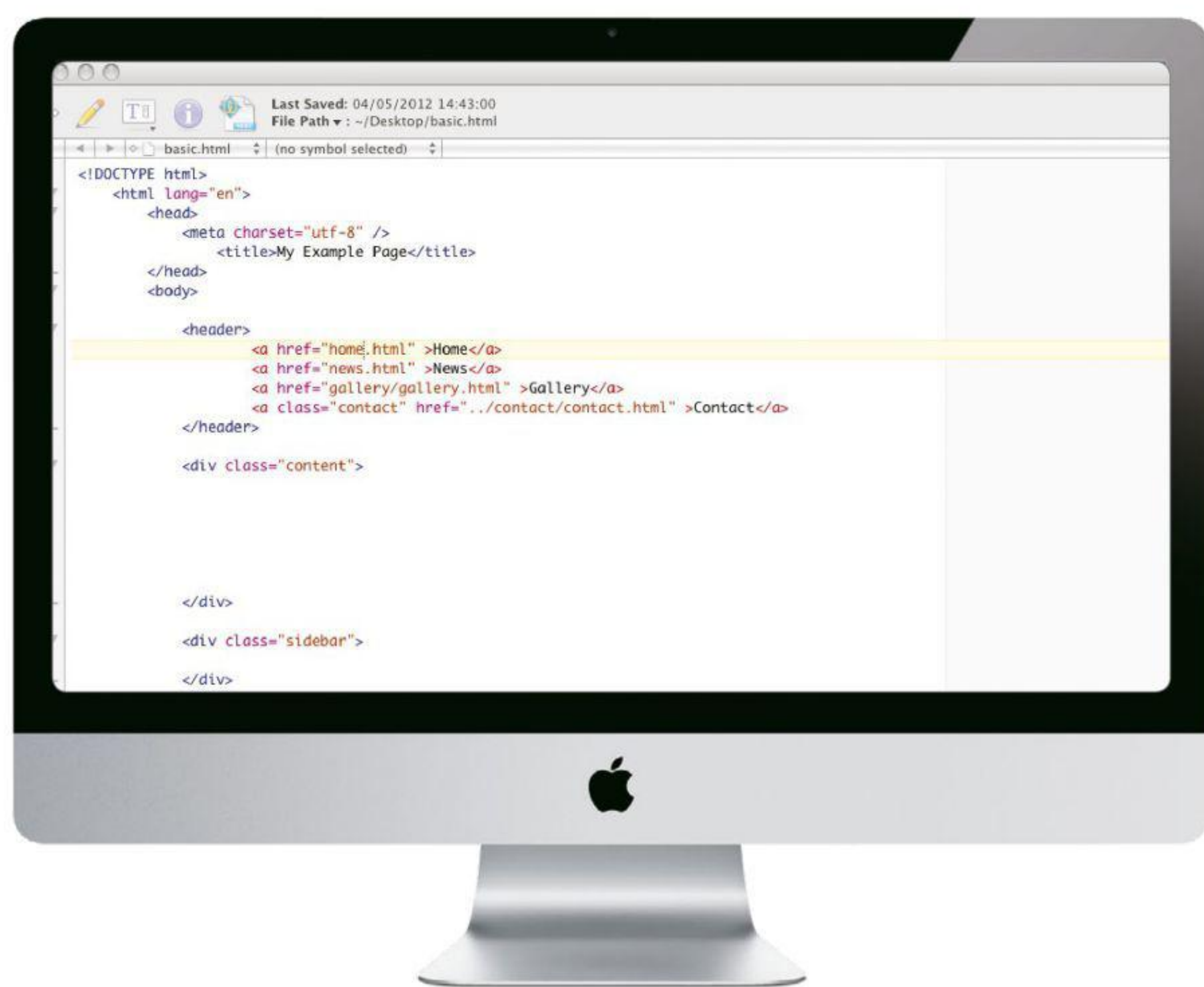
```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
    </div>
    <div class="sidebar">
    </div>
    <div class="footer">
    </div>
  </body>
</html>
```

06 Add the footer

The `<footer>` element usually contains quick links to common areas of the site such as 'Contact us', and sometimes has copyrights or addresses.

Code a link

Adding in links to other pages in your site and external sites is a key part of web design



While links may seem like a simple element to add to a webpage, they are the key building blocks of the entire internet. Imagine having to type a different address into the browser for every single page you wanted to visit on the web! Similar to pages within a book, separate webpages within a website help to break up content by topic or purpose. Then, by adding in a navigation bar or something similar to your site, it means that visitors will be able to quickly move to the content that they are interested in.

Links are also one of the most important elements that Google and other search engines use to find and index your site. The kind of content that you link out to, and the kind of content contained within sites that link to your pages, are vital in informing the search engine on how to categorise your site for its search results.

This tutorial will take you through adding in links leading to other pages in your website, and how to link out to other people's sites. Once you have added some links, your site can start to function how it's intended to, with visitors being able to view all the content contained with ease.

“Links are the key building blocks of the entire internet”

Adding in links to pages

Adding links to other pages is straightforward

Link text

The link text is what your user will see, so make sure it's descriptive. Try to avoid using 'click here'; instead, word the surrounding text, eg view my `gallery`

Default styling

Without adding in any styling of your own, links will be underlined and blue, and once visited will turn purple. Your cursor will also change appearance in most browsers

<a> tag

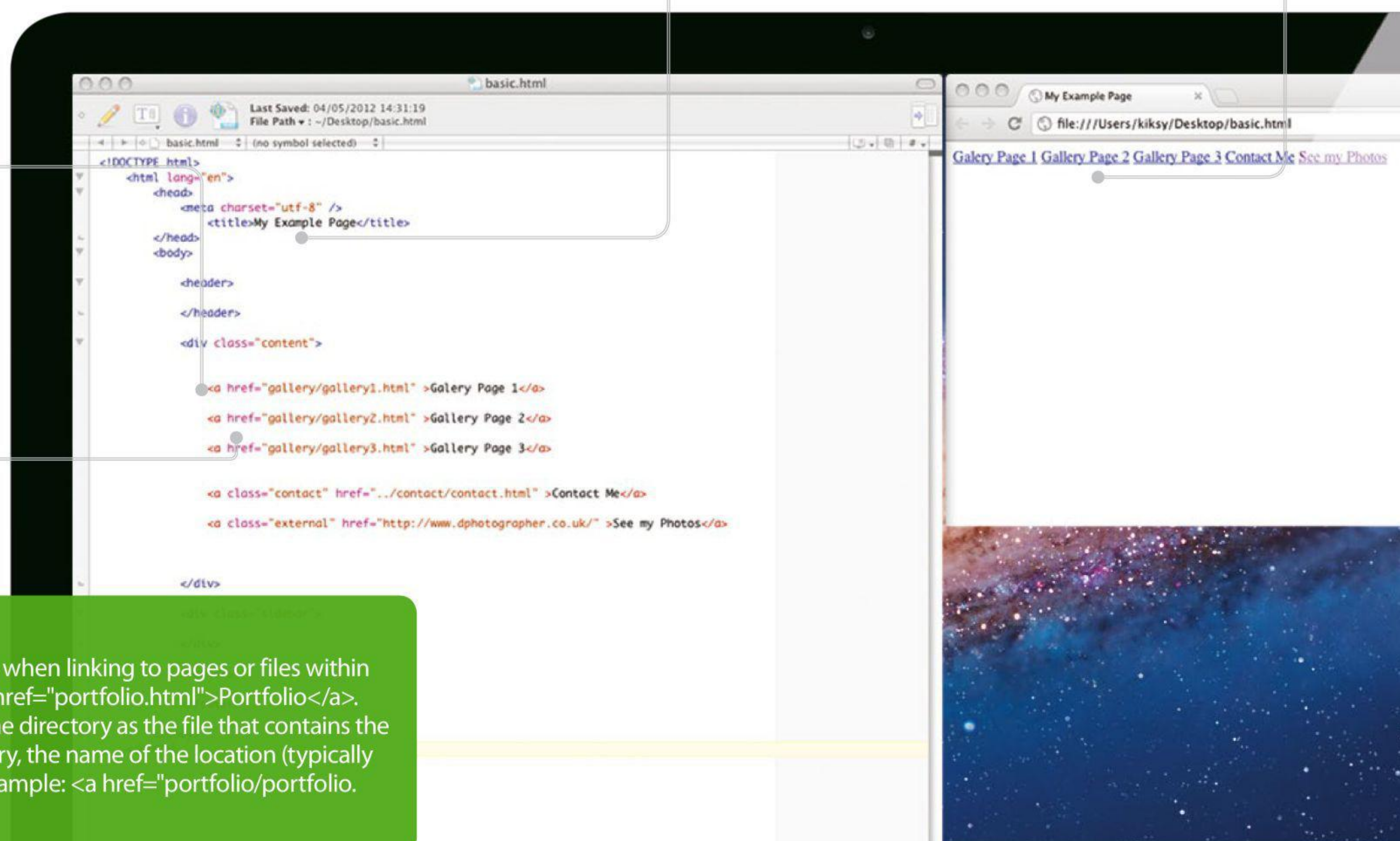
The `<a>` tag is what denotes a link, and is used on practically every webpage on the internet to link to other documents and sites

href

The 'href' part is where you enter in the destination for the link. Usually this will be somewhere else within your site, but it can also be to another page on the internet

RELATIVE PATHS

Relative paths or links, can only be used when linking to pages or files within a site directory. A simple example is `Portfolio`. This assumes that the page is in the same directory as the file that contains the link. To link to a file in a different directory, the name of the location (typically a folder) will need to be included, for example: `Portfolio`



```
(New Document)
untitled text (no symbol selected)
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <a />
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>
```

01 The basic 'a' tag

A link is denoted using the 'a' tag, short for anchor. We have already briefly touched on this when we looked at common HTML tags. To start off your link, enter in: `<a> `. However, unlike some other HTML tags, an anchor needs a little more information in order for it to work properly.

```
(New Document)
untitled text (no symbol selected)
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <a href="http://www.webdesignermag.co.uk" />
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>
```

02 Href

The link needs a destination so that when it's clicked, the browser knows where to go. This is added in using 'href'. For example, `` would send the browser to that external website.

```
(New Document)
untitled text (no symbol selected)
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <a href="contact/contactme.html" />
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>
```

03 Internal links

To link to another page in your own site, you simply add the name of the page; eg ``. This assumes that the contact.html page is within the same folder as the page we are working on. See the 'Relative paths' boxout for more information.

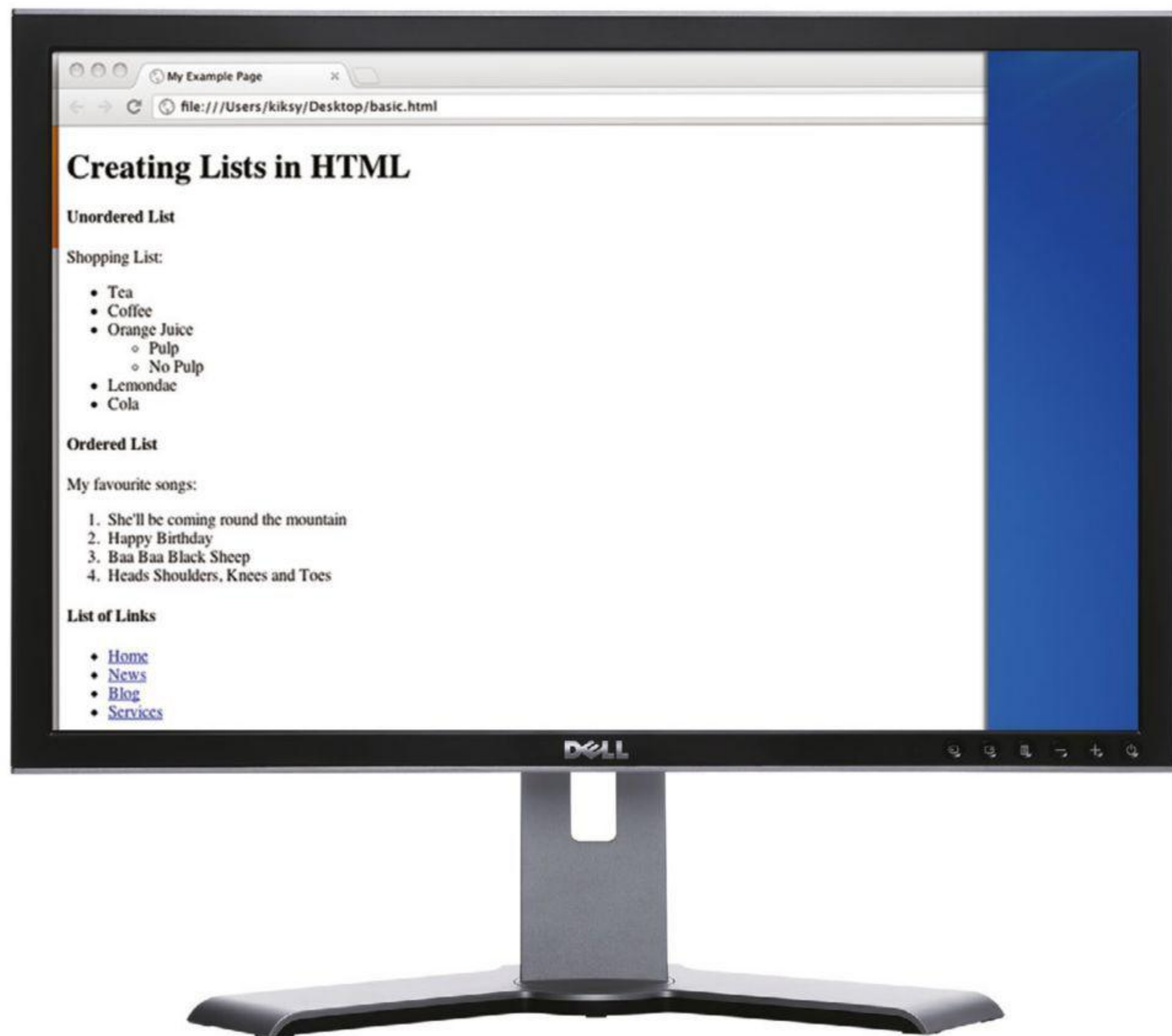
```
(New Document)
untitled text (no symbol selected)
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <a href="gallery.html" >View My Gallery</a>
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>
```

04 Add link text

To make the link visible to the user, add in some text between your opening and closing `<a>` tags. For example: ` See My Gallery`. Open the page in your browser, and assuming the gallery.html page exists in the same directory, clicking the text will take you there.

Create lists in your website

Learn how to quickly create various lists within your webpages using HTML



Lists are an effective way of presenting important information in a way that's quick and easy for your audience to read and digest. They are also a good method for giving a brief overview or introduction of the content to follow, helping your users find what it is they are looking for.

Coding up a list in HTML is quick and very straightforward, and once you've got the hang of the basics you can start to apply your own styles using CSS to make them really stand out from the crowd, which we'll come to later.

There are two main types of lists in HTML: ordered and unordered. An ordered list starts at one and then increases. This is useful when you need to prioritise certain entries and give preference those that appear higher up. Alternatively, ordered lists are essential if you want to display a step-by-step guide that's easy to follow.

An unordered list is simply bullet-pointed; this style is useful when you just need to display a list where the order is irrelevant. By default, lists will be indented from the surrounding content and a circular bullet point will be used.

This tutorial will show you how to add lists to your pages, both ordered and unordered, and also how to create lists within lists. The only thing you need to bear in mind is not to go overkill with lists, leaving your content boring and 'listless'!

“Coding up a list in HTML is quick and very straightforward”

Types of lists in HTML

Using the list tags to create ordered and unordered lists

Links within lists

Links can be put into lists simply by wrapping an `<a>` tag around the text. This is great for making menus and navigation items

Unordered list

An unordered list is simply a series of items grouped together. By default they will be indented and each item will have a bullet point next to it

Nested lists

Lists can be embedded within other lists simply by opening and closing a `` or `` within another list. These are then indented further, and show a white bullet point

Ordered list

An ordered list automatically applies numbers of ascending value to each item within it. This is useful when you need to prioritise content, for example

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <h3>Creating Lists in HTML</h3>
      <h4>Unordered List</h4>
      Shopping List:
      <ul>
        <li>Tea </li>
        <li>Coffee </li>
        <li>Orange Juice </li>
        <ul>
          <li>Pulp</li>
          <li>No Pulp</li>
        </ul>
        <li>Lemondae </li>
        <li>Cola </li>
      </ul>
      <h4>Ordered List</h4>
      My favourite songs:
      <ol>
        <li>She'll be coming round the mountain</li>
        <li>Happy Birthday</li>
        <li>Baa Baa Black Sheep</li>
        <li>Heads Shoulders, Knees and Toes</li>
      </ol>
      <h4>List of Links</h4>
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">News</a></li>
        <li><a href="#">Blog</a></li>
        <li><a href="#">Services</a></li>
      </ul>
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>
```

DEFINITION LISTS
There is one other type of list in HTML – the definition list. It's quite rarely used but allows an indented description to be added to each list item. An example definition list would be:

```
<dl>
  <dt>Snowboard</dt>
  <dd>- Great for freestyle tricks</dd>
  <dt>Cross Country Skis</dt>
  <dd>- Ideal for exploring on</dd>
</dl>
```



```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <!-- My shopping list -->
      <ul>
      </ul>
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>

```

01 Unordered list

An unordered list by default is shown slightly indented with a bullet point denoting each item. To add in an unordered list you use the `` tag. Remember to close it with a ``.

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <!-- My shopping list -->
      <ul>
        <li>Tea </li>
        <li>Coffee </li>
        <li>Orange Juice </li>
      </ul>
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>

```

02 Add list items

Within your list, items are added using the list item tag like so: ` `. Text can go between the open and close li tags; for example: ` Tea `. Remember that the li tags must go within your `` tag.

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <!-- My shopping list -->
      <ul>
        <li>Tea </li>
        <li>Coffee </li>
        <li>Orange Juice </li>
        <ul>
          <li>Pulp</li>
          <li>No Pulp</li>
        </ul>
        <li>Lemondae </li>
        <li>Cola </li>
      </ul>
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>

```

03 Nested lists

Lists can be embedded within other lists just by opening and closing a new `` within another ``, and then list items can be added to that too. They will then be indented again within that ``.

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <header>
    </header>
    <div class="content">
      <!-- My shopping list -->
      <ol>
        <li>Tea </li>
        <li>Coffee </li>
        <li>Orange Juice </li>
        <ul>
          <li>Pulp</li>
          <li>No Pulp</li>
        </ul>
        <li>Lemondae </li>
        <li>Cola </li>
      </ol>
    </div>
    <div class="sidebar">
    </div>
    <footer>
    </footer>
  </body>
</html>

```

04 Ordered lists

If you wish to number your list items then you can use the `` tag in place of the ``. This will then replace the bullet points with ascending numeric values for the list items.

Learn to use div tags

Learn about the all-important div tag in HTML and how it's used to group content

An HTML page is made up of a series of tags that tell the web browser what to display and where. The main building block of a page is a div tag, short for division. If you look at a newspaper page, you will see that text is grouped together in columns. Images with captions are also together with a margin around them. A div in HTML is similar to this, and it's usual to group together content in a similar way. While HTML5 has added a few new tags with more semantic names such as 'header' and 'footer', the main body of most pages is still constructed using divs.

There is no limit on how many divs you have within a page and most webpages you visit online will contain many, all nested within each other. Divs can contain text, images, video and audio, as well as other HTML elements such as articles and sections.

This tutorial will show you how to make your first divs and then how to apply an ID or class to them so when you're ready you can apply CSS styles, or use JavaScript on them. We'll be using plenty of them throughout the book!



Properties of the div

Divs, classes and IDs

Indenting divs

Once your pages get more complicated, they can feature many divs all nested within each other. This can make it hard to track where one opens and another closes. It's standard practice to indent the content of a div using the tab button

Div classes

Classes are widely used in web development to allow CSS styles to be associated with elements within your HTML page

IDs

IDs are used in a similar way to classes, but there should only be one element on a page with a particular ID. IDs allow you to target specific elements using JavaScript for manipulation

Code highlighting

Most HTML editors offer code colour highlighting of some sort. This can help you when checking which divs have classes applied etc

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>
    <div class="contentRed">
      This is a div with a class applied
    </div>
    <div id="leftSection">
      This is a div with an id applied
    </div>
    <div class="mainWrapper">
      <div class="leftColumn">
        This is a div within a div.
      </div>
      <div class="rightColumn">
        Another div within a div.
      </div>
    </div>
  </body>
</html>
```

Indenting divs
Once your pages get more complicated, they can feature many divs all nested within each other. This can make it hard to track where one opens and another closes. It's standard practice to indent the content of a div using the tab button

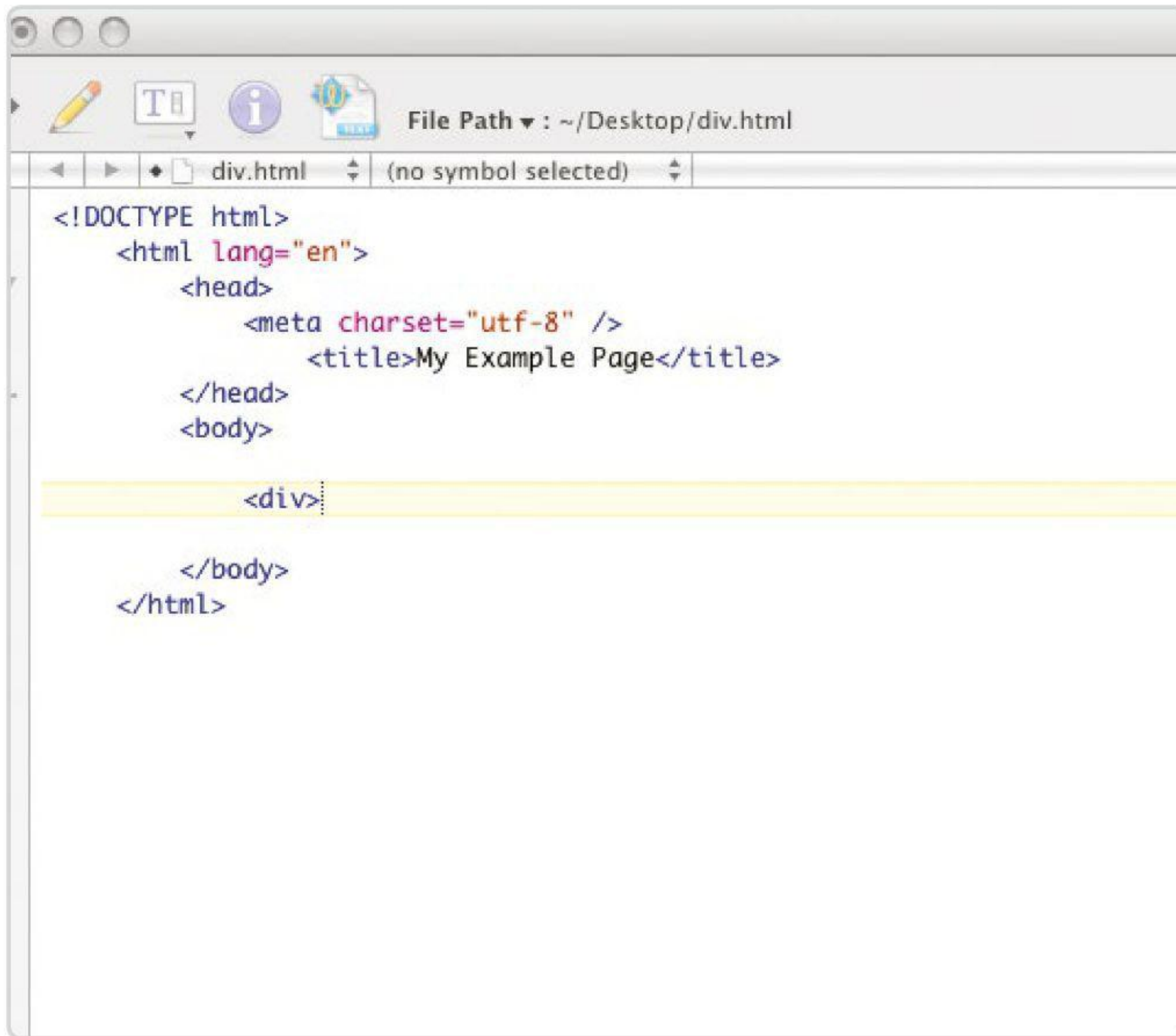
Div classes
Classes are widely used in web development to allow CSS styles to be associated with elements within your HTML page

IDs
IDs are used in a similar way to classes, but there should only be one element on a page with a particular ID. IDs allow you to target specific elements using JavaScript for manipulation

Code highlighting
Most HTML editors offer code colour highlighting of some sort. This can help you when checking which divs have classes applied etc

NESTING DIVS
Many webpages are made up of a few main elements such as a header and footer, and then a main content div. Within a div it's possible to have other divs. For example:
`<div id="content">`
 `<div class="leftColumn"`
 `</div>`

 `<div class="rightColumn"`
 `</div>`
`</div>`
Doing this allows you to have a universal style to the 'content' div, and then apply different styles to the divs contained within.



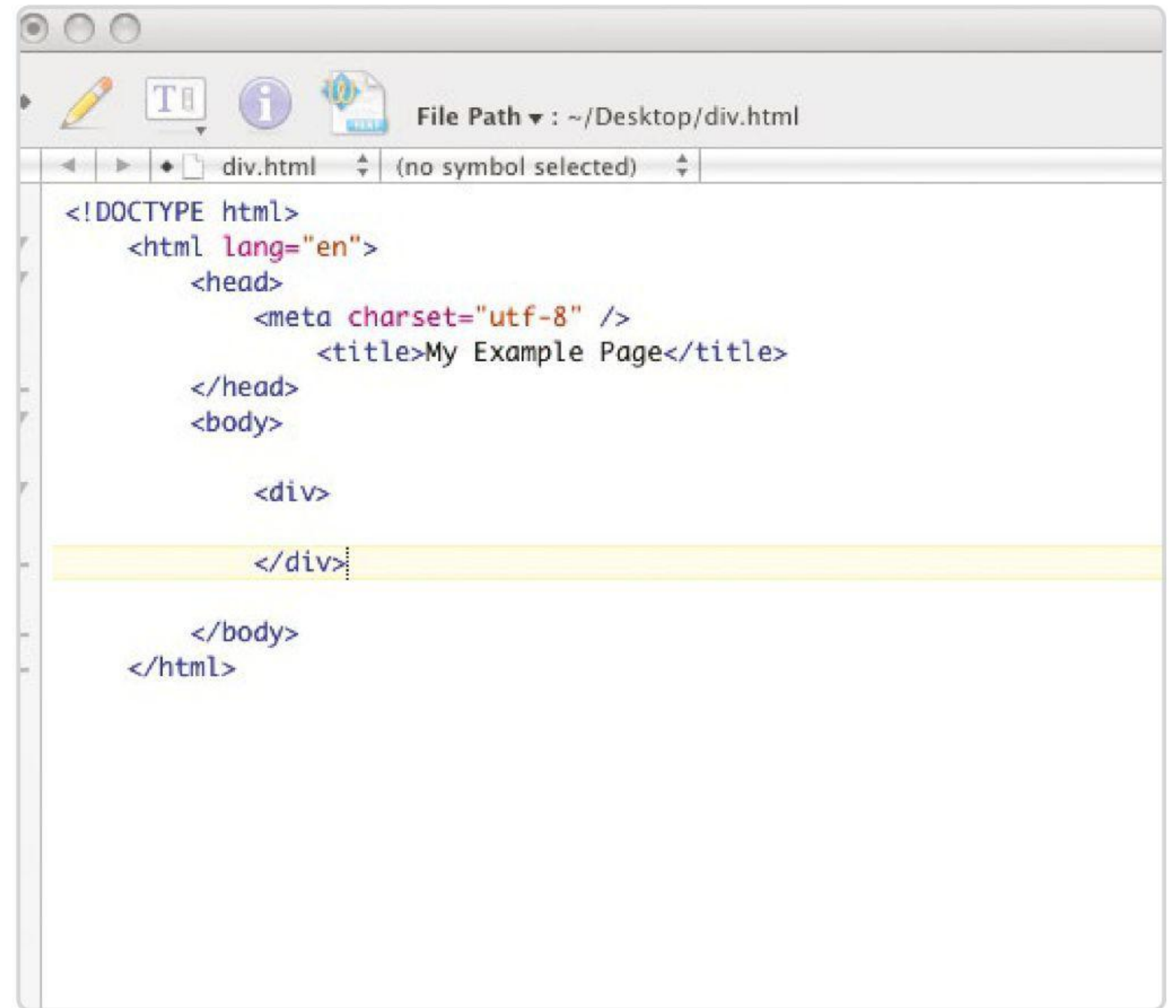
```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>

    <div>

  </body>
</html>
```

01 The basic div

A div is started by using this simple piece of code: `<div>`. Following on from that, you can then insert all the content you want to contain within the div.



```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>

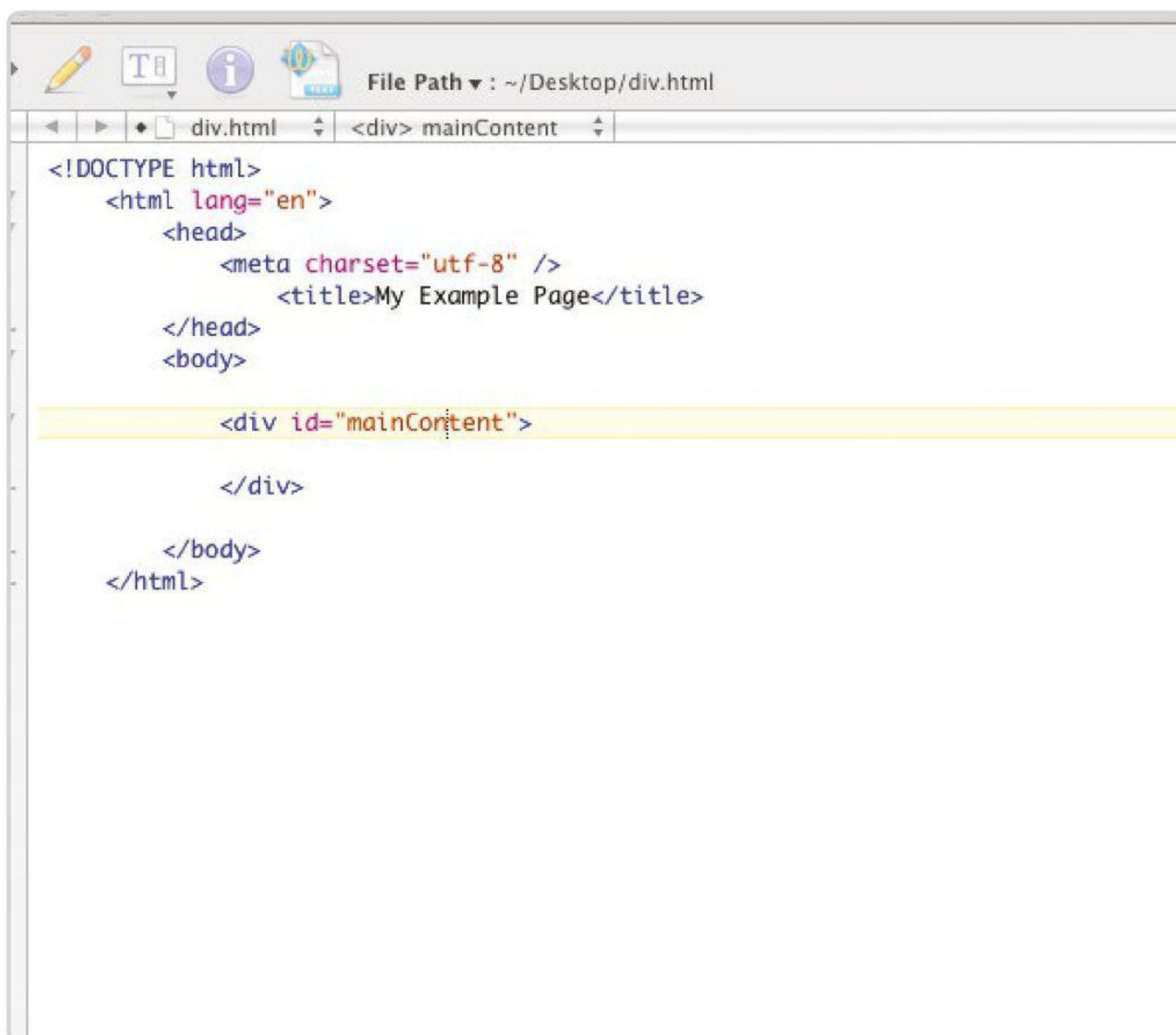
    <div>

  </div>

</body>
</html>
```

02 Closing the div

Once you have inserted all the content, you need to make sure you close off the div by using `</div>`. Note the forward slash denoting the ending of the current div.



```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>

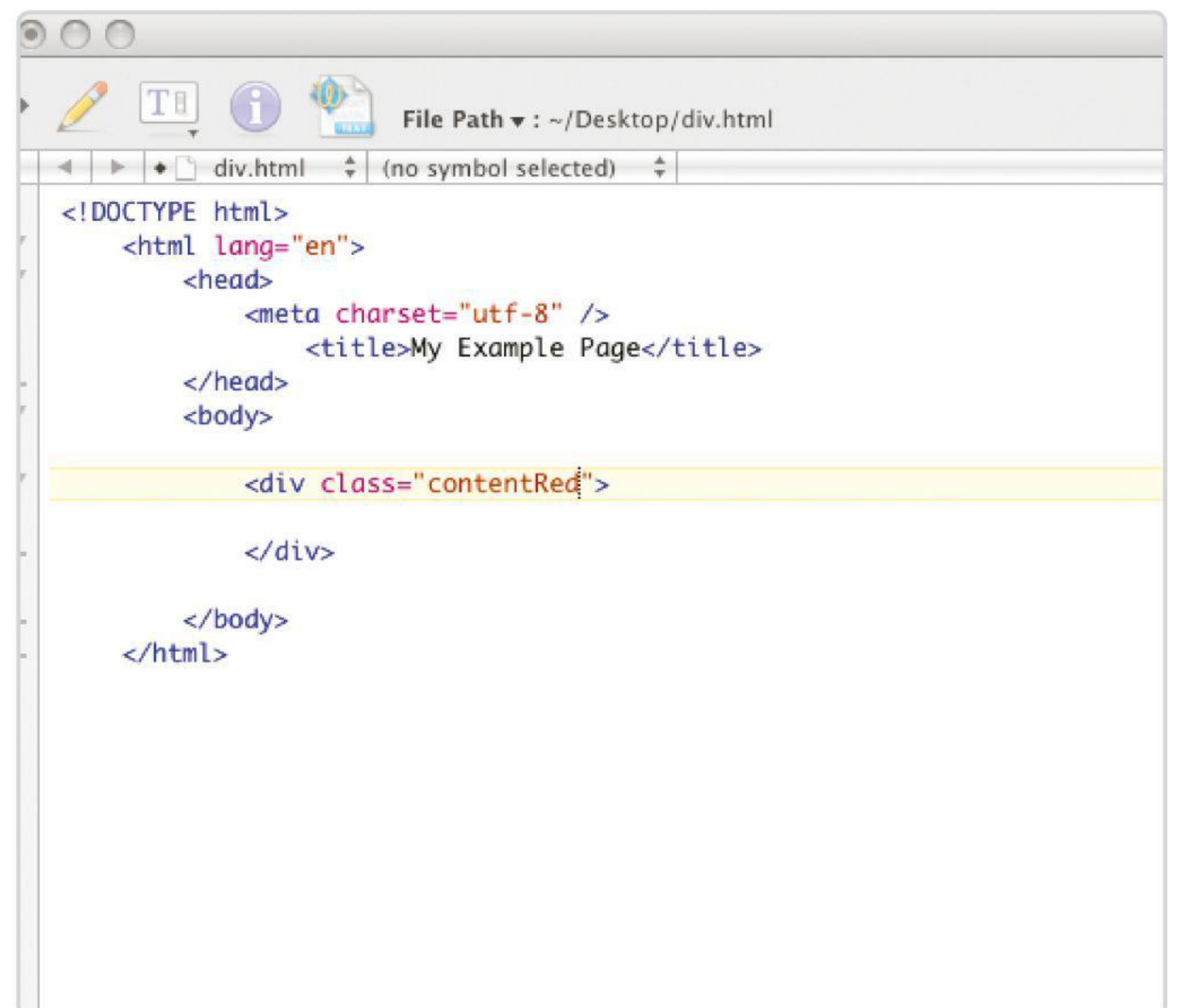
    <div id="mainContent">

  </div>

</body>
</html>
```

03 Adding an ID

A div can have a unique identifier so it can be recognised in a style sheet or by any JavaScript you may add. To apply an ID to a div, use: `<div id="myDivId"> </div>`



```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <title>My Example Page</title>
  </head>
  <body>

    <div class="contentRed">

  </div>

</body>
</html>
```

04 Adding a class

Classes are similar to IDs, but many items on a page can have the same class. To apply a class to a div, use: `<div class="myDivClass"> </div>` Using classes makes styling multiple elements much easier.

Create a three-column layout

Put what you've learnt so far into practice and make the popular three-column webpage structure using HTML5

HTML and CSS essentially allow for a huge range of freedom when designing your pages, but there are a few layout principles that have developed over the years which it's a good idea to follow.

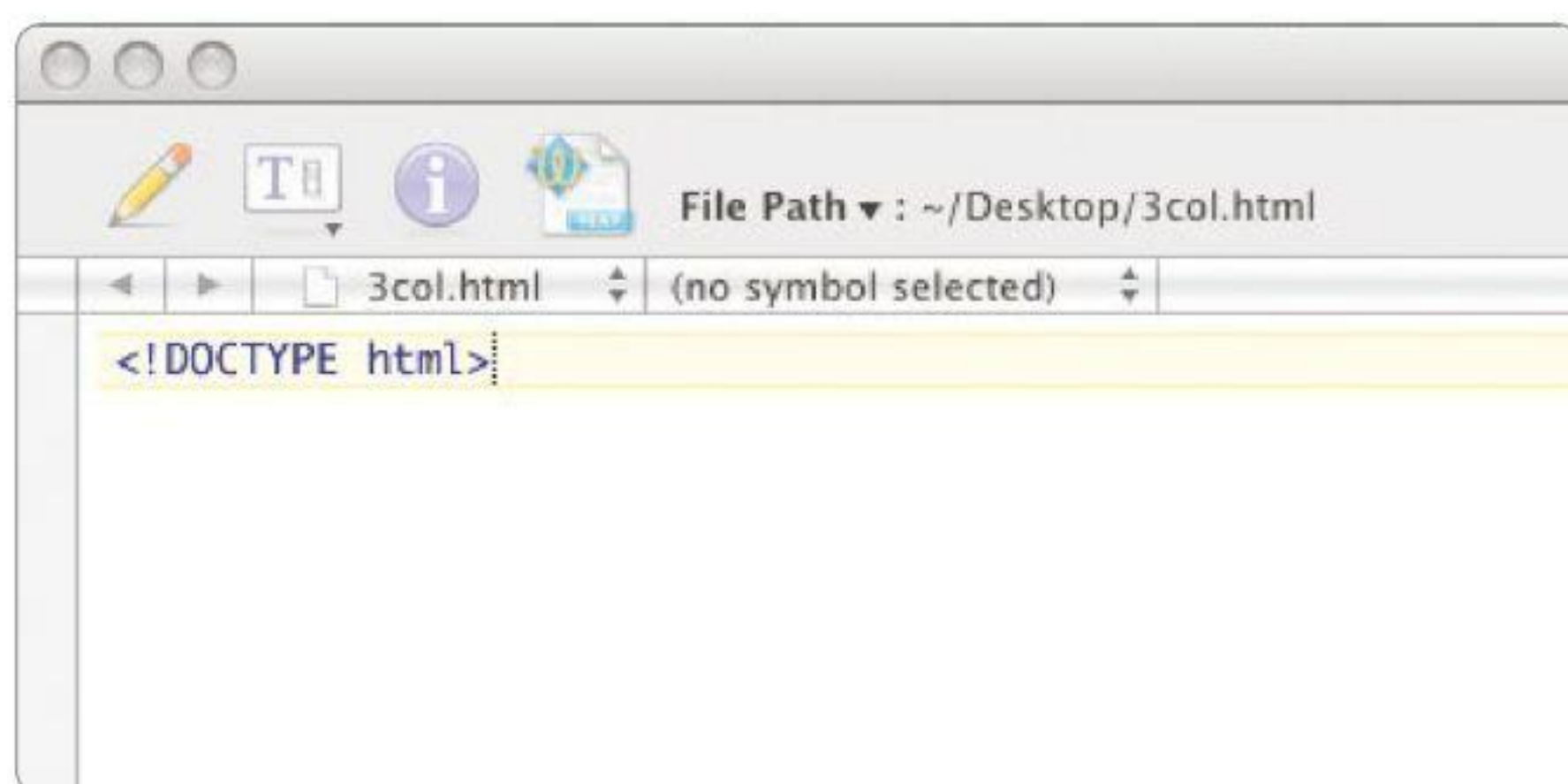
If you have a quick look at some of your favourite sites on the internet it's quite likely that they will use a column layout, akin to a newspaper. A common layout for a site is to have the site or company logo at the top of the page, then have a column down the left for navigation or links, a main content section in the centre, and then a sidebar on the

right with supplementary information or Facebook and Twitter feeds. This is then commonly rounded off with a site-wide footer containing copyright information, the name of the site designer, site links and sometimes a contact address. This tutorial will

show you how to code up the HTML scaffolding for a three-column layout using modern HTML5 elements. Once you have mastered this, it can then be adapted into a two- or more-than-three-column layout if you so wish.

"This tutorial will show you how to code up the HTML scaffolding for a three-column layout using modern HTML5 elements"



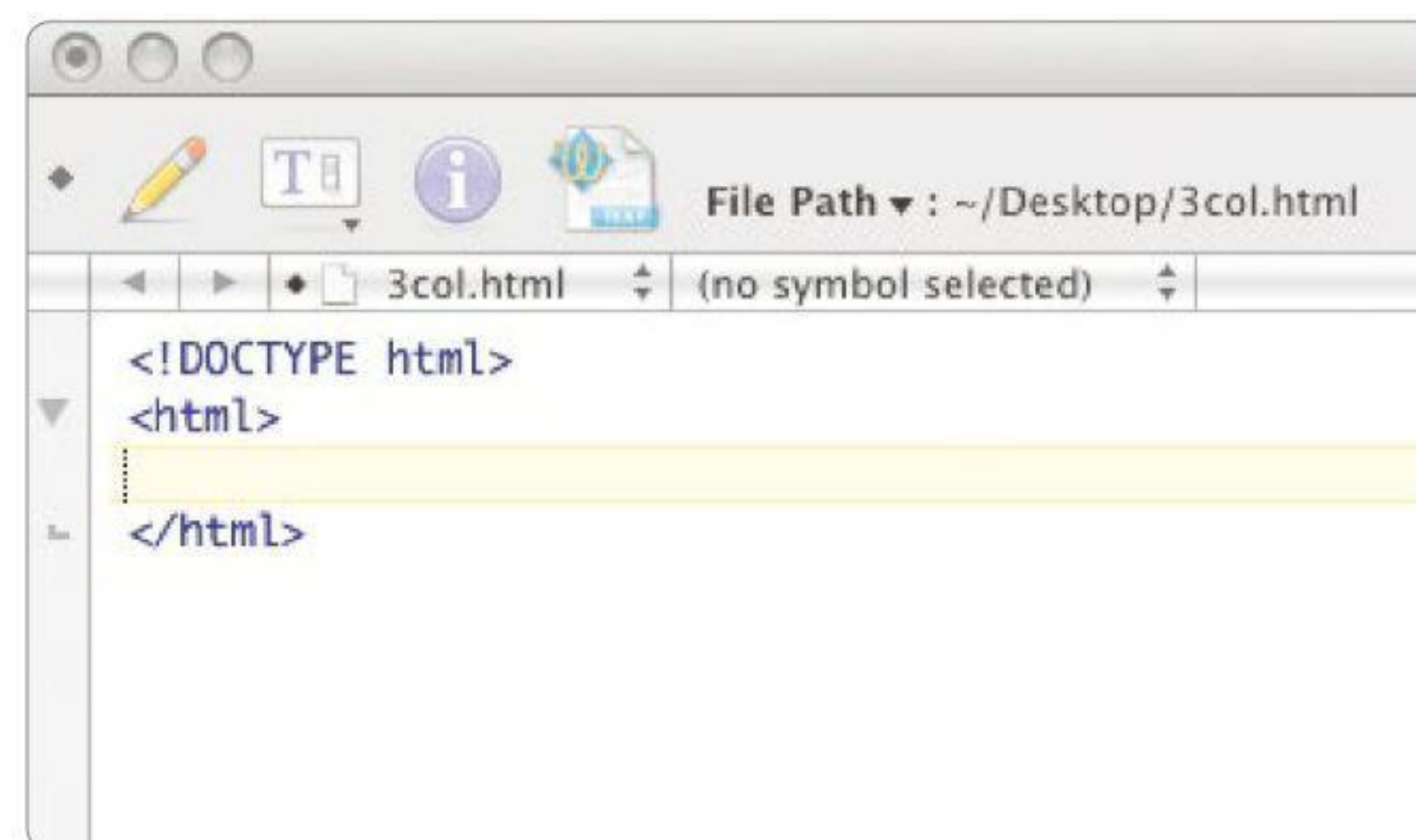


01 Set up your HTML page

To start off, open up your favourite editor and create the initial HTML elements as usual. The first thing we need to add is the HTML5 doctype declaration:

001 `<!DOCTYPE html>`

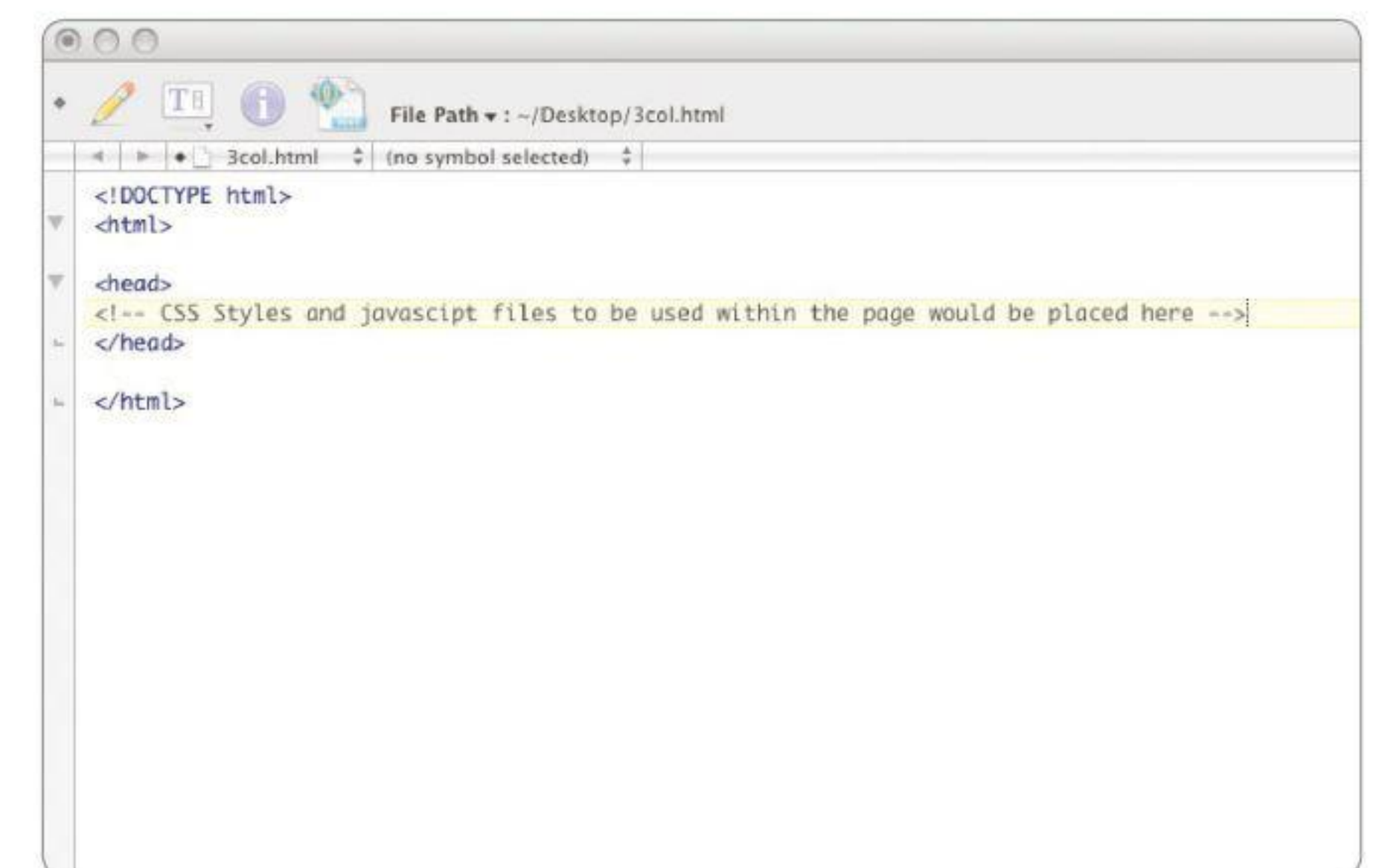
This tells our browser that we are using the HTML specification within the page, and it should be placed right at the top of your HTML file.



02 Open HTML tag

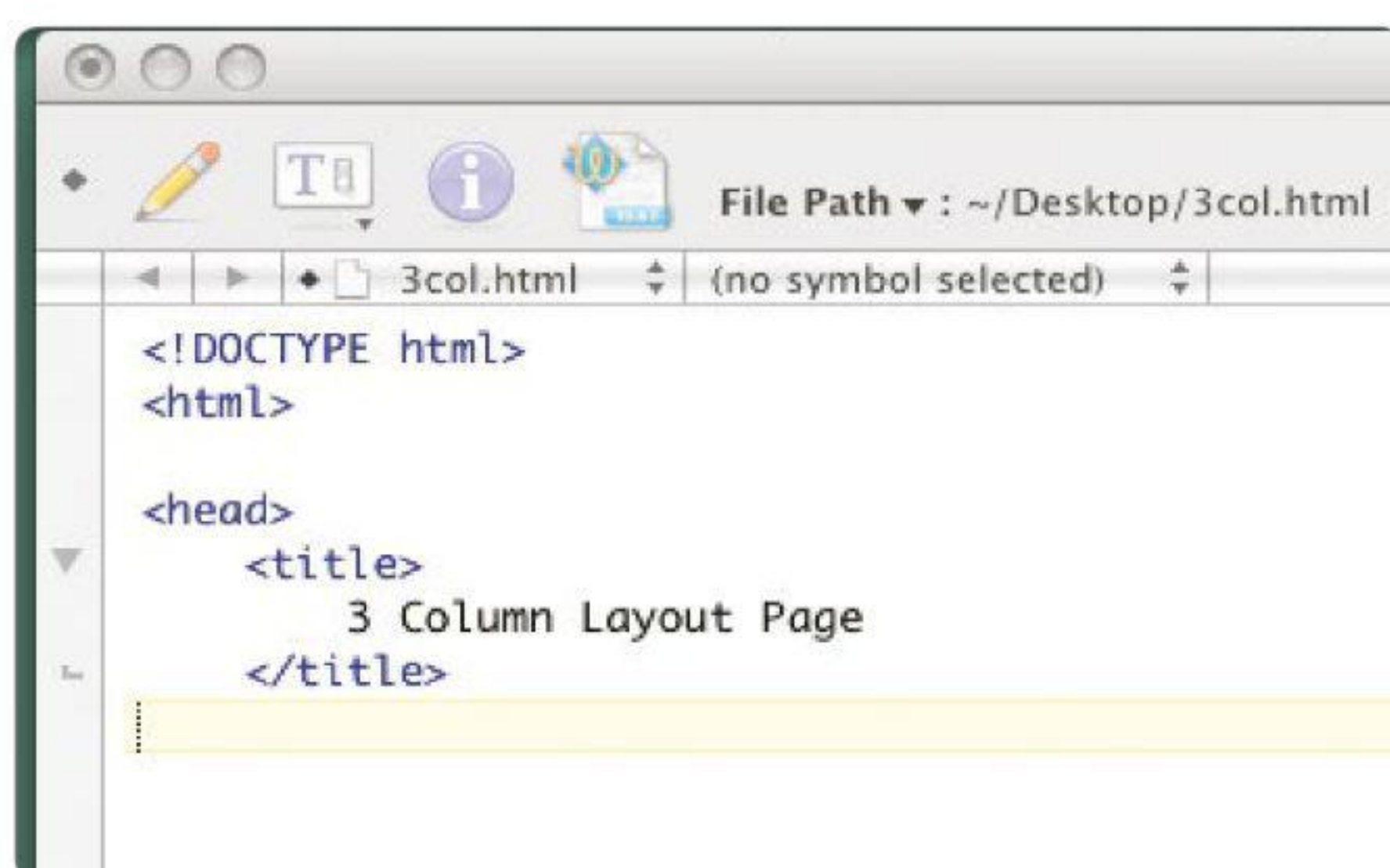
Next up we need to start off our HTML by entering the HTML tag – `<html>` – and then making sure we close this with `</html>`.

This tag tells the browser that contained within this section is HTML code. All the page content that we will be creating will need to go within these tags.



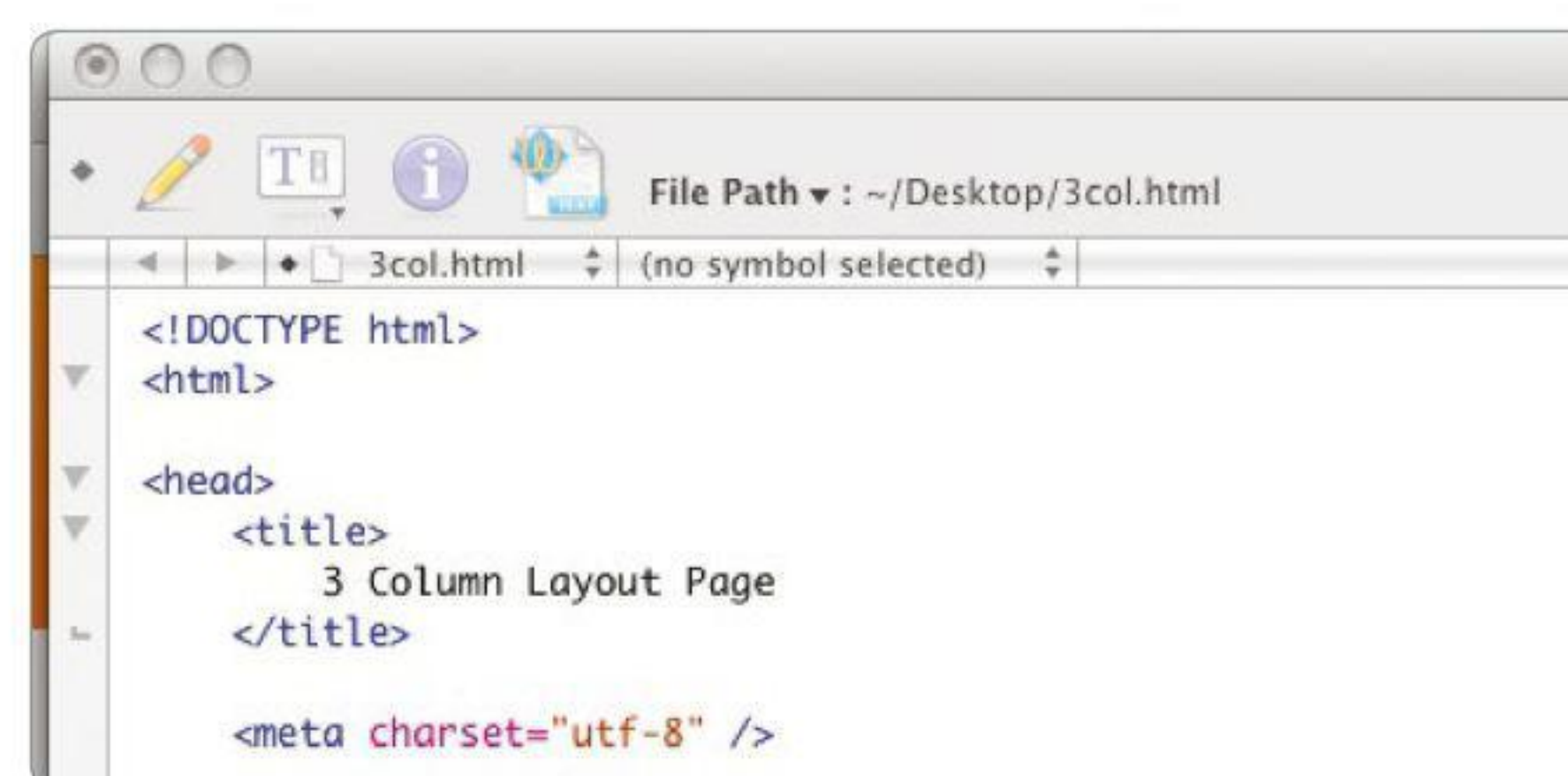
03 Insert the head

The head tag is an important one in HTML, and shouldn't be confused with the 'header' tag. Content within the head is not displayed to the user, but is used to include your CSS style sheets, JavaScript and metadata. Within your `<html>` tags, place `<head>`, then `</head>` to close it off.



04 Add a title

The title tag is used to display text in the browser's title bar at the top (if it has one), and also used as a guide for search engines to identify what content is contained within the page. Add a `<title>` tag within your head. Next, add a page title to describe the content, and close the title tag with `</title>`.

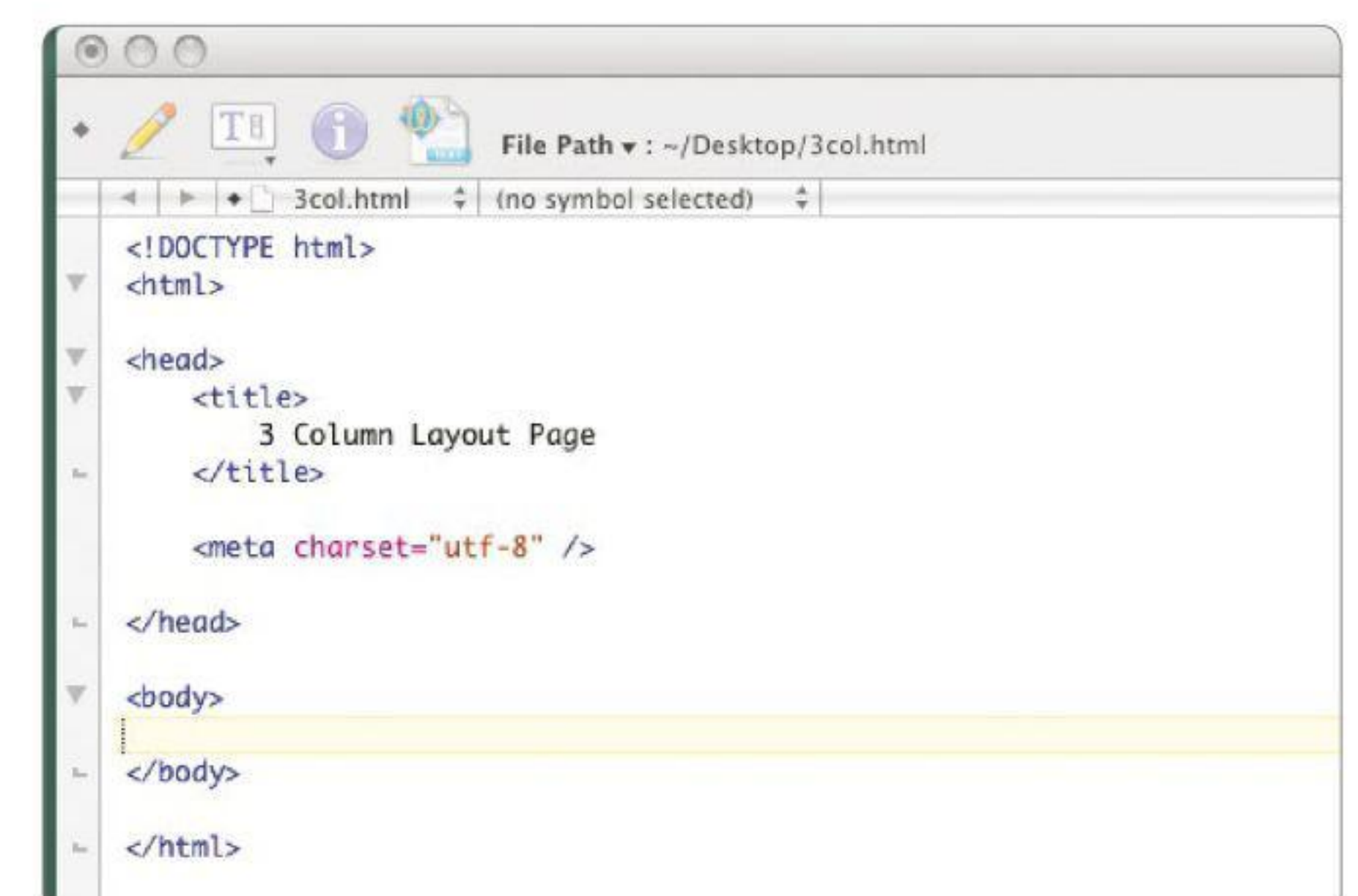


05 Define character set

There are many different ways of displaying characters in computing, and a few different standards depending on language; eg Greek or Arabic text looks very different from Chinese. Luckily for us, almost all the web uses the UTF-8 standard, which we define within our head with:

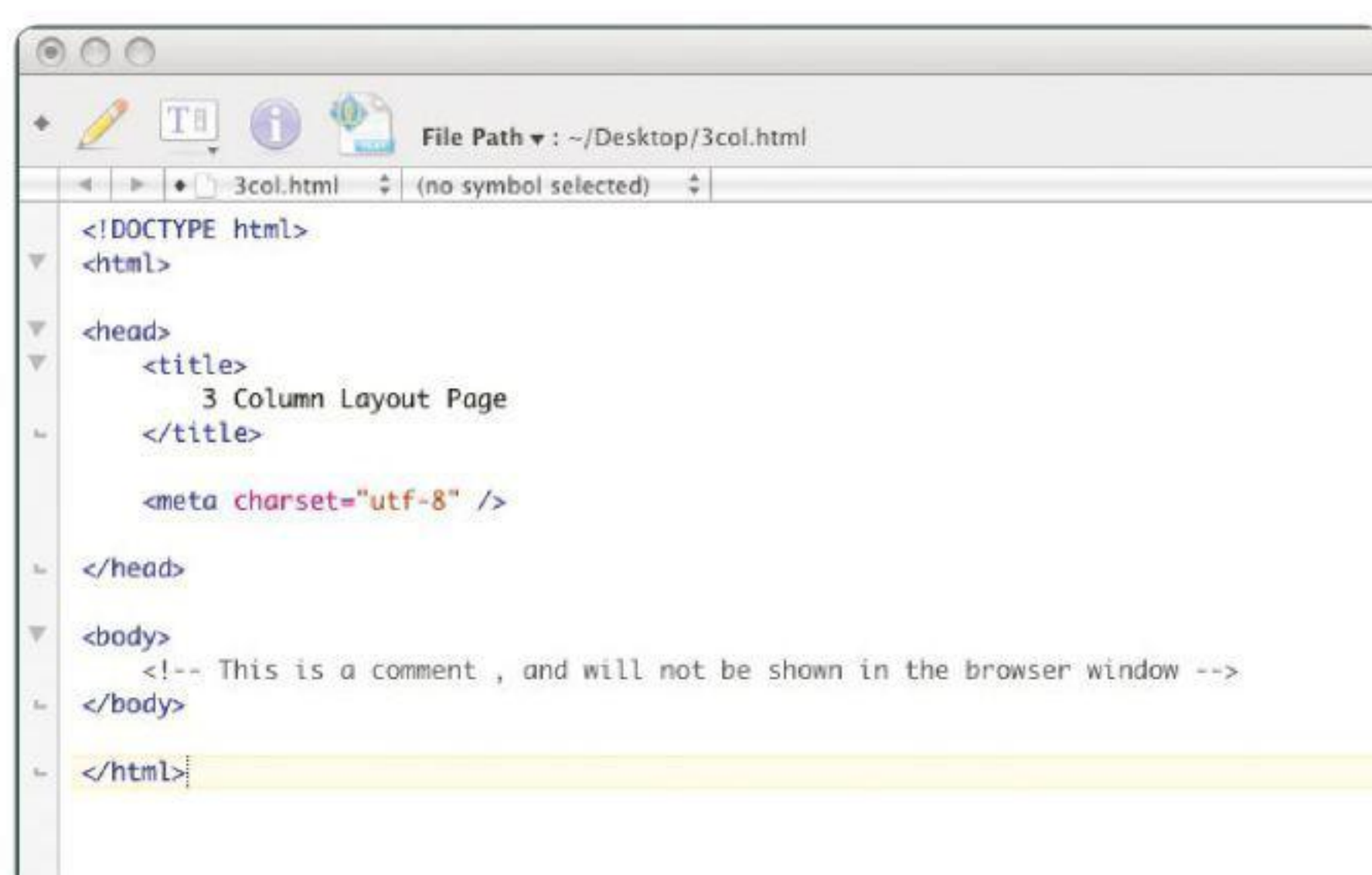
001 `<meta charset="utf-8" />`

UTF-8 does a good job of displaying most characters correctly.



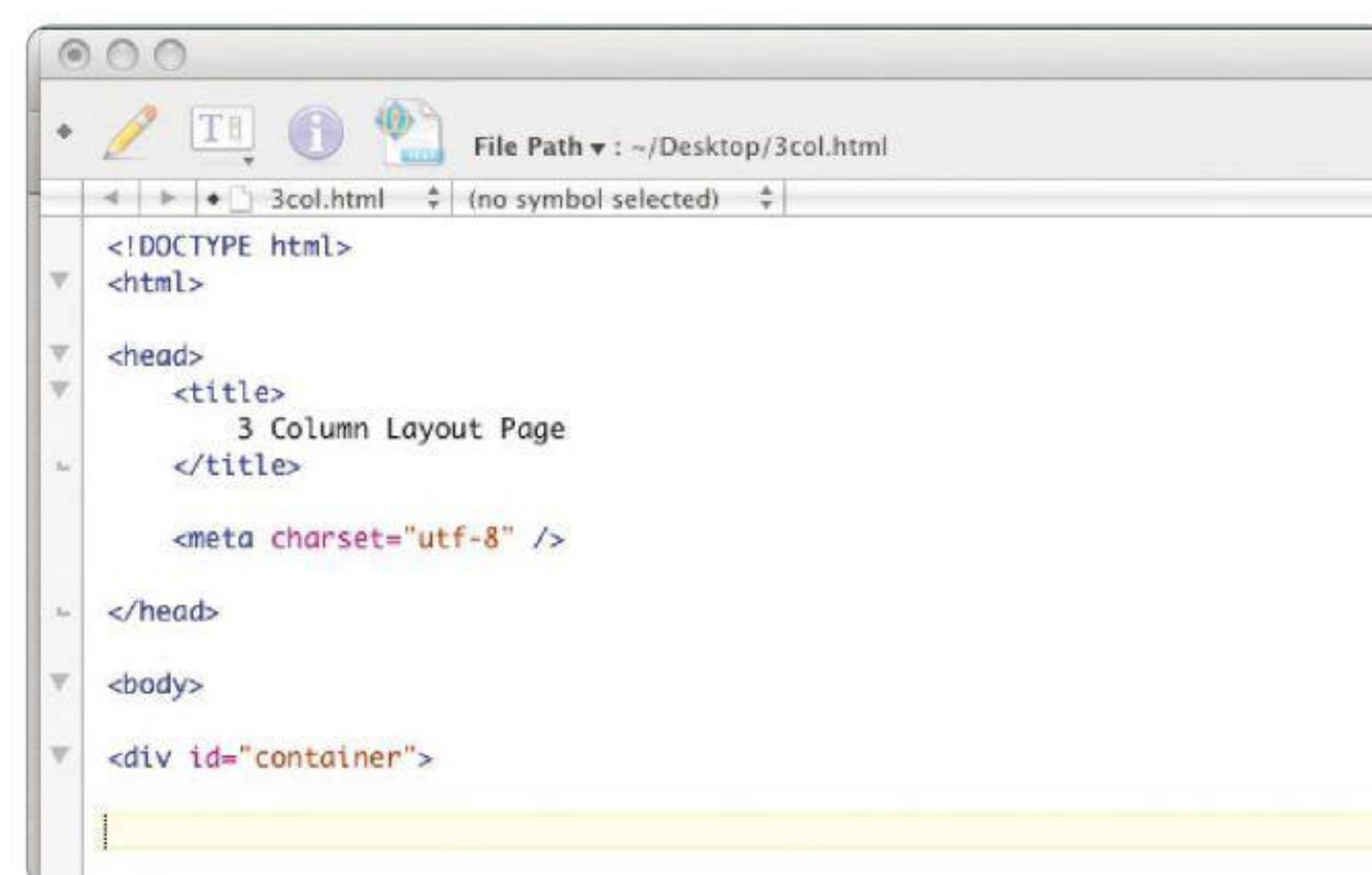
06 The body tag

All the content you wish to be displayed to the user is put within a 'body' tag. This goes after your 'head' tag has been closed, but within your `<html>` tag. Start it off with `<body>`, then close it off in the normal way: `</body>`. From now on we will place all code within the body tag.



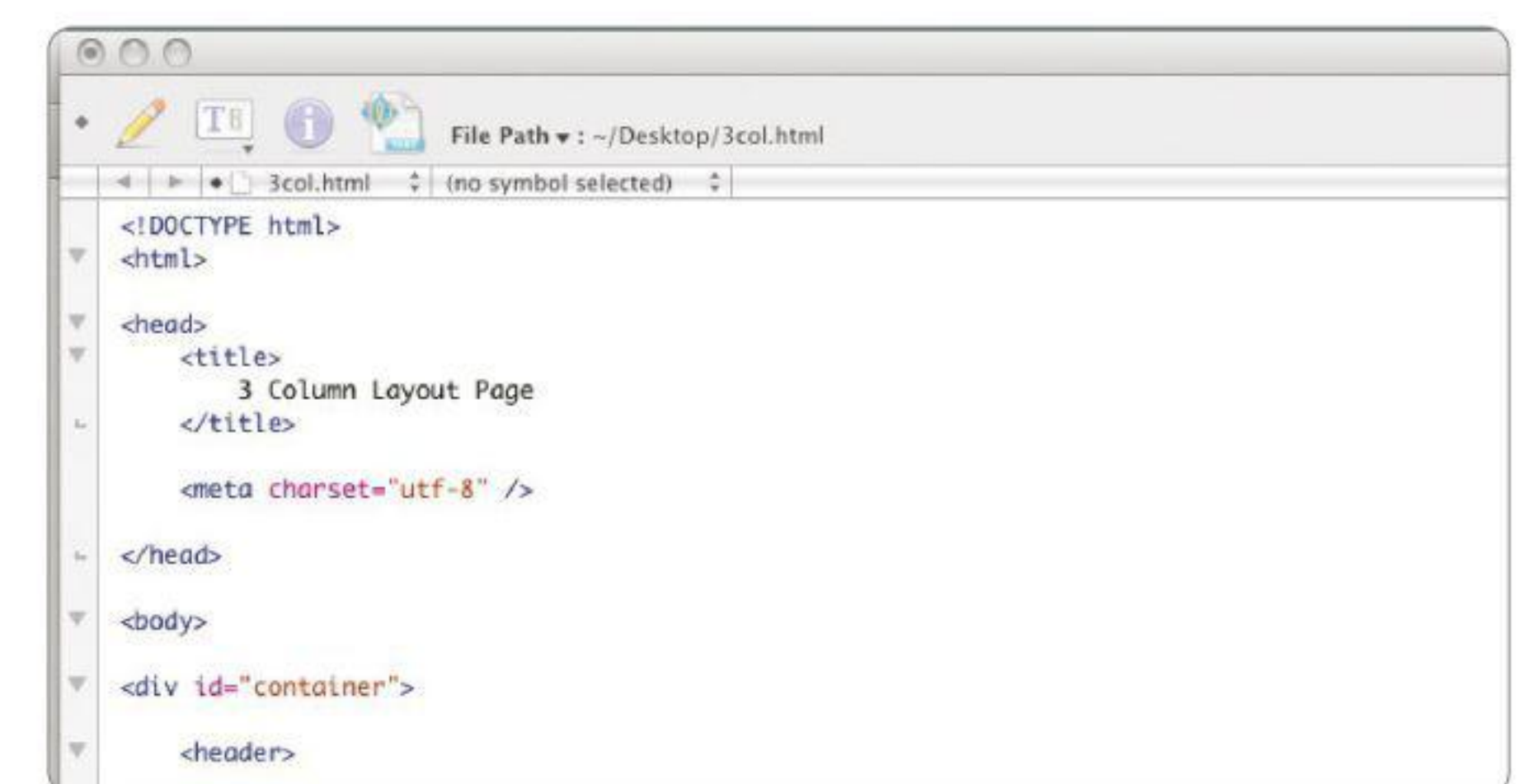
07 Adding comments

Sometimes you may wish to add a note to a location within your page, perhaps as a reminder or to make it easier to see where certain elements start or finish. Comments are started using `<!--`, followed by the comment text, and then ended with `-->`. For example: `<!-- Start header -->`



08 The container

It's quite common to wrap all the main content within the body in a 'container' div. This can make styling and centring easier when you start to write up your CSS. Add a container div within the body with `<div>` and `</div>`, then give it an ID so we can style it later: `<div id="container">`



09 The header

The top element to our page is usually referred to as a 'header' and contains the site title, logo, navigation, and sometimes adverts. To create a header we use the header tag, which is new in HTML5. To open it enter `<header>` and then to close, `</header>`. A page can have multiple headers, although they cannot be contained within each other.

Build a site

```
<!DOCTYPE html>
<html>
<head>
<title>
3 Column Layout Page
</title>
<meta charset="utf-8" />
</head>
<body>
<div id="container">
<header>
<nav>
</nav>
```

10 Nav tag

Nearly all pages contain a navigation or menu bar of some sort to allow visitors to get around the site. HTML5 now has a tag specifically for this. The 'nav' tag is where to place links to other items. Let's add one to our page – <nav> – and then close off again with </nav>.

```
<nav>
<a href="home.html">Home</a> |
<a href="products.html">Products</a> |
<a href="gallery.html">Gallery</a> |
<a href="contact.html">Contact</a>
</nav>
</header>
<div id="col1">
</div>
<div id="col2">
</div>
</div>
```

13 Second column

The second column is usually the widest in the centre, and normally houses the main page content. Add it to the page the same way as before, but give it a different ID this time.

001 <div id="col2"> </div>

Don't be concerned if you can't see any content within your browser – as without styling, divs are essentially invisible and only the content contained is displayed.

```
<!DOCTYPE html>
<html>
<head>
<title>
3 Column Layout Page
</title>
<meta charset="utf-8" />
<meta name="description" content="Fishing in Dorset">
</head>
<body>
<div id="container">
<header>
<nav>
<a href="home.html">Home</a> |
<a href="products.html">Products</a> |
<a href="gallery.html">Gallery</a> |
<a href="contact.html">Contact</a>
</nav>
</header>
<div id="col1">
Column 1
```

16 Metadata (optional)

If you know what content is going into the pages and wish to improve search engine optimisation, you can add meta information to the head. Meta information helps Google and other search engines to index and organise sites by content. The meta description tag is used to give a short account of the page content: <meta name="description" content="Fishing in Dorset">

```
<title>
3 Column Layout Page
</title>
<meta charset="utf-8" />
</head>
<body>
<div id="container">
<header>
<nav>
<a href="home.html">Home</a> |
<a href="products.html">Products</a> |
<a href="gallery.html">Gallery</a> |
<a href="contact.html">Contact</a>
</nav>
</header>
</div>
</body>
</html>
```

11 Navigation items

To add links to the navigation we use the <a> or anchor tag. Eg Products. If you don't yet know your exact site layout, it's common to use a '#' in place of the link. A hash symbol can also be used to target a specific div within a page.

```
<!DOCTYPE html>
<html>
<head>
<title>
3 Column Layout Page
</title>
<meta charset="utf-8" />
</head>
<body>
<div id="container">
<header>
<nav>
<a href="home.html">Home</a> |
<a href="products.html">Products</a> |
<a href="gallery.html">Gallery</a> |
<a href="contact.html">Contact</a>
</nav>
</header>
<div id="col1">
Column 1
</div>
<div id="col2">
Column 2
</div>
</div>
```

14 Third column

The third and final column is then added in exactly the same way, with a unique ID: <div id="sidebar"></div>. If you wanted to place the name within each div to see the results in the browser and help you visualise the page layout, then you can: <div id="sidebar">Sidebar</div>

```
<!DOCTYPE html>
<html>
<head>
<title>
3 Column Layout Page
</title>
<meta charset="utf-8" />
<meta name="description" content="Fishing in Dorset">
<meta name="robots" content="noindex">
</head>
<body>
<div id="container">
<header>
<nav>
<a href="home.html">Home</a> |
<a href="products.html">Products</a> |
<a href="gallery.html">Gallery</a> |
<a href="contact.html">Contact</a>
</nav>
</header>
<div id="col1">
Column 1
</div>
<div id="col2">
Column 2
</div>
<div id="sidebar">
Sidebar
</div>
</div>
```

17 Stopping Google indexing (optional)

To stop Google and other search engines indexing your page, you can add the following code to your head: <meta name="robots" content="noindex">. This means the page will not be shown in Google's search results. This can be useful on client login pages, or out-of-date pages that you wish to archive.

```
<!DOCTYPE html>
<html>
<head>
<title>
3 Column Layout Page
</title>
<meta charset="utf-8" />
</head>
<body>
<div id="container">
<header>
<nav>
<a href="home.html">Home</a> |
<a href="products.html">Products</a> |
<a href="gallery.html">Gallery</a> |
<a href="contact.html">Contact</a>
</nav>
</header>
<div id="col1">
```

12 First column

Now we can add our first left column. This goes after the header tag, but still within our container div. Add this in with <div> and then don't forget to close: </div>. Again, you can give it an ID or class, such as <div id="col1"></div>. This column might contain a menu or adverts, for example.

```
</nav>
</header>
<div id="col1">
Column 1
</div>
<div id="col2">
Column 2
</div>
<div id="sidebar">
Sidebar
</div>
<footer>
Footer
</footer>
```

15 The footer element

The footer is used to mark the bottom of the page, and often contains a list of common links, along with copyright and/or contact information. To add a footer we simply use the HTML5 footer tag – <footer> – and as always, close it off using </footer>. Place this after your sidebar column in the code.

```
<!DOCTYPE html>
<html>
<head>
<title>
3 Column Layout Page
</title>
<meta charset="utf-8" />
<meta name="description" content="Fishing in Dorset">
<meta name="robots" content="noindex">
</head>
<body>
<div id="container">
<header>
<nav>
<a href="home.html">Home</a> |
<a href="products.html">Products</a> |
<a href="gallery.html">Gallery</a> |
<a href="contact.html">Contact</a>
</nav>
</header>
<div id="col1">
Column 1
</div>
<div id="col2">
Column 2
</div>
<div id="sidebar">
Sidebar
</div>
<footer>
Footer
</footer>
```

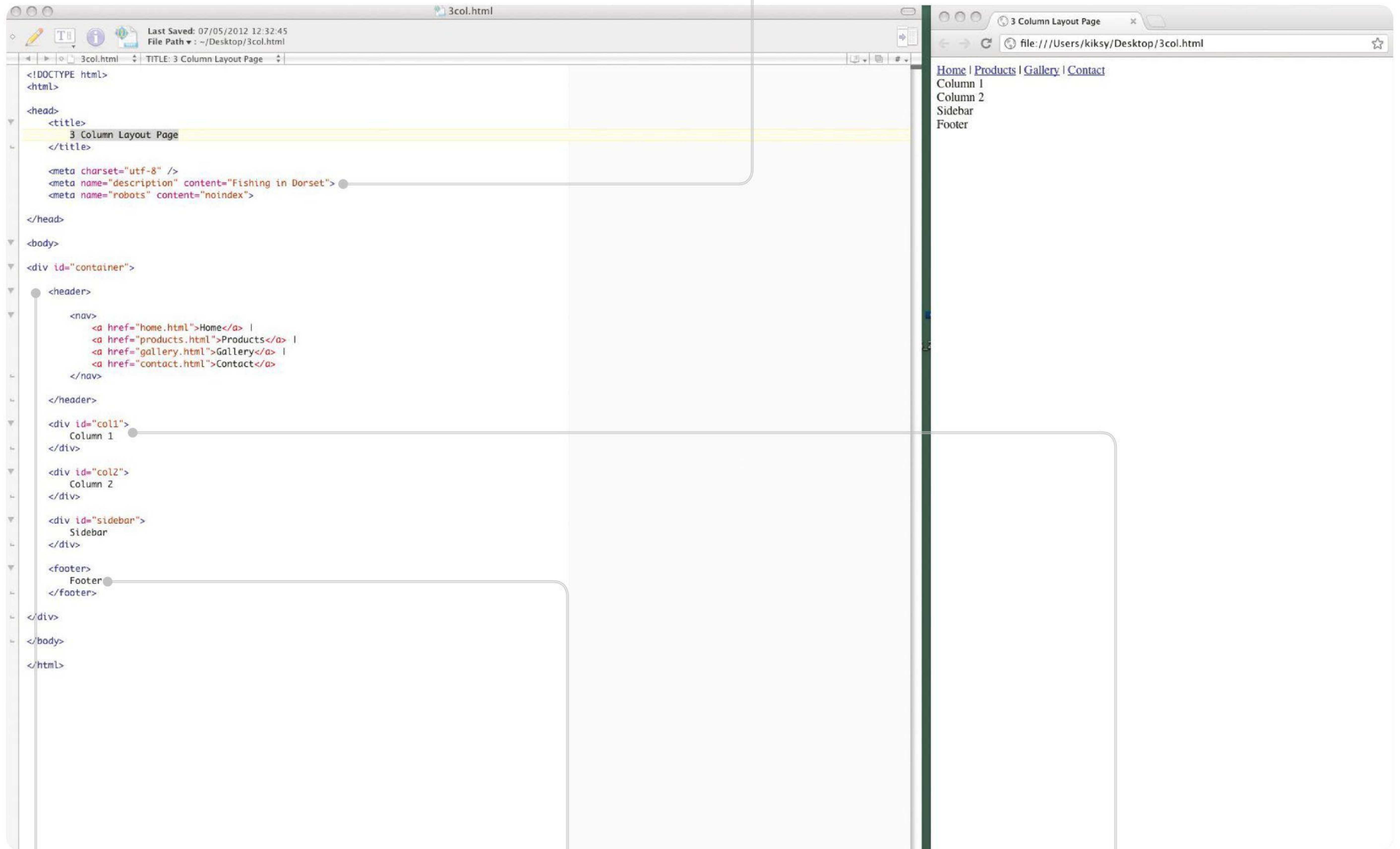
18 The end result

Save the file now, making sure to have the .html extension at the end. Open the file within a browser to see the result. As there is no styling applied yet, it won't look particularly attractive by any means, but you've created a basic web page layout that's now ready for CSS and content to be added.

The three-column layout

The flexible three-column page structure is used by many sites

Metadata
<meta charset="utf-8" />
<meta name="description" content="Fishing in Dorset">
<meta name="robots" content="noindex">
There are a few common meta elements which, while not displayed by the browser, help with search engine optimisation as well as how the browser renders your content



The header
In this instance the header code contains the navigation elements of the page, although it's also often used for site title and logos. Here we are using the HTML5 nav element

Footer
The footer element often remains consistent throughout a site and is usually not as tall as the header, although recently there have been some great designs featuring very prominent footer elements

Columns
The main columns are <div> elements that you can apply CSS to later, such as width, height, padding etc. It's usual to have the centre column the widest, but this isn't mandatory

Internet Explorer compatibility

Ensure your HTML5 page works in IE

While most users of Chrome, Firefox and Safari run HTML5, there is still a large chunk of the internet population running older versions of Microsoft's Internet Explorer which don't support the new standard. With all the new HTML5 elements, it's required to add in a few workarounds to get everything to work satisfactorily. One of the most popular methods is to use the HTML5Shiv. This small piece of JavaScript allows us to include the new tags such as <header>, <footer> and <nav> without worry. Adding the script is simple, and as it's hosted on GoogleCode you don't even need to download any files. Simply add this to your page's head:

```
<!--[if lt IE 9]>  
<script src="//html5shiv.googlecode.com/svn/trunk/html5.js"></script>  
<![endif]-->
```

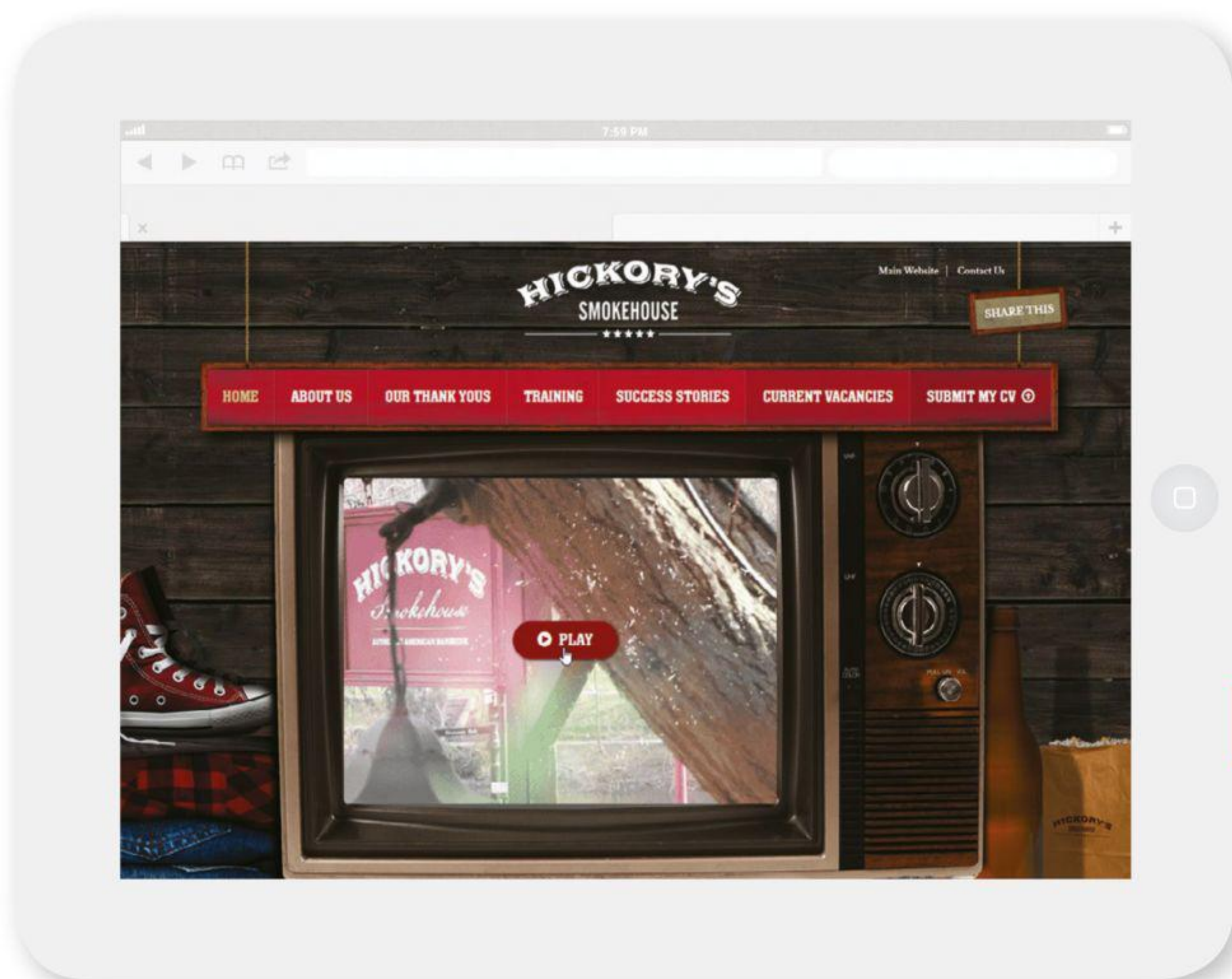
The <!--[if lt IE9]> part is a CSS conditional statement which says 'if the browser trying to read this page is IE and less than version 9 (which supports HTML5), then include this JavaScript file. Hopefully in the not too distant future when more people are running the latest version of Internet Explorer, hacks such as this can be avoided, but for now it's just something that we have to live with when designing pages.

Build a site

Style. CSS



ANDROID LANDSCAPE 320 X 240



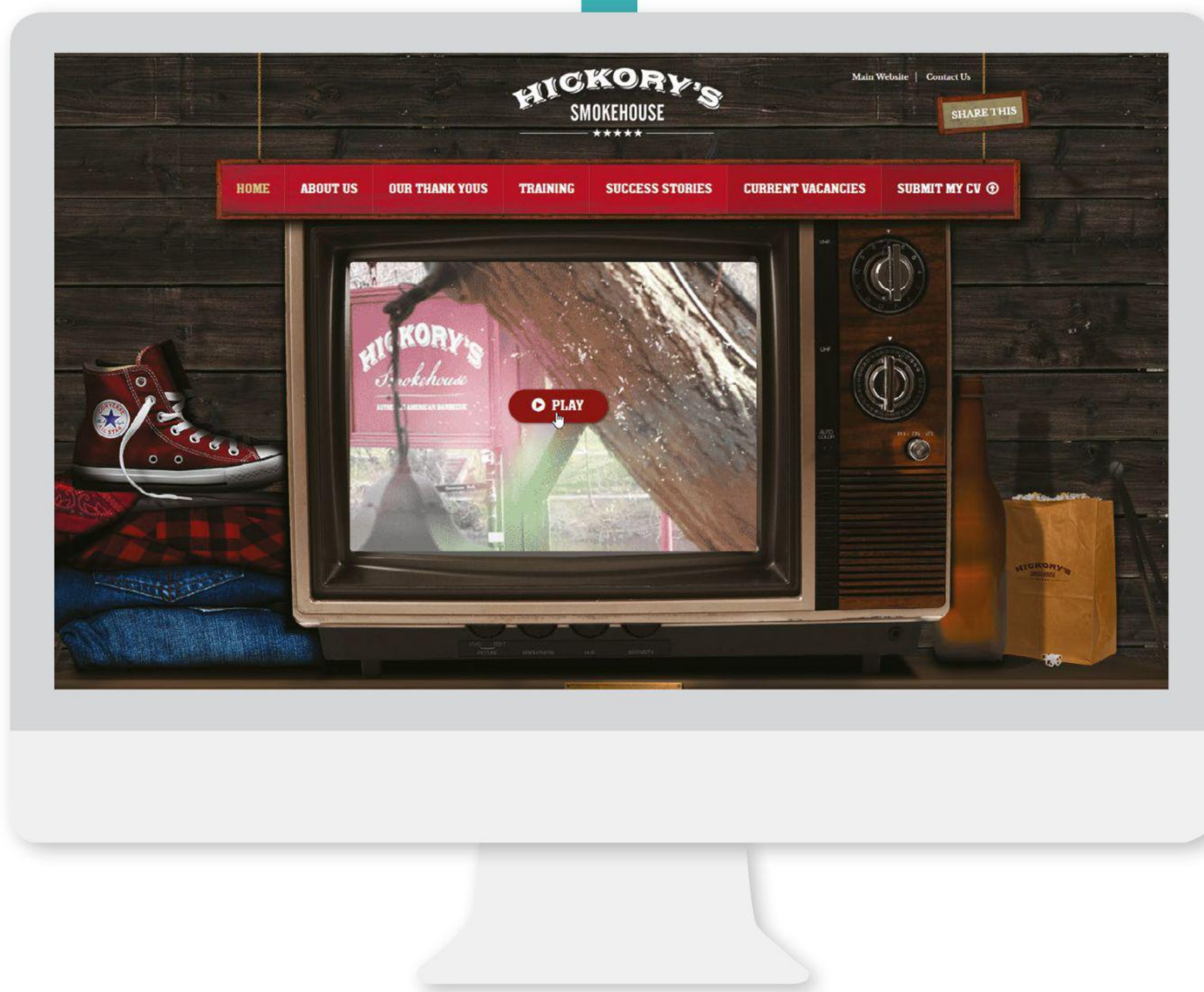
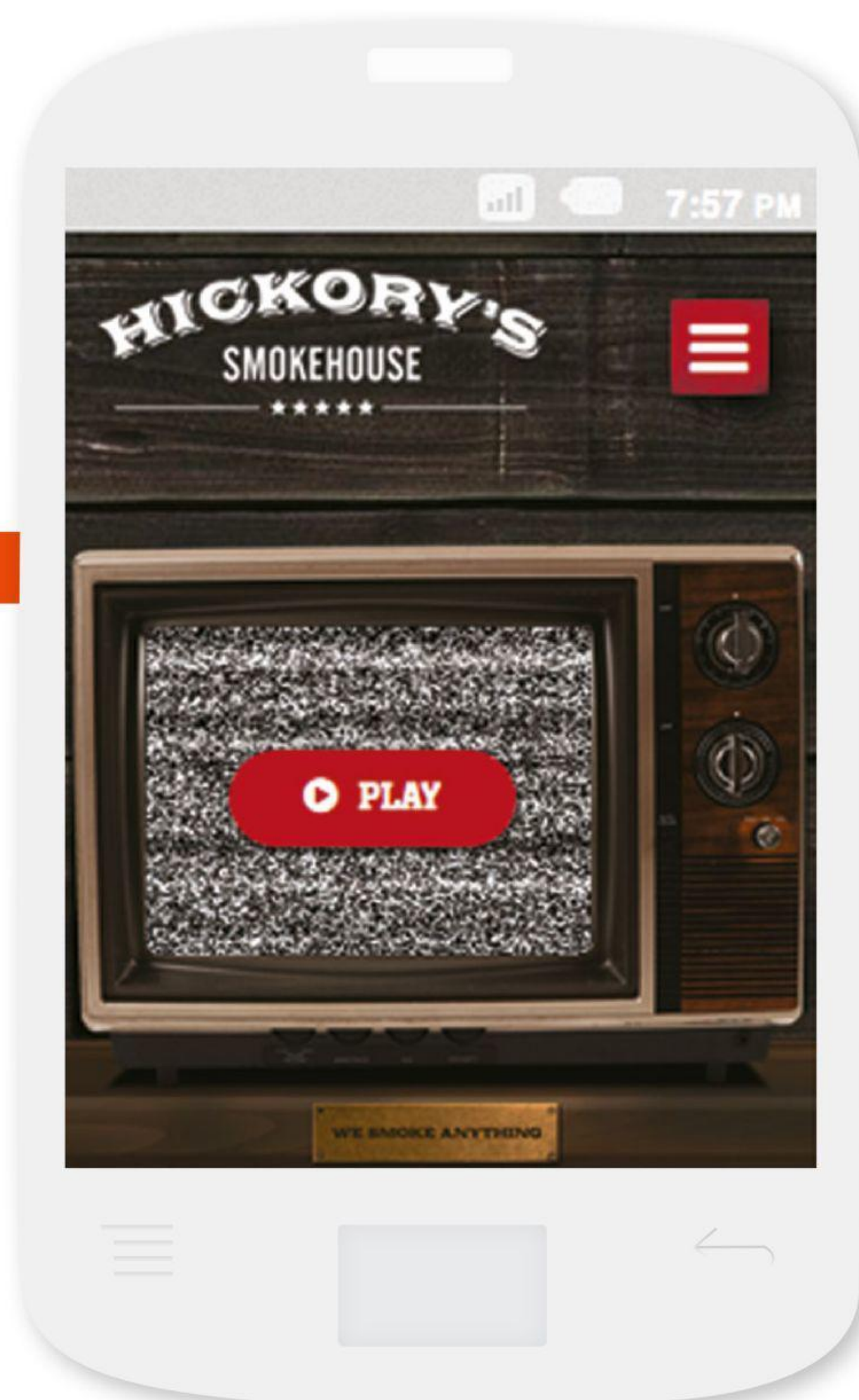
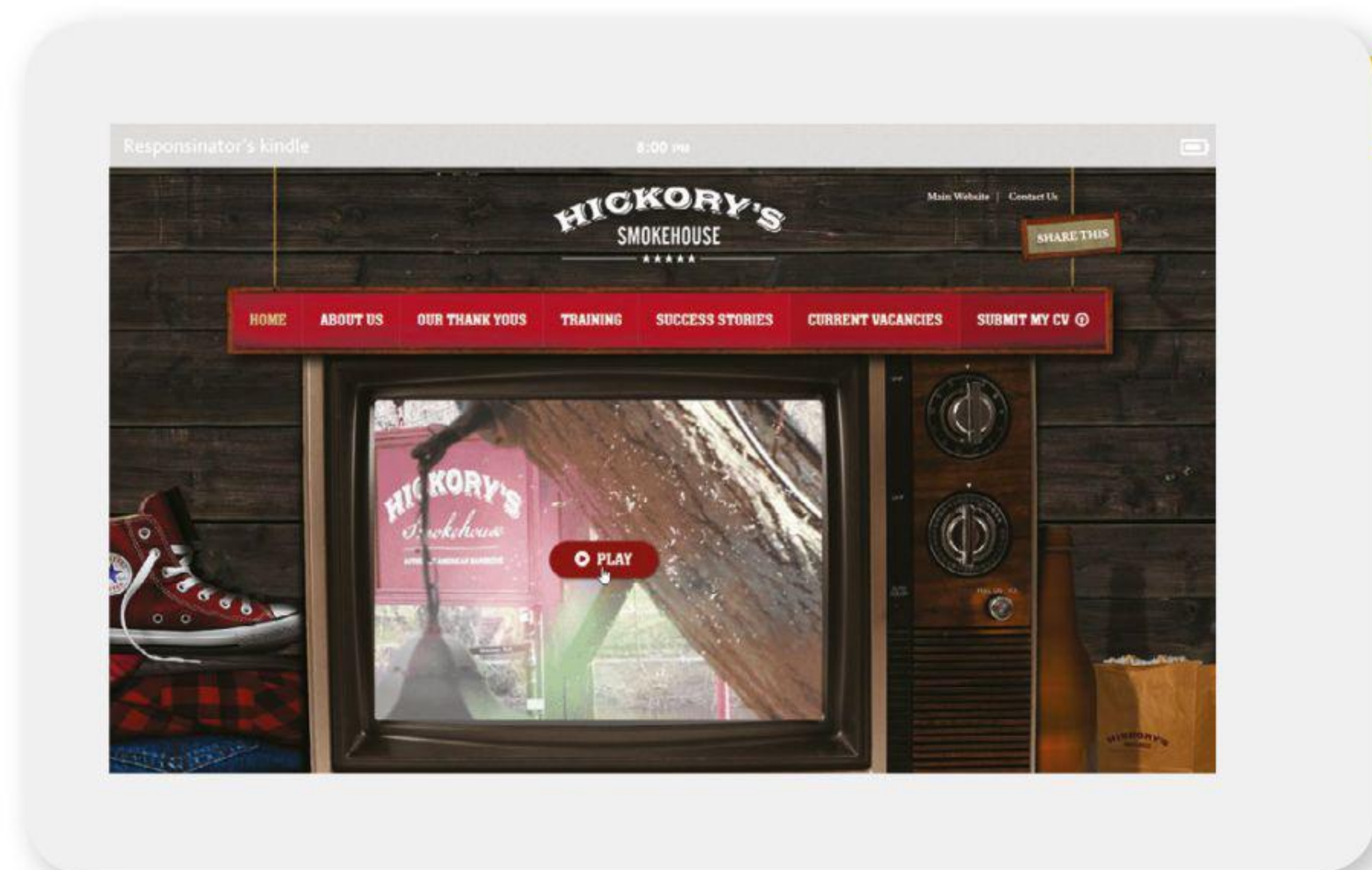
IPAD LANDSCAPE 1024 X 768

KINDLE LANDSCAPE 1024 X 600

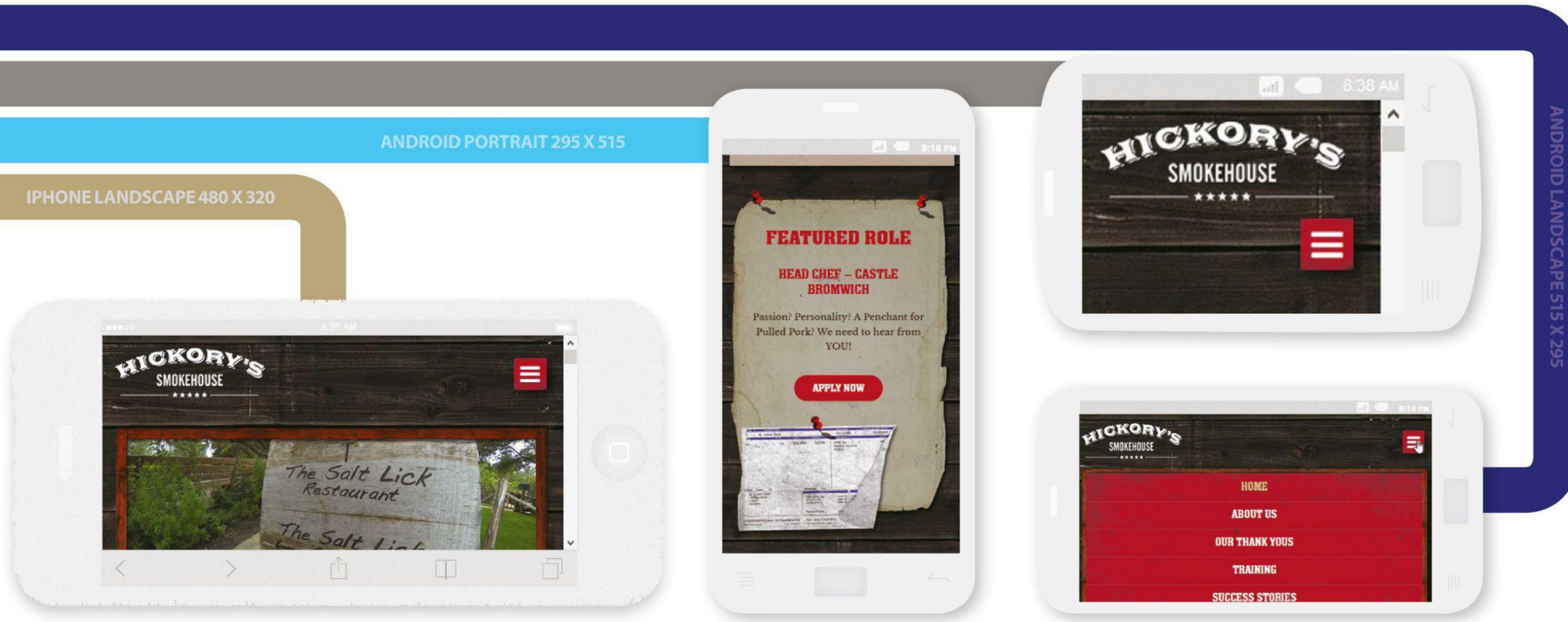
ANDROID PORTRAIT 240 X 320

IMAC LANDSCAPE 2560 X 1440

Visit www.responsinator.com to see how websites are styled on different devices



www.wesmokeanything.co.uk
(pictured here) is an exceptionally
stylish website



An introduction to CSS

If HTML provides the structure for a website, CSS provides the form. This is the language that will make your site stand out

Cascading Style Sheets, commonly abbreviated to CSS, is a language used for describing how HTML should be presented. CSS documents provide all the format, colour, positioning and other characteristics of a design that you will see on virtually any webpage.

Originally introduced alongside HTML4, the language was designed to separate the structure of a document from the presentation, improving the control of a design for web designers. CSS also helped to improve accessibility of web pages, reduce HTML code complexity and crucially the amount of repetition of markup that had to be created to describe how a page should look.

As well as these benefits, the separation of form and function allows different designs to be displayed to users according to their device, simply by providing a different style sheet. This means that, for example, a mobile phone can load the same webpage as a desktop browser, but present the content within the page in a different manner. Similarly, CSS can be used to present page content one way on screen and a second when printed, or to provide direction to screen reader software over areas for emphasis.

Additionally, CSS is user-configurable, so while the designer might specify that text should be shown in 18pt red Arial, the visitor to their site can load their own style sheet to show the text in 12pt blue Times instead, should they wish to. As you can see, CSS offers a great deal of flexibility

by design. To fully understand what it's capable of, we need to look a bit more at what CSS is, why and how it came about, and examine how the implementation of the language works across different web browsers.

The cascading bit

CSS is designed to use a priority scheme that determines how styles should be applied to HTML elements. The cascading bit of the language name refers to how this scheme works. Broadly, styles are applied in chronological order, but also according to specificity. If a style property is declared more than once for a particular element, the last chronological declaration will be used, unless the earlier declaration was more specific about the elements it should apply to than the latter. This sounds really confusing, but in practice it allows you to apply a set of broad styles that provide basic properties for the font that text should be rendered in, for example, and use more specific selectors to subsequently set the size, colour or font weight. To help make sense of it all, let's take a look at what CSS looks like in code.

CSS syntax

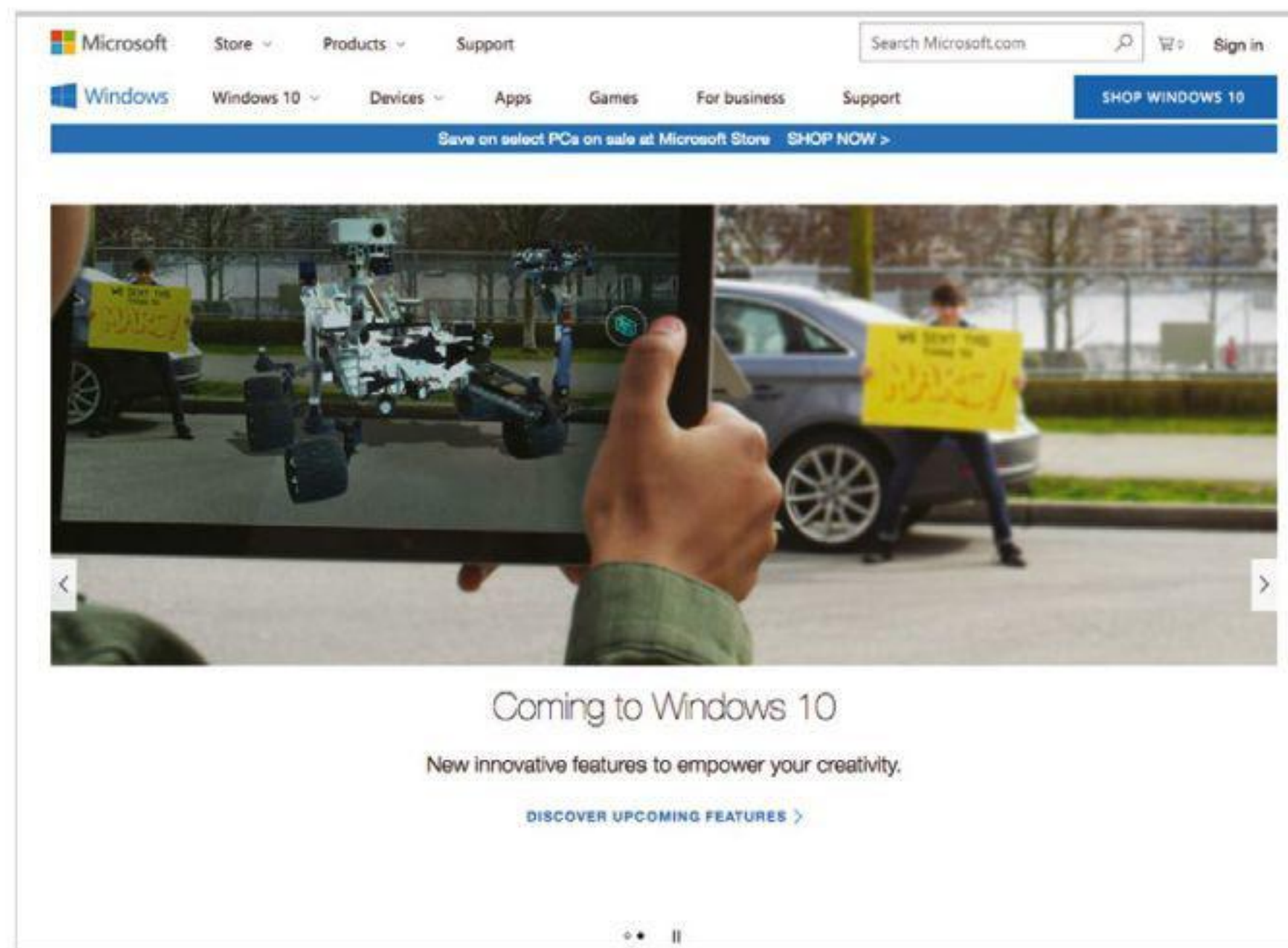
Just like HTML, CSS is designed to be human-readable in its raw form. English keywords are used with a simple syntax to describe a list of rules, style properties and style values. Each rule in a style sheet is defined by means of a selector,

which identifies the HTML elements the rule should apply to. Within the rule, a series of properties and values are defined so that the visual characteristics for an element are built up property by property. Let's take a quick look at an example:

```
001 h1 {
002     font-family:    arial, helvetica,
                        sans-serif;
003     font-weight:    bold;
004     font-size:      18pt;
005     color:          red;
006     margin:         10px;
007 }
```

In the code above we've defined the rule using the `h1 { }` selector. This specifies that the style properties within should apply to all `<h1>` tags found on the page. Within the curly brackets we define a series of properties, such as font-family, font-size etc, and the values we'd like to set for each. As a result, every heading 1 on our page

Build a site



Recent versions of web browsers have vastly improved their implementation of CSS standards

would be rendered in Arial (or Helvetica if Arial wasn't available), bold 18pt red text. The entire `<h1>` would have a ten-pixel margin around it.

More complicated selectors

In the previous example we used a simple selector to establish which elements the rule should apply to. Selectors can be nested so that only specific elements have the rule applied. An

example might look like the code that follows:

```
001 #content article h1 {
```

```
002     color:         blue;
```

```
003 }
```

Here, the rule would only apply to HTML `<h1>` elements that are nested inside an `<article>` element, itself within any other element that has an ID attribute of "content". Our page would now show all `<h1>` tags as red, bold, 18pt Arial, with the exception of those headings inside an `<article>`, itself inside an element with an ID of #content where the colour would be blue instead.

This works because the CSS sheet cascades the styles and also has the priority scheme we discussed earlier. As our second rule is more specific in its selector, it takes priority over the more generic rule we created first. We could have also positioned our second rule chronologically after our first to ensure it would take priority, but sometimes the specificity rules that are a part of CSS would prioritise over chronology. By combining specific selectors with different rules, and using specificity and priority it's possible to style a document with a few CSS rules.

Different ways to load a style

There are three different ways a style can be applied to an HTML element. The first is through an external file that is loaded into the HTML document in the `<head>` section. The second is to include a `<style>` declaration in the `<head>` section of the document, writing your rules and properties directly inside the `<style>` area, and the third is directly onto an element using the style attribute. The latter is referred to as an 'inline' style.

When calculating the style properties of an element, CSS is loaded first from any external files and applied, then from the `<head>` section of the page, and finally from any inline styles. Where the same property is set by more than one of these three methods, they apply in the order as described above.

Positioning elements

One of the most common areas of CSS that new designers struggle to grasp is how elements can be positioned on the page. CSS offers a number of different positioning systems, and these can be mixed and matched within a single page

Browser support

CSS-TRICKS

Blog Videos Almanac Snippets Forums Shop Lodge Jobs

SEPTEMBER 19, 2016

Reframe.js Notes

BY CHRIS COYIER

FitVids.js is still a perfectly workable mini plugin for making videos (or anything) responsive. You need it, or something like it, for sites that have things like YouTube or Vimeo videos, Instagram embeds, or really anything that's not responsive in the aspect-ratio sense. ` / <video></video>` resize their width/height in an aspect ratio friendly way, `<iframe></iframe> / <canvas></canvas> / <object></object>` do not.

Reframe.js is kind of a modernized version of FitVids.

(more...)

One of the biggest headaches over the past decade, at least for web designers, has been the differences in the way browsers render CSS. The original idea was that CSS would be rendered in a standard way, regardless of what software a user had. Browsers that didn't support CSS would simply ignore it, but those that understood style sheets would display content in a predictable, consistent manner. The issues started almost as soon as CSS was introduced, however, with different browser vendors implementing their own understanding of the standards, leading to wildly different representations of a design according to which browser a visitor to a website used.

The most well-known example of this was the box-model problem where two browser vendors disagreed over whether padding should be applied to an element in addition to the specified width, or as part of the specified width. One method meant that an element set to be 200 pixels wide with 50 pixels of padding either side would render as 300px in total – 200 pixels of space for content, and 50 pixels padding each side, while the other left the element width at 200 pixels overall, leaving just 100 pixels for content. This particular disagreement led to Internet Explorer having special style sheets developed to work around the 'wrong' implementation for more than ten years!

Microsoft has now officially retired IE6, although IE7 and 8 both continue to support the old system, but as CSS3 properties have been introduced the W3C designers are forced to specify the same properties multiple times, targeting vendor-specific features.

design. The first, and default, positioning scheme is 'relative' positioning. This operates on the basis that an HTML document is chronological. Much like a word processor, content that appears beneath other content has its position on the page dictated by the content above which pushes it down into position.

In addition to relative positioning, CSS also offers absolute positioning, where an element is positioned according to a set of co-ordinates relative to the container element. This allows elements to be very precisely positioned on the page, relative to the whole page.

Similar to absolute positioning is fixed positioning. This works, as with absolute, using a series of co-ordinates but rather than being positioned relative to the page, 'position: fixed'

getting to know how positioning, and especially float, works.

History and potential hiccups

By now you're starting to see the value and potential of CSS, but it's not all as perfect as it might at first seem. There are a number of problems that web designers have to overcome when using CSS to style their web pages, and to fully understand those issues it's worth taking a quick trip down memory lane.

When HTML3.2 was released, a series of new tags were added that allowed web designers to specify different visual characteristics for their content. These included the likes of ``, `` (for bold text), `<color>`, `<center>` and many more. These tags provided the control over

"CSS offers absolute positioning of an element according to set co-ordinates"

elements are always relative to the viewport (the visible portion of the browser screen). As you scroll, position fixed elements remain in the same place in the browser window.

The final, and often the most confusing, system is the floating element. This system allows elements to push to one side or the other of the containing element, with content and other elements automatically flowing around it. This takes some understanding and experimentation, but is fundamental to achieving some common layouts so it's worth spending a little extra time

presentation that web designers were craving, but a problem quickly emerged: by mixing style with content the pages designers worked on quickly became unmanageable, especially when a web site had lots of pages. Something as simple as changing the font a website used might have taken days to change, working through each HTML page in the website and changing references from one font to another.

As a consequence, the W3C quickly realised that content should be separate from presentation, and developed CSS. CSS1 debuted

The advantages of CSS

CSS offers many benefits over the previous idea of incorporating visual characteristics into HTML. The most obvious one is that by separating content from presentation, the aesthetic of a webpage or entire website can be tailored to individual user profiles or devices with ease. A single HTML page can be rendered in many different ways, as amply demonstrated by the CSS Zen Garden experiment (www.csszengarden.com), and this characteristic can be used to ensure that mobile devices see a layout appropriate to their form while a desktop computer sees a different rendering more aligned to the larger screen estate. CSS supports many different usage scenarios including both print and audio.

As well as the ability to tailor the presentation according to device, user characteristic or location, CSS also helps to ensure consistency across an entire website. Where multiple pages reference the same CSS sheet, a change in the CSS is instantly reflected across all those pages, saving the designer time and reducing the risk of inconsistencies. Along the same vein, CSS allows multiple elements to be selected and styled with a single selector. This reduces the amount of code required to achieve a design.

CSS makes the web more accessible; a user can choose to load their own style sheet onto any document. Useful for visually-impaired users (who might need to see content in a larger font size) this characteristic also allows designers to separate styles into multiple style sheets with each applying an additional layer of styling for easy organisation and adaptation of a design.



CSS3 opens the web up to more users by allowing individual stylesheets on pages

Transitions

2D Transitions:

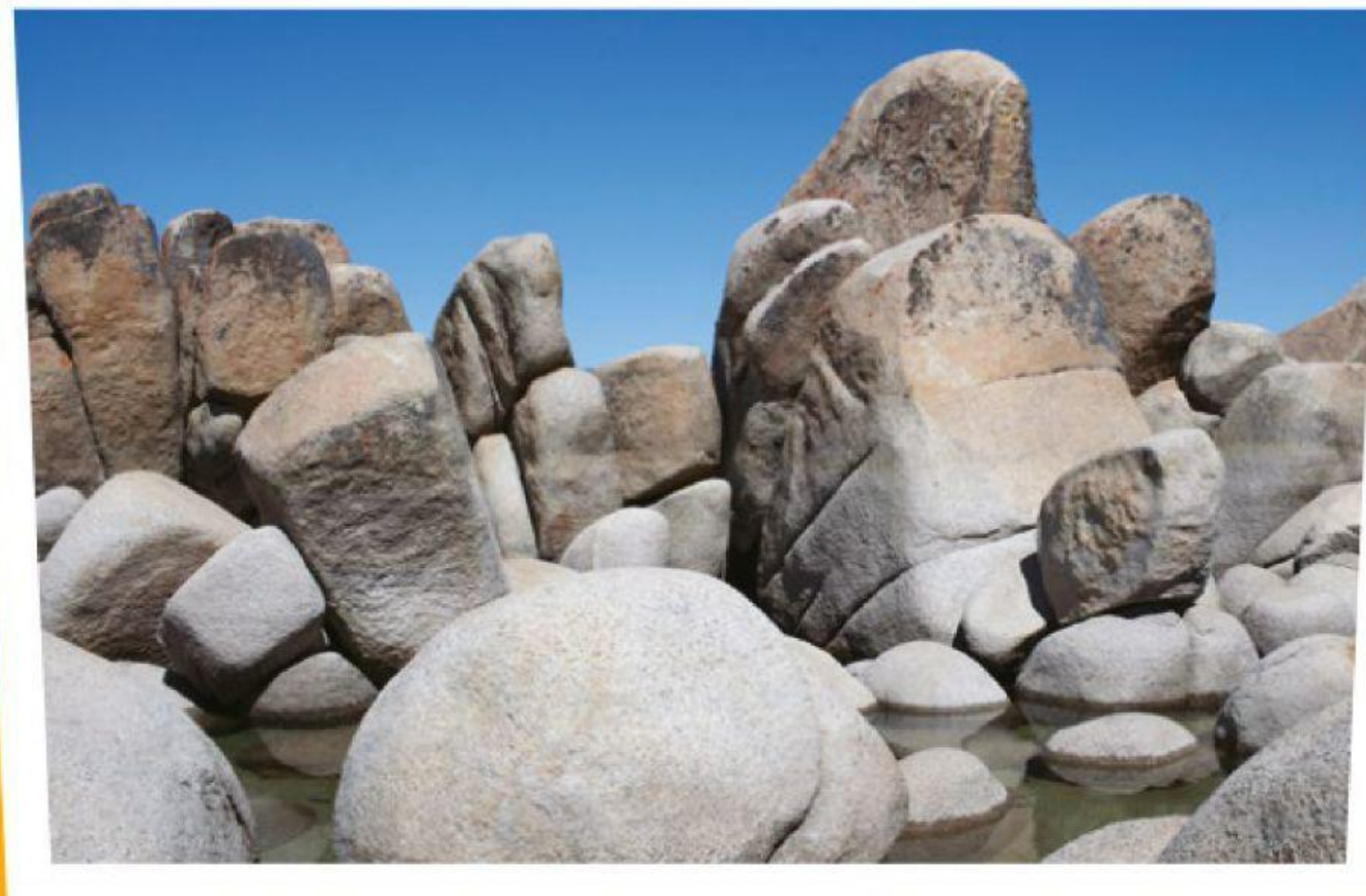
- Dissolve
- Toss
- Slide In
- Iris
- Fade Through

3D Transitions:

- Cube
- Rotate In
- Horizontal Flip
- Multi-Flip
- Unfold

Try it out: Click any of the transitions above to see them in action.

About this demo: Add Keynote-style transitions to objects on your web pages by using CSS 2D and 3D transforms like the ones displayed here.



Watch it again

Visit the Safari Dev Center to learn more and download sample code

CSS3 brings animations to the mix by allowing designers to set up automatic changes in property values, altering over time

Build a site

alongside HTML4 in 1996, but it wasn't until some years later that web browser vendors had managed to fully implement the language. In the meantime, a newer version of CSS had been created in 1998, and Netscape and Internet Explorer version 6 had both partially implemented CSS2.

As well as the slow implementation, from the start there were issues with the way the CSS specification had been written, leaving room for individual interpretation over what each part of the specification meant. This resulted in Internet Explorer rendering styles in one way, while the other popular browser of the day, Netscape, rendered differently. As well as differences in

“It's only in the last few years that technology has been implemented properly”

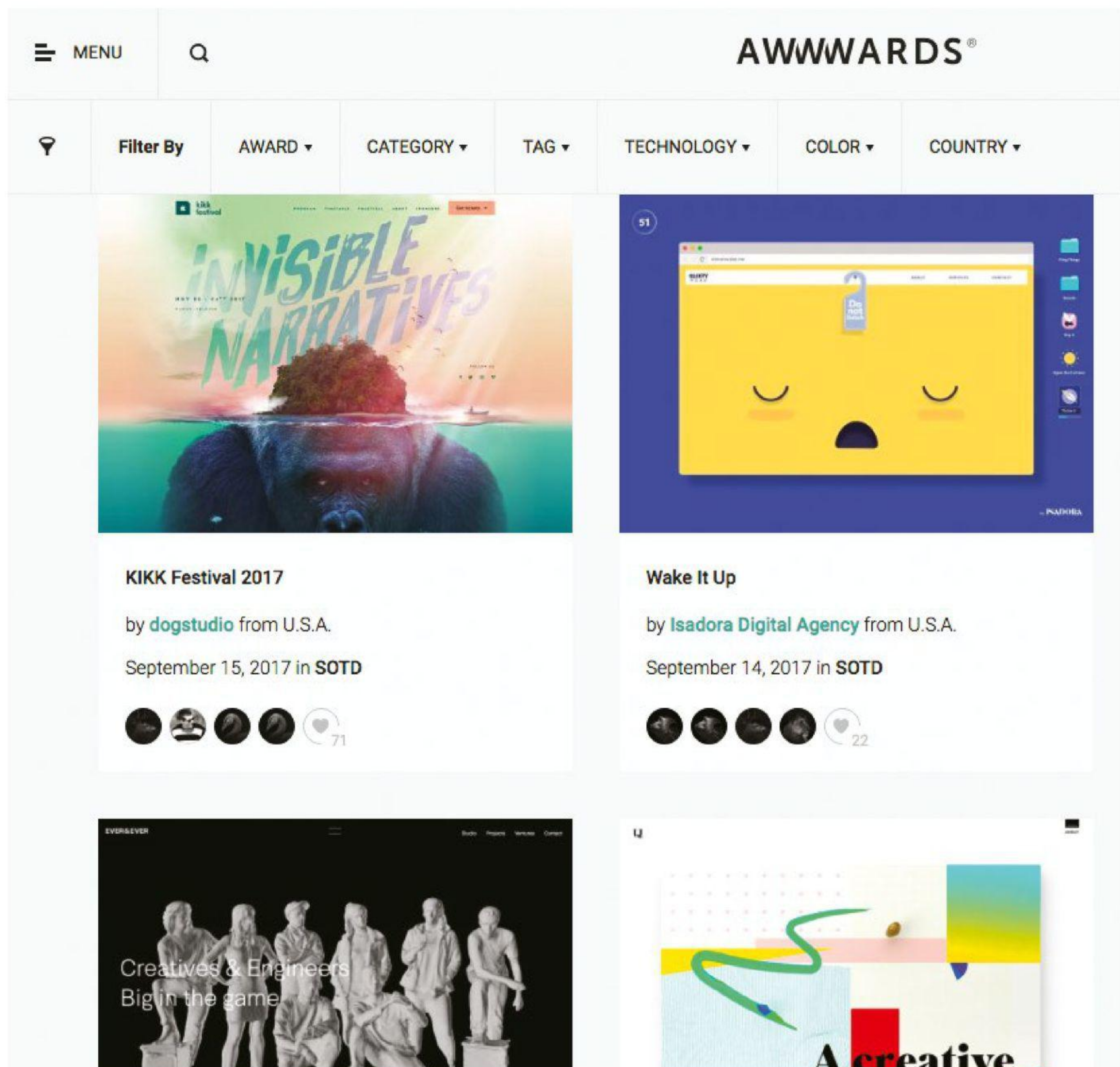
opinion, both these popular browsers had their own bugs and quirks that resulted in strange behaviours when interpreting and rendering CSS. To further compound the issue, as the web was taking off and becoming mainstream, once the damage had been done there was no easy way to backtrack. The net consequence of these unfortunate events was that web designers had to start using workarounds to code different style rules for different browsers, taking into account the bugs, quirks and differences in rendering.

The arrival of HTML5

As the web has matured, so have the technologies used to create it and CSS is no different. HTML is now just about at version 5, and CSS3 first came into existence at the beginning of the century. It's only in the last couple of years



Although the technology has been around for years, it's only now we're implementing it effectively



CSS allows websites to be tailored according the device upon which the website is accessed

that either technology has started to be properly implemented by browser vendors however, and the combination of HTML version 5, CSS version 3 and JavaScript is often referred to collectively as HTML5 (erroneously it must be said!).

As mobile devices have become increasingly popular, driving the desire for access to the web on the move, and across different screen sizes, so the browser vendors have been coaxed into accelerating their implementations. This has provided quite a relief to web designers who only a couple of years ago were still implementing workarounds for Internet Explorer version 6 – over a decade-old piece of software!

Differences of opinion

Despite the recent strides towards adoption of CSS3, and the retirement of Internet Explorer 6 by Microsoft, there continues to be quite a lot of differences between the way different browsers render CSS. The most common issue today is where browsers implement CSS properties that haven't yet been fully ratified by the W3C. To ensure compliance, vendors prefix these properties with a name that represents the browser's maker. So, for example, to create a CSS drop shadow we currently have to have a rule

that specifies properties for box-shadow, -webkit-box-shadow, -moz-drop-shadow, ms-drop-shadow and o-drop-shadow. The first property is the actual CSS3 specification property, while the others are the early implementations by Safari and Chrome, Firefox, Internet Explorer, and Opera respectively.

Vendor prefixes are the subject of much debate currently as they've become more prevalent in recent years as vendors rush to outdo each other in their CSS implementations. For web designers the new opportunities CSS3 presents are slightly offset by the continuing need to provide browser-specific properties for most of the modern properties.

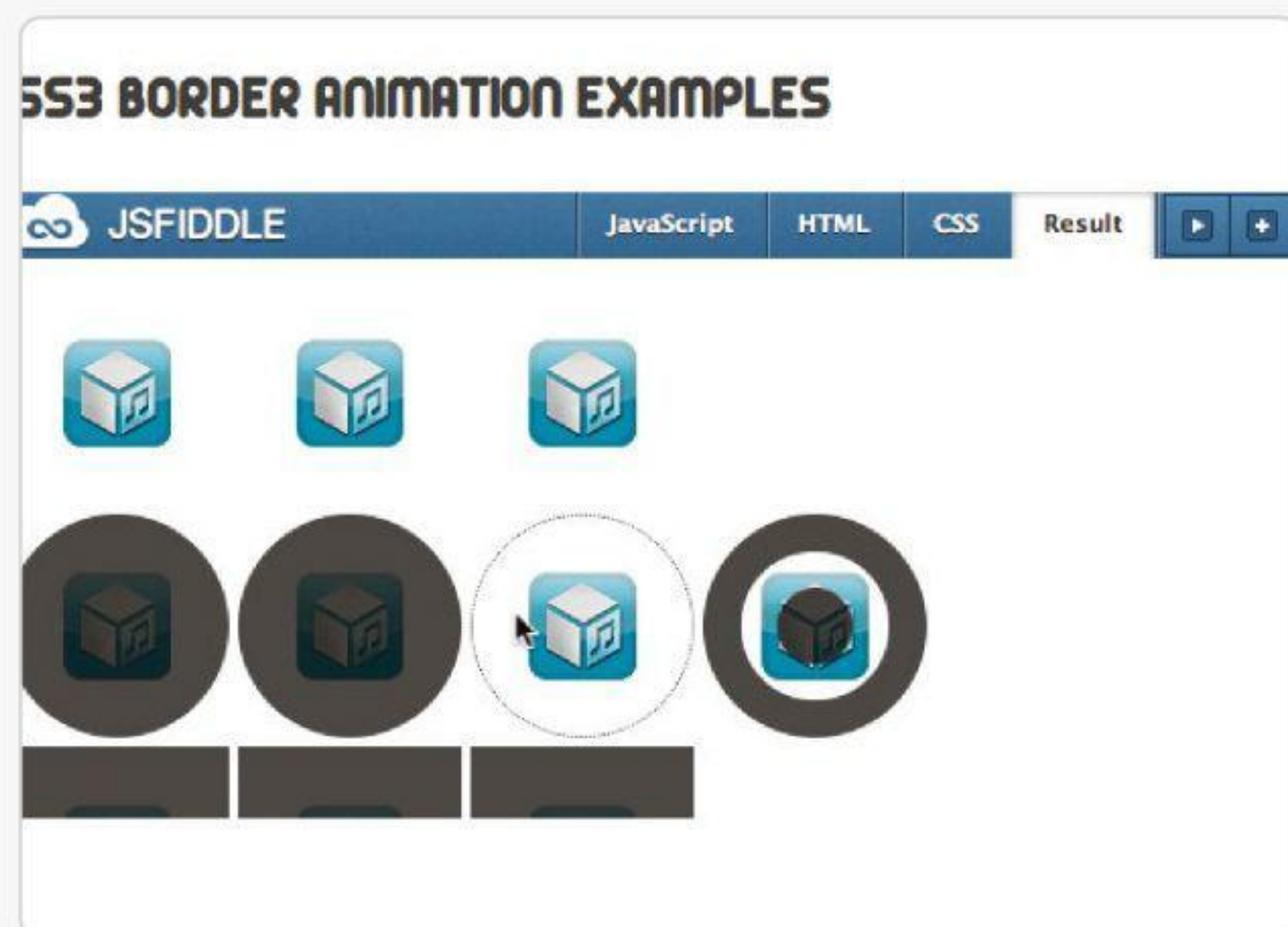
What does the future hold?

As you've read, CSS3 is still being implemented and defined by both the W3C and browser vendors. And as for the future? Don't expect to see it any time soon, but CSS4 has been in development since 2009. It's still in early draft of course, but promises all manner of exciting new styling options and properties. If we're all still designing websites in another ten years, no doubt we'll be discussing matching selectors and reference combinators!

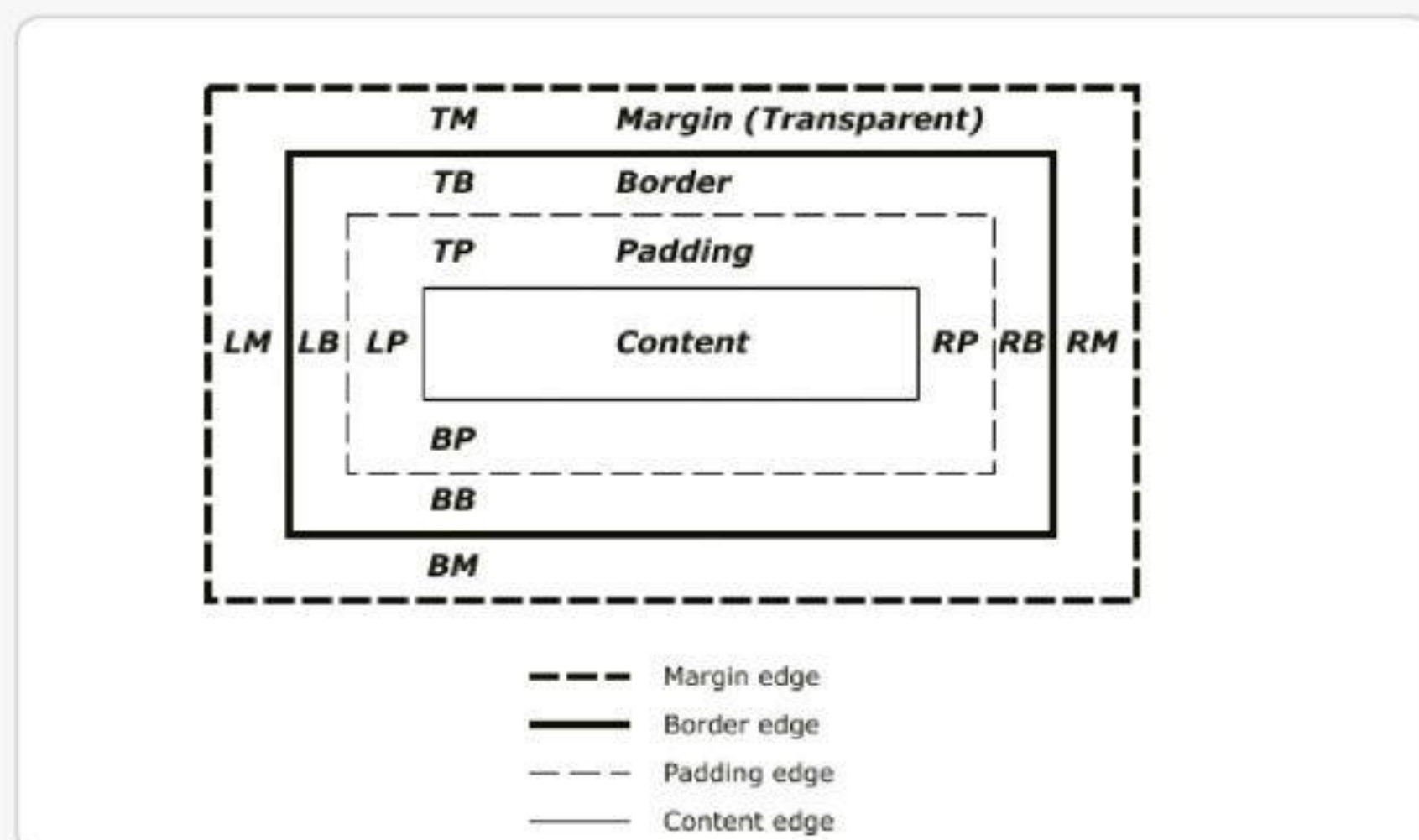
Glossary of common properties



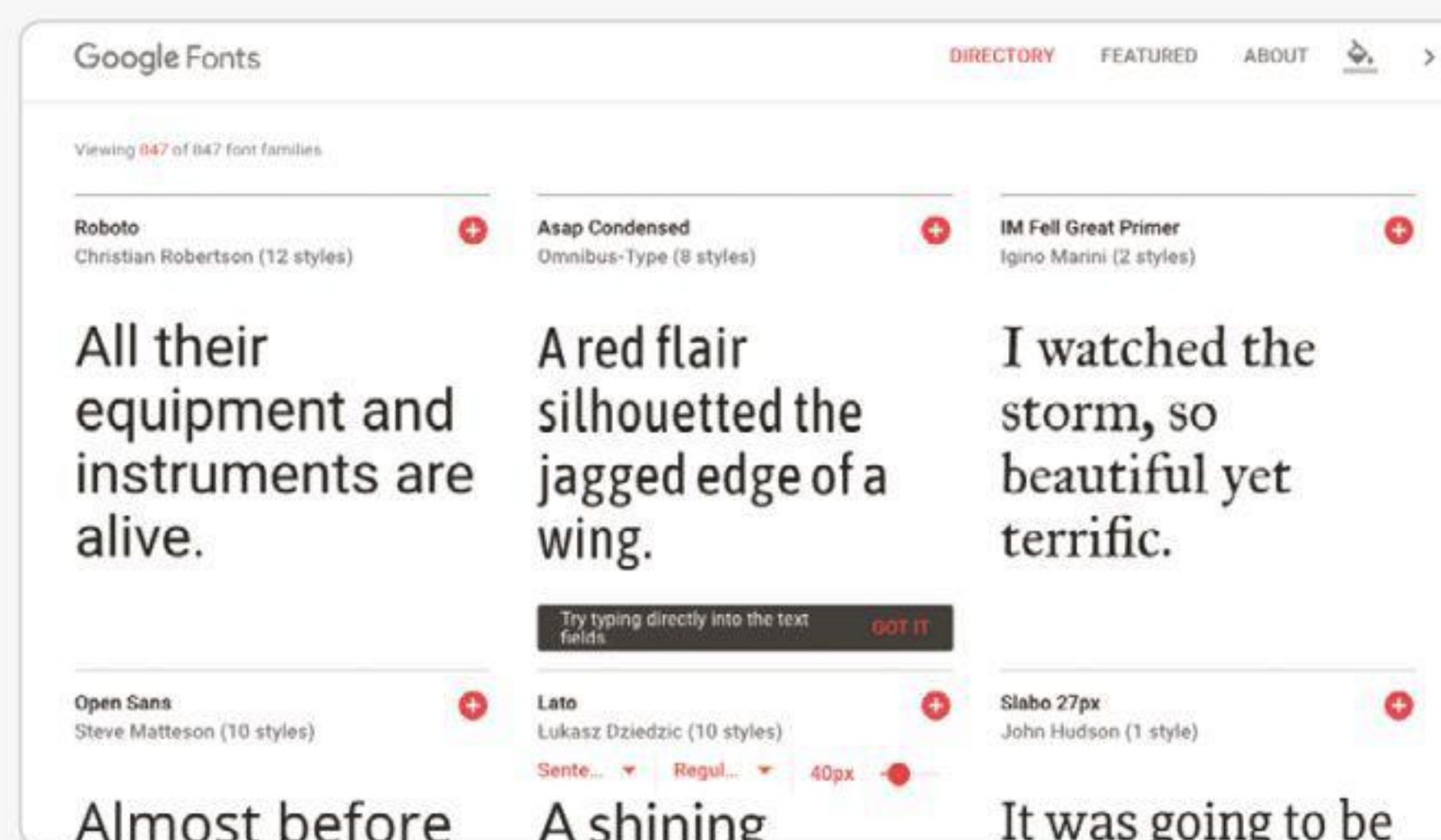
background The background property allows designers to assign a colour and background image to an element. As well as the image itself, the position of the image in the element and how the image repeats are configurable.



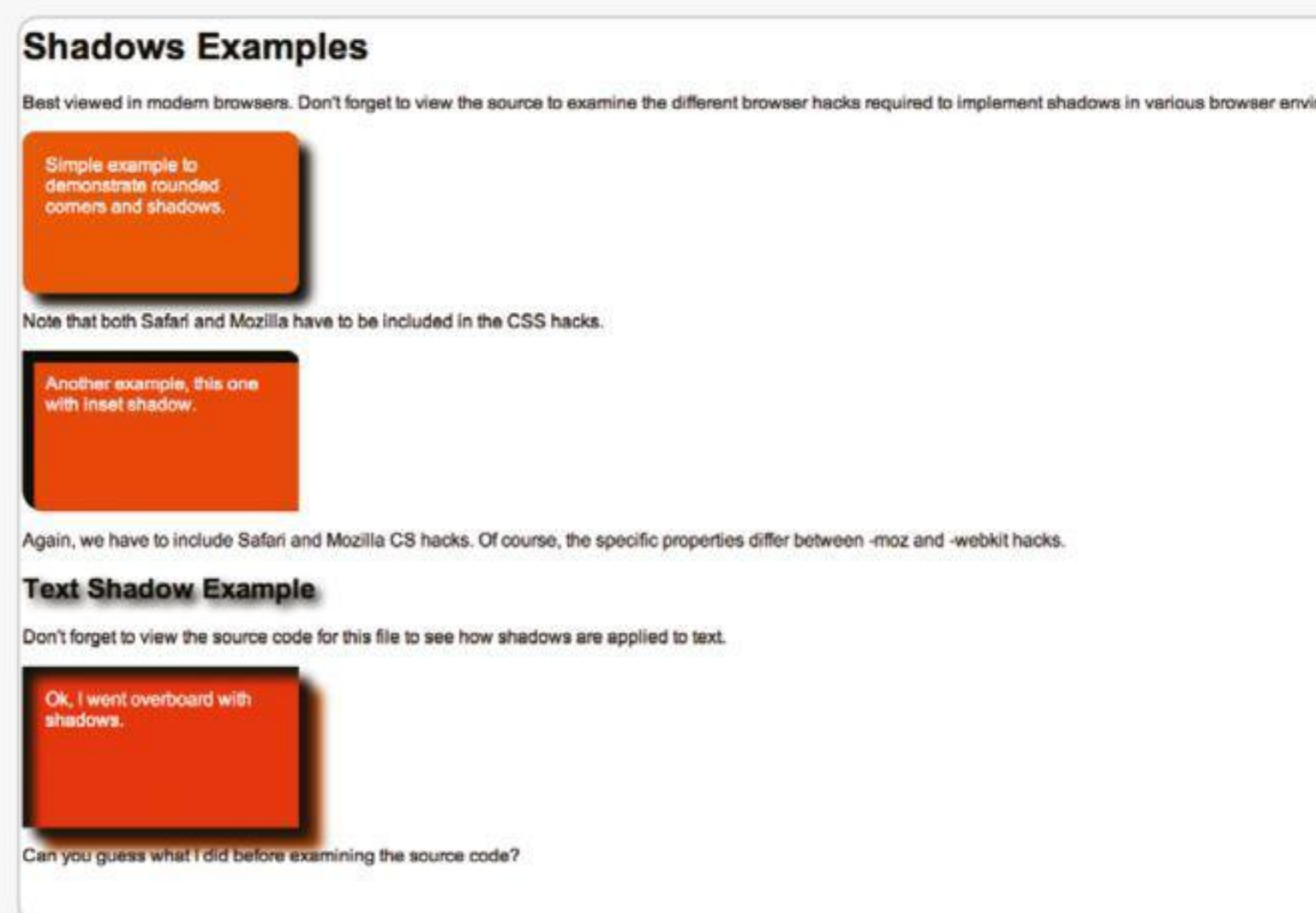
border The border property allows the designer to assign a border of varying types to any element. The options available include the weight of the border (how thick it is), colour and line style (eg solid line, dotted, dashed, etc).



margin The margin property defines the amount of space the selected element should be away from other elements in the document. It works by pushing the other elements away from it, providing 'white space' around the element, and can be defined against each of the top, bottom, left and right sides.



font-family The font-family property is the method through which all the different fonts used on a web page are designated. In the past web designers were forced to stick to a small set of 'web safe' fonts, but in recent years great advances have been made in providing web-enabled fonts on demand through a style sheet.



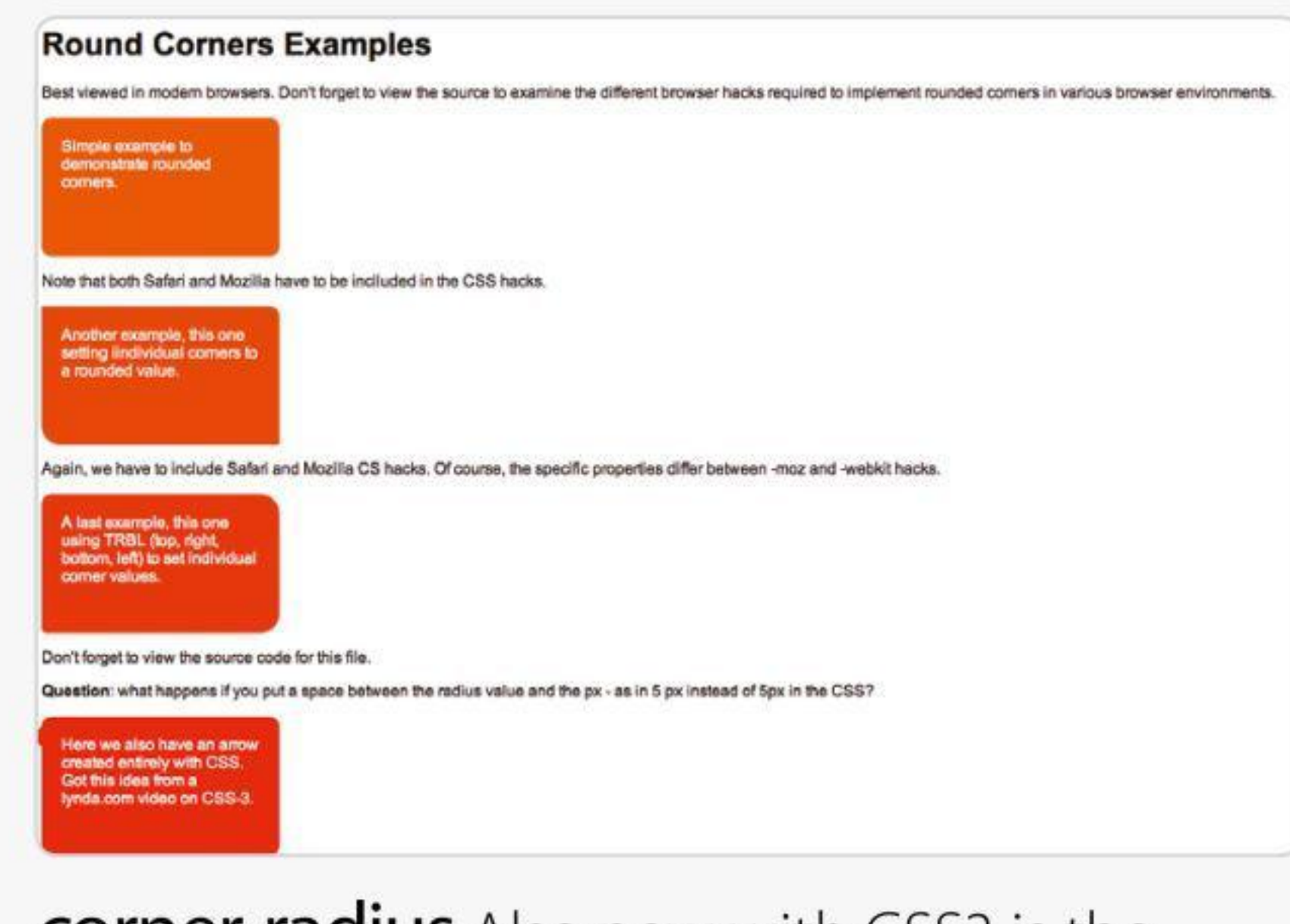
box-shadow New with CSS3 is the ability to define drop shadows on elements using the box-shadow property. An offset can be assigned independently on the X and Y axis, along with a colour and amount of blur to apply.



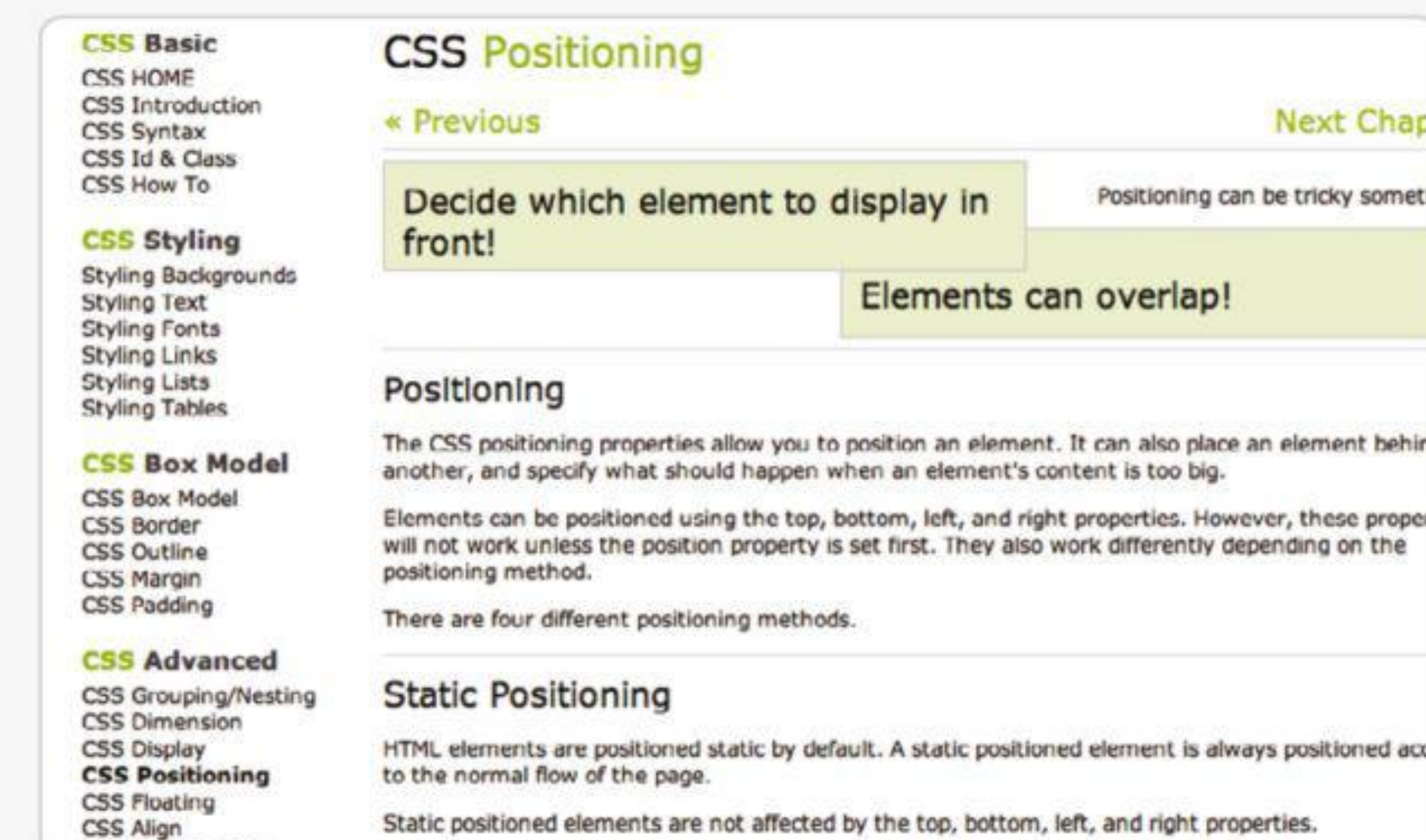
padding Similar to margin, padding also provides white space to an element, but instead of pushing other elements away, the white space exists within the selected element. If an element has a border, increasing the amount of padding will push that border away from the content within the element.



colour The colour property sets the foreground colour of any element which has a foreground. Most commonly this is text, although certain other elements also support colour. If colour doesn't work, most probably you actually should be using background-colour or just background for short.



corner-radius Also new with CSS3 is the corner-radius property, which sets the roundness of a corner on any block level element. Radii can be defined independently for each corner, along with the way the curve should be applied.



position The position property is used to define which positioning system should be used on an element in the page. Confusingly, however, should you want to use the float system you need to use the float property to define which direction the element should float to.

Centre your page

Using CSS to wrap your page's content in div tags gives you great control over the way it's displayed

When you're designing a webpage, you have to remember that a browser window can be almost any shape and size. Desktop computers have a wide range of screen sizes, and mobile phone and tablets are used to browse the web too. Your nicely designed page could be ruined if you simply allow it to flow into the browser window, regardless of the latter's size or shape. By creating a wrapper you can specify the width of the webpage content and its position in the browser window. It is an essential part of the design process.

A 'wrapper' is a commonly used name for a piece of CSS code that is used with a div tag to size and position the content of a webpage. A div tag is placed at the start of the page content just after the opening body tag and again just before the closing body tag, thereby enclosing or wrapping the content.

In CSS we can define how everything between the div tags – the page's content – is displayed. It can be centred on the page, positioned a certain number of pixels from the left, a border can be added, its width can be fixed or variable and so on. It is an essential component of any webpage and it's quite straightforward.

"You can specify the width of the webpage content and its position"

A simple div wrapper

See how the CSS code relates to the content on the webpage

Set the width

How wide do you want the page content to be? You can either set a width in pixels, as shown here, or use a percentage. 100% would be the full browser width

Borders or borderless?

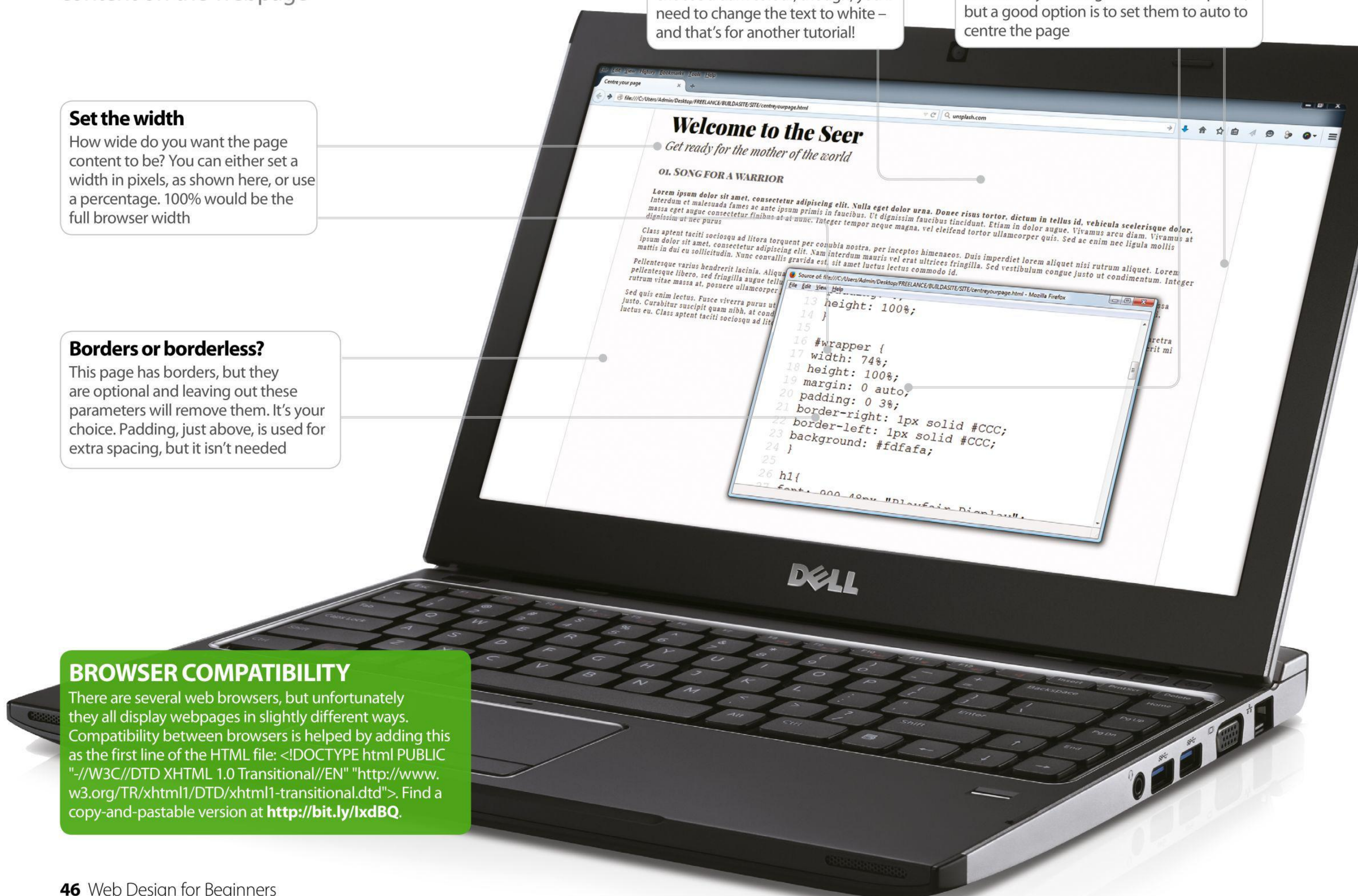
This page has borders, but they are optional and leaving out these parameters will remove them. It's your choice. Padding, just above, is used for extra spacing, but it isn't needed

Set the colour

You can choose whatever colour you want for the background. If you choose a dark colour, though, you'll need to change the text to white – and that's for another tutorial!

Set the margins

Without margins, the page content is displayed on the left. You can manually set them by entering the number of pixels, but a good option is to set them to auto to centre the page



BROWSER COMPATIBILITY

There are several web browsers, but unfortunately they all display webpages in slightly different ways. Compatibility between browsers is helped by adding this as the first line of the HTML file: `<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">`. Find a copy-and-pastable version at <http://bit.ly/lxdBQ>.

```

1 <!DOCTYPE HTML>
2 <html>
3 <head>
4
5 <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
6
7 <link href='http://fonts.googleapis.com
8 /css?family=Playfair+Display:400,700,900,700italic,900italic,400italic'
9 rel='stylesheet' type='text/css'>
10 <link href='http://fonts.googleapis.com
11 /css?family=Playfair+Display+SC:400,700,900' rel='stylesheet'
12 type='text/css'>
13 <link href='http://fonts.googleapis.com
14 /css?family=Raleway:400,600,300,700' rel='stylesheet' type='text/css'>
15
16 <title>Centre your page</title>
17
18 <link rel="stylesheet" type="text/css" href="style.css" />
19
20 </head>
21
22 <body>

```

01 The CSS link

CSS definitions can be stored in a webpage or a separate file. If it is in a separate file then any webpage can access it and it saves having to add it to each new page. Add a link in the HTML header to a file called style.css.

```

10
11
12 /* CSS - style.css */
13
14 #wrapper {
15 width: 750px;
16 }
17
18

```

03 Create the CSS

We don't yet have any CSS, so create a new file called style.css and add a div ID called #wrapper. Set the width to 750 pixels. This value determines the width of the webpage content because everything is contained within the two div tags.

```

10
11
12 /* CSS - style.css */
13
14 #wrapper {
15 width: 80%;
16 margin-left: auto;
17 margin-right: auto;
18 }

```

05 Set the margins

We have specified the width for the page content, but not its position. With margin-left you can specify the number of pixels from the left the content is to be displayed. An alternative is to set both margins to auto to centre it in the browser.

```

1 <!DOCTYPE HTML>
2 <html>
3 <head>
4
5 <meta http-equiv="Content-Type" content="text/html; charset=utf-8">
6
7 <link href='http://fonts.googleapis.com/css?family=Playfair+Display:400,700,900,700italic,
8 type='text/css'>
9 <link href='http://fonts.googleapis.com/css?family=Playfair+Display+SC:400,700,900' rel='s
10 <link href='http://fonts.googleapis.com/css?family=Raleway:400,600,300,700' rel='styleshe
11 <title>Centre your page</title>
12
13 <link rel="stylesheet" type="text/css" href="style.css" />
14
15 </head>
16
17 <body>
18 <div id="wrapper">
19
20 <p><strong>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla eget dolor urna
21 vehicula scelerisque dolor.</strong> Interdum et malesuada fames ac ante ipsum primis in
22 Etiam in dolor augue. Vivamus arcu diam. Vivamus at massa eget augue consectetur finibus

```

02 Add div tags

We want to specify the size and position of the webpage content, so we must place div tags at the start and end of the page, thereby enclosing all the content. The CSS definition will be called 'wrapper' and we refer to it with id="wrapper".

```

10
11
12 /* CSS - style.css */
13
14 #wrapper {
15 width: 80%;
16 }
17
18

```

04 Flexible page width

Set the page width using absolute dimensions and it may not fit on small screens like mobile phones or tablets, or it may look tiny on computers with large monitors. An alternative is to set it to a percentage of the browser width instead.

```

11
12 /* CSS - style.css */
13
14 #wrapper {
15 width: 80%;
16 margin-left: auto;
17 margin-right: auto;
18 border: 2px;
19 border-style: solid;
20 border-color: #CCCCCC;
21 }

```

06 Add the borders

Your page design may look good if there is a border, and this specifies one that is two pixels wide. The border colour is set to light grey (#CCCCCC) and the border style is set to solid. Alternatives include dotted, dashed, double and ridge.

Define body text and heading styles

Create CSS rules for displaying the text on the page

Every webpage contains text and it is frequently the main content. You should therefore ensure that it looks good by choosing the fonts and styles to fit your design and the image you want to portray. There might only be a small amount of text if the main content focuses on images, but even so, there will be titles, links and captions. There's no getting away from text on webpages.

You can add CSS code to a webpage to define how the text is displayed, but placing it in a separate .css file and linking to it in the page's

head section means that the same text styles are applied everywhere in your site. HTML font tags have been replaced by CSS font-family definitions, old-fashioned `<i>` and `` tags are no longer needed, and font-style and font-weight enable you to set the styles to normal, italic, bold and so on. It might seem like extra work for one webpage, but

when you are creating a site with 100 pages it is a considerable time-saver.

Writing the CSS rules for the text is simple and you can create a class that defines a text style and then use it over and over again in the page. We only look at headings and body text here, but expanding the CSS yourself should not present any problems.

“You can create a class that defines a text style and then use it over and over again”

Style the text

As you make style changes, you can see the effects on the page

Heading style

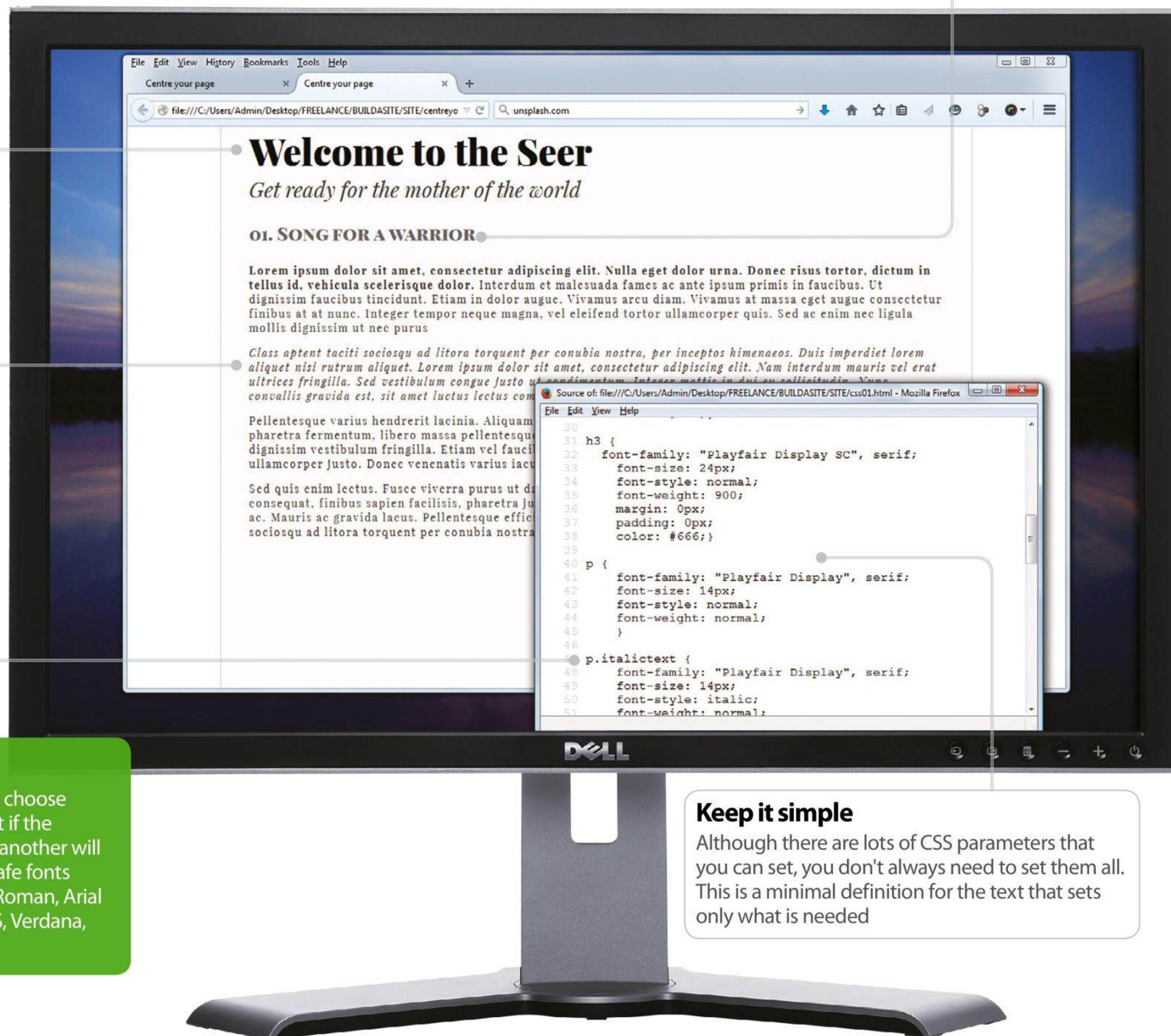
This is an h1 heading, the largest that is available, so we have made it big and bold. Choose your font and font size carefully to get the desired impact

Italic text

The p tag has already been set, so to display italic text on the page we just need to create an italictext class and set the font-style to italic. All other settings are inherited

Style other headings

Here you can see the style settings for the h3 tag and the heading in use on the page. The font-family, font-size, font-weight and margin-bottom have all been set



CHOOSING A FONT

When you are designing a webpage, you can choose any font on your computer, but be aware that if the visitors to your website do not have the font, another will be substituted and it may ruin your design. Safe fonts include Georgia, Arial, Helvetica, Times New Roman, Arial Black, Comic Sans MS, Tahoma, Trebuchet MS, Verdana, and Lucida Console.

Keep it simple

Although there are lots of CSS parameters that you can set, you don't always need to set them all. This is a minimal definition for the text that sets only what is needed


```

10
11
12 /* CSS - style.css */
13
14 p {
15     font-family: Verdana;
16 }
17
18

```

01 Pick a font

Using CSS you can set the font for all the text enclosed by `<p></p>` tags on all webpages with this in your style.css file. Link to it in the page header using `<link rel="stylesheet" type="text/css" href="mystyle.css" />`. This bit of code sets the font family to Verdana.

```

11
12 /* CSS - style.css */
13
14 p {
15     font-family: "Playfair Display", serif;
16     font-size: 14px;
17     font-style: normal;
18     font-weight: normal;
19 }
20
21
22
23

```

03 Size and style

The text may be fine at its default size, but if it isn't, you can set the size in pixels. The size you need depends on the font, so experiment with 10px to 16px. The font-style can be normal or italic and the font-weight can be normal, bold, bolder or lighter.

```

16 <body>
17 <div id="wrapper">
18
19 <p><strong>Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla eget dolor urna. Donec
20 dictum in tellus id, vehicula scelerisque dolor.</strong> Interdum et malesuada fames ac ante
21 faucibus. Ut dignissim faucibus tincidunt. Etiam in dolor augue. Vivamus arcu diam. Vivamus at
22 consectetur finibus at at nunc. Integer tempor neque magna, vel eleifend tortor ullamcorper qu
23 ligula mollis dignissim ut nec purus</p>
24
25 <p class="italictext">Class aptent taciti sociosqu ad litora torquent per conubia nostra, per
26 Duis imperdiet lorem aliquet nisi rutrum aliquet. Lorem ipsum dolor sit amet, consectetur adipi
27 interdum mauris vel erat ultrices fringilla. Sed vestibulum congue justo ut condimentum. Intege
28 sollicitudin. Nunc convallis gravida est, sit amet luctus lectus commodo id.</p>
29
30 <p class="boldtext">Pellentesque varius hendrerit lacinia. Aliquam hendrerit ultricies elit ut
31 venenatis, arcu vitae pharetra fermentum, libero massa pellentesque libero, sed fringilla augue
32 Duis mollis magna dignissim vestibulum fringilla. Etiam vel faucibus elit. Etiam elit orci, rui
33 posuere ullamcorper justo. Donec venenatis varius iaculis.</p>
34
35 <p>Sed quis enim lectus. Fusce viverra purus ut dapibus sodales. Maecenas vel quam urna. Donec
36 consequat, finibus sapien facilisis, pharetra justo. Curabitur suscipit quam nibh, at condiment
37 Mauris ac gravida lacus. Pellentesque efficitur euismod justo, non hendrerit mi luctus eu. Clas
38 sociosqu ad litora torquent per conubia nostra, per inceptos himenaeos.</p>
39

```

05 Use different classes

Step 4 created three CSS classes for the `<p>` tag. When you want text to appear in one of these styles, you add a class parameter to the `<p>` tag. The style is used for all the following text until you either change it with another tag or end it with `</p>`.

```

10
11
12 /* CSS - style.css */
13
14 p {
15     font-family: "Playfair Display"
16 }
17
18
19

```

02 Select a family

When a font name contains spaces, you must put quotes around it or the CSS won't work. It is also a good idea to offer an alternative font in case the visitor to your site doesn't have the one you specified. Choose a family such as serif (fancy) or sans-serif (plain).

```

14 p {
15     font-family: "Playfair Display", serif;
16     font-size: 14px;
17     font-style: normal;
18     font-weight: normal;
19 }
20
21 p.italictext {
22     font-family: "Playfair Display", serif;
23     font-size: 14px;
24     font-style: italic;
25     font-weight: normal;
26 }
27
28 p.boldtext {
29     font-family: "Playfair Display", serif;
30     font-size: 14px;
31     font-style: normal;
32     font-weight: bold;
33 }

```

04 Define a class

There may be paragraphs that you want to make bold or italic, so here are three classes that define three styles of text. It varies the font-style and font-weight, but you could also create small text, large text, styles for panels, captions for images and so on.

```

14 h1 {
15     font-family: "Playfair Display", serif;
16     font-size: 48px;
17     font-style: normal;
18     font-weight: 900;
19     margin: 0px;
20     padding: 0px;}
21
22 h2 {
23     font-family: "Playfair Display", serif;
24     font-size: 28px;
25     font-style: normal;
26     font-weight: 900;
27     margin: 0px;
28     padding: 0px;
29     color: #333;}
30
31 h3 {
32     font-family: "Playfair Display SC", serif;
33     font-size: 24px;
34     font-style: normal;

```

06 Define the headings

In addition to body text, there are also headings using h1 to h6 tags. You don't need to define all of them, just the ones you use. Do it exactly like the p tag and set the font, size, style and so on. We've also reduced the bottom margin below the header.

Style your lists to stand out

Standard lists tend to be a bit boring, so spice them up with some CSS styling

Although some web pages may require a lot of text, it is generally best to keep it brief and to the point. People scan a page for interesting content and then move on if they don't spot anything straight away. Lists are therefore very useful for drawing the visitor's attention to some content and for presenting it in a way that can be digested quickly.

The HTML `` and `` tags are used to create ordered (numbered) and unordered (bullet) lists. They are useful if unexciting, but with CSS `list-style-type` you can change the bullet to different shapes

like a circle or square. It is even possible to replace it with an image that's specially created to fit in with your site's design and colour scheme using `list-style-image`. You can change the font used to display lists so they match the body text. If you have

used HTML lists you will have noticed that they are indented, but with CSS you have finer control over the positioning using padding and margins. You can either tighten up the layout or space it out – it's your choice.

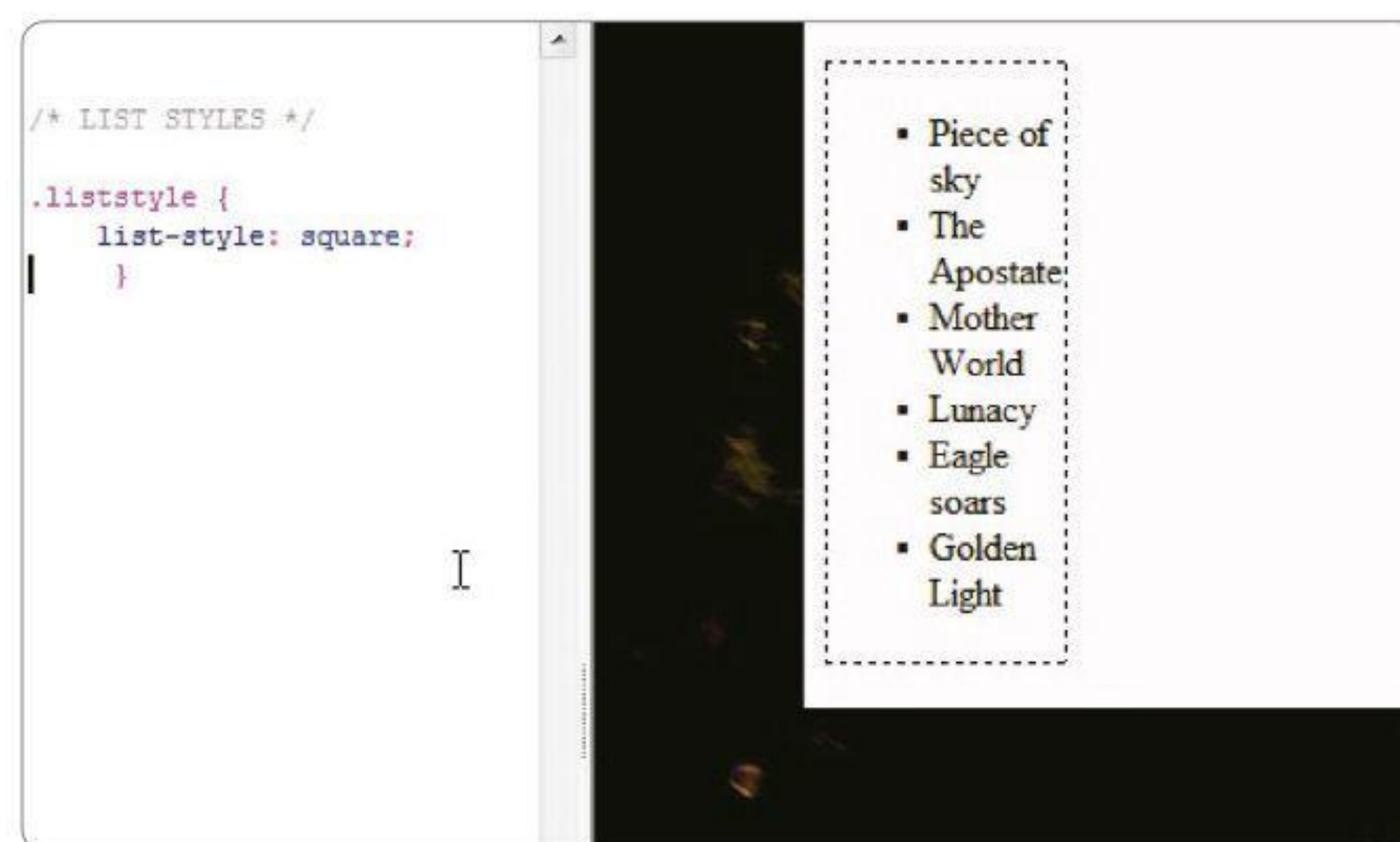
“With CSS you have finer control over the list's positioning using padding and margins”





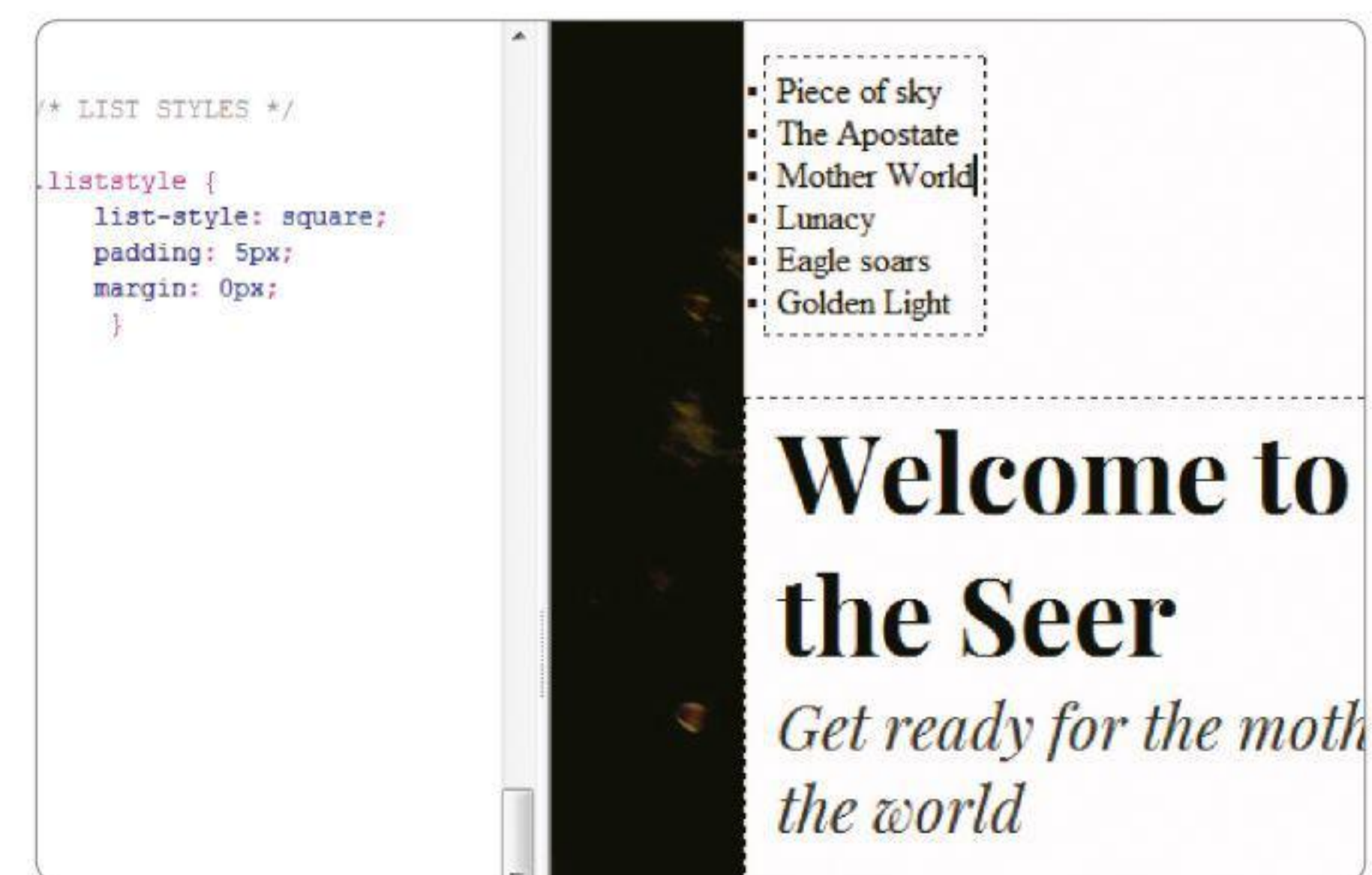
01 Create a list

Before you can style a list you will first need to create one. The first step is to add a set of `` tags as shown. Inside these tags you will need to add list, or `` tags to place the list text. Add as many as you need, with a minimum of four for context. Inside each set of the list tags add the desired text to populate and save.



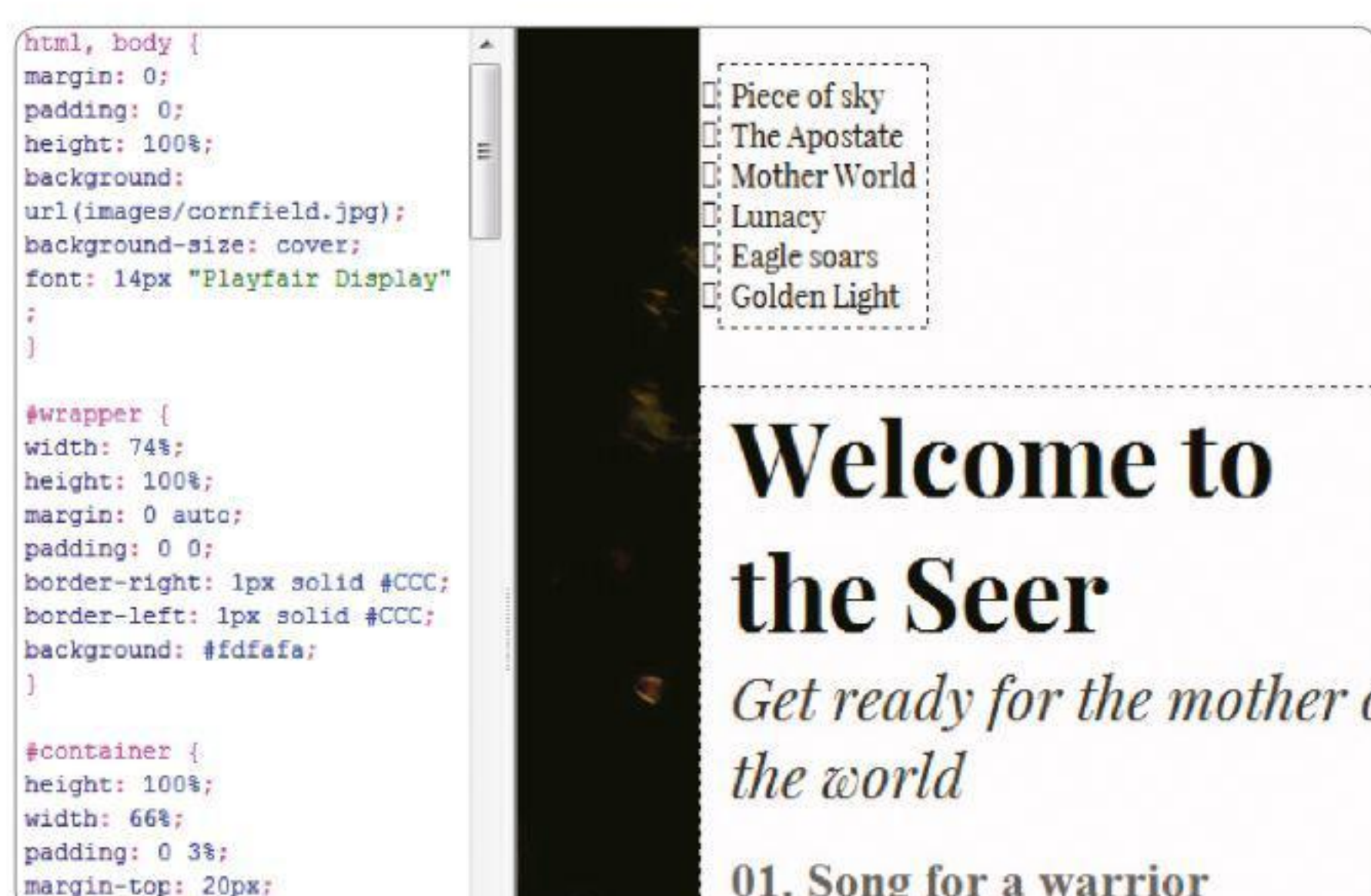
02 Boxed lists

You should have a separate file called style.css for CSS code, so load it and create a new class called list style as shown. It contains just one item called list-style: square, but there are over 20 different possible values. These include circle, lower-roman, disc, decimal, upper-latin, and others. Try each one to see what they are like.



03 Position the list

With those boxes in mind, we can position the list within the space allocated to it on the page. Padding and margin have been added to the list style class and set to 10 and 0 pixels respectively. Experiment with different values to see how they affect the position of the list.



04 Style the text

Notice in the last step that the list text has a different font to the body text. That's because no style is set for lists. We defined the font and size for the body text in a previous tutorial and we can simply add `ul` to the `p` code so it uses the same font and size as the body text.



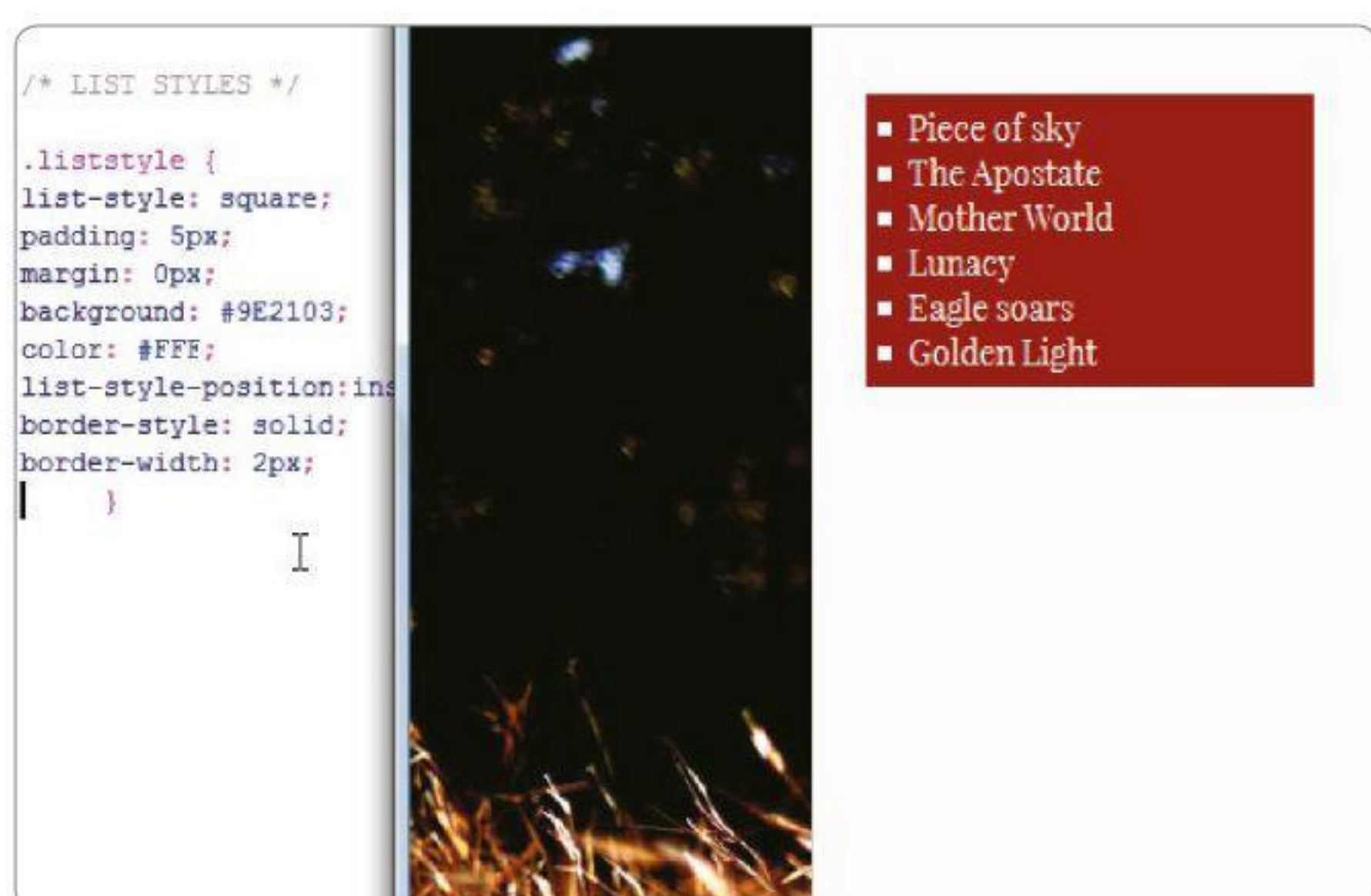
05 Choose a background

Many HTML elements can have a background colour and it is applied to both the content and padding areas, but not the border or margin. A background-colour of `#9E2103` has been set, but if you are not familiar with this notation, you can use common names like red, yellow, blue and so on. This is less flexible, though.



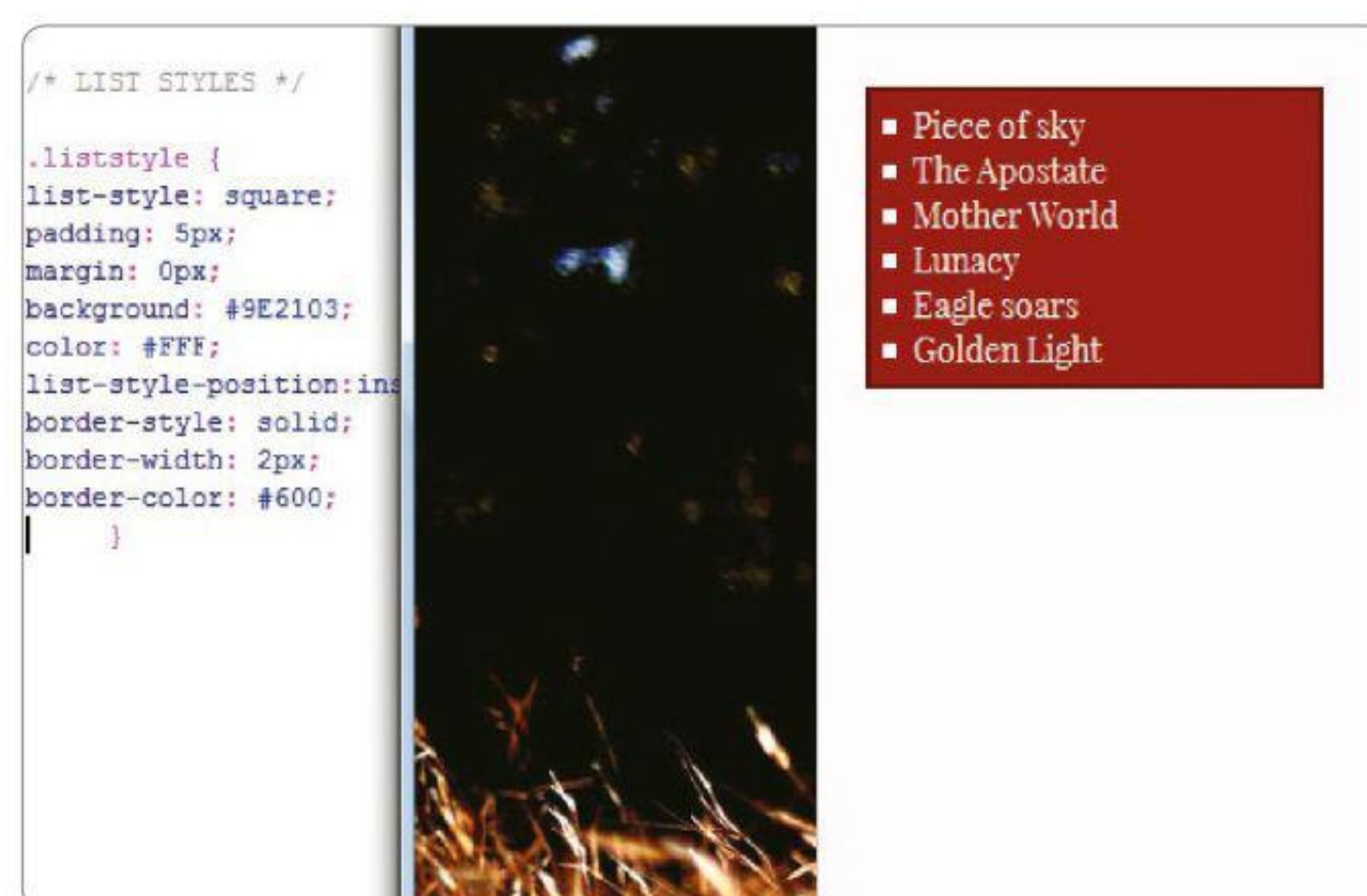
06 Inside vs outside

In the last step did you notice that the bullet blobs are outside of the background colour? This is their default position, but it's possible to change this and make them appear in the background area. In this step, list-style-position is set to inside and this makes the list look more attractive.



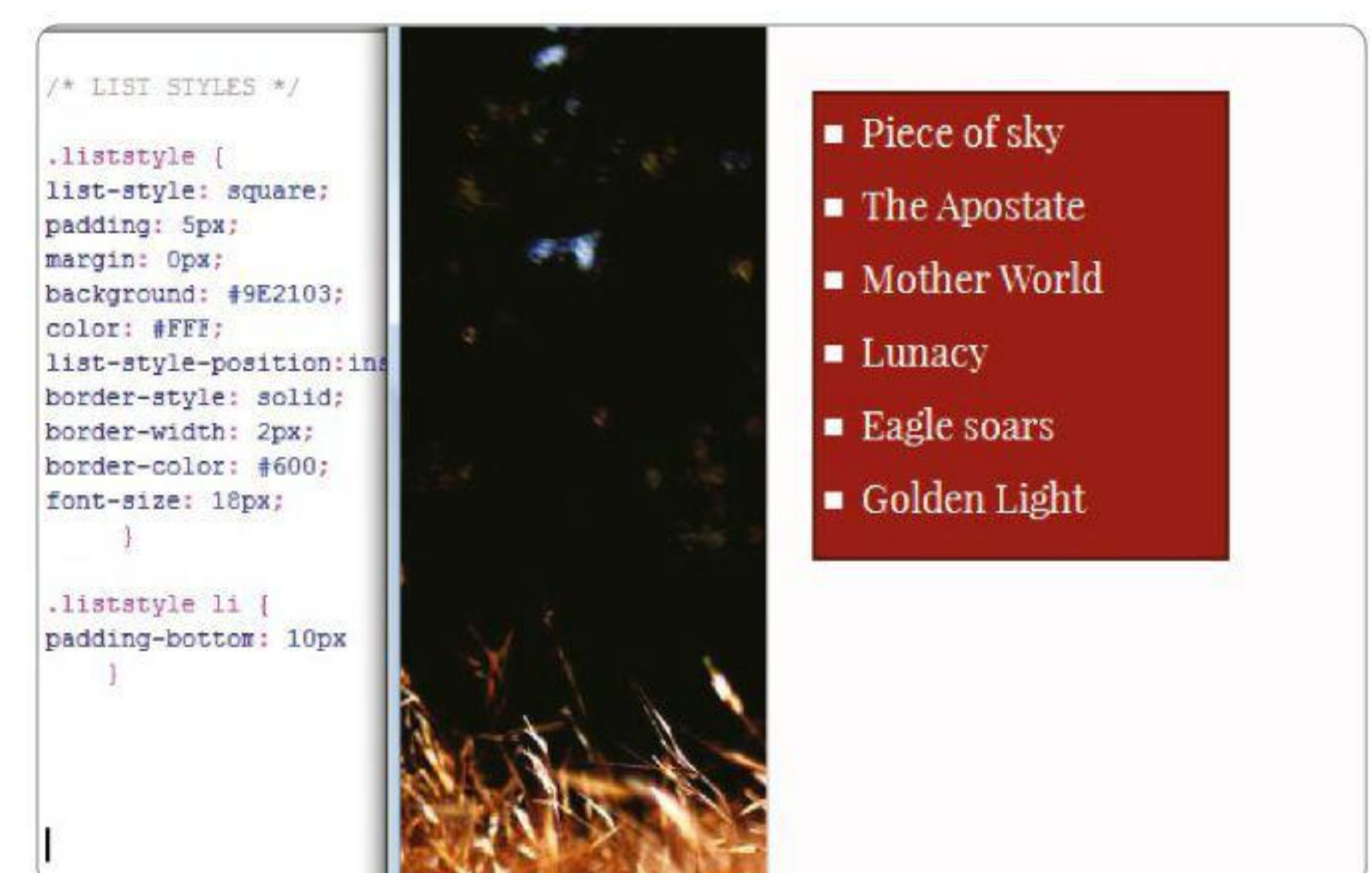
07 Add a border

As we've discussed, each HTML element can have a border. We haven't specified one so far, so one hasn't been drawn. However, we can easily define one by setting border-width to the number of pixels and border style to dotted, solid, dashed, double, groove, ridge, inset or outset.



08 Colour the border

Most parts of the list can be coloured and this includes the border. The border-colour has been set to `#600`, which makes it stand out against the red. It's a good idea to specify the colour even if it's black, because default settings for web browsers might be different.



09 Style up

The elements added so far, eg. margin, padding and font sizes may not work exactly as you want. So the next step is to fine-tune the margins and padding and bump up the font-size. Experiment with the different values until you get a finish that you are happy with and save.

Turn lists into navigation bars

Every website needs some sort of navigation, so why not use CSS for it?

Web site navigation is an important topic and it is something that you need to put some thought into as you are designing your website. At one time we would have used button images created in a paint or photo program and then used JavaScript to create a rollover effect when the mouse hovered over one. But that's yesterday's technology and modern sites use CSS instead.

A CSS navigation bar looks like a regular unordered list in the HTML of the page, but using CSS we can manipulate the list elements and turn

them into the website's navigation. Instead of the list running down the page, the list elements can be displayed across it instead. We can style the links just like any other text and create a custom look for the navigation bar. The result looks nothing like its original plain HTML layout and it really shows off the power of CSS.

You can copy the code into your own web pages and it will work fine. All you need to do is to change the link text to correspond to the pages or sections on your own site, and style the text to fit in with the fonts and colours that you use. It is really quite straightforward once you see how it works for yourself.

“The result looks nothing like its plain HTML layout and it shows off the power of CSS”

Build your navigation

A guide to CSS navigation menu bars

Create an ID

The navigation menu only appears once on the page, so we use an ID instead of a class. This #navbar turns a regular list into a site navigation menu at the top of the page

Vertical to horizontal

Using float:left a vertical list of items is displayed as a horizontal list. It is the key component of this navigation menu and it would not work without it. However, display:inline is an alternative

Block links

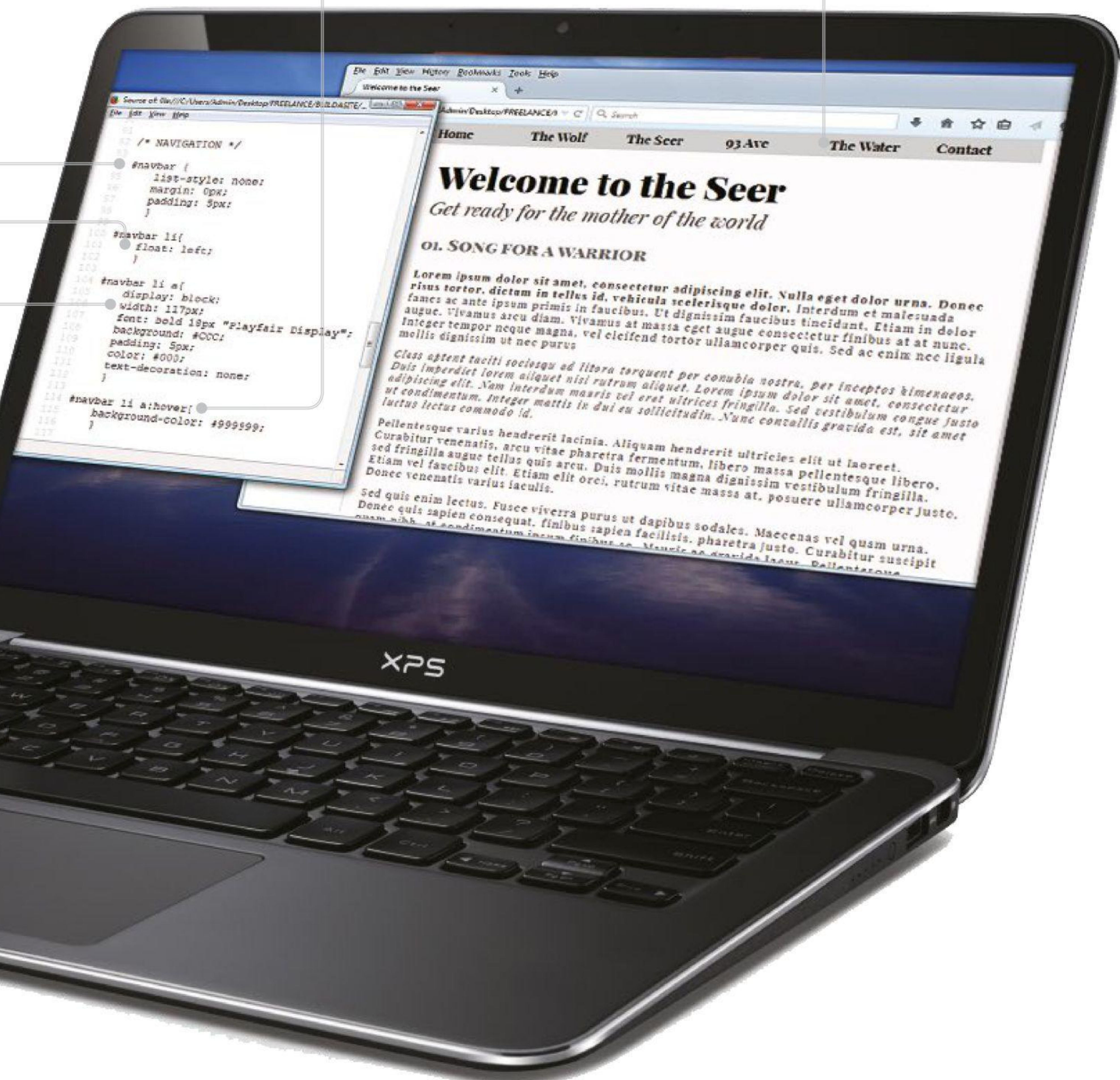
The spacing between the items in the navigation bar is created by setting a specific width for each item. Links are turned into rectangular blocks and the width determines their size

Mouse-over effects

We've sneaked in one final bit of code here. Using #navbar li a:hover, a different colour is defined for when the mouse hovers over a link in the navigation bar. It adds the finishing touch

STRETCH IT TO FIT

In the finished screen shot the navigation bar stretches across the full width of the page. There are several ways to achieve this; in this case we have simply chosen a width for the list items that exactly, or near enough, fit across the page. If you have more navigation items you will need to reduce the width or make the page wider.



```

71 </head>
72
73 <body>
74 <div id="wrapper">
75
76 <ul id="navbar">
77 <li><a href="#">Home</a></li>
78 <li><a href="#">The Wolf</a></li>
79 <li><a href="#">The Seer</a></li>
80 <li><a href="#">93 Ave</a></li>
81 <li><a href="#">The Water</a></li>
82 <li><a href="#">Contact</a></li>
83 </ul>

```

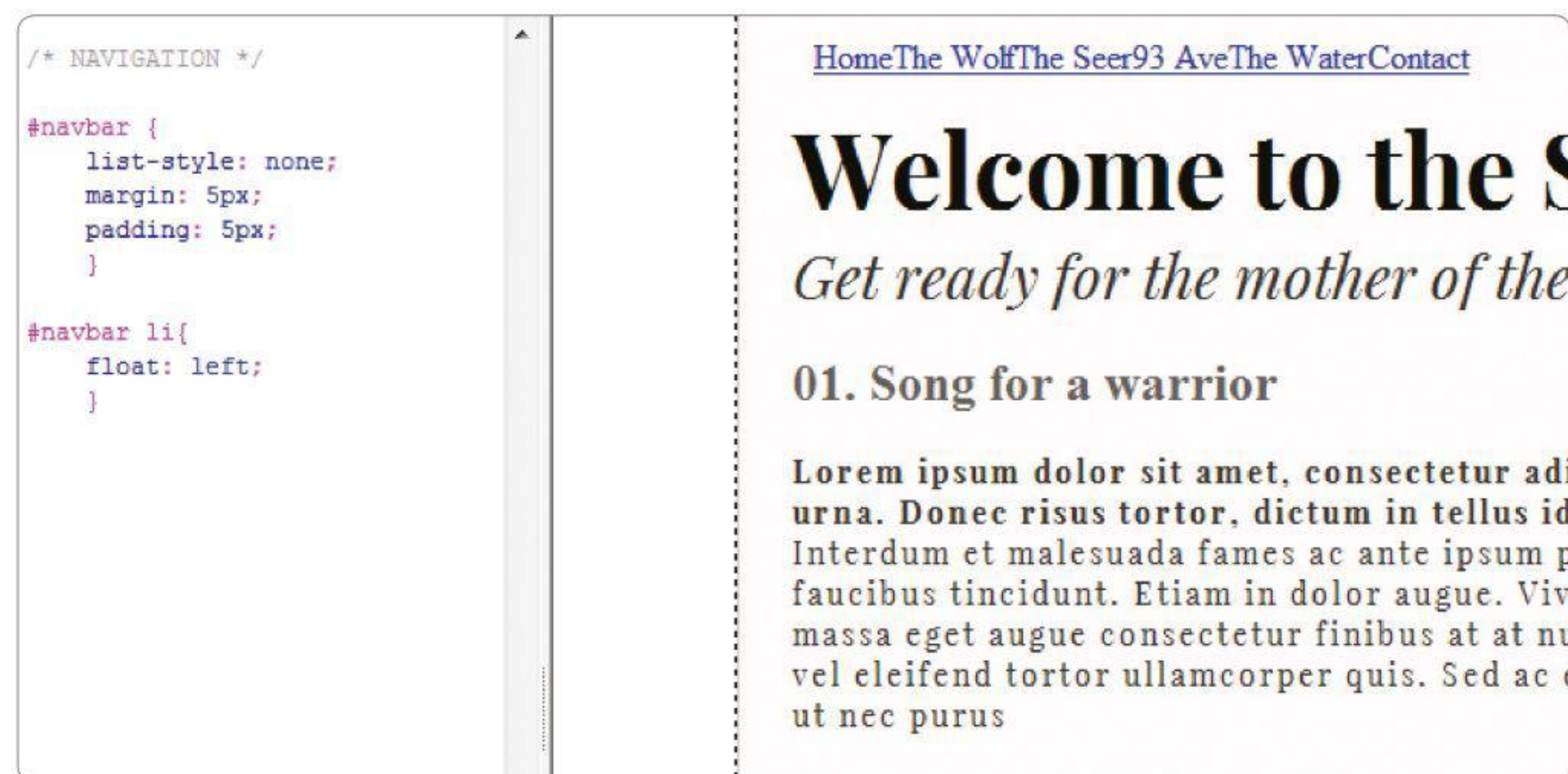
01 Create a list

An unordered list (ul) is used to provide links to other sections of the website. It's all standard HTML and it's exceedingly dull compared to CSS. Try it and see. In the ul tag though, we have added id="navbar" and we'll use it to change the way the list is displayed.



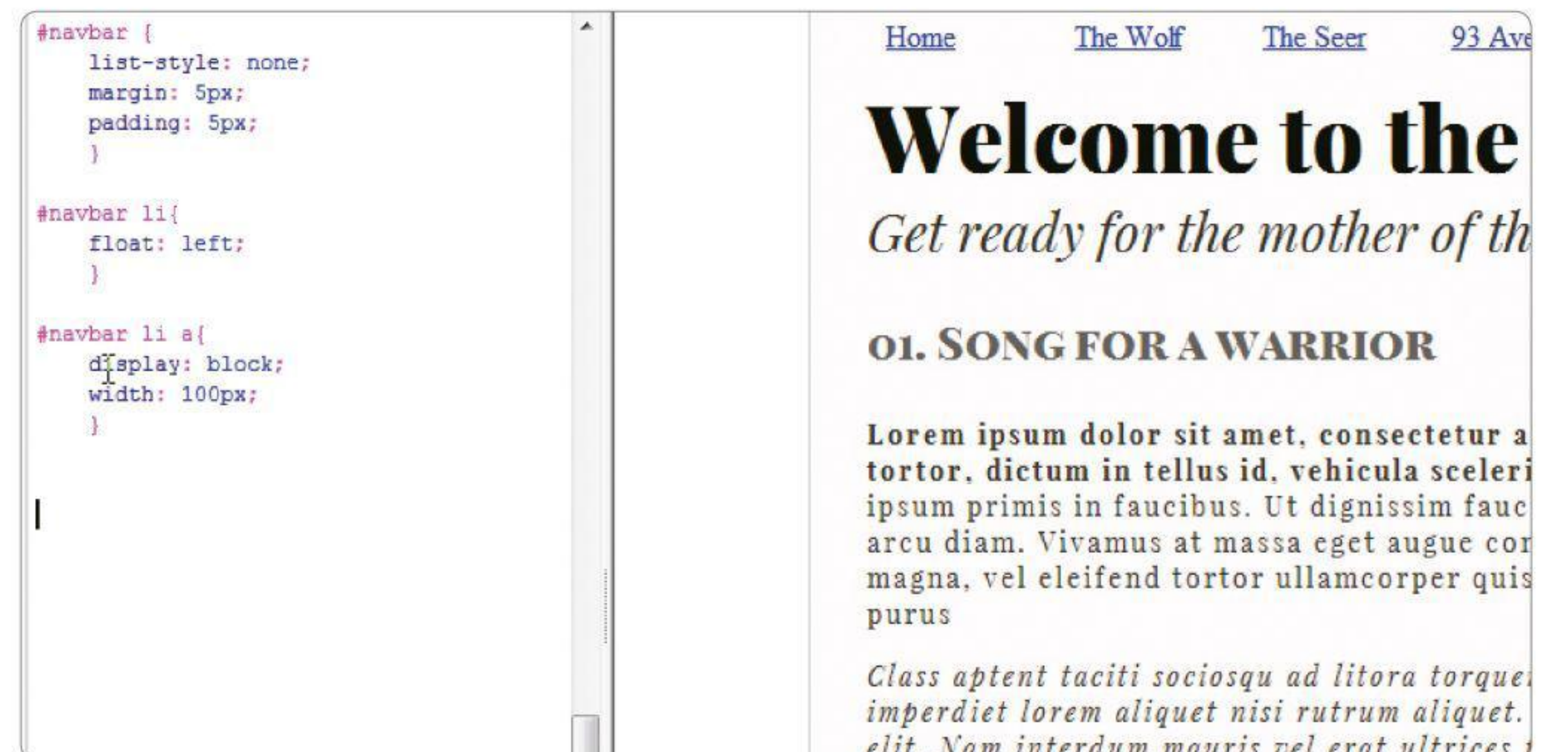
02 Make it plain

In the last tutorial we saw how to style lists and the bullets can be removed by setting list-style-type to none. The padding and margin can also be set to zero. This produces a very plain list of links at the top of the page that's not very exciting.



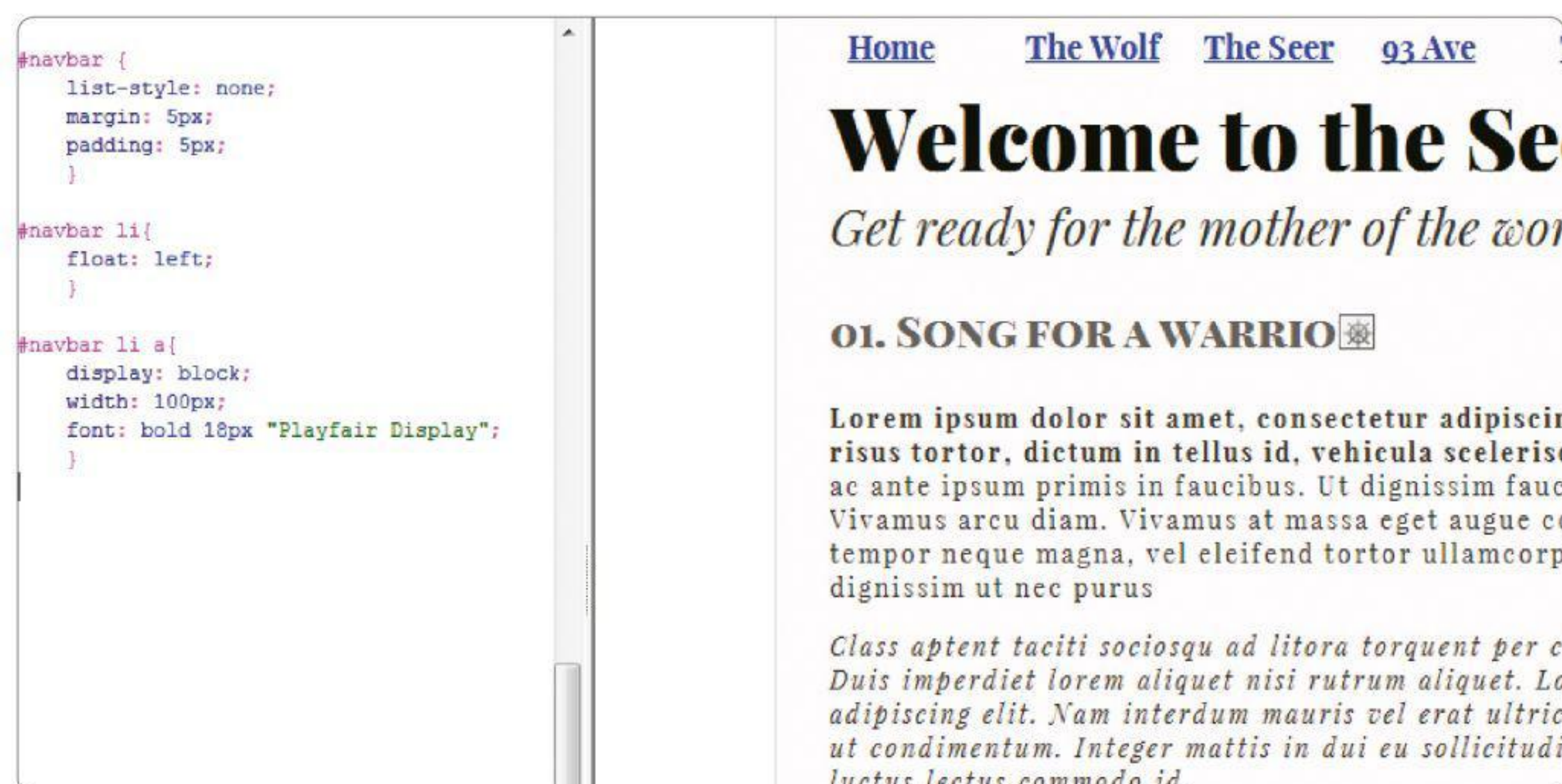
03 Floating elements

Normally each list item is displayed on a separate line, but it is possible to remove the line breaks by using float. Setting the list elements (#navbar li) to float left causes them to be displayed one after the other on the same line, like a navigation bar.



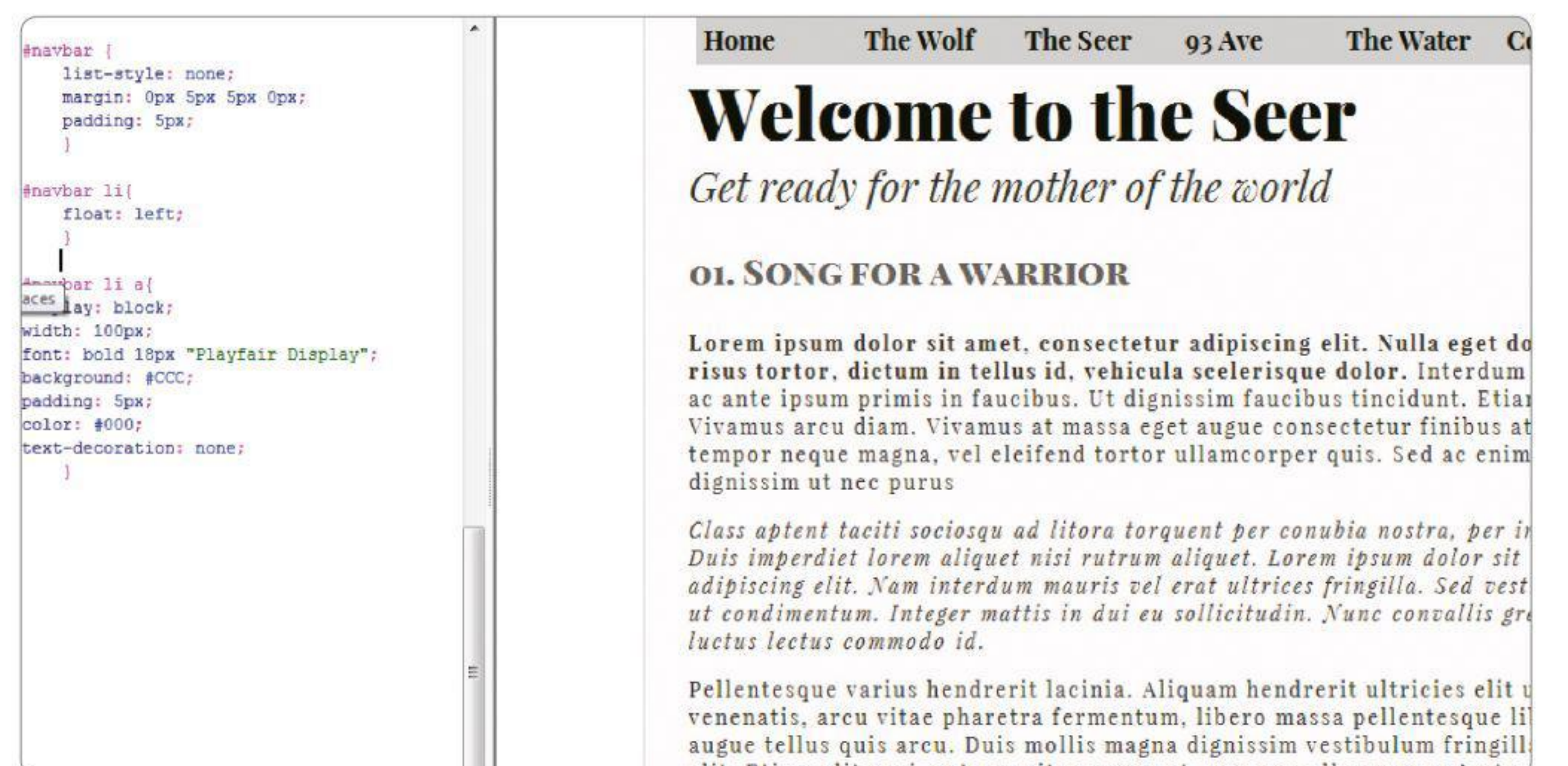
04 Spread them out

All the links are bunched up together and Step 3 doesn't look much like a navigation bar. What we need to do is to make each link a fixed width. We define the a link within li of navbar (#navbar li a) as a block and set its width to 100 pixels.



05 Style the text

Remember how we styled some text a while back? We can do the same here. Add the formatting information to #navbar li a to change the way that <a> links look in items. Set the font size and weight, margin and padding, and so on.



06 Colour and decoration

Three items have been added and immediately noticeable is the colour. The text colour has been set to black and the background has been set to mid-grey with colour and background-colour. Finally, text-decoration:none removes the underline from the links.

Format images using CSS

Use CSS to gain precise control over the display of images on your website

A webpage would be pretty dull without any images on it. Some images may appear on every page, such as a graphical website logo or heading, while others may be specific to each page. You will need to create the images for your site before you start. Remember to use them sparingly and keep the file size as small as possible to ensure that your webpages load quickly. If you're having trouble, we will go into further detail later in the book.

Images are inserted into webpages using the HTML `` tag, and there are attributes to

position it left and right, set the size and so on, but those are dated. If you use CSS to format images instead, there are many more options available to you. For example, you can add a border, set its thickness and its colour. The spacing around each side of the image can be individually adjusted, text can be wrapped around it on the left or the right

and so on. The latest web browsers that are up to speed with CSS version 3 can display advanced image attributes like drop shadows that give the page a 3D look.

Forget the old HTML way of doing things and take advantage of CSS and its powerful features. Our tutorial will guide you through the process.

“If you use CSS to format images, there are many more options available to you”

A guide to CSS images

There are many formatting options to enhance your images

Width and height

The size of an image can be manually set by entering the width and height in pixels. However, enlarging or shrinking it will affect the quality. It's best with auto width and height

Add a shadow

If you want to lift the image off the page, add a shadow below it using this command. Try different values to see the effect they have. It only works in new web browsers though

Define the margins

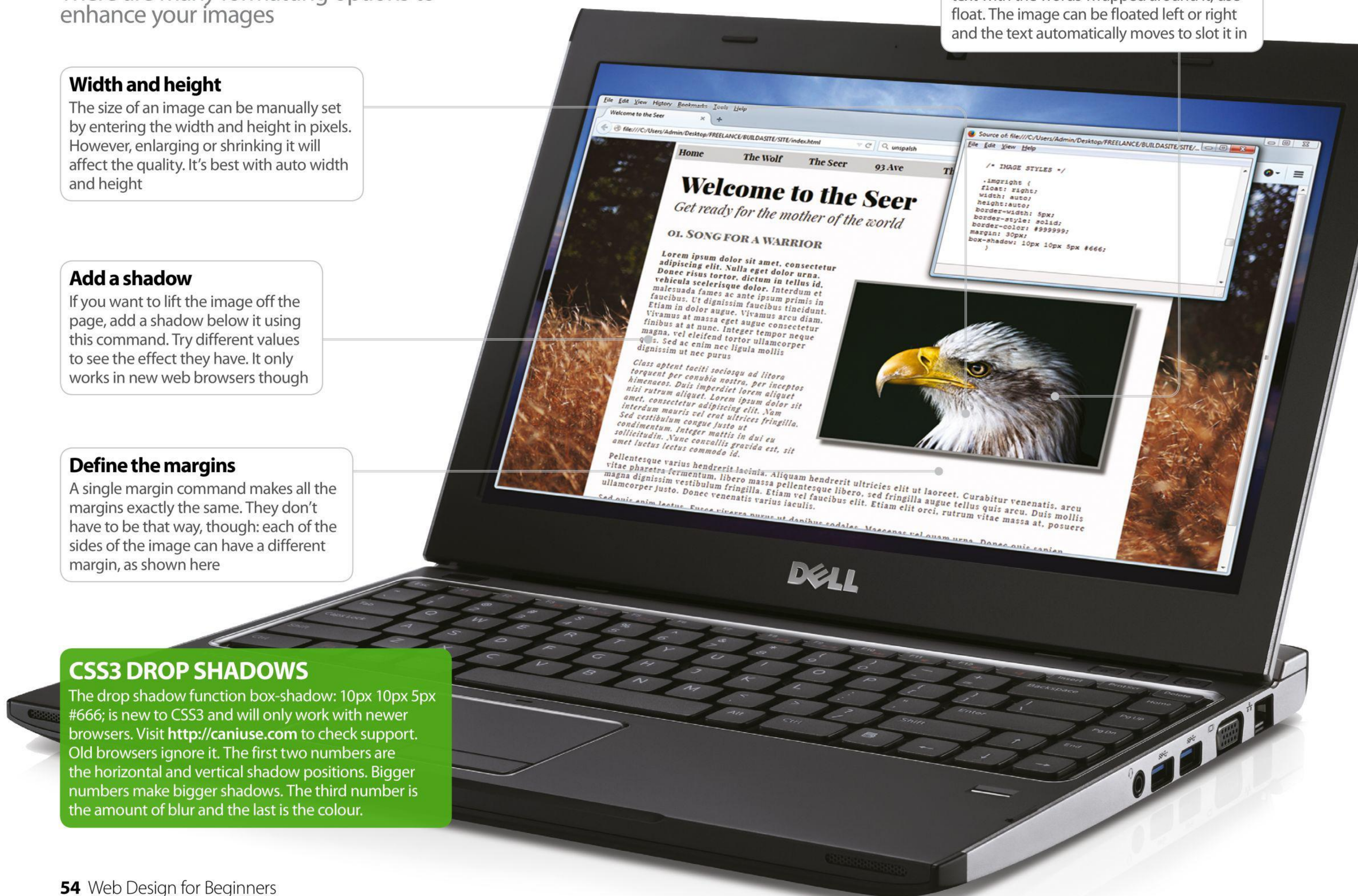
A single margin command makes all the margins exactly the same. They don't have to be that way, though: each of the sides of the image can have a different margin, as shown here

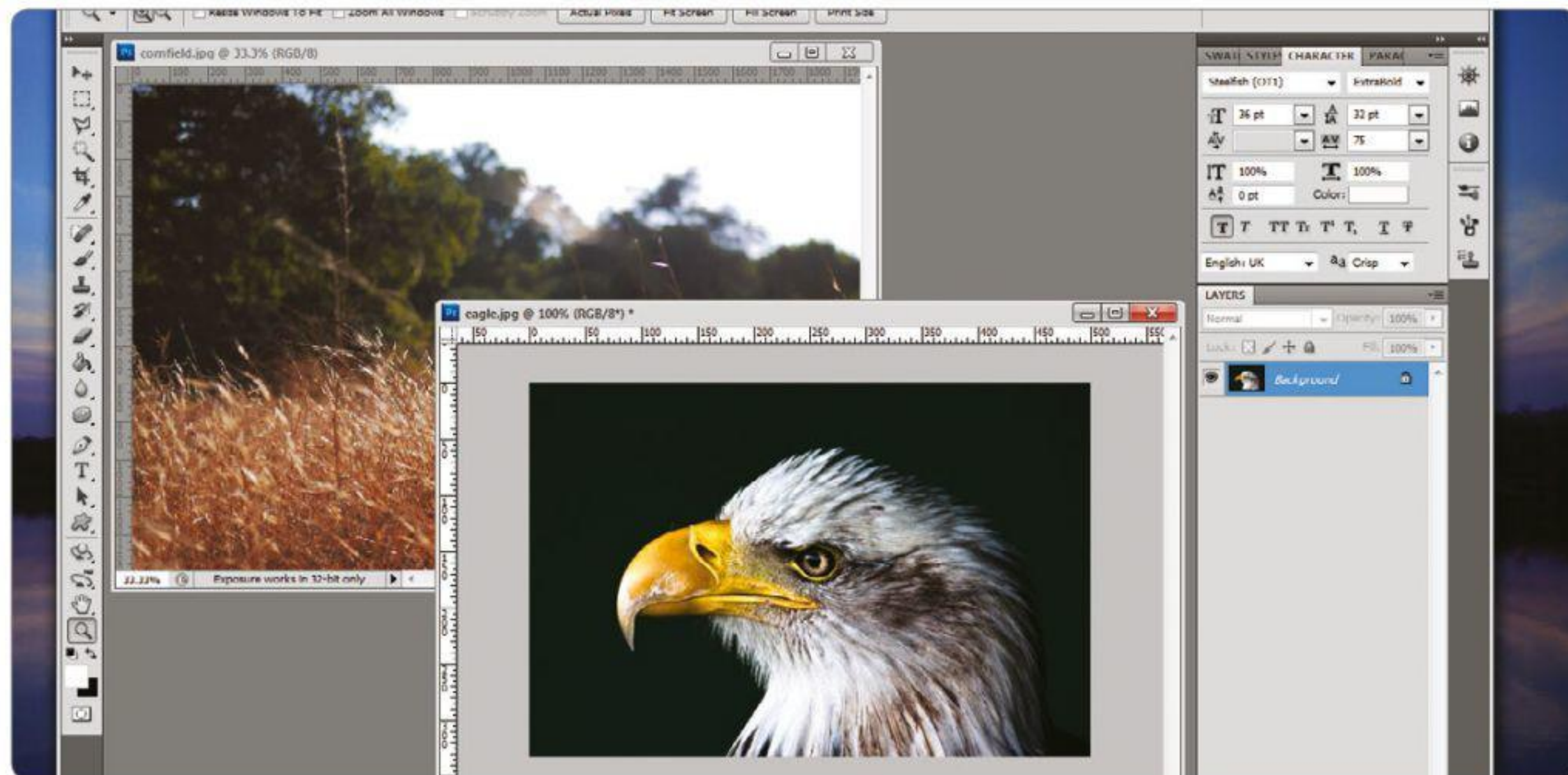
Float the image

If you want the image to appear within the text with the words wrapped around it, use float. The image can be floated left or right and the text automatically moves to slot it in

CSS3 DROP SHADOWS

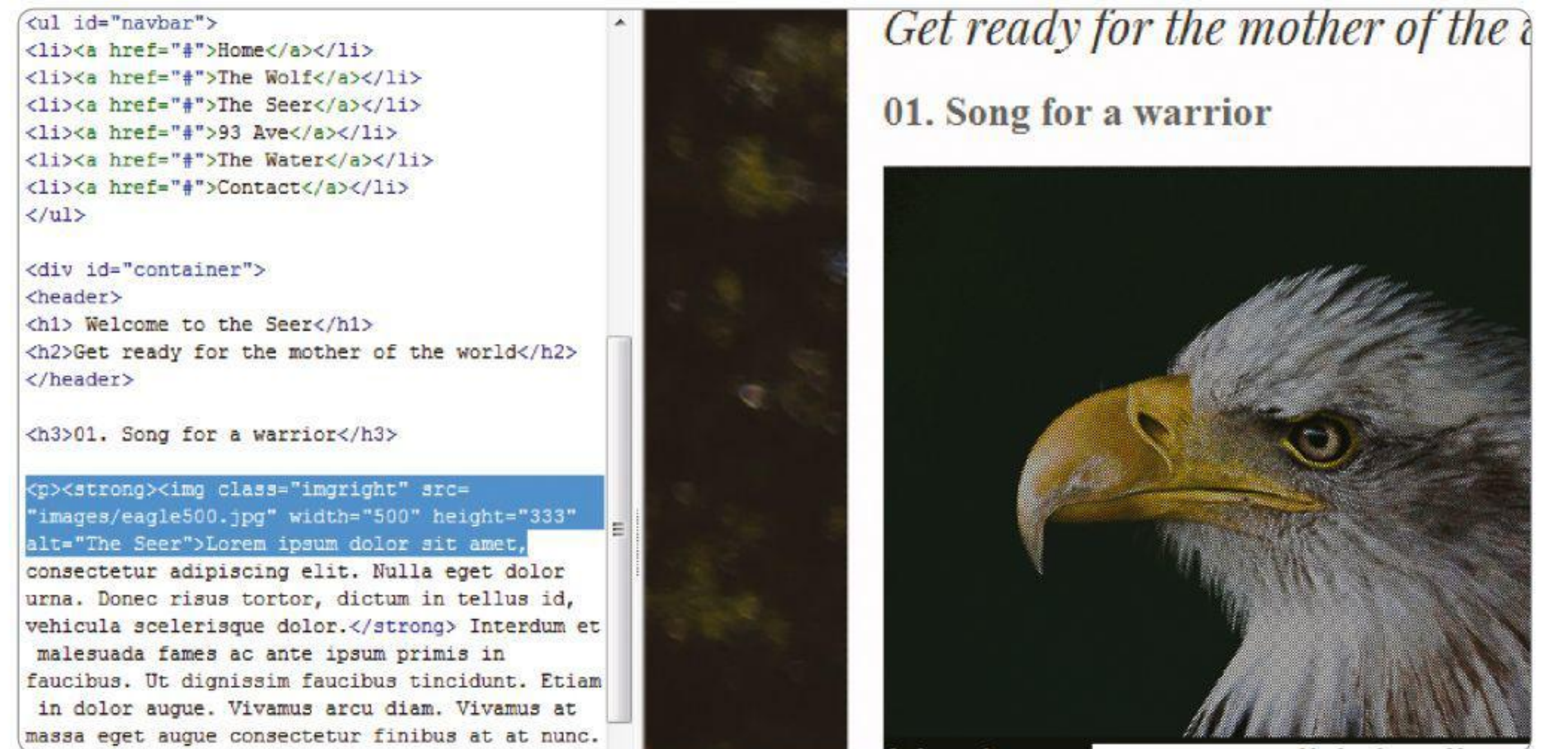
The drop shadow function `box-shadow: 10px 10px 5px #666;` is new to CSS3 and will only work with newer browsers. Visit <http://caniuse.com> to check support. Old browsers ignore it. The first two numbers are the horizontal and vertical shadow positions. Bigger numbers make bigger shadows. The third number is the amount of blur and the last is the colour.





01 Create the images

Load your paint program or photo editor and create the images for your webpage. There may be a background image, as shown here, and one or more other images to be displayed in the page. It is usually best to save photos as JPEGs and illustrations as 256-colour PNGs.



02 Insert the images

Images are inserted into the HTML of the page using the `img` tag, with `src` pointing to the filename. Add an `alt` attribute as an image title: it's useful for search engines. Where the image is now, it doesn't look good. Add `class="imgright"` to the `img` tag.



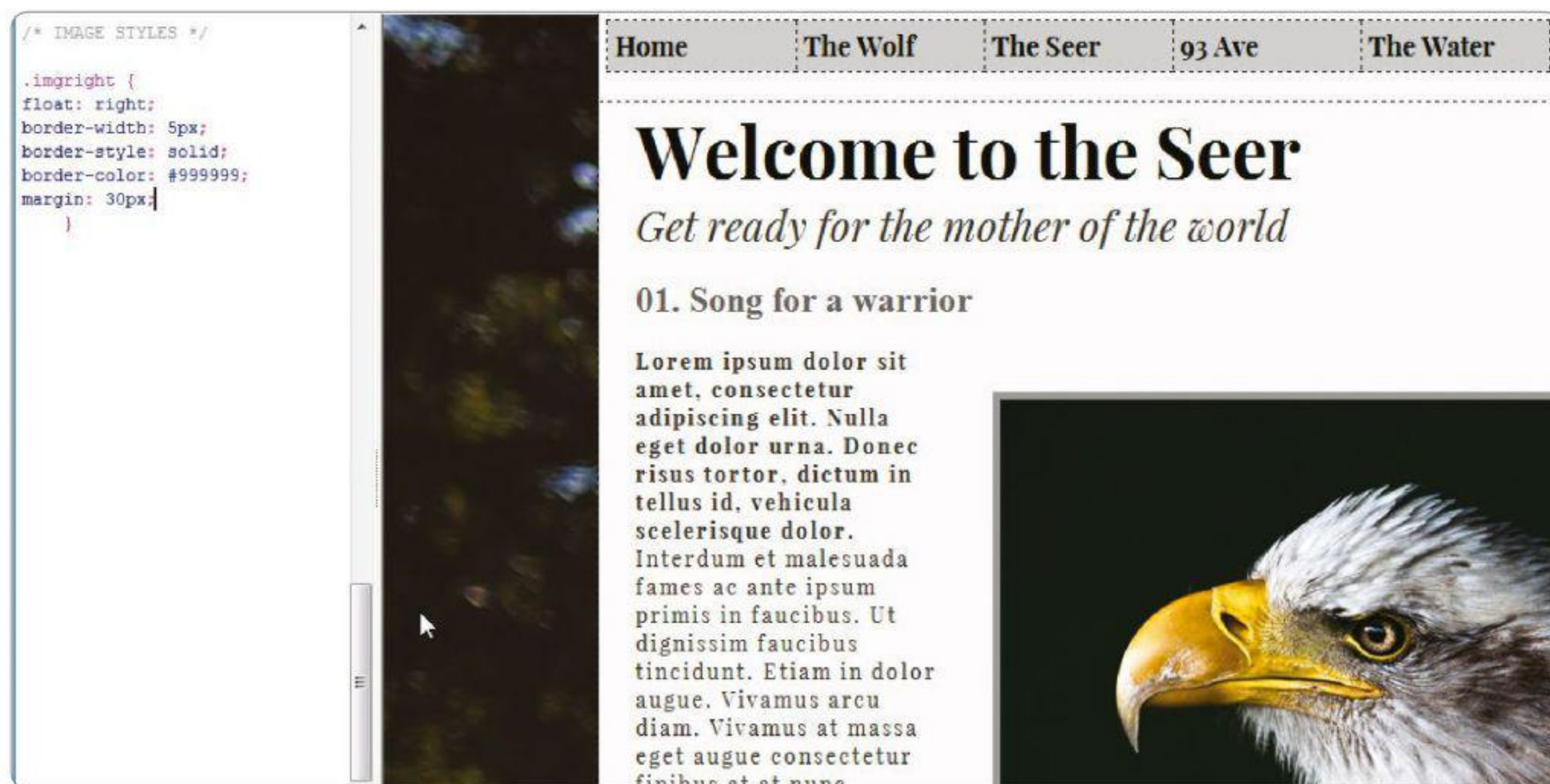
03 Build a class

Adding `img.picright` to the CSS file adds the class we need to format the image. The `float:right;` causes the image to be displayed on the right – `float:left;` would display it on the left. In both cases the following text will wrap around the image on the left or right.



04 Add some borders

As with many other HTML elements, in CSS images can have borders. The `border-style` can be solid, dotted, dashed and so on, the `border-width` can be specified in pixels and the colour selected with `border-color`. Use colour names or for more controls hexadecimal codes eg `#999999`.



05 Define the margins

You may find that the text runs right up to the image, which might not look very attractive. It can be prevented by setting margins. We've exaggerated the effect with a 30-pixel margin; 10 is usually fine. `margin-top`, `margin-left`, `margin-bottom` and `margin-right` can be set separately if necessary.



06 Size the images

If you don't specify a size for the images, they will be displayed at whatever size they are. In some situations, though, you might want to display an image at a different size, such as when showing thumbnails. Set the width and height to the number of pixels to make the image that size.



Create a header

Learn how to create a clean, simple and effective header for your website

Having clean and clear header for your website can be the difference between a successful and user-friendly experience and a cluttered and disorganised website that no one will want to visit again. You don't want a first-time user coming to your site and not know how your navigation works, or your company branding and logo hidden under a load of useless graphics or text – it doesn't even really matter how effective the rest of your layout is.

Yes, this sort of thing has been known to happen (more often than web designers would like to admit), that is why so many designers are turning to a relatively new role called user experience or 'UX'. In

this tutorial we will take a look at how we can create a simple, clean and useful header for your site to make your website easier to navigate.

“You don't want a user coming to your site not knowing how your navigation works”

LOGO POSITIONING

One of the most important things to remember is to make a feature of your branding, and crucially, your logo. It is considered best practice to position your logo in the top left-hand corner and make it link to your home page (index.html). If it's something you consider to be common practice, then not putting it there would frustrate the user. So when you design and develop your header, you first need to realise what the user would want or would expect to be there. It's also a good way of adding in more important information such as phone numbers or email addresses. The choice is yours, but be mindful of not making the header look cluttered.

How to make a header

Here are the most important things to consider when creating a header for your web page

The logo

The logo can be either a graphic or just text. You will also notice we have used the same font for both the logo and navigation

The hover state

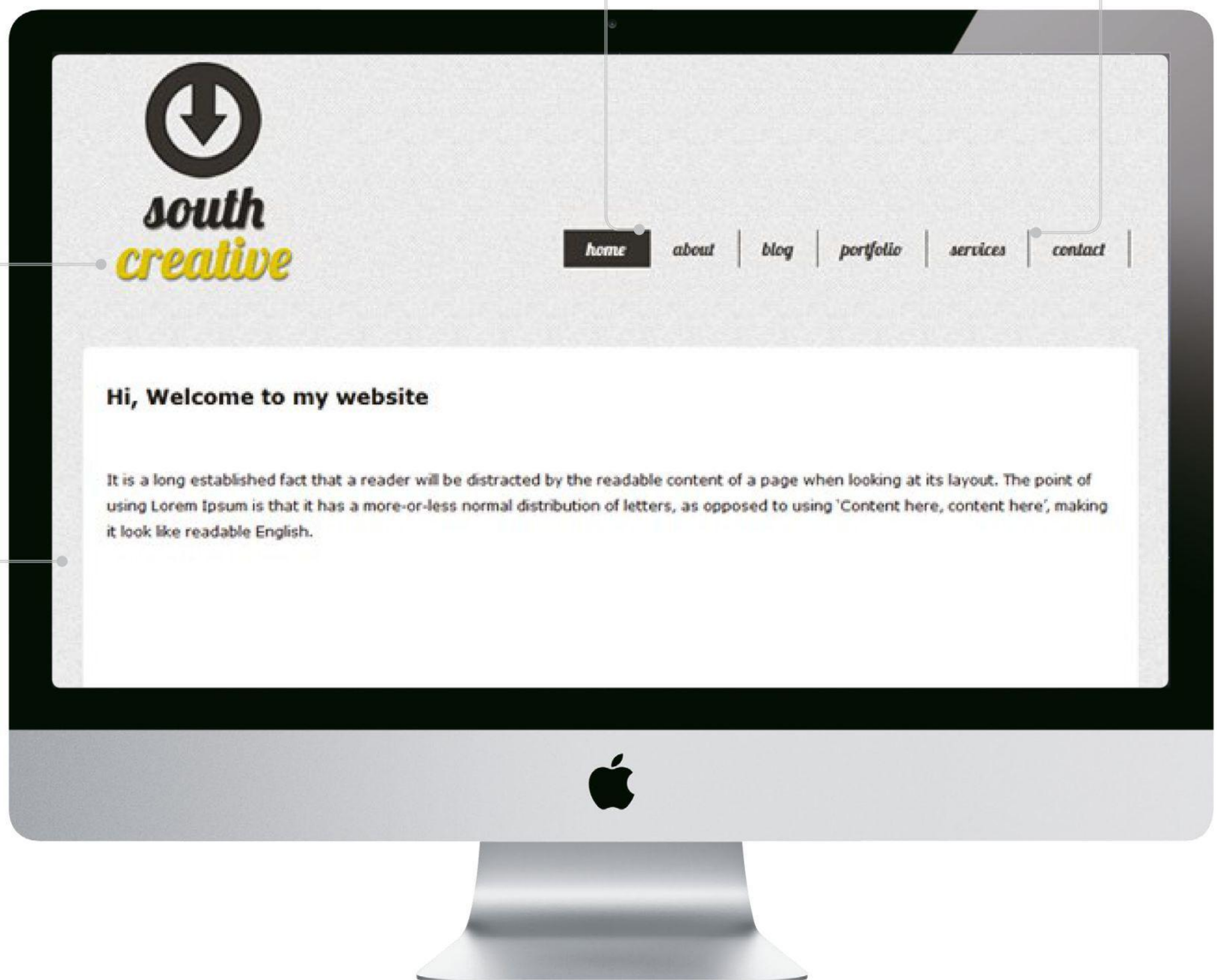
The hover state is nicely styled and can be easily changed whenever needed just by changing both the background colour or font colour

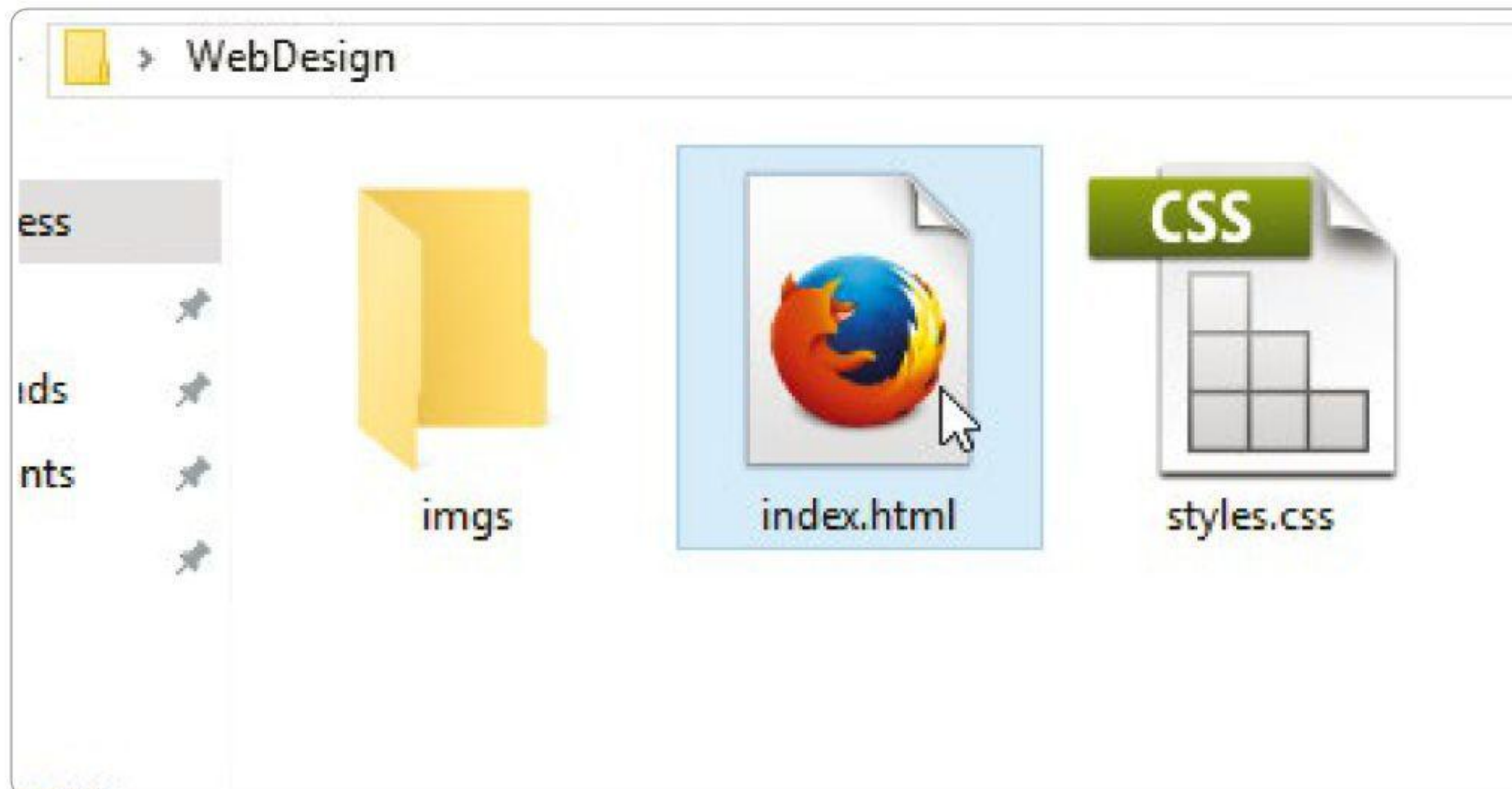
Separators

Adding a separator to our navigation links doesn't need to be pure CSS as we did, but it is handy using the 'border' property

The background

Creating a textured background will always help stand your web page out from the crowd – gone are the days of white backgrounds with nothing but text and images





01 Getting started

First thing we need to do is create new 'index.html' and 'styles.css' files and place them in the same location. Because we will be using images for our header, let's also create an empty folder called 'imgs'. This is where the logo needs to be stored along with the textured background file.

```

1 <!DOCTYPE HTML>
2 <html>
3 <head>
4 <meta charset="utf-8">
5 <title>Creating a header</title>
6
7 <!-- CSS -->
8 <link rel="stylesheet" href="styles.css">
9 </head>
10
11 <body>
12
13 <div id="wrapper">
14
15
16 </div><!-- END wrapper -->

```

03 Setting the wrapper

Still in index.html, let's add in a 'wrapper' div to centre all our content on the screen. We've used an ID (<div id="") because this is going to be a main part of the page's structure and will only be used only once throughout. If it was going to be used multiple times, then we'd use a class (<div class="").

```

6
7 <!-- CSS -->
8 <link rel="stylesheet" href="styles.css">
9
10 </head>
11 <body>
12
13 <div id="wrapper">
14
15     <div id="header">
16
17     <a href="index.html"><div id="logo"></div></a>
18
19
20
21 </div><!-- END header -->

```

05 Adding the logo

Now let's place our logo within the header section; you can use your own or grab ours on FileSilo to have a play with. We are going to use an ID again and call it 'logo'. Then we will wrap it within an anchor tag and link it to our page by adding in the index page within ''.

```

1 <!DOCTYPE HTML>
2 <html>
3 <head>
4 <meta charset="utf-8">
5 <title>Creating a header</title>
6
7 <!-- CSS -->
8 <link rel="stylesheet" href="styles.css">
9
10
11 </head>
12
13 <body>
14
15
16

```

02 Linking the CSS

Now we have our index.html and styles.css files, we'll need to link them up within the '<head></head>' tags of our HTML. Open index.html in your editor and just underneath the '<title>' tags place your link to your CSS. It's good practice to leave a HTML comment to denote where the CSS links will go.

```

2 <html>
3 <head>
4 <meta charset="utf-8">
5 <title>Creating a header</title>
6
7 <!-- CSS -->
8 <link rel="stylesheet" href="styles.css">
9 </head>
10
11 <body>
12
13 <div id="wrapper">
14
15     <div id="header">
16
17     </div><!-- END header -->
18

```

04 Header

Now let's add in our header section. So within the 'wrapper' div, create another div ID called 'header'. You will also notice we used HTML comments to mark the 'END' of our divs. That way if our mark-up (HTML) gets too messy, we will know what end div (</div>) belongs to what.

```

14 <div id="wrapper">
15
16     <div id="header">
17
18     <a href="index.html"><div id="logo"></div></a>
19
20     <ul class="navigation">
21
22         <li><a href="">home</a></li>
23         <li><a href="">about</a></li>
24         <li><a href="">blog</a></li>
25         <li><a href="">portfolio</a></li>
26         <li><a href="">services</a></li>
27         <li><a href="">contact</a></li>
28
29     </ul>

```

06 Navigation list

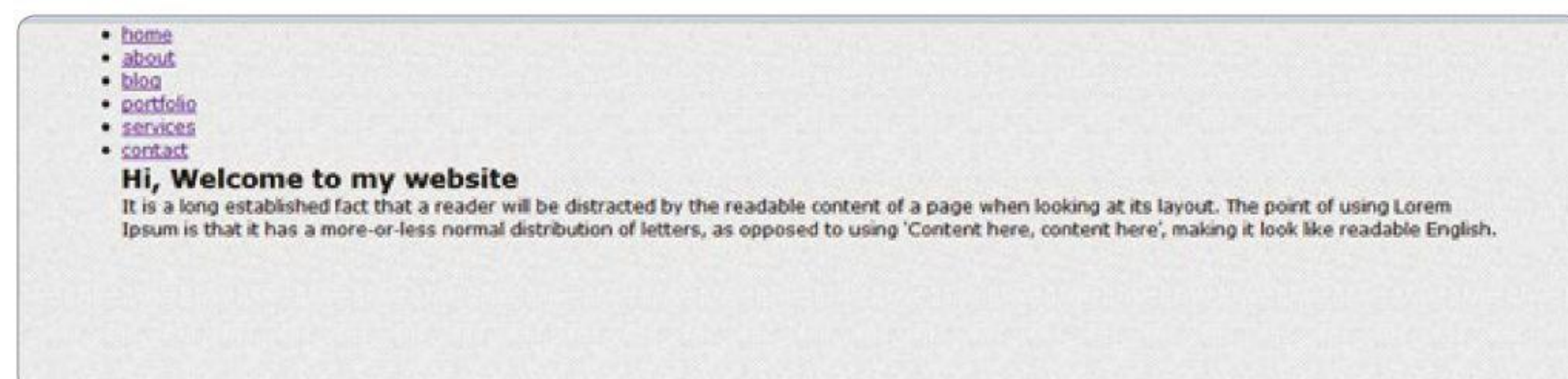
In this step we are going to add in the navigation. What we will use here is a standard unordered list and each list item () will have a link to each page using the '' attribute. Then we will give our unordered list a class name of 'navigation'.

Build a site

```
27     <li><a href="">services</a></li>
28     <li><a href="">contact</a></li>
29
30   </ul>
31
32 </div><!-- END header -->
33
34 <div id="main_content">
35
36   <h2>Hi, Welcome to my website</h2>
37
38   <p>It is a long established fact that a reader will
39   at its layout. The point of using Lorem Ipsum is that
40   opposed to using 'Content here, content here', making it
41
```

07 Main content

We will now finish off our HTML markup with some content underneath our header. Just underneath our closing header div `</div>`, let's add in a div ID of `'main_content'` and add in a welcome title using header tags `<h2>` and then some dummy text using `<p>` tags.



09 The wrapper

Now we are going to centre our header and content using the `'wrapper'` div. What we are doing here is making sure we have no margin at the top or bottom and automatically find the difference on the left and right that is in relation to our fixed width – which we set to 960px. 960 pixels is mostly used because it fits nicely within the lowest common denominator of screen resolutions (1080 x 760).

```
001 #wrapper {
002   margin: 0 auto;
003   width: 960px;
004 }
```



11 The logo

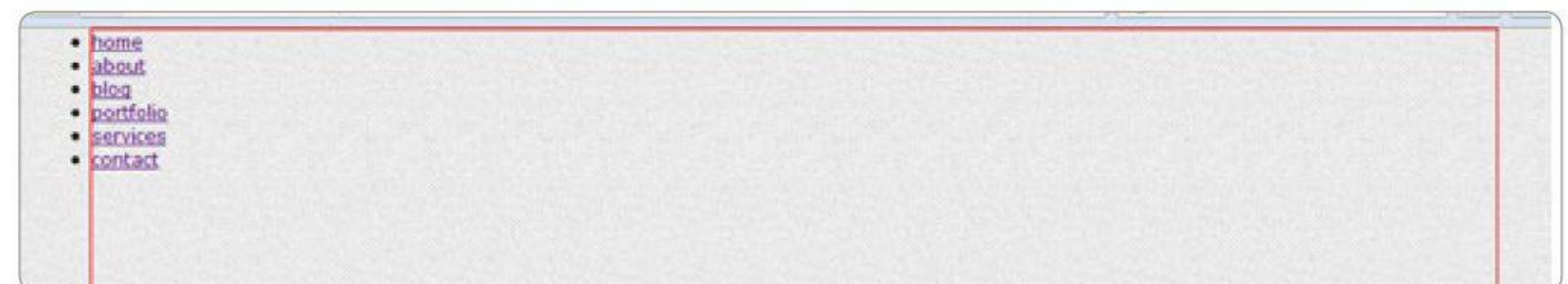
Adding the logo is going to be very simple. All we are going to do is locate our logo that we have inside our `'imgs'` folder and then make sure it doesn't repeat. Then position it on the left by floating it left and then specify its height and width. A thing to remember here is that if you don't specify its dimensions you will not see it on the webpage.

```
001 #logo {
002   background: url('imgs/sc_logo.png') no-repeat;
003   float: left;
004   width: 200px;
005   height: 200px;
006 }
```

08 The CSS

Now open up your `'styles.css'` file and at the top put in our simple reset. The reset does exactly that – resets every element to zero, which will clear all the default styles that most browsers put on. Then, using the body tag we can give our page a textured background using an image and leaving it to repeat across the page. And then we set the `'font-family'` and `'size'`.

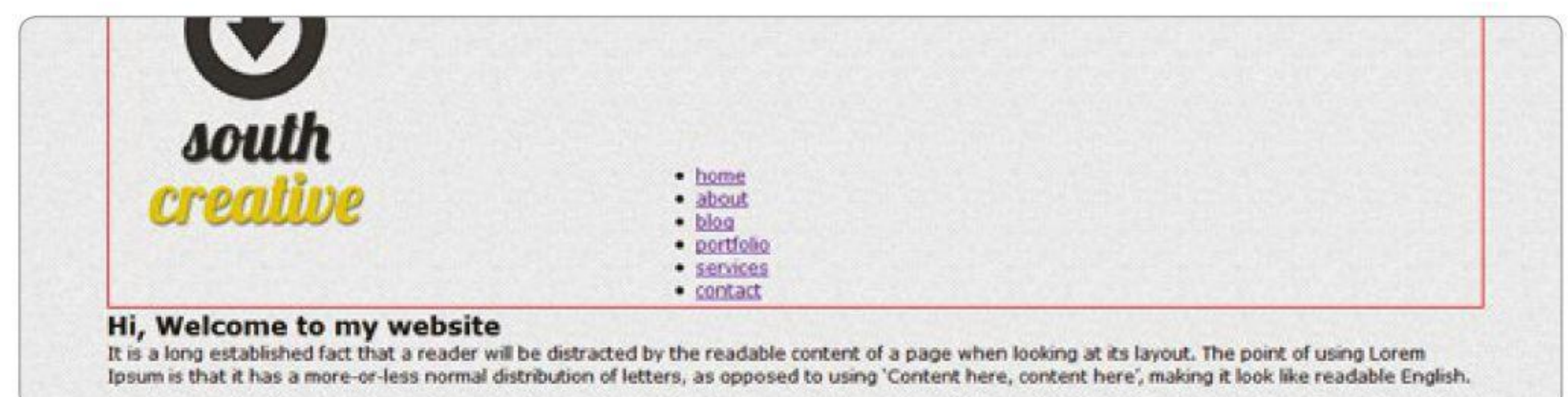
```
001 * {
002   padding: 0;
003   margin: 0;
004 }
005
006 body {
007   background: url('imgs/bg.jpg');
008   font-family: Verdana, Geneva, sans-serif;
009   font-size: 12px;
010 }
```



10 The header

Now for our header we are going to float it left and give it a 100% width so it spans the full width of our wrapper div, then give it a height of 250px. Let's also add in a red border so we can see the header more clearly and get a better visual idea of where we need our logo and navigation, which we will add in over the next few steps – then once happy we will remove it.

```
001 #header {
002   float: left;
003   width: 100%;
004   height: 250px;
005   border: 1px solid #f00;
006 }
```



12 The navigation

Now let's style our navigation. We do this by floating the whole element right then positioning it 150px down and then pulling it over to the right using a negative margin of `'-50px'`. Never be worried about using negative margins as they work very well. Then we give the navigation a width of 600px.

```
001 .navigation {
002   float: right;
003   margin: 150px -50px 0 0;
004   width: 600px;
005 }
```



13 Navigation buttons

At the moment our navigation looks nothing like a horizontal navigation bar, more like a basic list of links. So let's make it go horizontal by floating each item left, which will push them all horizontal. Then we can take away the default item bullets by specifying the 'list-style' being none.

```
001 .navigation li {
002     float: left;
003     list-style: none;
004 }
```

15 The content

Now let's style our page content, which helps to keep our page looking like a website. While we're here let's get sneaky and add some CSS3 properties to make the background have rounded corners by using 'border-radius: 6px'. We then style the paragraphs give it some padding to both the paragraph text and header tags.

```
001 #main_content {
002     float: left;
003     width: 900px;
004     height: 400px;
005     background: #fff;
006     border-radius: 6px;
007 }
008 #main_content p, h2 {
009     line-height: 22px;
010     margin-top: 10px;
011     padding: 20px;
012 }
```

17 Apply the Google font

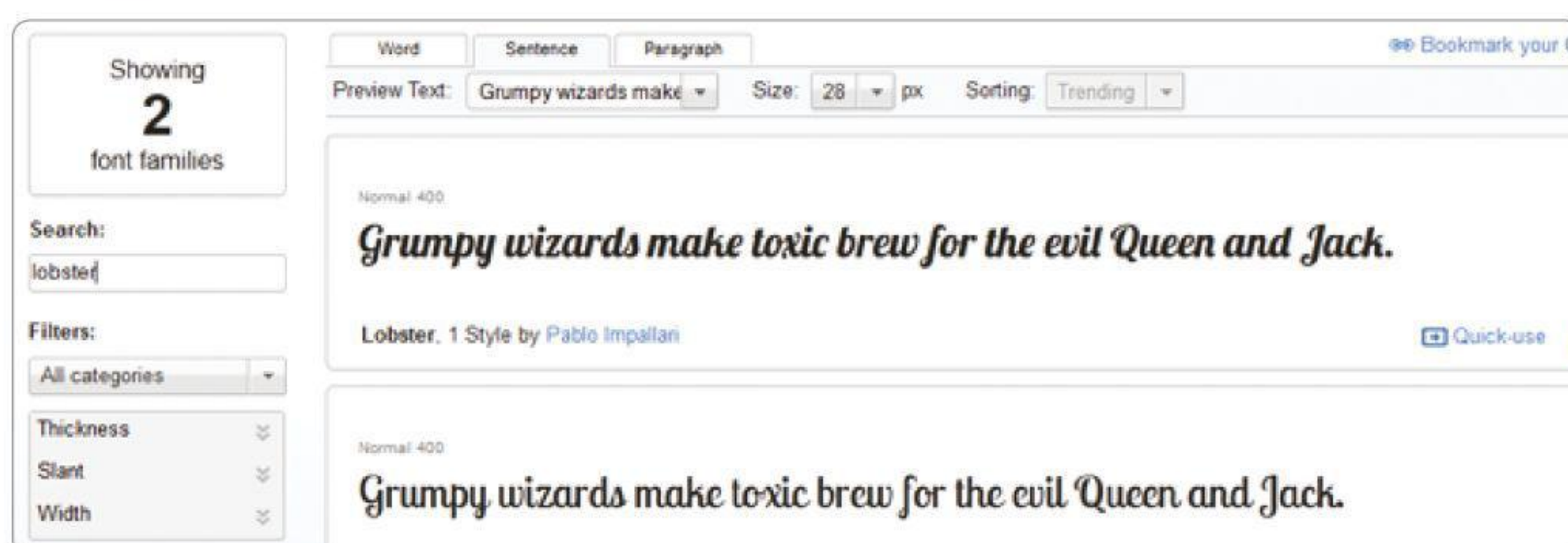
Now the next step here is to click the 'use' grey button located at the very bottom right and scroll down the page slightly. What we have first is the 'link' tag line that will link straight to the Google font servers and will always be available. That way you can guarantee everyone will be able to see your chosen font. So click and drag over the link and press Ctrl/Cmd+C to copy it to your clipboard. Then paste it into your 'index.html' file just underneath our other CSS link within the <head> tag.

```
001 <!-- CSS -->
002 <link rel="stylesheet" href="styles.css">
003 <link href='http://fonts.googleapis.com/css?family=Lobster'
004 rel='stylesheet'
005 type='text/css'>
006 </head>
```

14 Navigation anchors

Now we need to give each anchor tag some padding. Take off the underline by specifying the text-decoration as 'none' and then create a separator using 'border-right'. We can remove also the red border around the 'header'. Then we can add in a hover state that will change the background and text colour.

```
001 .navigation li a {
002     float: left;
003     color: #333;
004     padding: 6px 20px;
005     text-decoration: none;
006     border-right: 1px solid #333;
007     font-size: 16px;
008 }
009
010 .navigation li a:hover {
011
012     background-color: #333;
013     color: #fff;
014 }
```



16 Find Google Fonts

Looking at our navigation, we can clearly see that it doesn't look very attractive. So let's spruce it up somewhat by heading over to Google Fonts www.google.com/webfonts and type in 'lobster' within the search field and you should see at least two choices of fonts. The one we want is the top style. Then click the blue 'add to collection' button to the right and now it is ready to use.

18 Google font-family

Now let's Ctrl/Cmd+C to copy the 'font-family' property and then open up the 'styles.css' file and locate the '.navigation li a' rule (a CSS rule is everything within the curly brackets) and paste the new 'font-family' underneath the 'font-size' property.

```
001 .navigation li a {
002
003     float: left;
004     color: #333;
005     padding: 6px 20px;
006     text-decoration: none;
007     border-right: 1px solid #333;
008     font-size: 16px;
009     font-family: 'Lobster', cursive;
010 }
```

Create a sidebar

Learn how to create a clean navigation system for your website

A sidebar is without doubt the area that is most often created by web designers because it's the most needed. It can hold all sorts of content: things such as extra navigation links, a search field and perhaps some small thumbnail images that relate to your website – it can be anything.

So in this tutorial we're going to create a simple page layout that has a functional navigation and a nice and simple sidebar that includes some content within. We're going to include within the sidebar a list of links for that extra navigation we mentioned and a search bar above and also some thumbnail images at the bottom to act as though we have a

Flickr section – very useful for any photography-based sites. So open up your favourite text editor and let's get started.

“A sidebar can hold all sorts of content: extra navigation links, a search field, even some small images”

STICK TO THE RIGHT

If you spend some time surfing the internet in some detail, the chances are that you won't see too many websites with the sidebar fixed over to the left side – it is far more likely to be over to the right. Even though it is relatively easy to swap it over, you wouldn't be doing anyone any favours if you thought you would be clever and original by plonking it on the left – internet users are now accustomed to seeing this section on the right-hand side of their screens. If you're struggling to add content in the sidebar, then you can add a short summary about you or your business or perhaps even a small YouTube video about your site.

A perfect sidebar

Your sidebar needs to be clean and crisp to keep your visitors engaged

The search field

The sidebar is a great place to put your search field – and you will see this on most WordPress themes or other blogging platforms

Navigation

Having a list of links for an extra navigation will allow you to add in links that you may not have had the room to fit in the main navigation menu

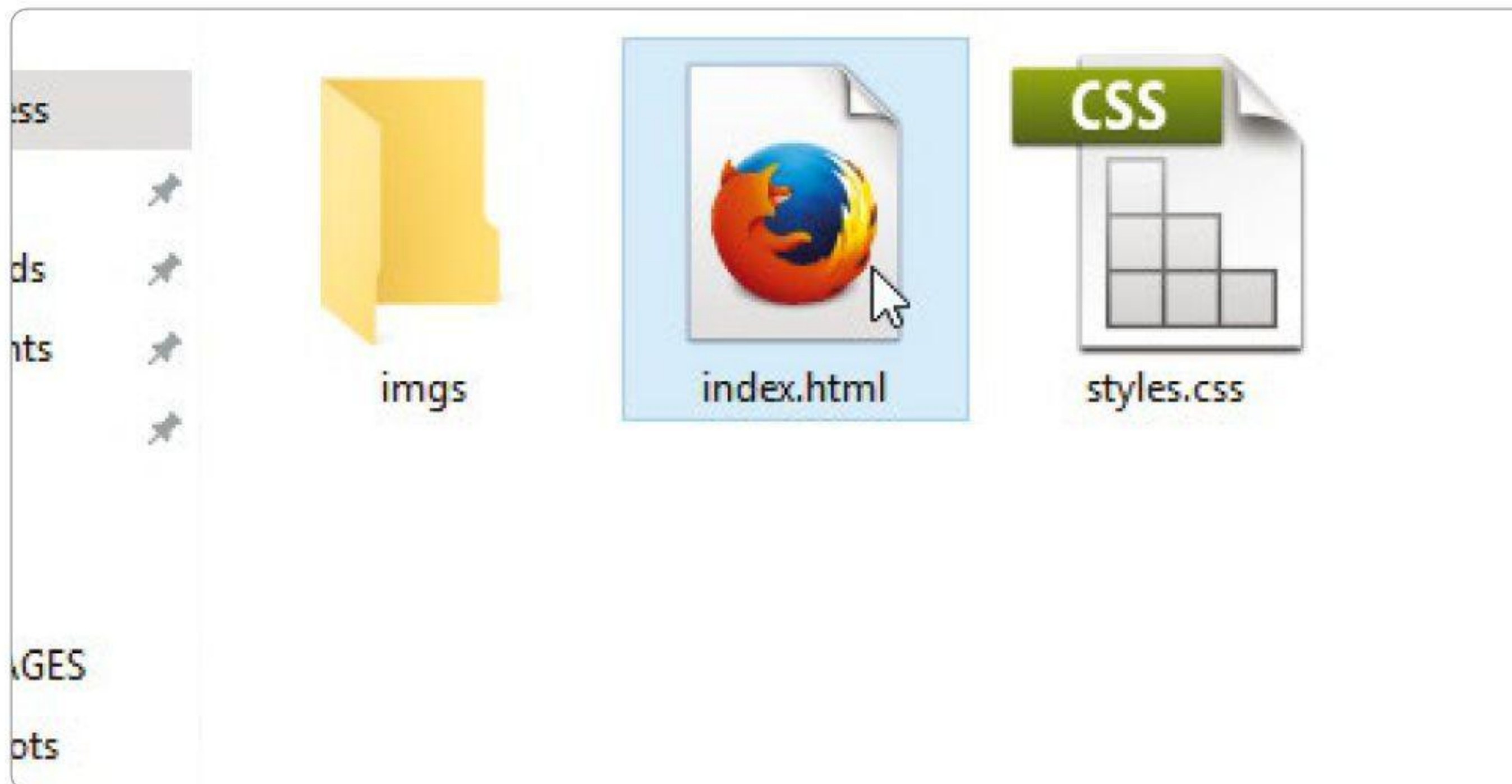
The thumbnails

We added this feature because you see it all the time. People who have a blog can use a plug-in that allows them to feature their Flickr photos

The width

A thin-looking sidebar wouldn't help anyone unless you have no intention of anything but small thumbnail images





01 Getting started

First thing we need to do is create new 'index.html' and 'styles.css' files and place them in the same location (directory). And because we will be using images for our sidebar, let's also create an empty folder called 'imgs'. This is where any images used in the sidebar need to be stored.

```

5 <title>Creating a sidebar</title>
6
7 <!-- CSS -->
8 <link rel="stylesheet" href="styles.css">
9
10 </head>
11
12 <body>
13
14 <div id="wrapper">
15
16     <div id="header">
17
18     <a href="index.html"><div id="logo">
19
20         <h1>Your logo goes here!</h1>

```

03 The header

Next we want to add in a header for our page and we do this by adding a div with an ID of 'header'. Then within the header we are going to put our type-based logo that is wrapped within an anchor tag that links back to the home page (index.html).

```

28     <li><a href="">about</a></li>
29     <li><a href="">blog</a></li>
30     <li><a href="">portfolio</a></li>
31     <li><a href="">services</a></li>
32     <li><a href="">contact</a></li>
33
34 </ul>
35
36 </div><!-- END header -->
37
38 <div id="sidebar">
39
40     <form id="search_form" action="" method="get">
41
42     <input id="search_term" type="text" value="" placeholder="search..."/>
43     <input class="submit_button" type="submit" value="Search">
44
45     </form>
46
47 </div><!-- END sidebar -->
48

```

05 Sidebar and search

Let's now add in our sidebar section. All we do here is create a div ID with the name of 'sidebar' just underneath the closing header div '</div>'. Then, using the code above, within our sidebar section let's add in a search field that will just sit there and look pretty.

```

5 <title>Creating a sidebar</title>
6
7 <!-- CSS -->
8 <link rel="stylesheet" href="styles.css">
9
10 </head>
11
12 <body>
13
14 <div id="wrapper">
15
16
17
18
19 </div><!-- END wrapper -->
20

```

02 CSS and wrapper

If you open up the index.html file and just underneath the '<title>' tags, place your link to your CSS. Then we want to add in a wrapper div that will help us contain everything on the page and allow us to centre it all using CSS.

```

16
17     <div id="header">
18
19     <a href="index.html"><div id="logo">
20
21         <h1>Your logo goes here!</h1>
22
23     </div></a>
24
25     <ul class="navigation">
26
27         <li><a href="">home</a></li>
28         <li><a href="">about</a></li>
29         <li><a href="">blog</a></li>
30         <li><a href="">portfolio</a></li>
31         <li><a href="">services</a></li>
32         <li><a href="">contact</a></li>

```

04 Navigation

In this step we are going to add in the navigation. What we will use here is a standard unordered list and each list item () will have a link to each page using the '' attribute. Then we will give our unordered list a class name of 'navigation'.

```

43     <input class="submit_button" type="submit" value="Search">
44
45 </form>
46
47     <ul class="sidebar_list">
48     <li><a href="">home</a></li>
49     <li><a href="">about</a></li>
50     <li><a href="">blog</a></li>
51     <li><a href="">portfolio</a></li>
52     <li><a href="">services</a></li>
53     <li><a href="">contact</a></li>
54 </ul>
55
56 </div><!-- END sidebar -->
57
58

```

06 Sidebar navigation

Now what we need to do is now is add in what will be our sidebar navigation. This is the exactly the same code as our top main navigation, so it's just a case of copying and pasting that into the sidebar. But we will need to give it a different class name, which can be 'sidebar_list'.

Build a site

```
45 </form>
46
47 <ul class="sidebar_list">
48 <li><a href="">home</a></li>
49 <li><a href="">about</a></li>
50 <li><a href="">blog</a></li>
51 <li><a href="">portfolio</a></li>
52 <li><a href="">services</a></li>
53 <li><a href="">contact</a></li>
54 </ul>
55
56 <h3>My flickr images</h3>
57
58 
59 
60
61 </div><!-- END sidebar -->
62
63
64
65 </div><!-- END wrapper -->
```

07 Sidebar images

We'll now add some images to sit below our navigation list. We have the same image here for both, set to the size of 100x100px. We've given them a class name of 'thumb' so we can use CSS to position them better without relying on the 'img' tag. Also we've given this section a title with the 'h3' tag.

09 The CSS

Open up your 'styles.css' file and at the top add in the universal selector that will allow you to reset every element (<p>, <h1>, div, etc) to zero margin and padding. Then using the 'body' tag we can set the background colour to an off white '#f1f1f1' and set our default font style and size.

```
001 * {
002   padding: 0;
003   margin: 0;
004 }
005
006 body {
007   background: #f1f1f1;
008   font-family: Verdana, Geneva, sans-serif;
009   font-size: 12px;
010 }
```

11 The header & logo

We're styling our header by giving it a 100% width with a height of 250px. Adding the logo is also going to be very simple as we'll only be using text for now. We've given ours a drop shadow using the 'text-shadow' property.

```
001 #header {
002   float: left;
003   width: 100%;
004   height: 250px;
005 }
006 #logo h1 {
007   font-size: 35px;
008   float: left;
009   margin-top: 130px;
010   color: #dac91a;
011   text-shadow: 1px 1px 3px #333;
012 }
```

```
57 <!-- My flickr images -->
58 
59 
60
61 </div><!-- END sidebar -->
62
63 <div id="main_content">
64
65 <h2>Hi, Welcome to my website</h2>
66
67 <p>It is a long established fact that a reader will be distracted by
68 the readable content of a page when looking at its layout. The pe
69 of using Lorem Ipsum is that it has a more-or-less normal distri
70 of letters, as opposed to using 'Content here, content here', mai
71 look like readable English.
72 </p>
73
74 </div><!-- END main content -->
75
76 </div><!-- END wrapper -->
```

08 The main content

To finish off our HTML markup, we will add in a main content section. Again let's use an ID and name it 'main_content'. Then within the 'main_content' section we can add in a 'welcome' title accompanied by some dummy text wrapped in a paragraph tag 'p'.

10 The wrapper

So with our wrapper acting as a container for all our page content, we can centre everything using a fixed width and margin. We're specifying 0 pixels on top and bottom, with auto margins on the left and right. This is an easy and most often the best way of centring your page on your screen.

```
001 #wrapper {
002   margin: 0 auto;
003   width: 960px;
004 }
```

12 The navigation

Now let's style our navigation. We can do this by floating the whole element right, positioning it 150px down and then pulling it over to the right using a negative margin of '-50px'. Then we give the navigation a width of 600px. To bump everything to a horizontal position we float all the 'li' left, then create our button separator by adding a 'border-right' to the 'navigation li a' selector.

```
001 .navigation {
002   float: right;
003   margin: 150px -50px 0 0;
004   width: 600px;
005 }
006 .navigation li {
007   float: left;
008   list-style: none;
009 }
010 .navigation li a {
011   float: left;
012   color: #333;
013   padding: 6px 20px;
014   text-decoration: none;
015   border-right: 1px solid #333;
016   font-size: 16px;
017 }
```



13 Navigation hover state

At the moment our navigation looks nothing like a functional navigation menu and it still needs a couple of things added. The hover state will be the first thing we are going to add here, and then in the next step we will shoot over to Google fonts to download the 'lobster' font and use that.

```
001 .navigation li a:hover {
002
003     background-color: #333;
004     color: #fff;
005 }
```

15 The sidebar

Now in this step we are going to style our sidebar. So first we are going to float the sidebar over to the right and set a fixed height and width. Then we can style the '<h3>' header tag and just push that off the left side using padding. Then give the text a dark grey colour of '#333'.

```
001 #sidebar {
002     float: right;
003     width: 300px;
004     height: 100%;
005     background: #fff;
006 }
007
008 #sidebar h3 {
009     padding-left: 20px;
010     color: #333;
011 }
```

17 The search field

In this step let's style our search field. First of all we push it down slightly and then make sure anything underneath it is 50px away. Then we slightly push it away from the left edge using 20px. And lastly we give the input field some padding to make it a bit more attractive.

```
001 #search_form {
002
003     margin: 10px 0 50px 20px;
004 }
005
006 #search_form input{
007
008     padding: 5px;
009 }
```

14 Google fonts

Now let's go to google.com/webfonts and search for 'lobster'. Add it to your collection and click 'use'. Then add the '<link=' code to the index.html file just underneath your main CSS link. Then locate the '.navigation li a' rule and add in the 'font-family' property. Do the same for your '#logo' rule.

```
001 <!-- CSS -->
002 <link rel="stylesheet" href="styles.css">
003 <link href='http://fonts.googleapis.com/css?family=Lobster'
004 rel='stylesheet'
005 type='text/css'>
006
007 .navigation li a {
008     float: left;
009     color: #333;
010     padding: 6px 20px;
011     text-decoration: none;
012     border-right: 1px solid #333;
013     font-size: 16px;
014     font-family: 'Lobster', cursive;
015 }
```

16 Sidebar list

Style the sidebar navigation list by pushing it away from the edges using a 20px margin. Add a subtle dotted line using the 'border-bottom' property.

```
001 .sidebar_list {
002     margin: 20px;
003 }
004
005 .sidebar_list li {
006     list-style: none;
007     margin: 10px;
008     padding-bottom: 10px;
009     border-bottom: 1px dotted #ddd;
010 }
011
012 .sidebar_list li a{
013     text-decoration: none;
014     color: #333;
015     font-size: 13px;
016 }
```

18 Finishing off

To finish, we need to style our thumbnail images. So we float them left so they bump up to each other and then space them out by using margin.

```
001 .thumb {
002     float: left;
003     margin: 22px;
004     border: 1px solid #fff;
005     box-shadow: 0px 4px 6px #999;
006 }
```

Add content to your website

Learn how you can add content to the main area of your website

Adding content to your website is either done dynamically using a content management system (CMS) or by hand.

Either way, you are going to have to learn how it's styled and what options you have. For instance, will you have just text or text with images? How about a video that's either embedded using YouTube's, or your own flash or HTML5 player?

Of course your choices should be dependent on what niche your website caters for and thus knowing who will be visiting your website. So in this tutorial, we will add a few elements of content where one will include a video (which you can grab whatever video you want, you don't have to use our

one) and also some text and an image. So open up the index.html and styles.css files within your text editor and follow these simple steps.

“Your content choices should be dependent on the niche audience your website caters for”

THE RIGHT STUFF

Adding the right amount of content to any website is vital and can mean the difference of having a successful, clean website to a cluttered and confusing one. The layout needn't be the main concern here as you can have multiple columns throughout. But it's the white space and the way that your sections are aligned that will give your web page a better and more readable layout. We also used horizontal rules to add separators to section out our content even further. But there is no real need to use a horizontal rule; we can just as easily use an image here or in some cases a bottom border. Just remember that if there's no content, you won't get many visitors.

Content is king

Let's check out the most important parts of adding content to your webpage

The top section

It's a good idea to add some text about your website so users can see what you are all about before going any further

The width

You will need to think about the width of your main content area(s) and plan ahead accordingly

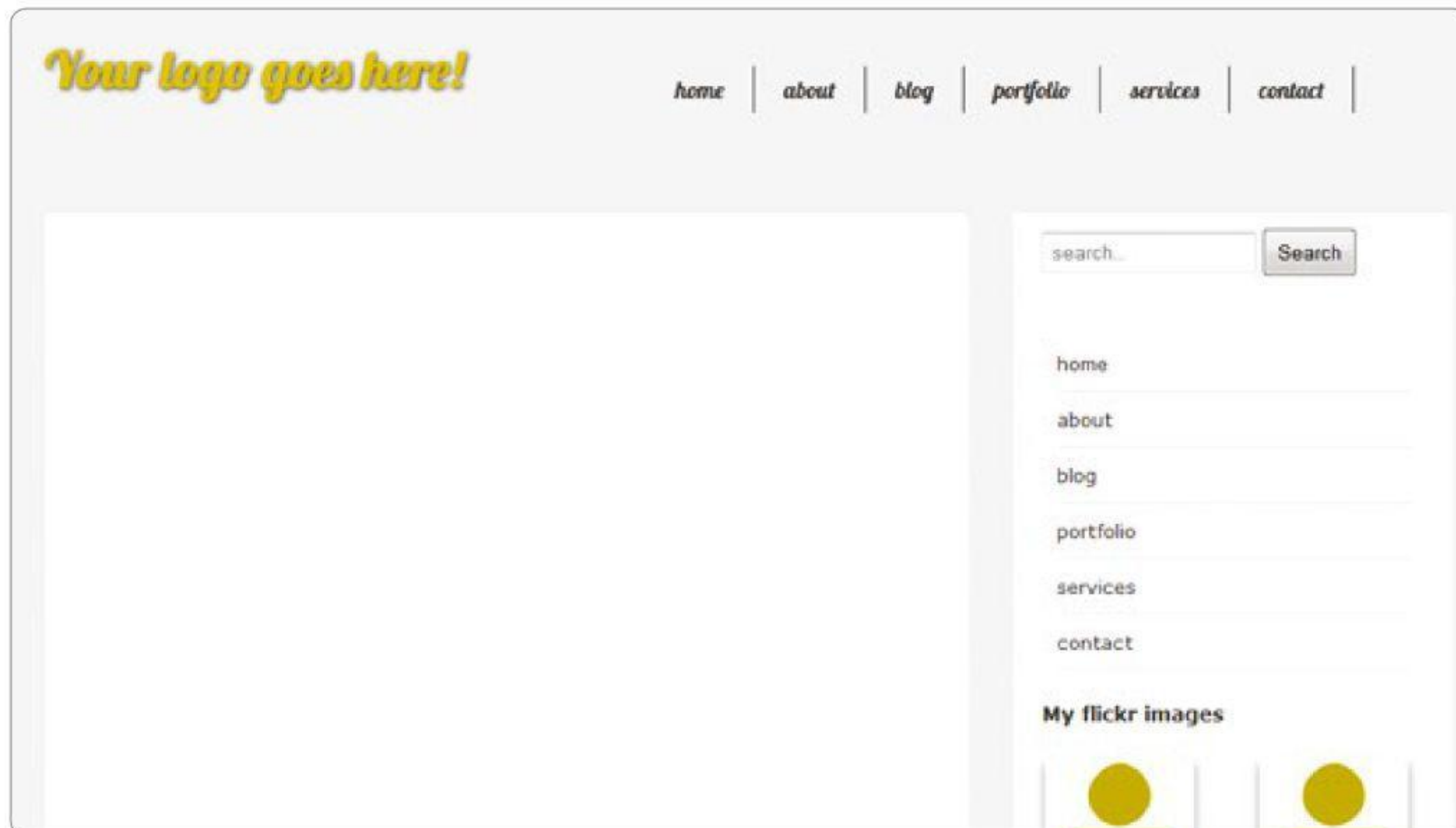
The middle section

We have added a video from YouTube here, but of course this could just as easily be a image of your company or yourself!

The bottom section

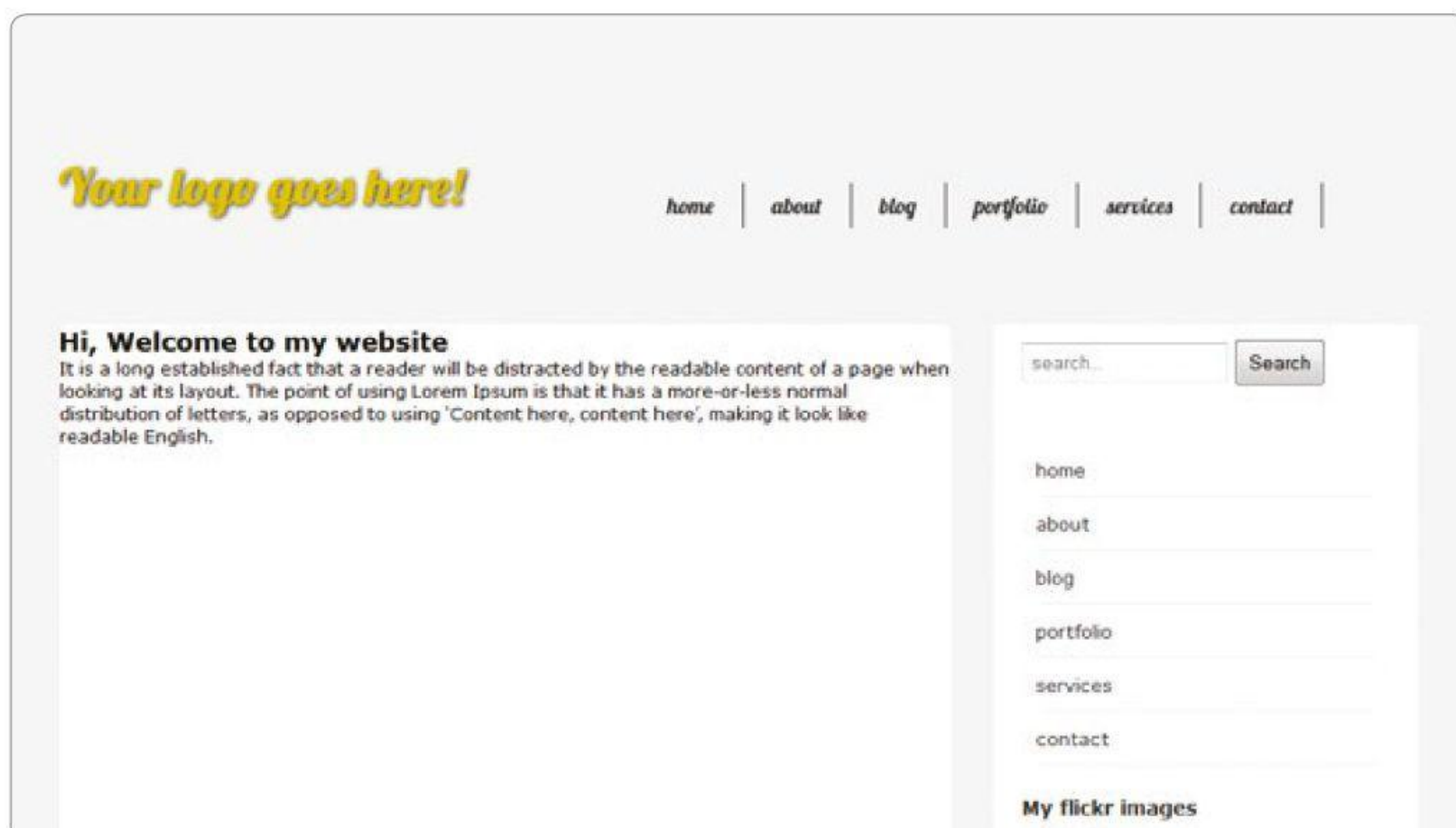
The bottom section is again used as a text-based section that describes the middle section video





01 Getting started

Open the Sidebar index.html file online or carry on from last time and you will see we have most of the template done. We have a logo, a navigation and the sidebar to the right. On the left we have our content area.



03 Welcome text

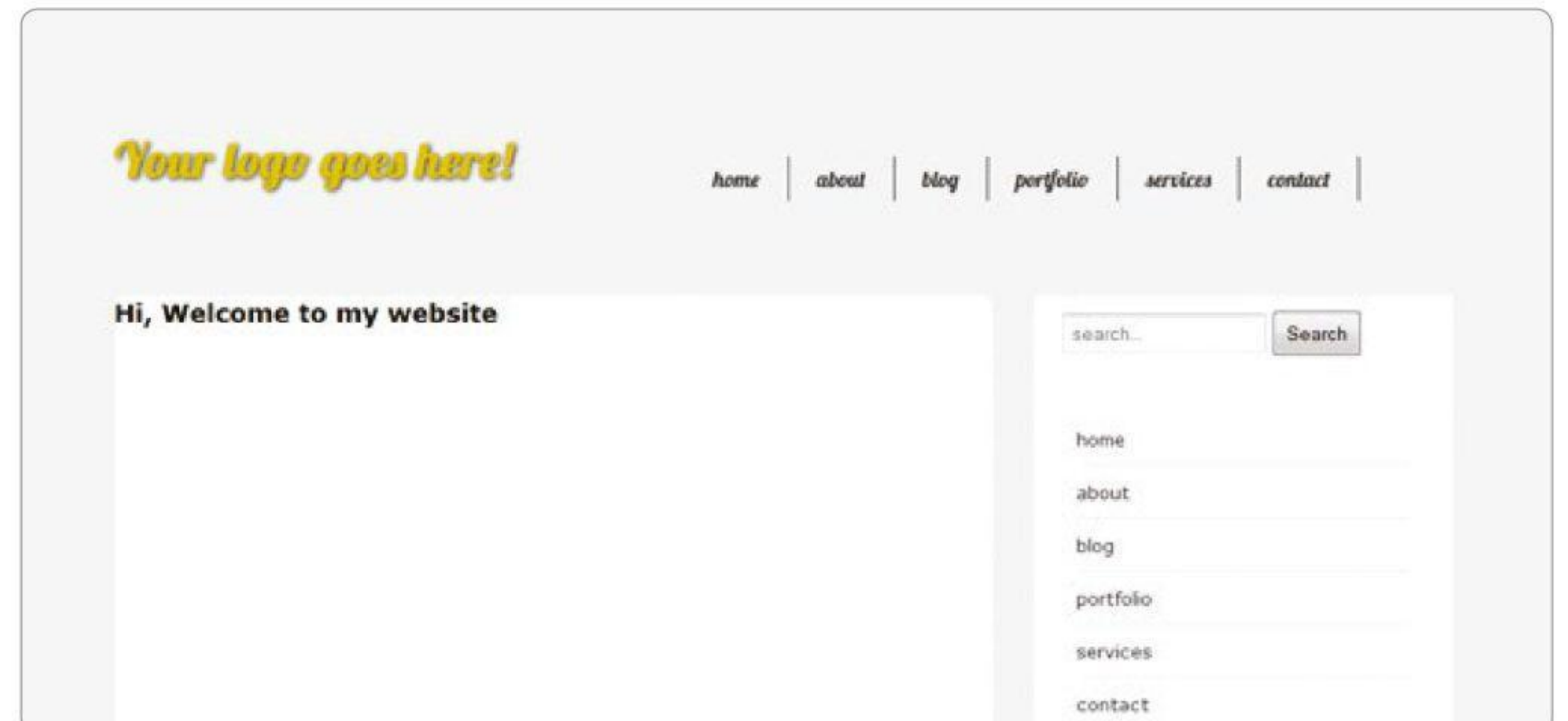
Now we need to add some 'welcome' text. This is normally a good way of letting the user know what your website is all about from the off. Here we will just wrap about three or four sentences within some '<p>' tags.



05 Styling our content

Let's open up our 'styles.css' file. We can point to the '#main_content' div and then hock onto the 'p' tag. We can then use multiple selectors here and use the same style properties and values for the '<h2>' tag.

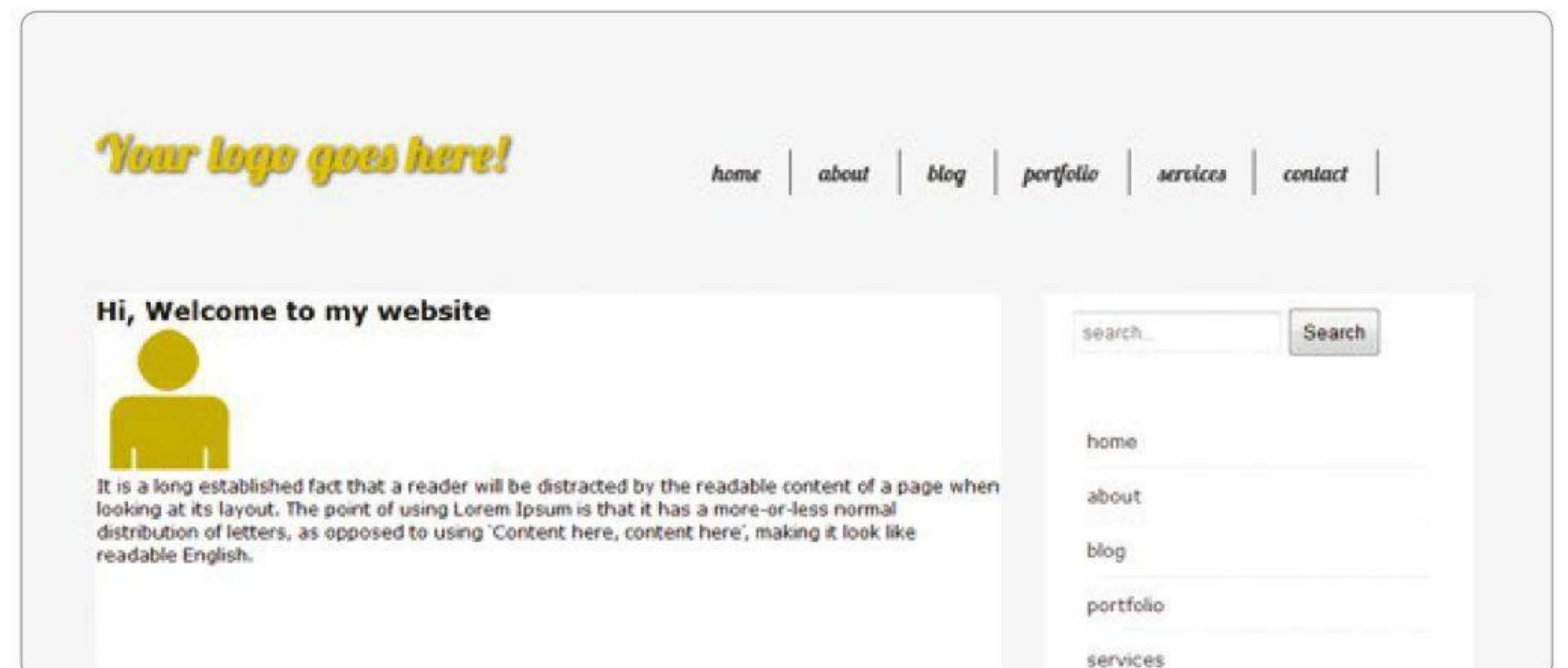
```
001 #main_content p, h2 {
002     line-height: 22px;
003     margin-top: 10px;
004     padding: 20px;
005     width: 350px;
006 }
```



02 Main content header

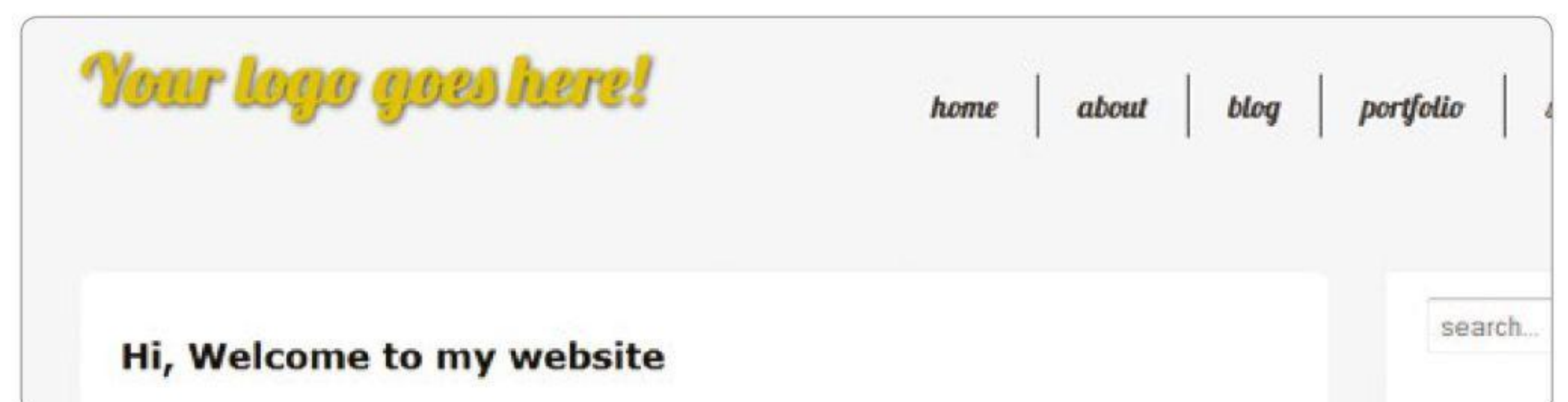
Now in this step we are going to give our main content area a title that will welcome everyone to the website. We do this very easily by adding in a '<h2>' tag and a nice message within. What we will do is use CSS later to see what we can do to make this look a little nicer.

```
001 <h2>Hi, Welcome to my website</h2>
```



04 Adding an image

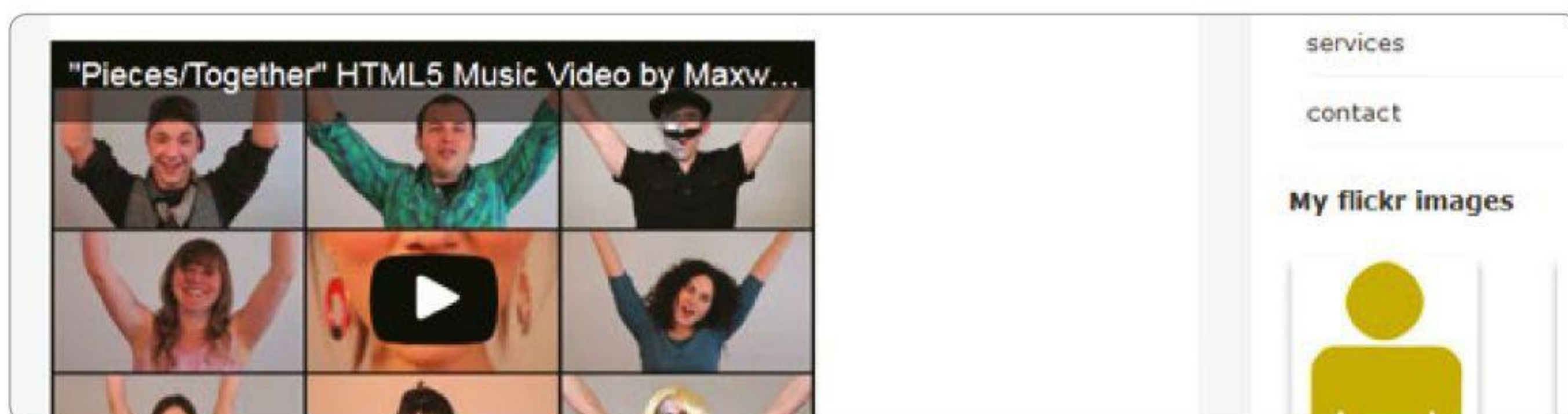
Now we can add in an image within our welcome text. The idea here is to have a small thumbnail image of something that relates to the website. So place your image tag '
```



## 06 Content image

Now let's float the image over to the right and add some styles to it. We are going to use the same CSS as we did on the sidebar thumbnails. Then we're going to make sure we have enough white space around the image.

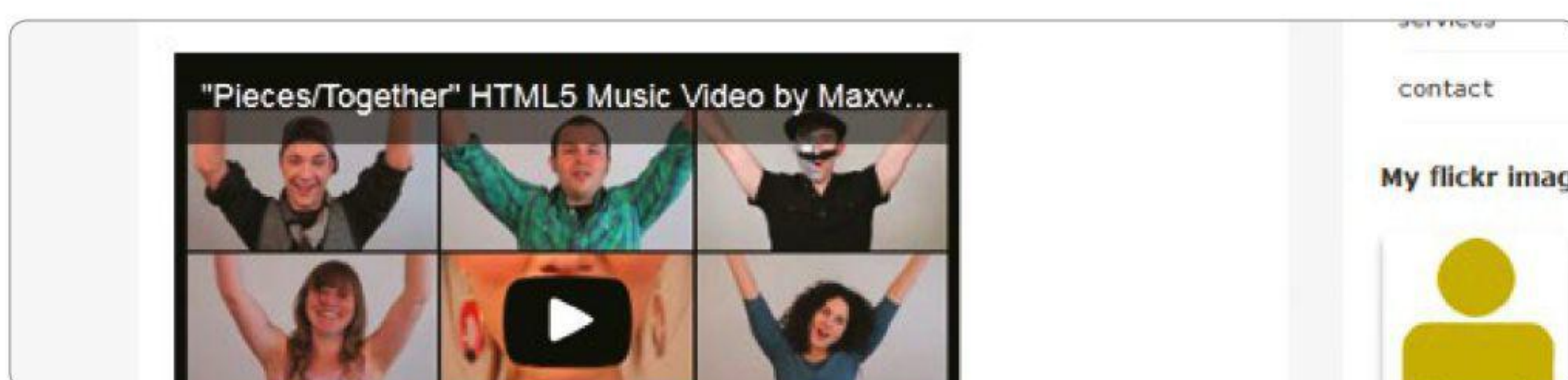
```
001 .main_thumb {
002 float: right;
003 margin: 40px;
004 border: 1px solid #fff;
005 box-shadow: 0px 4px 6px #999;
006 }
```



## 07 Video

Next we want to add the video to our main content area. Now we can get really technical and use an HTML5 or flash player here, but to keep things really simple, we can shoot over to youtube.com and copy and paste the embed code within our 'index.html' page. Then we want to be able to shift this video about using CSS, so it would make sense to wrap a div around it with an ID of 'video'.

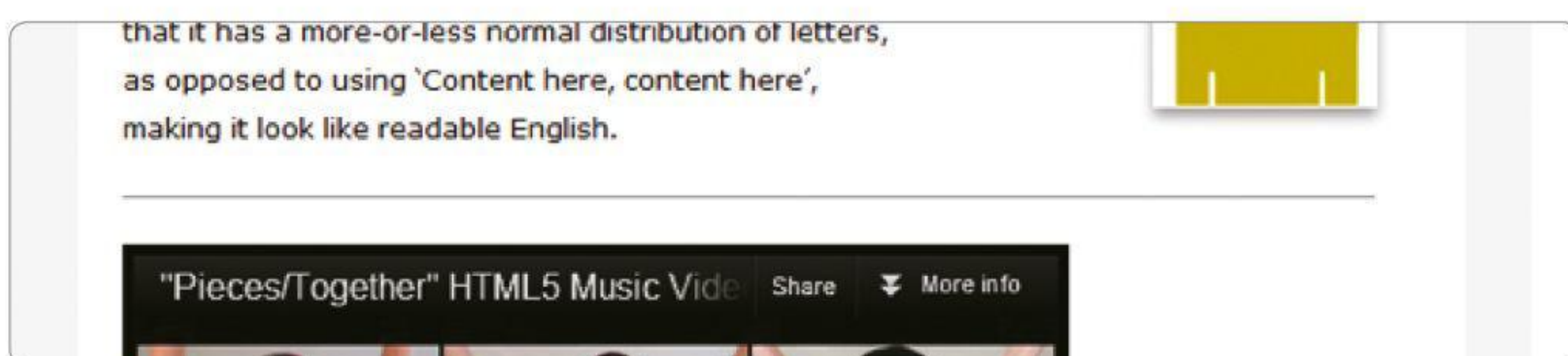
```
001 <div id="video">
002 <iframe width="420" height="315" src="http://www.youtube.com/
003 embed/kNn44gHqanM" frameborder="0" allowfullscreen></iframe>
004 </div>
```



## 09 Positioning the video

All we are going to do here is position the video using CSS. Now it makes sense to float the video left. Then we are going to use margin to push it away from the edges and anything that may be surrounding the video will now have a generous amount of white space. Then let's add a black 5px border to finish off our video.

```
001 #video {
002 float: left;
003 margin: 20px;
004 border: 5px solid #000;
005 }
```



## 11 Styling the horizontal rule

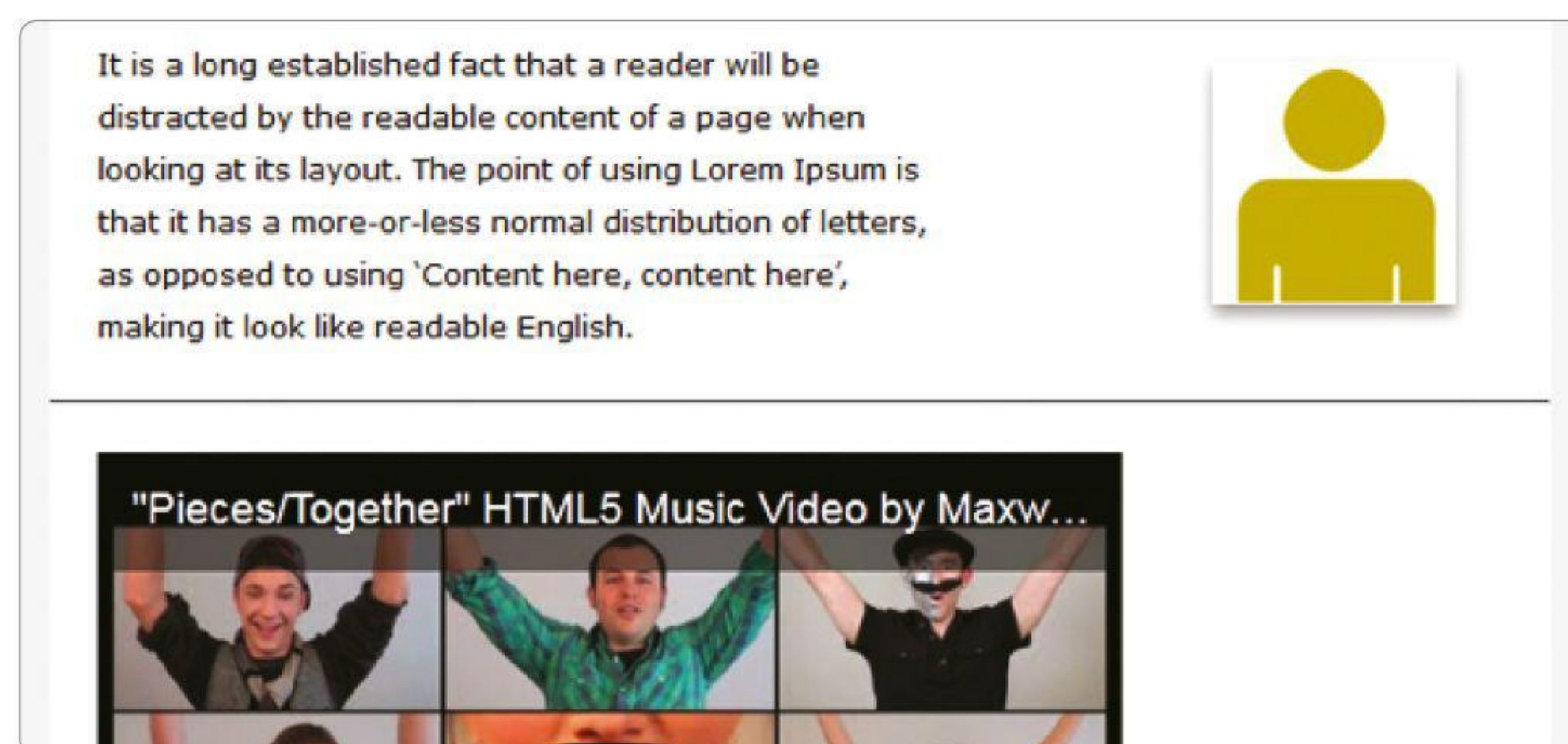
Styling the horizontal rule '<hr>' is going to be a very simple task, but it can leave you scratching your head at times. For instance, if you want to increase its height, you can't just call 'height: 10px' – we have to instead call upon its 'border' property like 'border: 5px solid #ddd'. But let's keep it simple and decrease its width, give it a grey colour and push it away from the left edge using 'margin-left'.

```
001 hr {
002 color: #ddd;
003 width: 570px;
004 margin-left: 20px;
005 }
```

## 08 The main content height

Now first thing you will notice is that the video is now hanging out at the bottom of our content area. This is because on our '#main\_content' rule we specified a fixed height of '500px;' So all we need to do now is locate that rule within our 'styles.css' file and change it from 'height: 500px;' to 'height: 100%;'

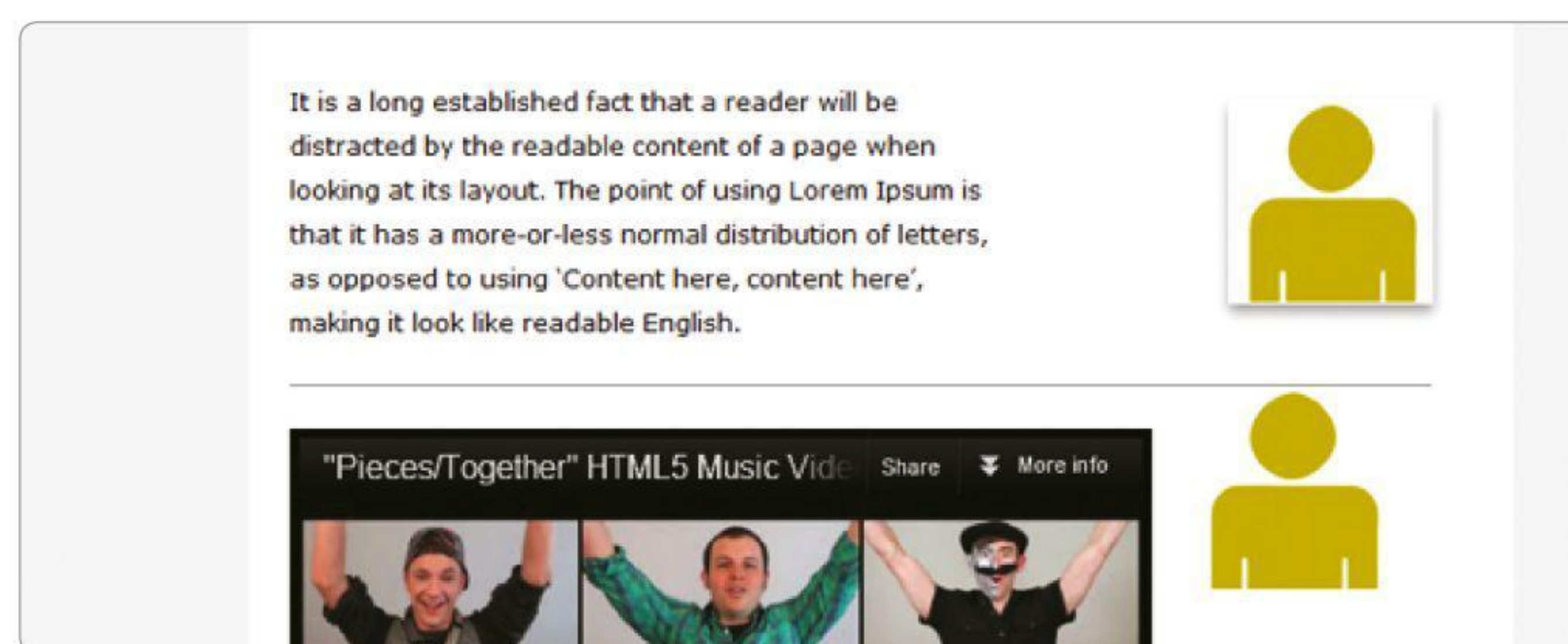
```
001 #main_content{
002 float: left;
003 height: 100%;
004 width: 630px;
005 background: #fff;
006 border-radius: 6px;
007 margin-bottom: 40px;
008 }
```



## 10 Horizontal rule

What we are going to do now is add a separator just above the video. This will be easily styled using CSS, so we won't need to depend on some graphic design software such as Photoshop or Fireworks. It's simply an HTML tag called a horizontal rule '<hr>' and we can add that just above the video div within our 'index.html' file.

```
001 <hr>
002 <div id="video">
```



## 12 Adding more content

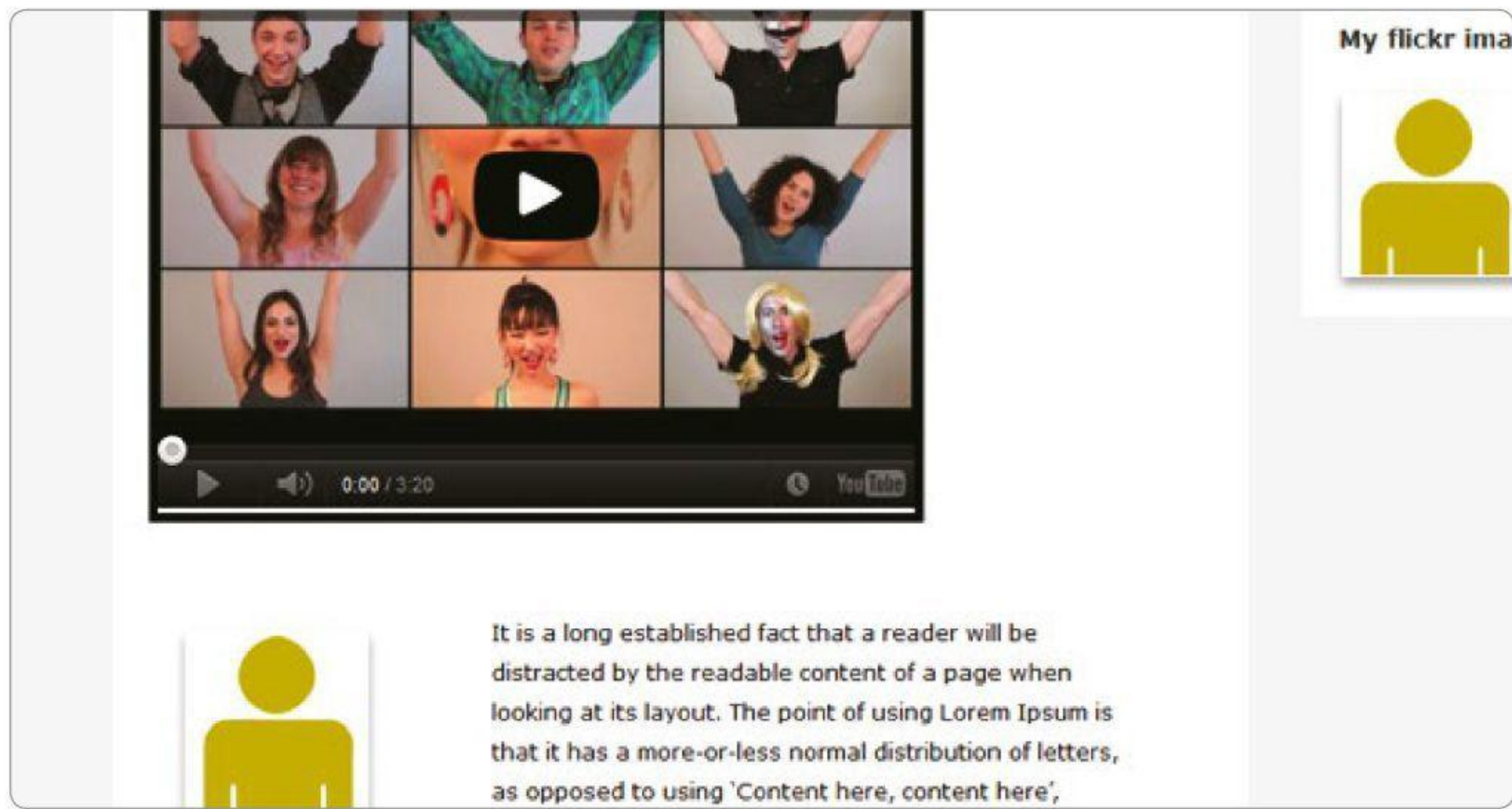
So now you should get the idea of how and what we can add for our main content. To get a real feel of it, let's add something underneath our video. What we can do then is add in another thumbnail image. So the best way would be to use the same image but give it a different class name of 'main\_thumb2' and place this directly under our closing div of our 'video'.

```
001
```

### 13 More text

So the next step would be to add in some more text that could be used for a summary/excerpt of our video. Underneath our new thumbnail image, place some more dummy text that is wrapped within paragraph tags '<p>' with a class name of 'vid\_excerpt' so we can style it using CSS.

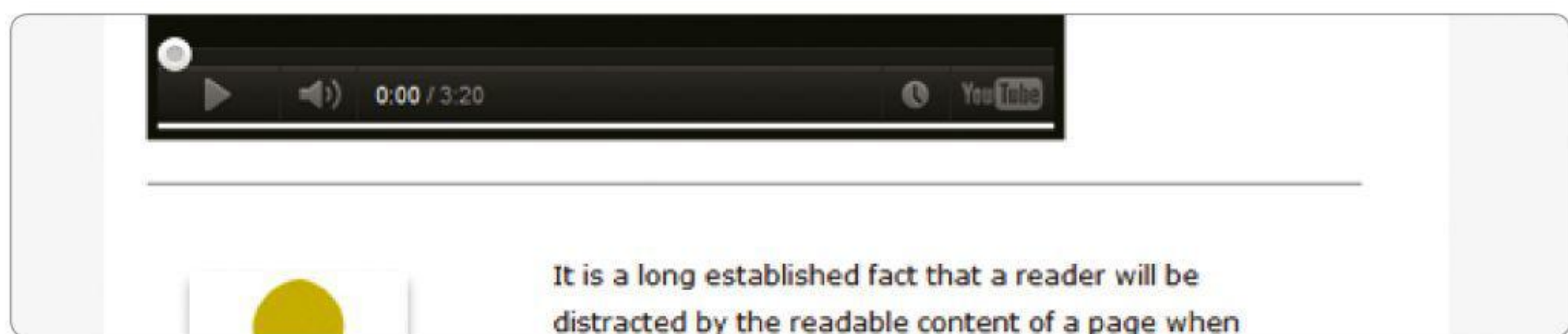
```
001
002 <p class="vid_excerpt">It is a long established fact that a reader
will be distracted by the readable content of a page when looking at its
layout. The point of using Lorem Ipsum is that it has a more-or-less normal
distribution of letters, as opposed to using 'Content here, content here',
making it look like readable English.
003 </p>
```



### 15 The excerpt

Now all we need to do is float our video excerpt to the right and give it some margins with 50px to the right, and 40px to the bottom.

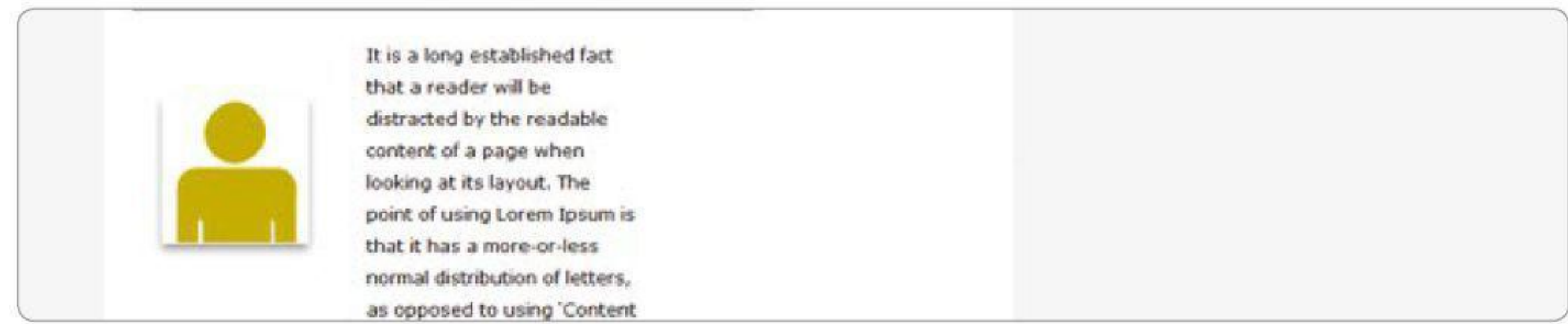
```
001 .vid_excerpt {
002 float: right;
003 margin: 0 50px 40px 0;
004 }
```



### 17 Adding another divider

Now what we want to do is add in another horizontal rule '<hr>' above the excerpt text so we can then section out the video properly. So just above the thumbnail image link, place in your '<hr>' tag. But before we view it in the browser, we need to go back into our CSS and float the 'hr' tags left. This will push the bottom one underneath the video.

```
001 hr {
002 color: #ddd;
003 width: 570px;
004 margin-left: 20px;
005 float: left;
006 }
```



### 14 Styling the content

What we need to do now is style our new content using some simple CSS. So, open up your 'styles.css' file and position our thumbnail image first. We will float it left and then give it a 40px margin all around. Then to finish it off we can give it the same subtle drop shadow as the other thumbnail we used in the sidebar.

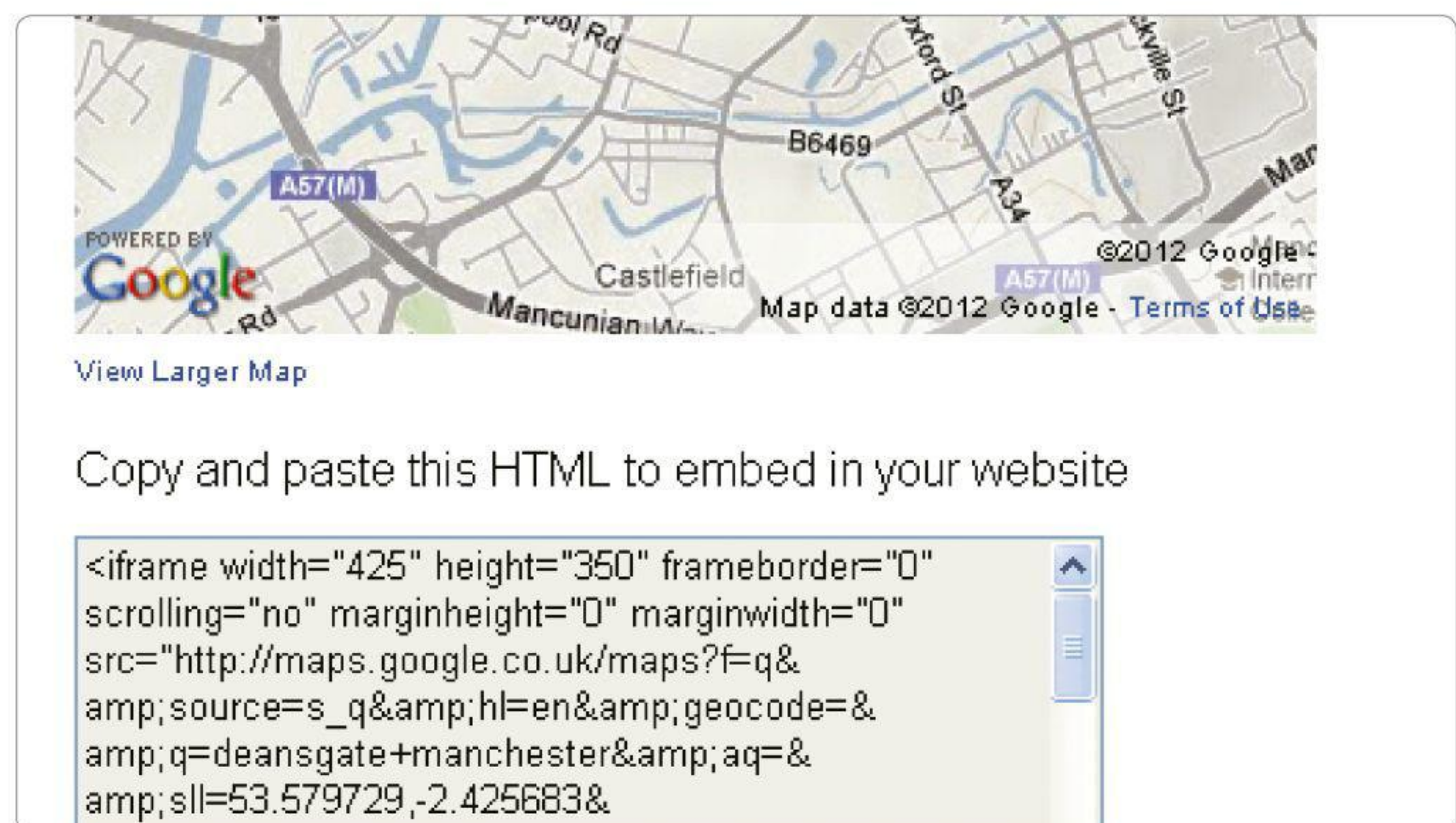
```
001 .main_thumb2 {
002 float: left;
003 margin: 40px;
004 border: 1px solid #fff;
005 box-shadow: 0px 4px 6px #999;
006 }
```

```
90 <div id="video">
91
92 <iframe width="420" height="315" src="http://www.youtube.com/embed/kNn
allowfullscreen"></iframe>
93
94 </div><!-- END video -->
95
96 <div id="bottom_content">
97
98 It is a long established fact that a reader will
101 the readable content of a page when looking at its layout. The point
102 of using Lorem Ipsum is that it has a more-or-less normal distribution
103 of letters, as opposed to using 'Content here, content here', making
```

### 16 Bottom content

When looking at our HTML, it would make more sense to wrap our bottom thumbnail and excerpt content within its own div. That way we can have more control of this section if at all we need to position it further. So, create a div with an ID of 'bottom\_content' and make sure you use an HTML comment to mark the ending div '</div><!-- END bottom content -->'

```
001 <div id="bottom_content">
002 </div><!-- END bottom content -->
```



### 18 Going further

As we said in the intro text to this tutorial, it's down to you as to what your content should include. Later in this book we explore adding maps, newsletters, social media icons and more!

## Add content to your footer

Finish off your first site with a footer to be proud of

In the past, the humble footer was not much more than a slim strip of colour with nothing more interesting than the copyright text written within. But in many modern websites, we have seen a huge improvement in footer designs and the content held within them.

These days, they are a lot higher and contain all sorts of content, which can include contact forms, newsletter sign-up fields, social media integration and much more. Ours for instance, in addition to a newsletter sign-up field and generic About Us text, features another set of links for navigation, so our

readers don't have to scroll back to the top or to the sidebar if they want visit another page.

As crazy as it sounds (and this would have sounded incredibly crazy no more than a few years ago), the footer has really taken the modern web by storm and has now developed into an area that needs good planning – like all parts of your website, it is important to offer the right amount of content without confusing the user. So in this tutorial we will build a simple footer and include some useful content that you would most likely see in a modern layout.

“The footer has taken the web by storm and has now developed into an area that needs good planning”

## Dissecting the footer

The most important things to keep in consideration for a good footer

### Navigation

Having a list of links for an extra navigation will allow your users to click through other pages without needing to scroll up

### The newsletter field

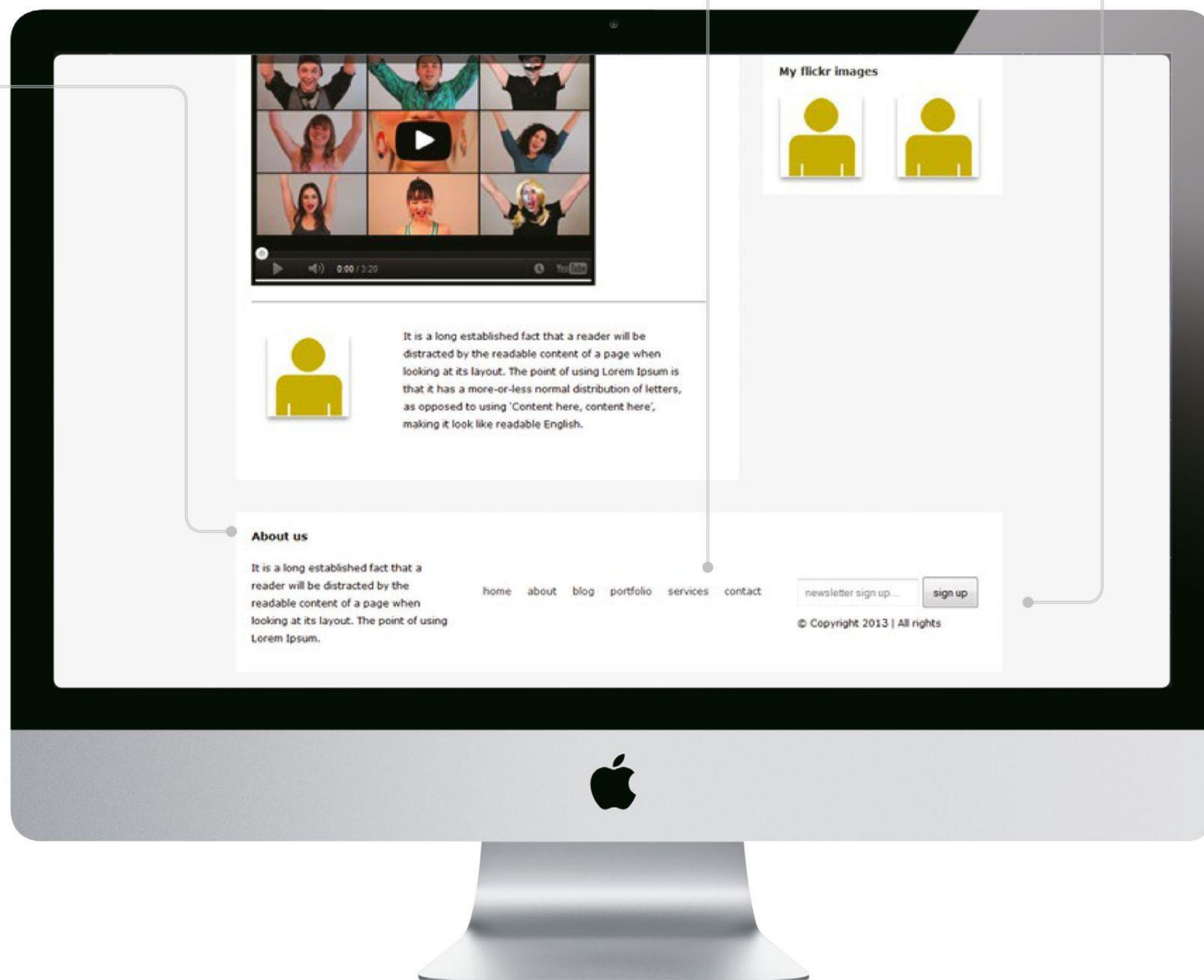
We added this feature because it would make sense for people to learn more about your business/service. A contact form here is also a good idea

### The about text

The about text is a great way of letting people know what you are about if and when they are viewing the content within your footer

### SHORTHAND CSS

Over the course of this tutorial we have used a lot of shorthand CSS. The reason being is it's quicker to write and decreases your style sheet's file size – even if it's only very small. The shorthand is used for margin and padding, and there is a lot more you can do with it that we haven't covered. So let's take a margin declaration for an example. It works in a clockwise direction, so 'margin: 10px 20px 30px 40px' would mean 10 pixels top, 20 pixels right, 30 pixels bottom and 40 pixels left. So top, right, bottom, left. Then we can get even more technical by only using two values such as: 'margin: 20px 30px'. Now this means 20 pixels top and bottom, then 30 pixels right and left. And lastly if we just use one value such as: 'margin: 20px' would simply mean 20 pixels all around to whatever element (div) was specified.



```

91
92
93 <p class="vid_excerpt">It is a long established fact that a reader will be distracted by the readable content of a page when looking at the readable content of a page when looking at
94 the readable content of a page when looking at
95 of using Lorem Ipsum is that it has a more-or-less
96 of letters, as opposed to using 'Content here, content here,'
97 look like readable English.
98 </p>
99
100 </div><!-- END bottom content -->
101
102 </div><!-- END main content -->
103
104 <div id="footer">
105
106 </div><!-- END footer -->
107

```

## 01 Getting started

Open up your 'index.html' file from the last project and scroll down to the very bottom of the document. The first we are going to do here is just underneath our closing 'main\_content' div, add in a div with an ID of 'footer'.

```

001 <div id="footer">
002 </div><!-- END footer -->

```

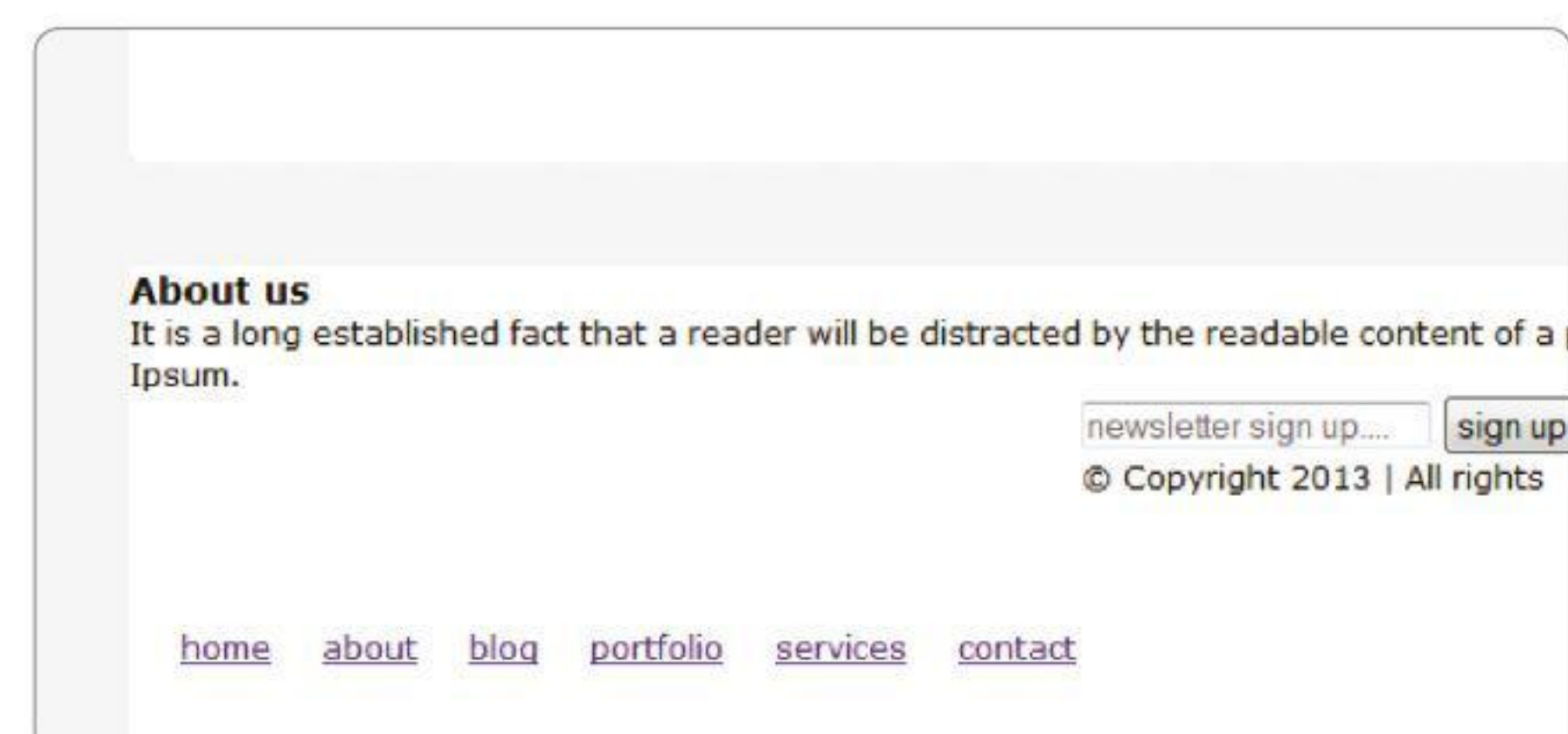
## 04 Newsletter sign up

Many websites would have either a contact form or newsletter sign up field within their footer. What we will do is keep it simple and add in a newsletter sign up field. We will give it an ID name of 'newsletter' and we will place this straight under the footer links. We can then position this later over to the right using CSS.

```

001 <form id="newsletter" action="" method="get">
002 <input id="search_term" type="text"
003 placeholder="newsletter sign up..." />
004 <input class="submit_button"
005 type="submit" value="sign up">
006 </form>

```



## 07 List items

Now style the list items '<li>'. Here we are removing the default bullet points and then floating all the items left, which will push each one up and next to each other giving us a horizontal alignment. Then using 'margin-left' we can create some space between each other.

```

001 .footer_links li {
002 list-style: none;
003 float: left;
004 margin-left: 20px;
005 }

```

```

96 of letters, as opposed to using 'Content here, content here,'
97 look like readable English.
98 </p>
99
100 </div><!-- END bottom content -->
101
102 </div><!-- END main content -->
103
104 <div id="footer">
105
106 <div class="about_txt">
107
108 </div><!-- END about txt -->
109
110 </div><!-- END footer -->
111

```

## 02 About us

In this step we are going to add some 'about us' text that will be positioned to the left of our footer. So first thing to do would be to create a div with a class name of 'about\_txt' within our footer ID making sure we add on a HTML comment to the closing div. For content, we will start with a '<h4>' header tag that includes the words 'about us'. Then underneath that we will add in some dummy text that is wrapped within paragraph tags '<p>'.

```

001 <div class="about_txt">
002 </div><!-- END about txt -->

```

## 05 Footer background

Now we have finished our HTML mark-up, but if we viewed it in the browser now it would look a bit of a mess! So let's open up the 'styles.css' file, scroll down to the very bottom and start adding some CSS for our footer. First thing we can do is clear the floats so it pops underneath everything above and give it some dimensions and a background colour of white.

```

001 #footer {
002 clear: both;
003 height: 200px;
004 width: 100%;
005 background: #fff;
006 margin-bottom: 20px;
007 }

```

## 08 Finishing the navigation

Now we're going to finish off our footer navigation. What we need to do is remove the default underline and then give the text a light grey colour. Then for our hover state, let's just change the colour of the text to black '#000', giving us a subtle rollover effect.

```

001 .footer_links li a {
002 text-decoration: none;
003 color: #333;
004 }
005 .footer_links li a:hover {
006 color: #000;
007 }

```

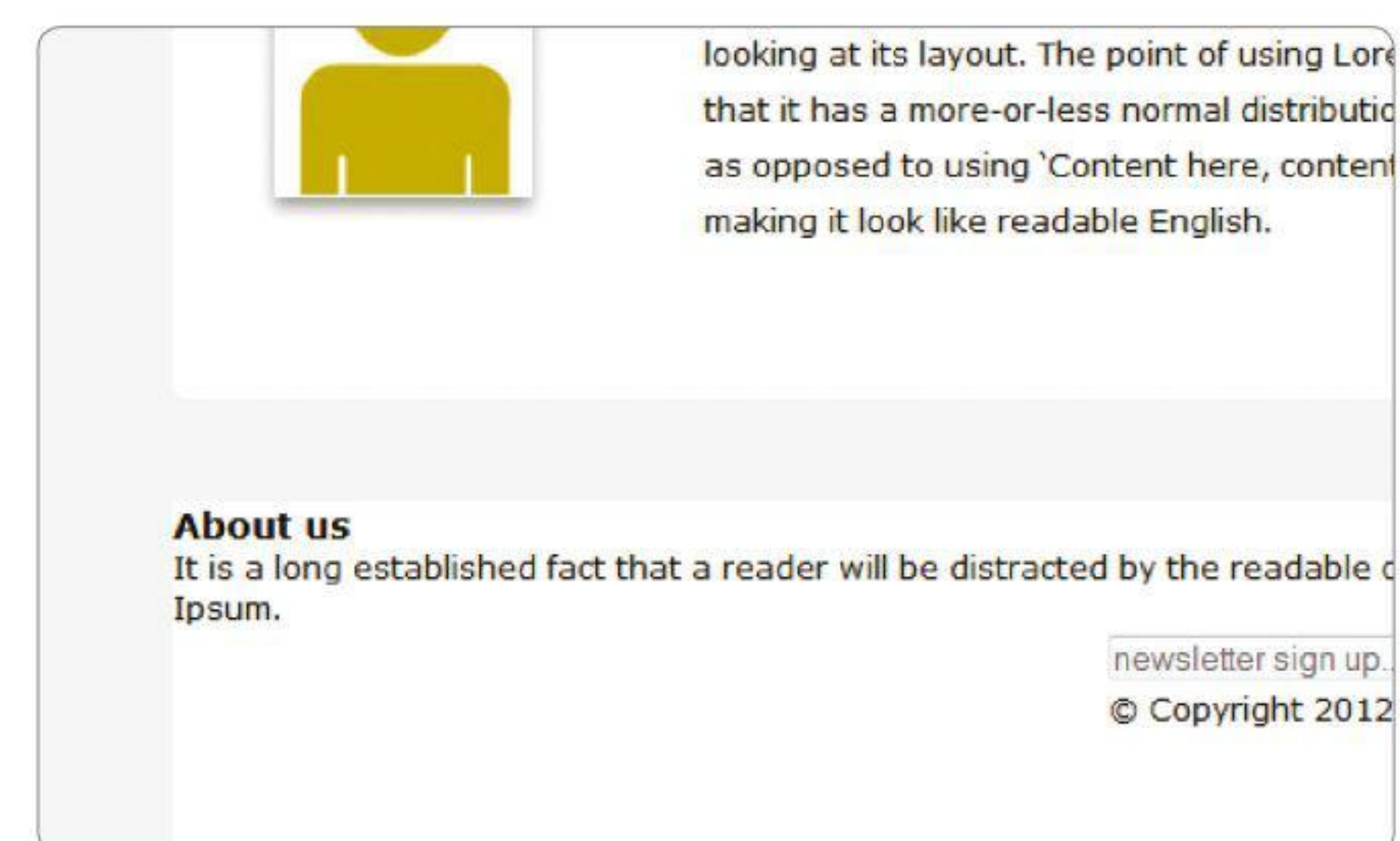
## 03 Footer links

It is always a good idea to place your site's navigation within the footer so the user doesn't need to scroll all the way up to the top to navigate your site. So let's use an unordered list and give it a class name of 'footer\_links' and place it just underneath the 'about' text.

```

001 <ul class="footer_links">
002 home
003 about
004 blog
005 portfolio
006 services
007 contact
008

```



## 06 The links

In this step let's style our footer links so they look more like a horizontal navigation list. We are going to float it left and push it down using margin and give it 20px space at the bottom. Then let's give it a width of 370px.

```

001 .footer_links {
002 float: left;
003 margin: 90px 0 20px 0px;
004 width: 370px;
005 }

```

## 09 About text

Styling the 'about' text is going to be very simple. We first float it left and then give it a width of 250px. We then give it some padding to allow some white space all around. One thing to remember by using padding is it will make the box element ('div') 20 pixels bigger as the padding effects the inner element, not the outer element, and pushes it out.

```

001 .about_txt {
002 float: left;
003 width: 250px;
004 padding: 20px;
005 }

```

# WordPress

## POST IMAGES

Get your blog looking great and professional with our tutorial on images

## WHAT YOU'LL LEARN

Throughout this section you will be harnessing the power of the robust yet simplistic content management system, WordPress. It's used by millions around the world for their personal and business blogs. You will set up and manage a blog, tidy your Dashboard, add video and audio, and much more



## SEARCH

## TEXT WIDGET

This is a text widget, which allows you to add text or HTML to your sidebar. You can use them to display text, links, images, HTML, or a combination of these. Edit them in the Widget section of the Customizer.

## Everything begins with a 'G'

SEPTEMBER 18,  
2016

GUITARSTAROCK  
LEAVE A COMMENT

In summer 1954, my uncle, Fred Gretsch Jr., and a rising Nashville session and recording guitar star named Chet Atkins put their signatures on a simple two-page contract. Neither of them could have predicted what was about to happen, or that this long and fruitful relationship would endure 60 years later.

Guitars That Rock

DELL

"Getting a WordPress blog up and running is much simpler than first-time users might think"

## SET UP YOUR SITE

Get your WordPress blog up and running



**72** What's new in WordPress 5.0?  
Uncover the latest updates

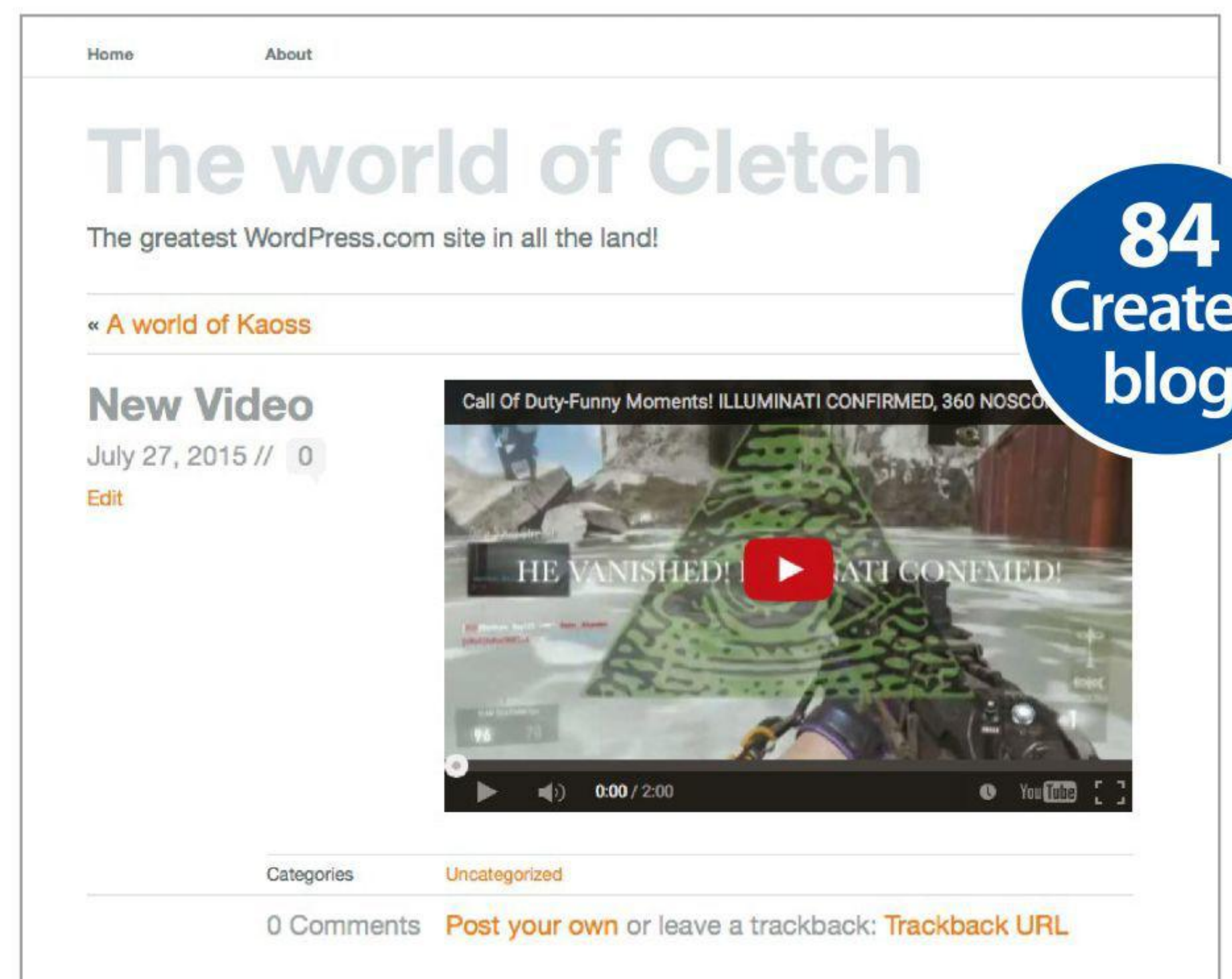
**78** Download, install and set up a self-hosted site  
The path to the perfect blog starts here

**82** View and organise WordPress dashboard modules  
Keep your dashboard clean and tidy

**78** Set up a site

**84** Creating a WordPress blog  
Create posts with text, images and videos

**88** 8 WordPress security secrets  
Learn how to prevent, deter and recover from attacks on your WordPress site with these must-know tips



**88** Security secrets

# What's new in WordPress 5.0?

Content editing with WordPress is getting a complete facelift. See what's changed in the new version of the world's most popular CMS



**W**ordPress 5.0 is slated to bring the biggest change to the CMS in a long time. With the rollout of Gutenberg, a block-based content editor, WordPress is taking a huge step towards bringing easy, responsive layouts into content editing. It's the first step in a three-stage plan to revolutionise content, templates and eventually WordPress site-building as a whole.

Gutenberg enables users to form their content out of responsive blocks – similar to site-builder tools like Squarespace – to create posts and pages that mould easily with their theme to any screen size. Theme editors can style block types to match their templates, and non code-savvy users will find it easy to add elements like columns, cover images and social media embeds without the need for unwieldy plugins. It's even possible to embed widgets in posts and pages. Gutenberg aims to negate the need for shortcodes and custom fields by standardising the content creation process.

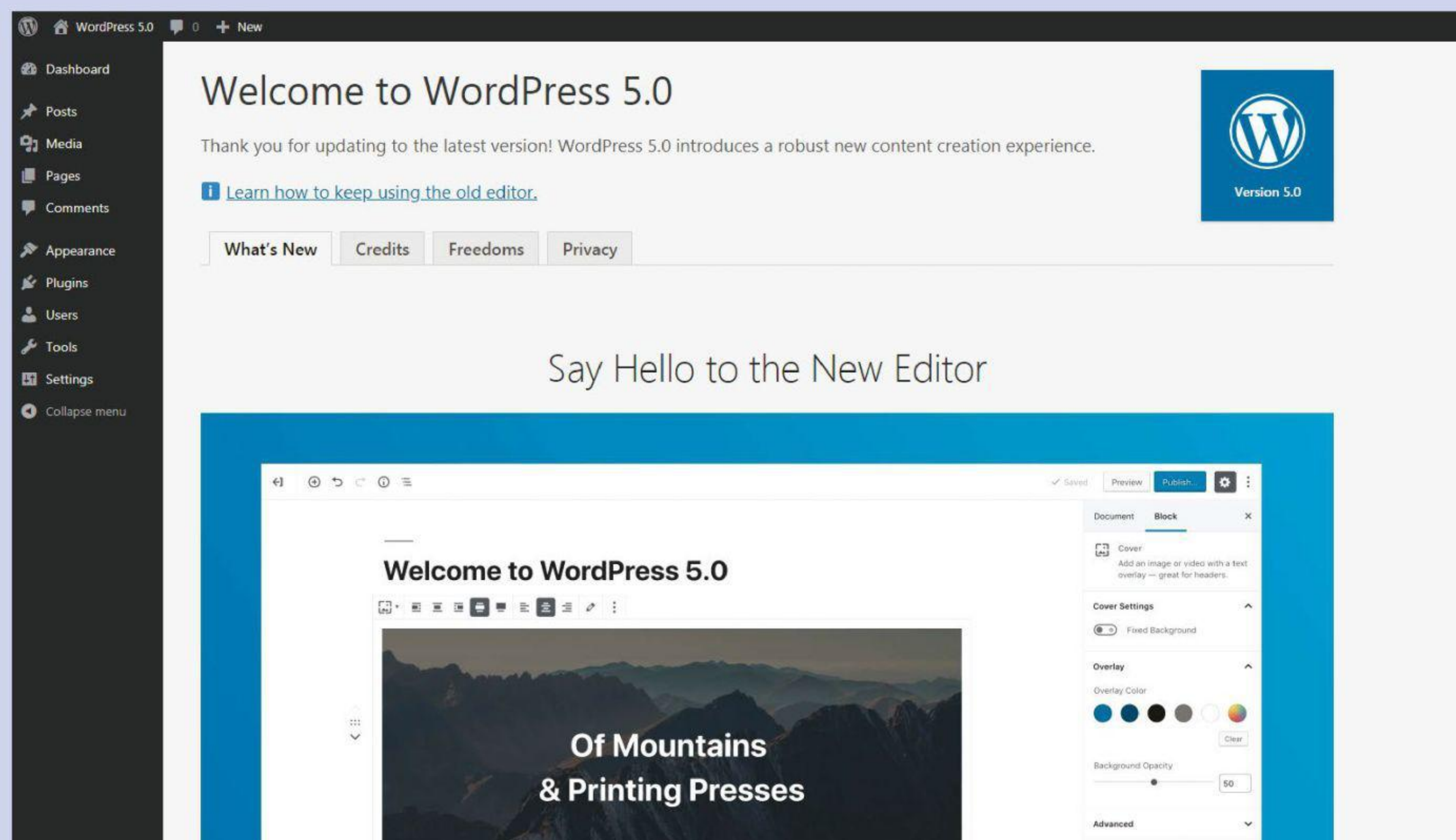
It makes publishing faster and more powerful, giving editors all-new tools to write and publish more efficiently than before. You can even write your content in other editors like Google Docs or Microsoft Word and paste into the Gutenberg editor, and it will translate your content into blocks automatically.

Coming with Gutenberg is the all new Twenty-Nineteen theme and updates to the previous WordPress themes to support the new Gutenberg editor. Suffice to say, the WordPress landscape is going to change massively in the next few years.

# 5 REASONS TO USE THE GUTENBERG EDITOR

- 1 IT'S EASIER THAN IT LOOKS** New things can be daunting, but Gutenberg is surprisingly easy to pick up. Within a few minutes of using the new content editor, you'll be creating content quicker than ever.
- 2 CREATE SOMETHING NEW** With all-new block types and support for things you never knew you needed, Gutenberg will encourage editors to create content that breaks the mould and discover new ways to display content and engage with viewers.
- 3 PROMOTE DEVELOPER AND USER SYNERGY** Because blocks standardise the way content is crafted, developers can get a better handle on what editors might be creating and predict how their themes and styles might be utilised to avoid disastrous user code clashes.
- 4 WYSIWYG IS REALLY WYSIWYG** Going forward, with a little dedication from developers and their styling, Gutenberg will more accurately represent what really appears in the published post. Editors can build their content in real time without having to rely on the preview.
- 5 STEP INTO THE FUTURE** The world of web content is changing fast, and what better way to keep up than to ride on the wave of new technology? Gutenberg is paving the way for exciting things to come.

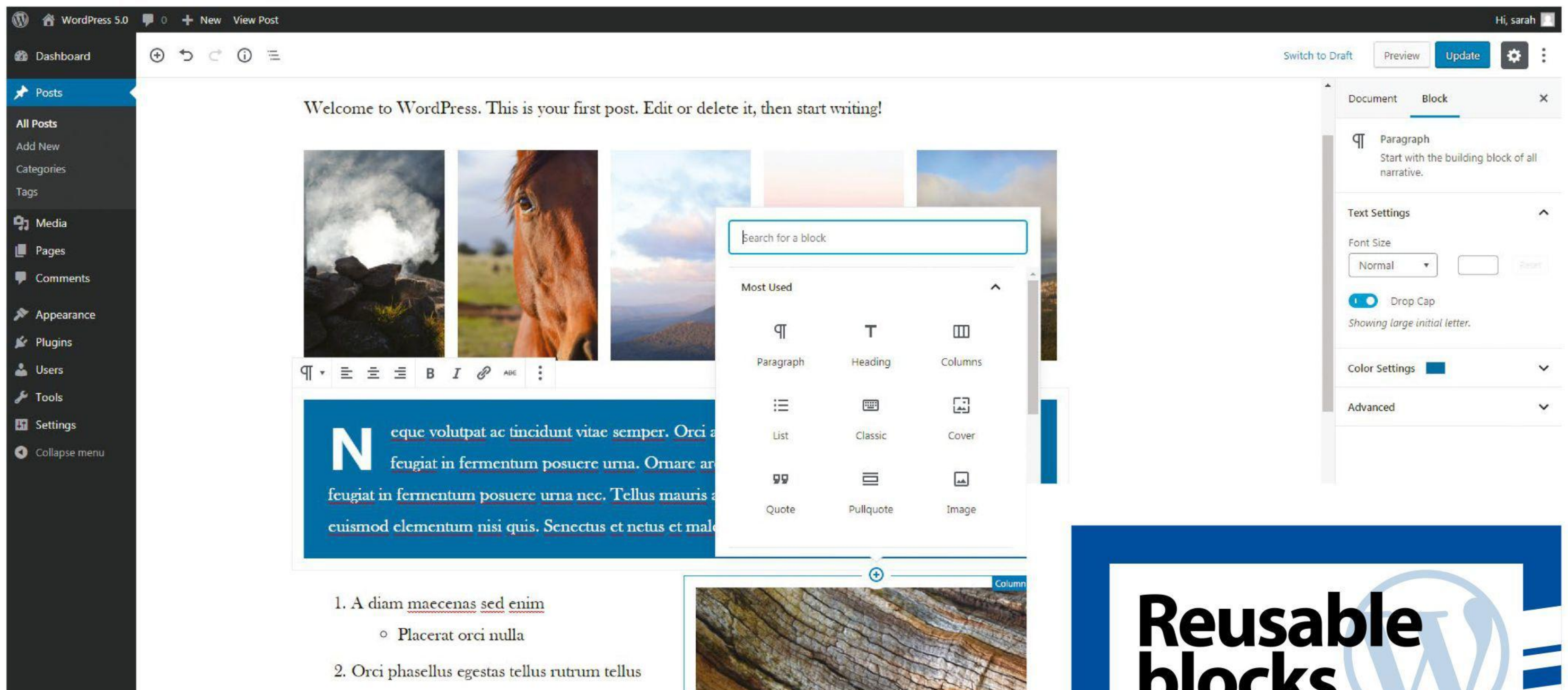
## Is WordPress 5.0 better than its predecessors?



With such a drastic change to the content editor, Gutenberg has encountered some negative feedback, so opinions are highly contested by certain factions. However, the future of web design is dependent on change, and as Matt Mullenweg said, "It's worth a little discomfort to change the world."

WordPress 5.0 is a huge step towards improving content creation for the layman, as well as enabling developers to maintain content unity. It makes it easy for editors to create content in different layouts without giving designers a headache, and is a boon for developers who have had trouble adapting user content to fit into their themes. The difficulty arises with the initial release; most, if not all, themes will need to be updated to utilise the new Gutenberg block styles.

Overall, opinions may be mixed, but WordPress 5.0 should pave the way for a more flexible and user-friendly experience all round.



## Gutenberg's building blocks

Blocks are the foundation of the new Gutenberg editor. By splitting content up into different types – such as paragraphs, lists, images, quotes and more – blocks enable editors to insert, drag and drop, remove and swap parts of the post or page with ease. Compared to the previous TinyMCE editor, it may be somewhat alien to users who have never seen a block-based editor or page builder before, but after a little practice the benefits far outweigh the learning curve. So don't lose heart if it seems daunting at first.

The default blocks are split into a few different sections; inline elements, common blocks, formatting, layout elements, widgets, embeds and reusable blocks. There's even a 'Classic' block, if you miss TinyMCE, with the option to convert it later into Gutenberg blocks. Plugins can add blocks too, making integration of new blocks easy and streamlined, and reducing the amount of clutter on the editor where you have multiple plugins weighing in.

Theme and plugin developers will have some work to do to bring their code up to date to make

full use of the new update, but it should be worth it to see users creating content that is not only easy on the eye, UI-friendly and theme-matching, but composed of valid code too. Page-breaking user code will be a thing of the past.

Writing with blocks is a breeze, with keyboard shortcuts to help you tab between existing blocks, insert, duplicate, move and delete blocks on the fly. Blocks also include a wide variety of default embed blocks, living up to the WordPress.org Gutenberg promise that content editing will support multimedia and content side by side. With such a comprehensive set of blocks right out of the box, Gutenberg is ready to tackle content of all flavours.

Blocks are going to standardise the way content is put together. Plugins, custom post types, meta boxes and shortcodes will be able to utilise the same UI, making the process of putting it all together seamless for every user. It also means code and content is finally completely separate. Updating code will no longer require any update to content, because developers can target the surrounding block behaviour.

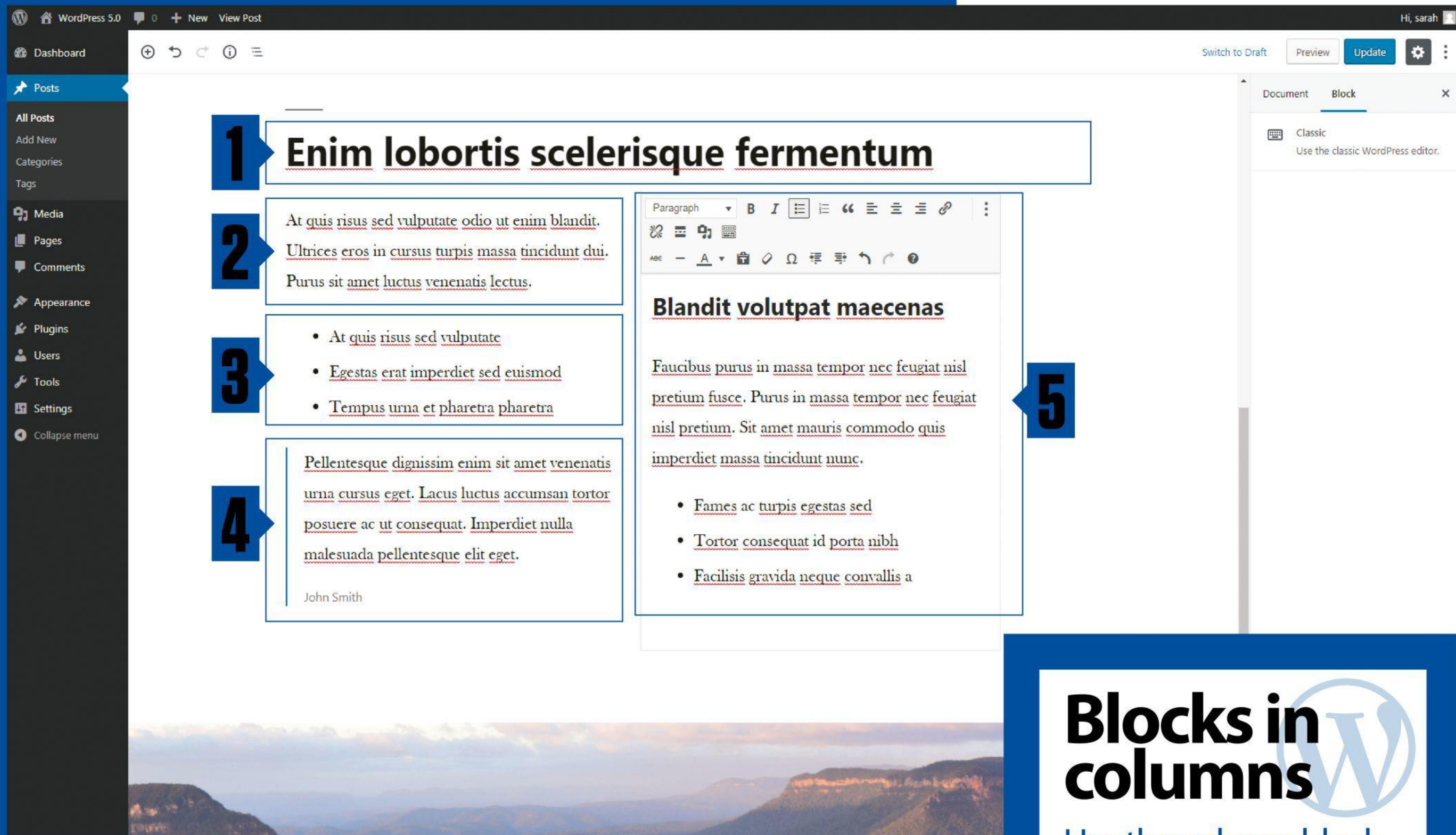
“Blocks also include a wide variety of default embed blocks, living up to the WordPress.org Gutenberg promise that content editing will support multimedia and content side by side”

## Reusable blocks

Save blocks to use repeatedly across your site

Reusable blocks are a new integral function that enables you to save a block and reuse it in any content. When a reusable block is edited, it updates automatically wherever it has been used, without the need to manually edit every page where it appears. Reusable blocks can be updated inline or from their own administration panel by clicking the 'Options' button in the top right of any content editor and going to 'Manage All Reusable Blocks'. Creating a reusable block can be done from there, or by clicking the 'Options' button on any block menu and clicking 'Add to Reusable Blocks'. You can also save multiple blocks into one reusable block by highlighting content, clicking the 'Options' button that appears in the top left of your selection and selecting 'Add to Reusable Blocks'.

Reusable blocks can be exported from the 'Manage All Reusable Blocks' menu by hovering over a block title and clicking 'Export as JSON' or imported via the 'Import from JSON' button. This makes it possible to share blocks between sites.



## Blocks for text formatting

Format your text with a different block for each type

**1** The heading block formats headings from H1 through to H6. Inserting a heading block into the content will by default select H2, which is ideal for maintaining the content's waterfall heading structure and avoiding multiple H1s on a page. Twenty Nineteen's default settings enables editors to change heading alignment and add an HTML anchor for linking directly to a section on the page.

**2** The paragraph block will make up most of your content; it's the 'building block of all narrative'. Each paragraph has its own block, and Twenty Nineteen comes with the default text settings for size, drop caps, text colour and background. It can be transformed into a quote, heading, list or verse. As you're writing, hitting enter will create a new block, ready for the next paragraph. Text formatting is limited to inline styles like bold, italic, links and strikethrough.

**3** Lists are separate blocks to paragraphs, which can cause some confusion at first because you could mistakenly look under 'paragraph' instead. List blocks by default have

simple options, such as ordered (numbered) and unordered (bullet-point) lists, as well as a tool to nest lists underneath other list items. Basic text formatting, like the paragraph block, includes bold, italic and links.

**4** Quote blocks format blockquotes with the option to add an easy citation. This used to be difficult for the non tech-savvy in the classic TinyMCE editor, as adding a citation would require additional coding in HTML view. Default options include quote text alignment, as well as regular or large quote styles. There is a separate Pullquote block option for featuring quotes in left- or right-floating blocks, or full-width spreads. Swapping between the two is easy and can be done with a single click.

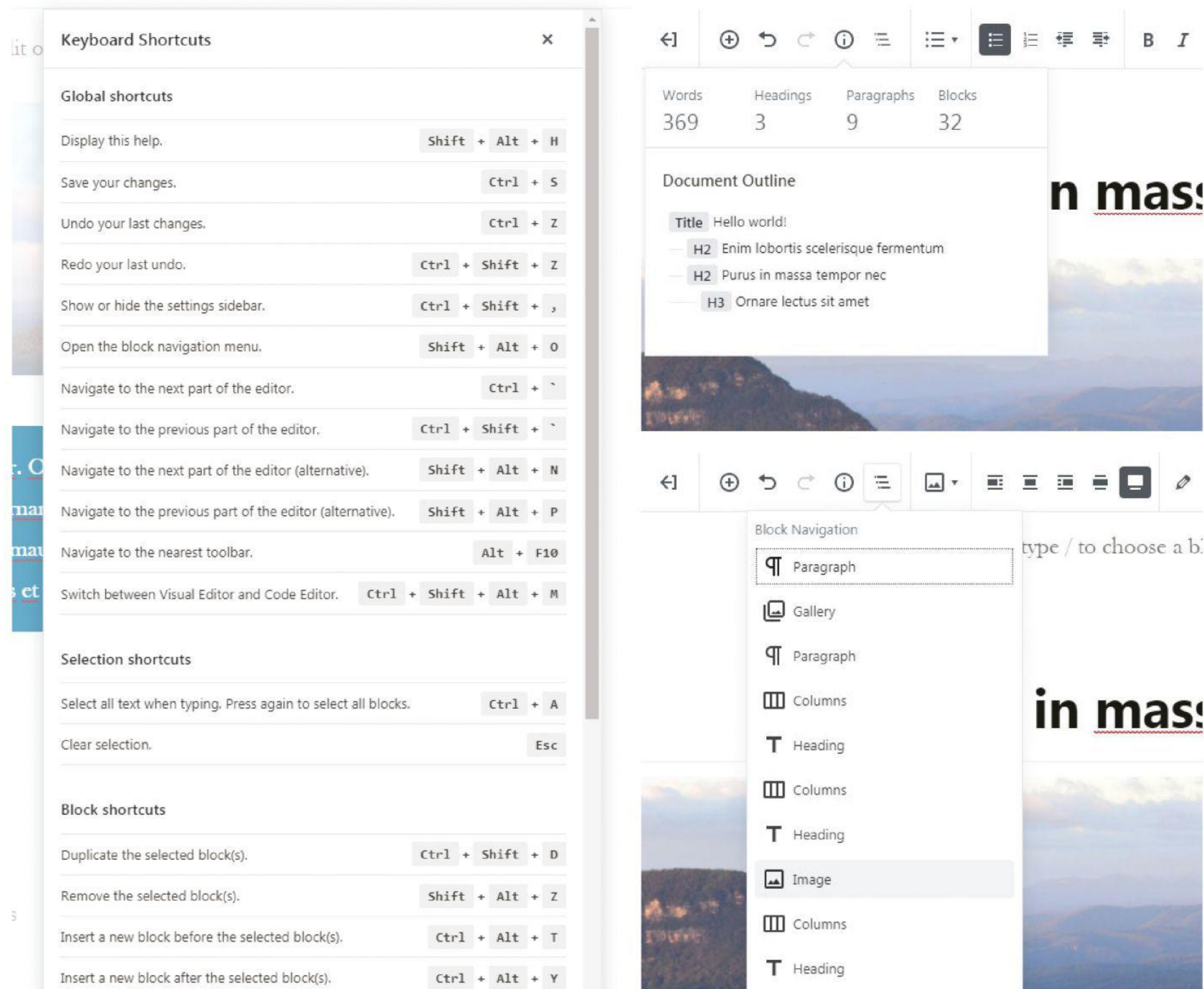
**5** Other formatting options include 'Classic', code, preformatted, table and custom HTML blocks. There should be a block for every occasion, even with just the default types in 5.0, while the addition of the custom HTML block along with the original TinyMCE Editor-like 'Classic' block should cover most of the edge-cases.

## Blocks in columns

Use the column block type to sit content side by side in responsive columns

Perhaps one of the most powerful new blocks for content layout is the column block type, enabling users to create up to six columns and insert paragraphs, lists, images and more in a responsive format. With the option to make the column block full width, the page's space is well-utilised and content can flow as the user likes.

There's a bit of a knack to find the column settings again once you've created and edited the block, but using Tab and Shift+Tab will help if it's proving difficult to bring up the options menu with the mouse hover. Beware, reducing the number of columns after filling them up will delete the content in the removed columns, so make sure to move your blocks out of the column structure before editing the column block. As long as the theme supports it, the columns will stack on smaller screen sizes, maintaining responsive design.



## Keyboard shortcuts

The Gutenberg editor is a haven of time-saving shortcuts, and an entire post can potentially be written without using a mouse. The WordPress team has been working hard to make the editor accessible for everybody; inserting blocks, swapping between blocks and editing block settings can all be done with keyboard shortcuts. Use Tab and Shift+Tab to skip up and down the page options, and use enter to select. To open the block type chooser, start a line with '/' or select any of the '+' icons with Tab.

## Content structure and block navigation

Gutenberg comes with some handy tools for content information and navigation. In the top left, the 'Content Structure' icon shows you the wordcount of your content, and how many headings, paragraphs and blocks it's split into. The block navigation gives a table of contents to negate scrolling up and down looking. This is particularly helpful for keyboard-only users, who won't need to tab through every block to get to the end of their content. The only downside is you can't currently name blocks.

## Editor views

The new editor has a few different views to cater to preferred writing environments. By opening the options in the top right, you can choose between visual and code editors. The code view will display the block syntax denoted by HTML comment tags, but be careful when editing them – broken tags will trigger blocks to be changed. You can choose one or more views: 'Top Toolbar' (move all block options to the sticky top menu), 'Spotlight Mode' (grey out the ones you're not working on), and 'Fullscreen Mode' (hide the rest of the site options).

## Converting old content

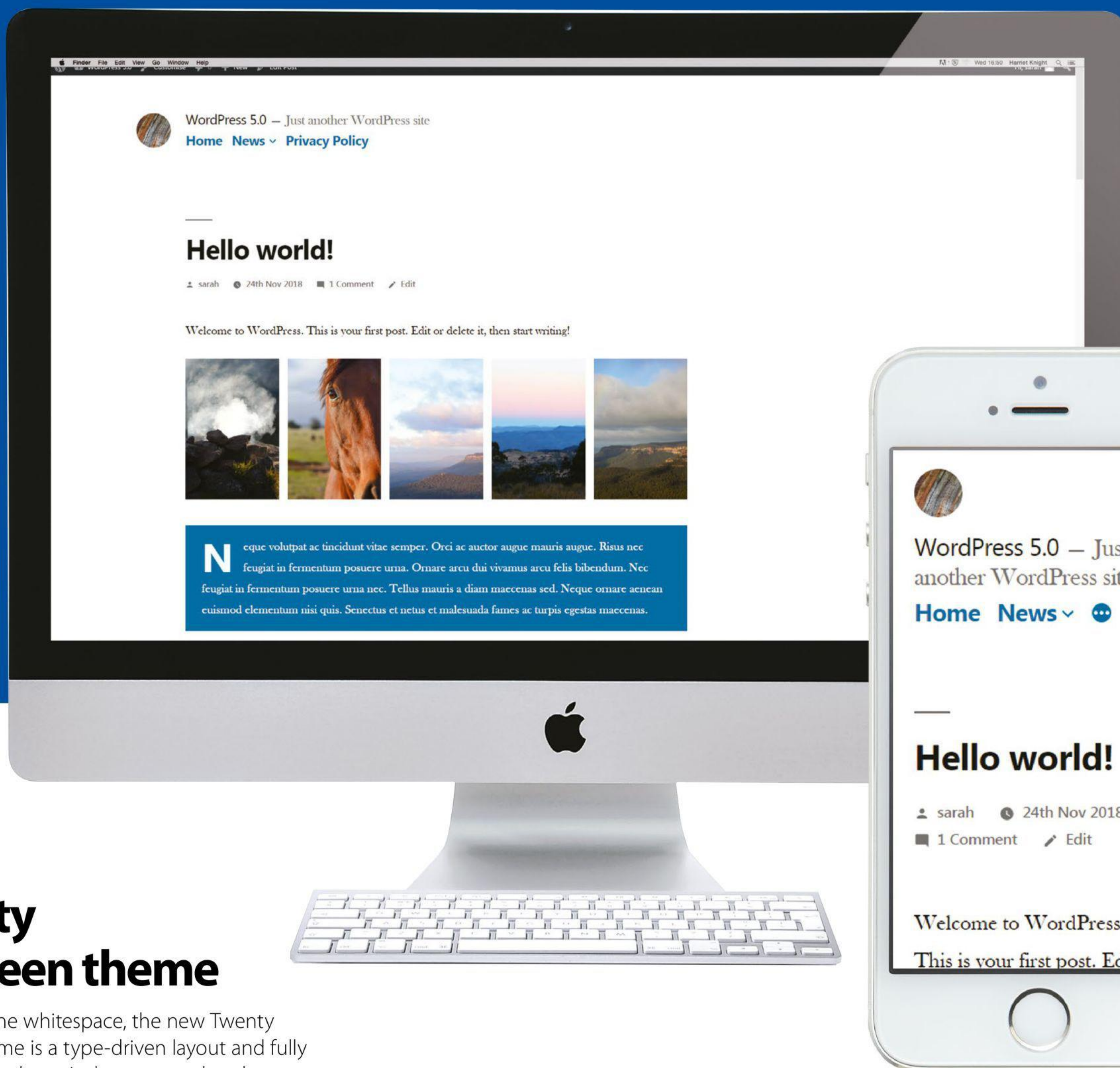
When you upgrade to WordPress 5.0, your old content will not be lost or broken. When you go to edit the page, it will be displayed as the full article without blocks in the 'Classic' block type. You can use the 'Convert to Blocks' tool to automatically update your old content, or you can create blocks manually. There are even 'Shortcode' blocks to handle your old shortcodes if that plugin does not yet support blocks. Or you can leave your content as it is; the 'Classic' block editor allows you to manage content with the familiar TinyMCE format.

## What happens to TinyMCE?

### Blocks won't replace TinyMCE, it's still there

TinyMCE – the current tool for editing rich text in WordPress – is not being replaced. Instead blocks will use TinyMCE for editing their rich text with boundaries, such as limiting formatting to bold, italics and links. Most of the TinyMCE options will be extracted into their own unique block types. Formatting like paragraphs, lists, media, blockquotes, code and headings will be split up into block types and inserted into content as self-contained sections. The original editing experience will still exist, however. The 'Classic' block will be very familiar to WordPress users, acting exactly like the current WordPress editor and adding a fallback for users who are not sure where to find the format type they are looking for within the myriad of new blocks. If Gutenberg or blocks really aren't for you, the Classic Editor is available as a plugin to completely replace the new editor or to be there as an optional alternative, and will be supported by WordPress until 2022.

"This is particularly helpful for keyboard-only users, who won't need to tab through every block to get to the end of their content"



## Twenty Nineteen theme

Embodying the whitespace, the new Twenty Nineteen theme is a type-driven layout and fully supports Gutenberg. It showcases what the new editor has to offer, embracing block layouts. The styles between editor and page are almost exact, so you can see what your page will look like as you edit it. It's designed to work for a variety of cases, from bloggers to small businesses, and has a minimalist menu and fullscreen featured image area (like the Twenty Seventeen theme). It also has a two-column widget area in the footer and no sidebar.

The theme comes with the option to change the primary colour for buttons and links, and the option to filter the featured images using the chosen primary colour. The inline menu is bold and minimalist, with the logo, title, tagline, menu and social menu sat together at the top. The theme adapts well to tablet and mobile sizes, although content in multiple columns looks a little cramped on medium-sized screens before it breaks down and stacks on smaller screens.

## ClassicPress

ClassicPress is a pre-Gutenberg spin-off of WordPress 4.8.9 aimed at business websites that want to maintain the original editing experience. The founders of ClassicPress fear that Gutenberg will disrupt the power and popularity of WordPress and launched the push-back initiative after the announcement that Gutenberg would become part of WordPress core. It's a community-led project and so no new features are added without the vote of the community. The casual admin bar greeting 'Howdy' and other colloquialisms have been stripped in favour of formal language better suited to more serious websites. This open-source fork is gaining traction and could actually be a valid resource for WordPress users looking for a more 'business-style' version of WordPress.

## REST API updates

The REST API caused a hubbub at its conception but until recently has not been used extensively in WordPress core. Now, with Gutenberg relying on the API to fetch and save content, the REST API is starting to be used more heavily, as it was intended. Many updates have been made to the REST API for 5.0, and importantly the same hooks have been used for saving and retrieving content with the API as were used in the original editor, to maintain integrity across plugins that work with the editor. The Gutenberg editor's seamless editing experience is powered by the REST API, saving and publishing without having to reload the page.

## Download, install and set up a self-hosted site

The path to a perfect blog starts right at the beginning. Here we show you how to download, install and set up WordPress

**W**ordPress has become synonymous with the term **blog**, and with good reason. The web publishing platform is free to download, easy to install and simple to use. Add into this already appealing mix the fact that there are continual updates and development, swathes of themes and literally thousands and thousands of add-ons and it's hard to see what's not to like.

WordPress itself comes in two distinct flavours: either hosted via [www.wordpress.com](http://www.wordpress.com) or self-hosted via [www.wordpress.org](http://www.wordpress.org), as we explained

earlier. In this tutorial we are focusing on the self-hosting option, which relates to users who already own a domain name and web space.

The WordPress site extols the virtues of its famous 'five-minute installation' and undoubtedly

"It's free to download, easy to install and simple to use"

WordPress can be installed in five minutes, when you know what you are doing. However, for those not so well acquainted with the WordPress platform, the process is a little more in-depth. Here we look at the basics, namely where to download the latest version of WordPress and how to install.

We also take a more in-depth look at setting up a MySQL database and how to transfer files, ready for installation, via an FTP client. Finally, we run through the installation process and take a peek at how to modify some of WordPress's essential settings.

## The WordPress Dashboard

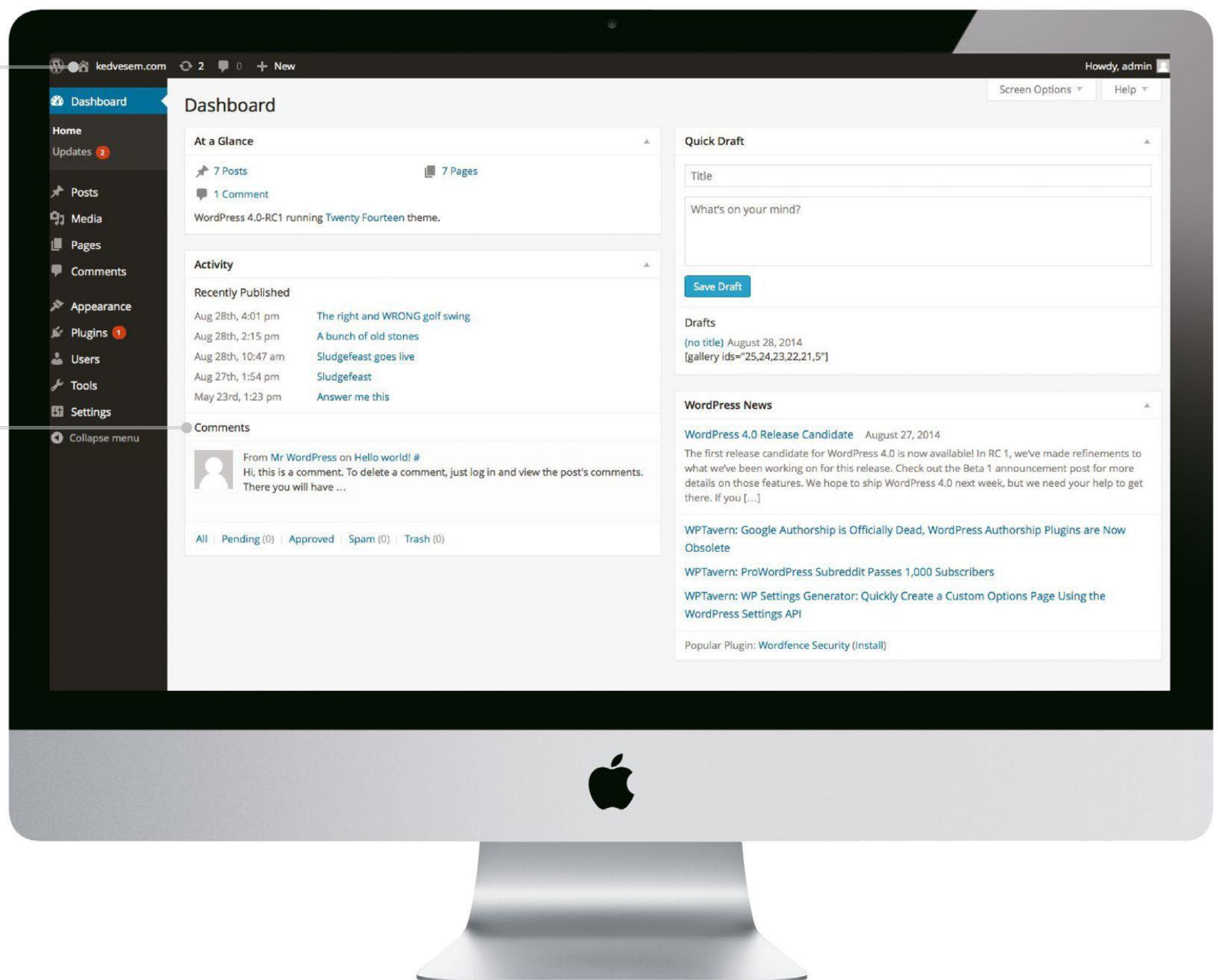
Where you'll be spending most of your time in WordPress

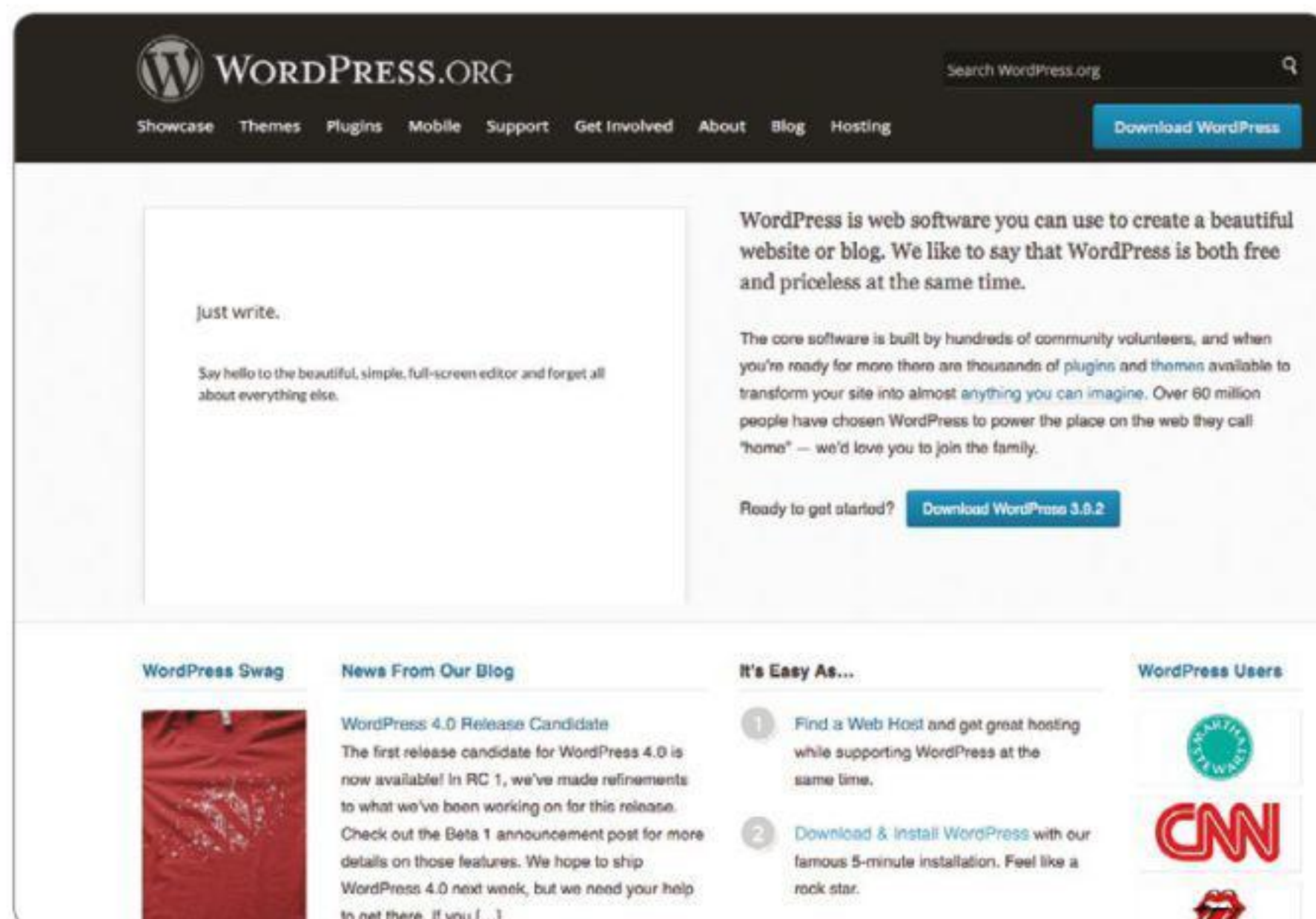
### Top toolbar

This toolbar is full of handy links, including access to your WordPress account, where you can change your name, email address and lots more besides

### Comments and links

After you start posting, you're likely to get comments from your readers. They, along with people who have linked to your site, will appear here for your approval





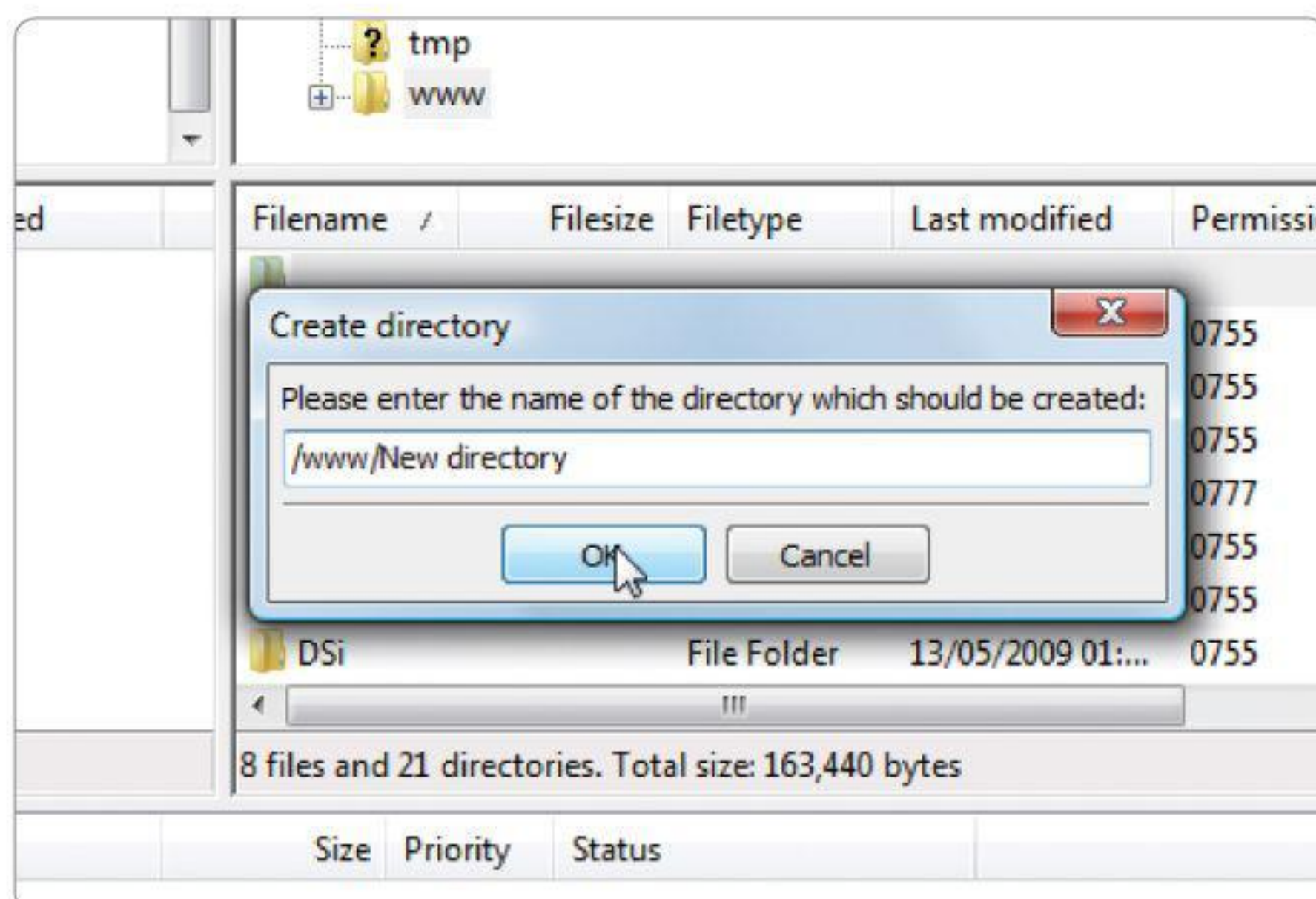
## 01 Get WordPress

The first step to a great blog is downloading and installing the platform. To download the latest version of WordPress, head to [wordpress.org/download](http://wordpress.org/download), click Download WordPress and save the file to the desktop.



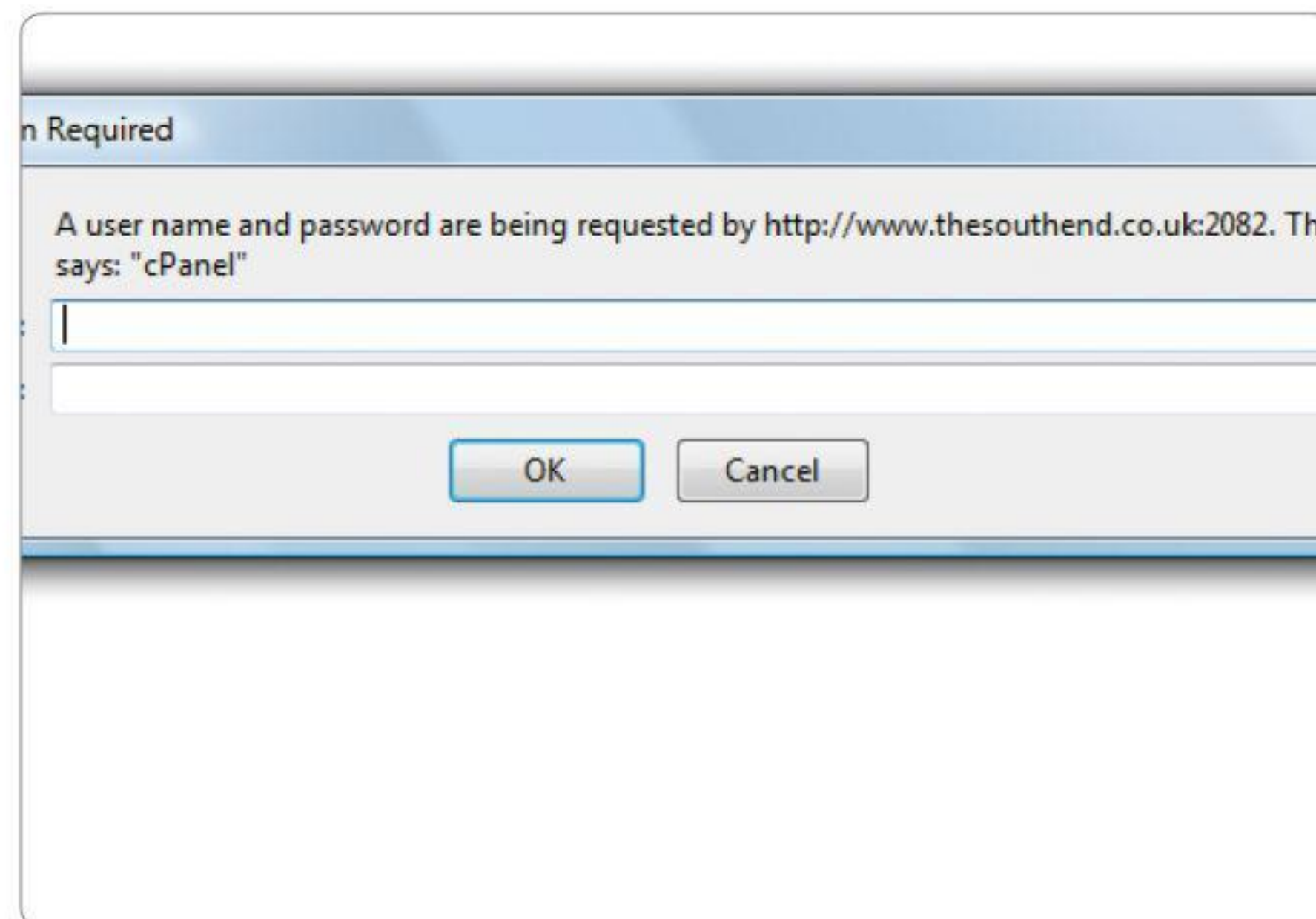
## 04 Database details

Head to the location of the WordPress download and locate wp-config-sample.php. Rename the file 'wp-config.php' and then open it in a text editor. At the top under MySQL settings is where the database and details need to be added.



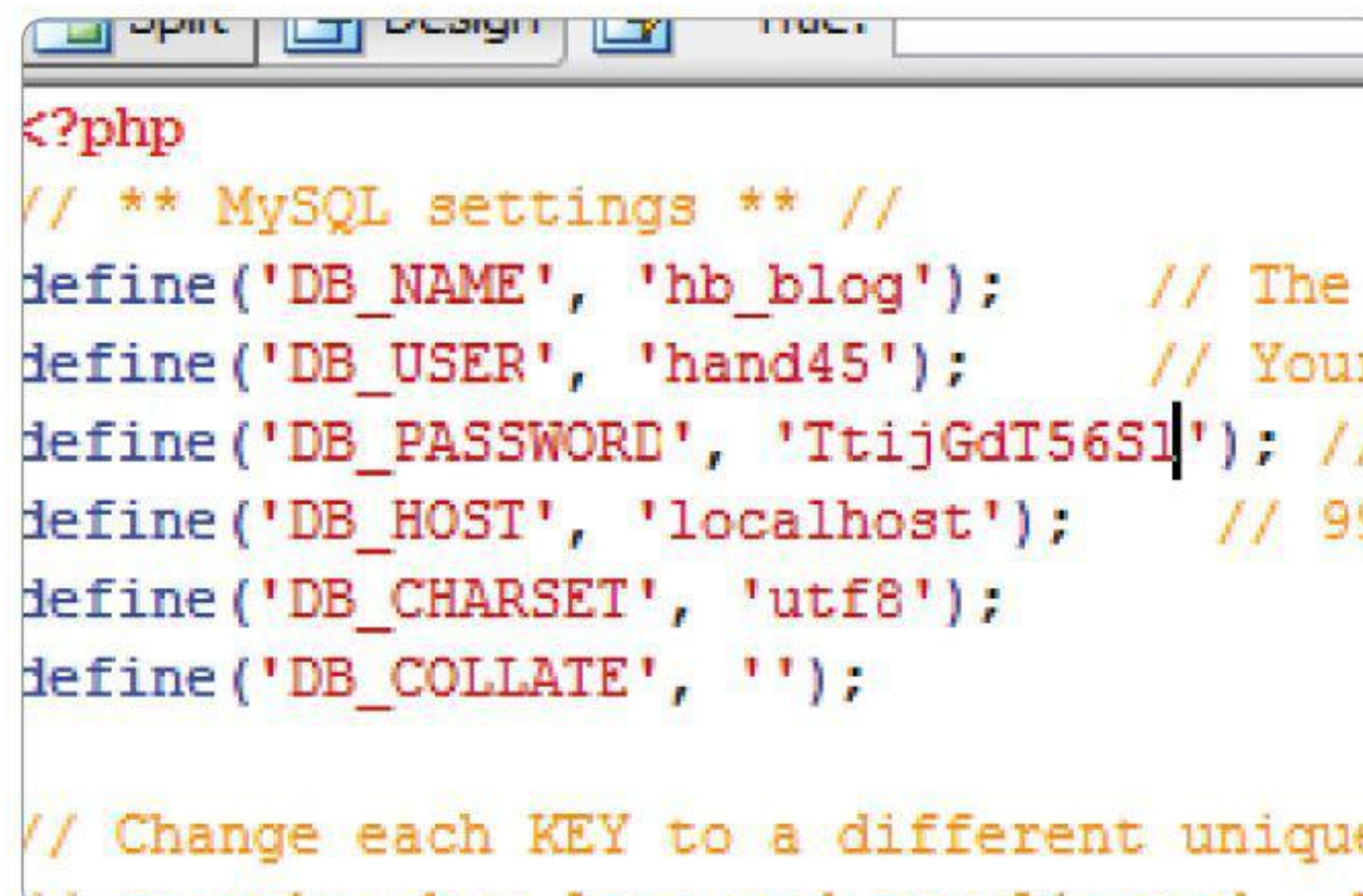
## 07 Create directory

There will be two windows, the left displaying local files and the right showing files on the server. Double-click the www folder in the top-right pane to get to the root. Right-click the bottom-right pane, select Create directory and name.



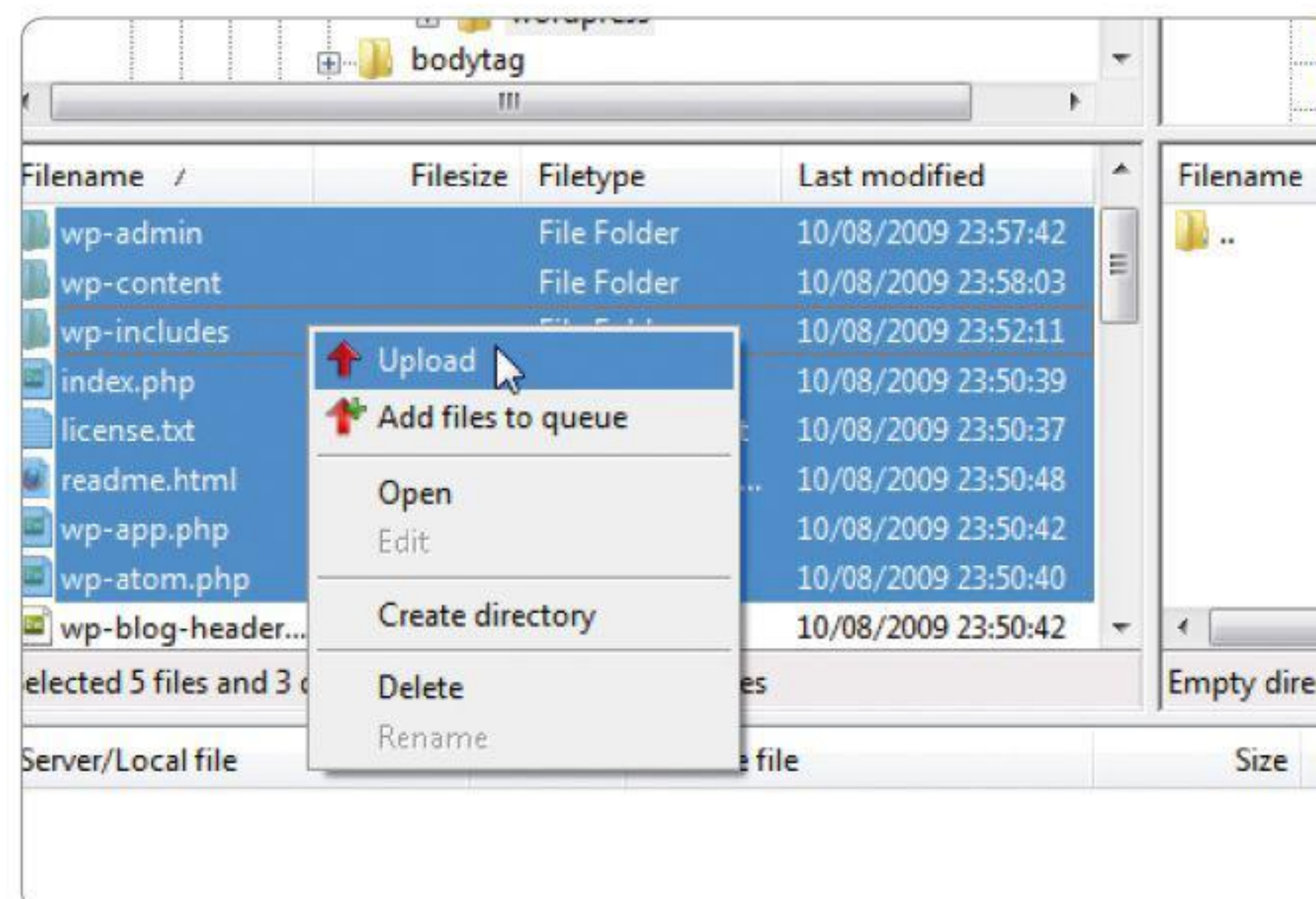
## 02 Web host account

Before installing WordPress, a database needs to be created. We are going to demonstrate a typical setup using cPanel. First of all you'll need to log in to your web host account; these details should have been provided by your web host.



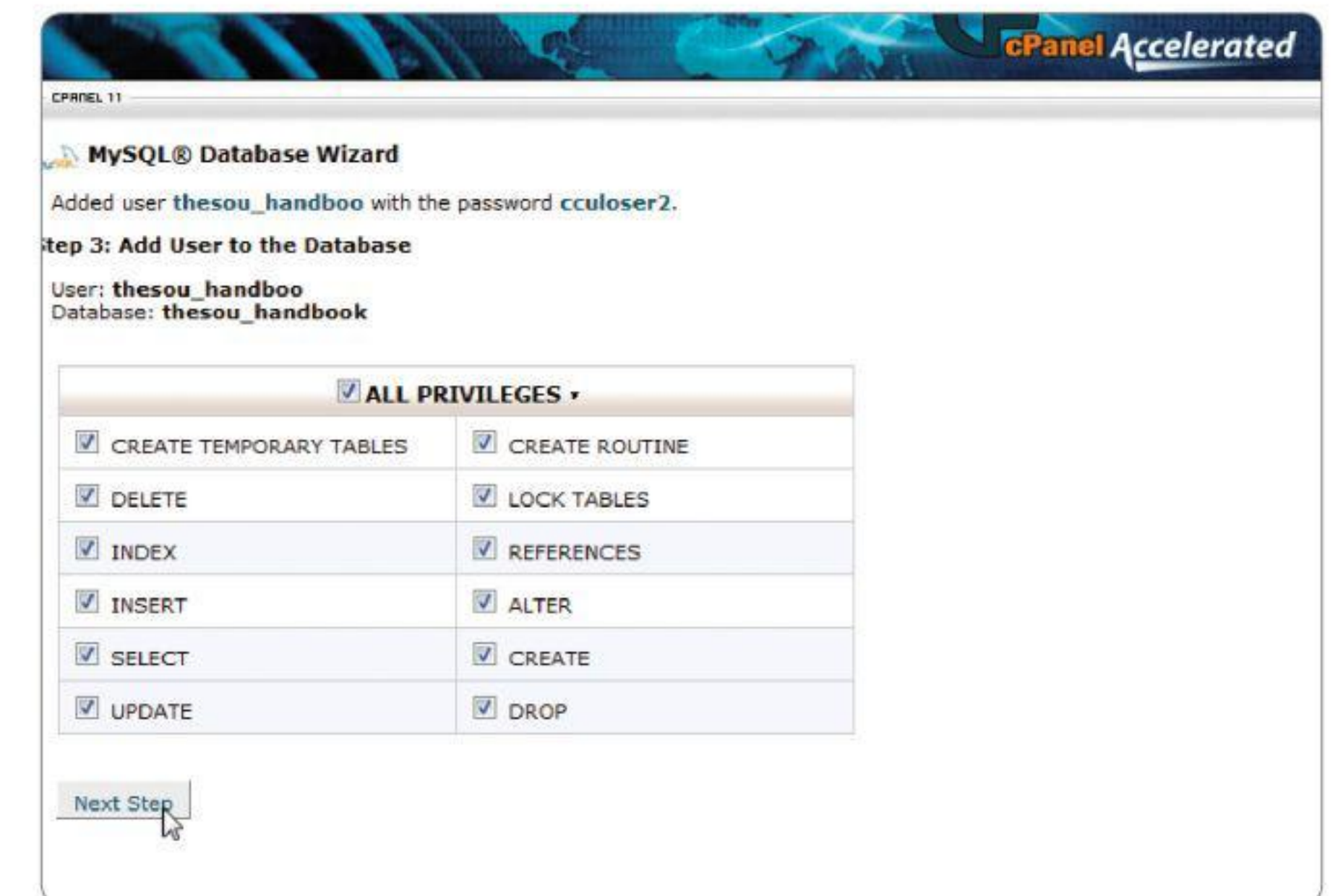
## 05 Settings

The only settings that need to be changed are 'DB\_NAME', 'DB\_USER' and 'DB\_PASSWORD'. Now substitute the putyourdbnamehere, usernamehere and yourpasswordhere with the appropriate text. Now save the file.



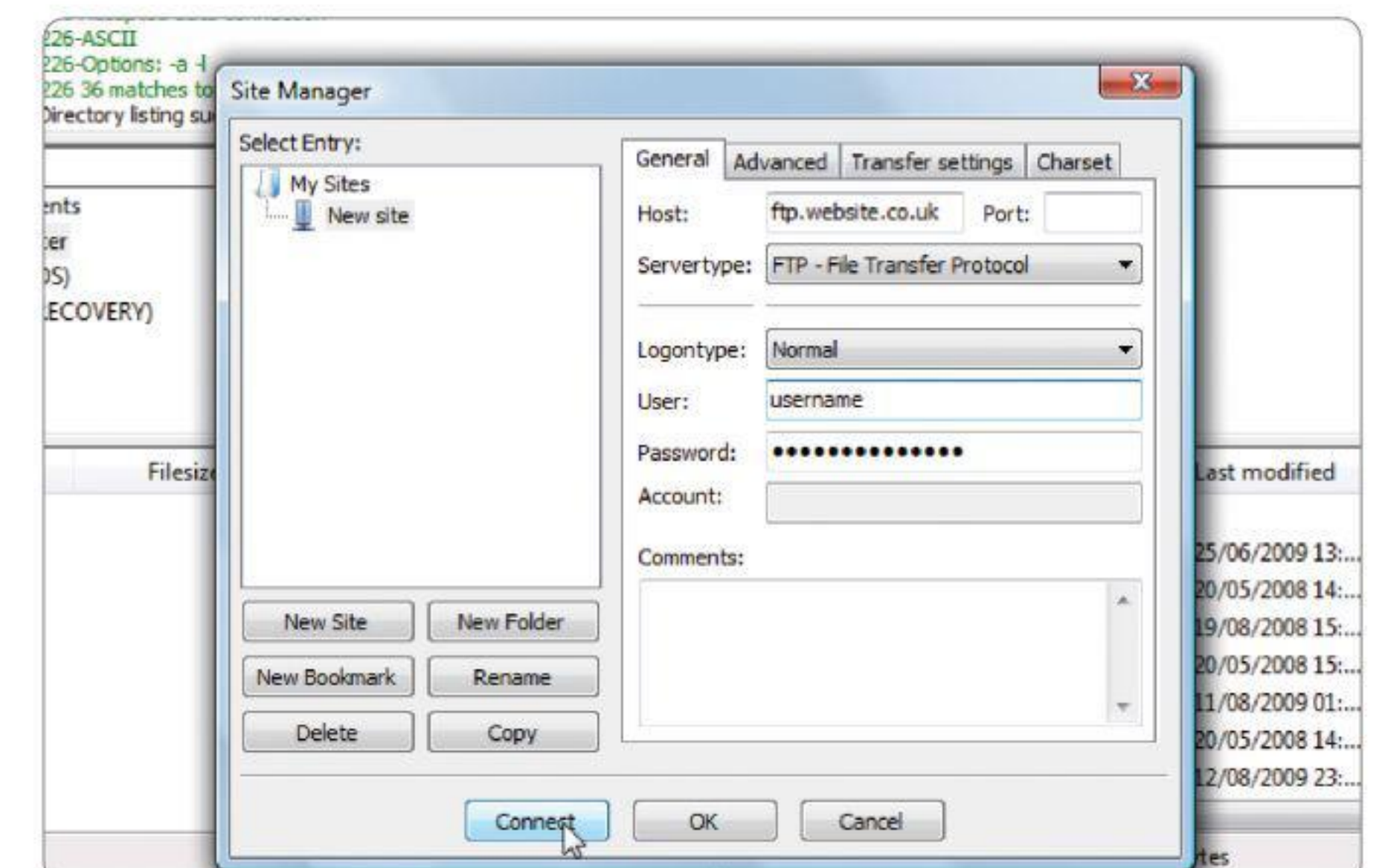
## 08 Transfer files

Double-click the folder just created. Go to the left windows and use both to locate the WordPress download. Make sure the WordPress folder lowest down the structure is selected. Select all files, right-click and select Upload to transfer the files.



## 03 Create a database

Locate the Database section and MySQL Database Wizard. Create a database, add a name in New Database and press Next Step. Now add a username and password, then press Next Step. Now click All Privileges and Next Step.



## 06 Get connected

Now upload all the WordPress files to the desired web space using FTP. Open FileZilla and go to File>Site Manager and enter the Host address, ie [ftp.mywebsitename.co.uk](http://ftp.mywebsitename.co.uk) and username and password as provided by your host. Press Connect.



## 09 Installation script

After all the files have been uploaded, open a browser and enter [www.yoursite.co.uk/blog/wp-admin/install.php](http://www.yoursite.co.uk/blog/wp-admin/install.php). 'Yoursite.co.uk' is the domain name where WordPress is installed and 'blog' is the name of the folder.

## Domain name and web space

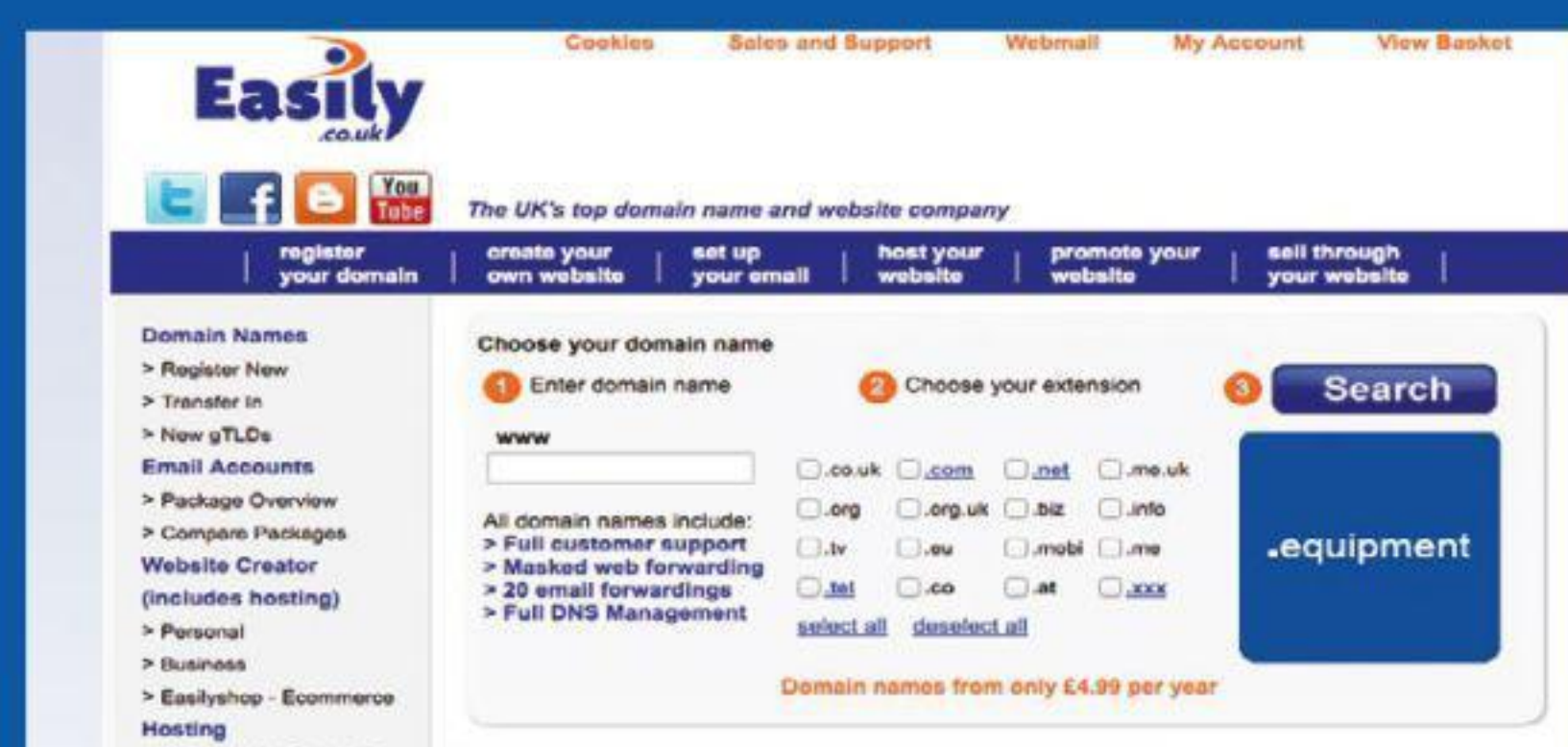
To get a WordPress blog online, a user needs their own web space and a domain name

The first requirement of any WordPress installation is web space. There are thousands of web hosting companies that'll supply space for a small fee. However, to determine which web hosting package to choose, the user needs to decide how much web space is required and the expected traffic. Typically, users can get 200MB of web space and gigabytes of traffic for a very small fee. But if more space is likely to be needed, eg for a photo blog, go for more.

A small UK company that provides cheap and efficient hosting is Z-Host ([www.z-host.co.uk](http://www.z-host.co.uk)). It provides packages from as little as £15 a year (100MB of web space and 10GB of monthly traffic), which is perfect for first time bloggers. Alternatively, choose 1GB of web space and 40GB of monthly traffic for £60 a year. At the other end of the scale, a popular choice is web designer Media Temple ([www.mediatemple.net](http://www.mediatemple.net)). This offers packages from \$20 a month (approx £15) but offers gigabytes of storage and 1TB network transfer rates. Other reputable web hosts to consider are Fasthosts ([www.fasthosts.co.uk](http://www.fasthosts.co.uk)), 1&1 ([www.1and1.co.uk](http://www.1and1.co.uk)) and Heart Internet ([www.heartinternet.co.uk](http://www.heartinternet.co.uk)).

To host a WordPress blog at a desired URL, for example [mywebsite.co.uk](http://mywebsite.co.uk), a domain name needs to be purchased. Try [www.123-reg.co.uk](http://www.123-reg.co.uk), which offers .co.uk domain names from £2.99 and .com domain names from £9.99 a year. Another well-respected domain name supplier is Easily ([www.easily.co.uk](http://www.easily.co.uk)).

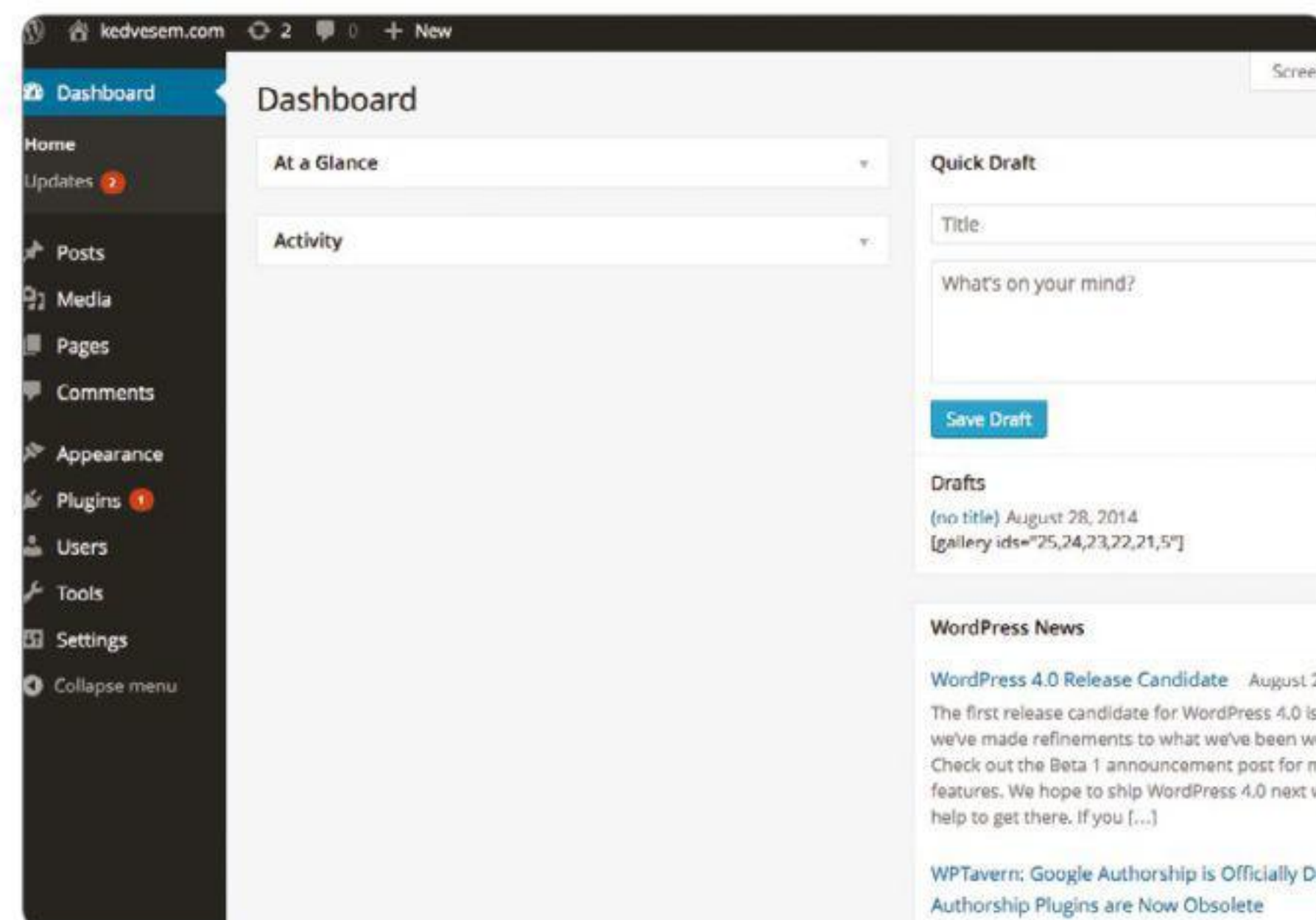
If the prospect of finding web space and getting a domain name seems like a lot of hard work, you could always go for the hosted option. Go to [www.wordpress.com](http://www.wordpress.com), click Sign Up Now and all that's needed is an email address. This gives a new user a unique WordPress URL, for example [myname.wordpress.com](http://myname.wordpress.com), and hosts the account.



Find a domain name to create an identity for your blog

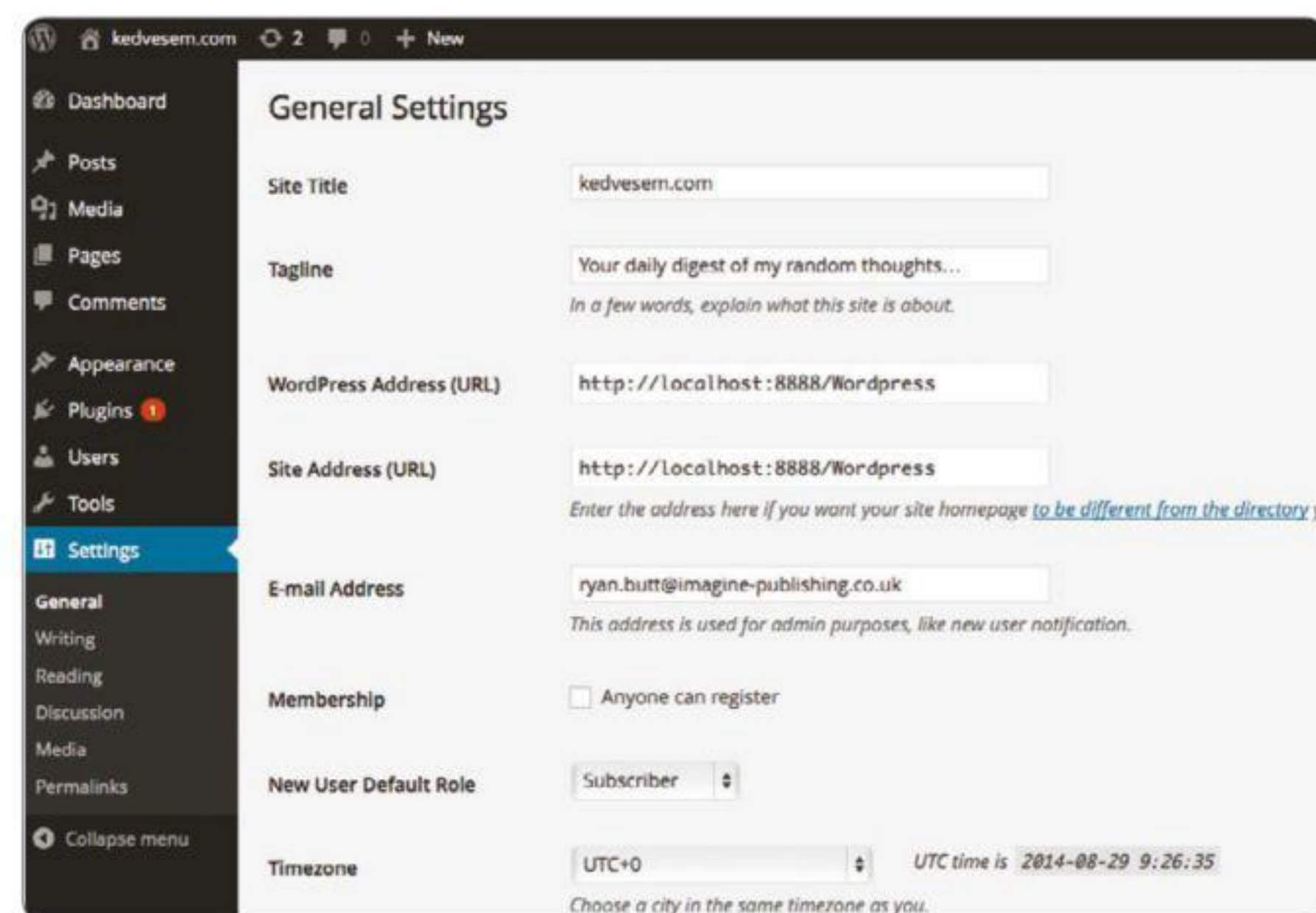


Try the free 'no hassle' option at [www.wordpress.com](http://www.wordpress.com)



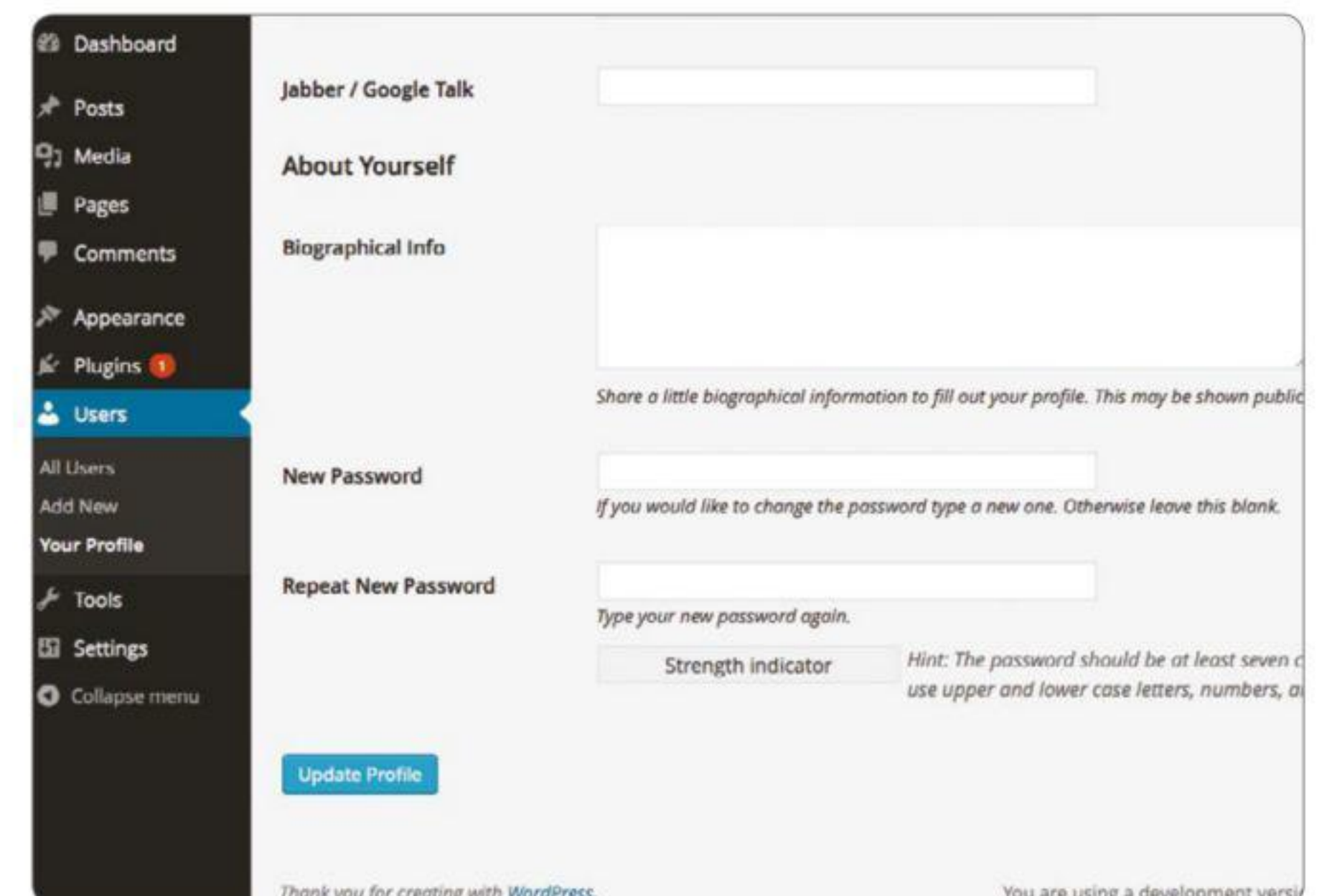
### 10 It's the dashboard

Now add a Blog Title, your email address, click the Allow... checkbox and press Install WordPress. Press Log In to skip to the log-in screen, enter the details just given and hit Log In to view the WordPress Dashboard.



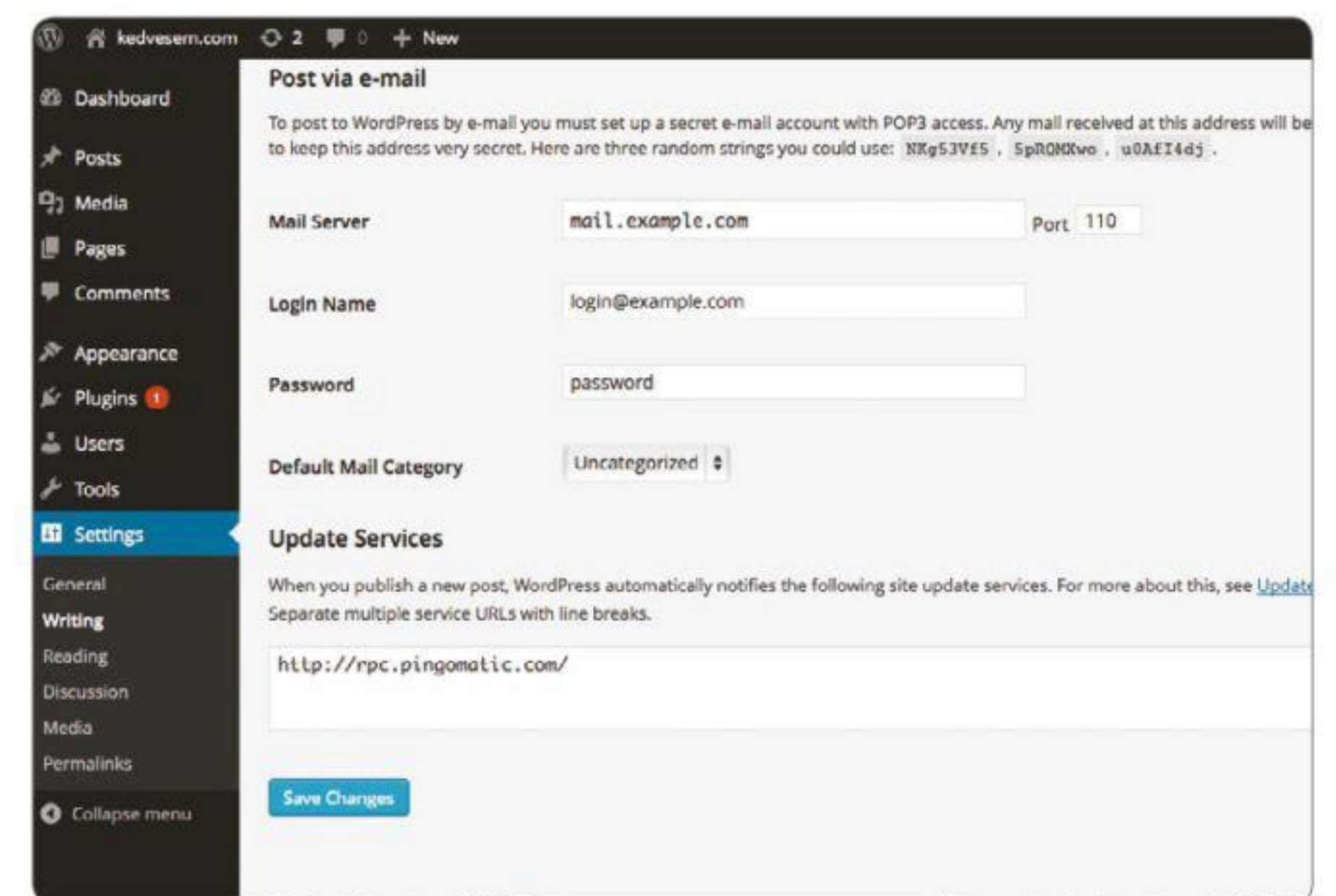
### 12 General Settings

Click Settings to extend the menu and select General. This section allows users to change the Blog title and tagline, as seen in the header. There is the option to change the original email address added at setup.



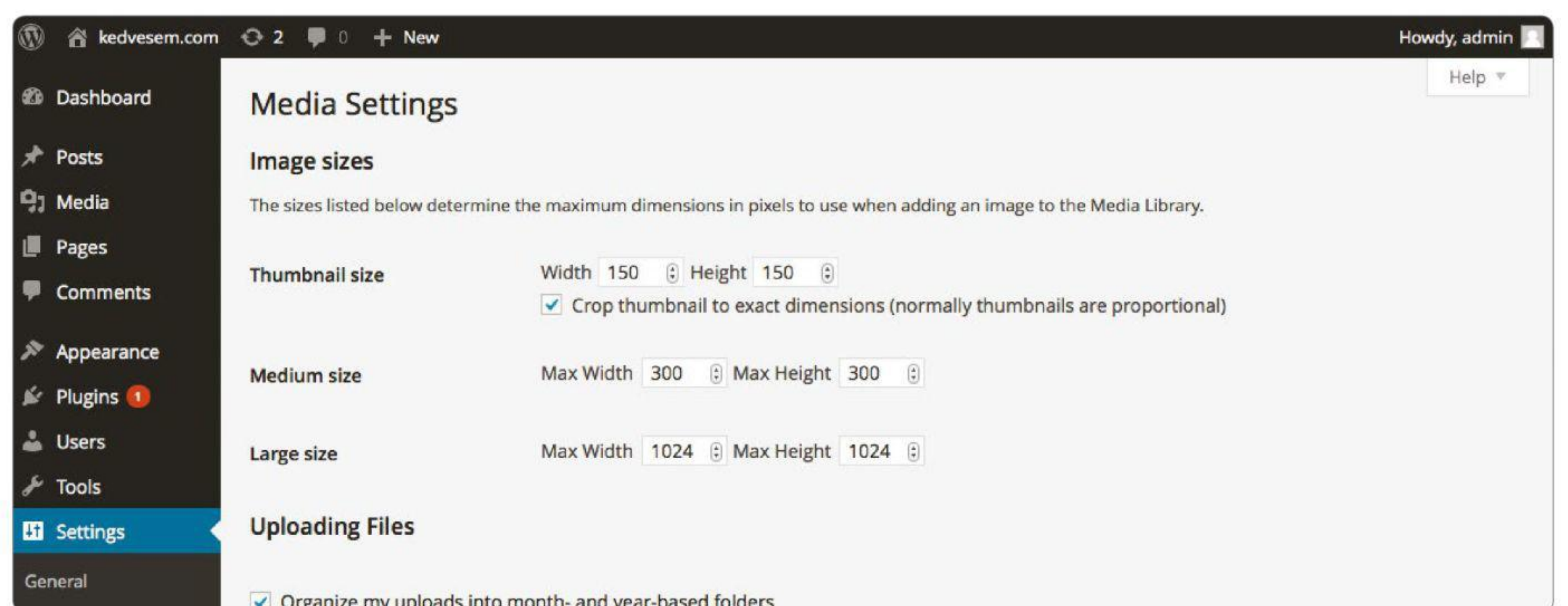
### 11 New password

WordPress automatically displays a notice telling the user that they are using the auto-generated password. Now add a new password under About Yourself (under Users in the sidebar), enter again and then press Update Profile.



### 13 Writing and reading

The Writing settings includes the option to choose the default category. This will be applied when a post is not given a category. There's also an option to set up remote publishing. This allows users to post from a desktop without logging in.



### 14 Media Settings

The media settings determine the size of images placed in a post. WordPress allows users to select the original size of the image or a predefined

option set up here. Change the settings to the desired size. This makes sure that when a specific option is selected the image will be a uniform size.

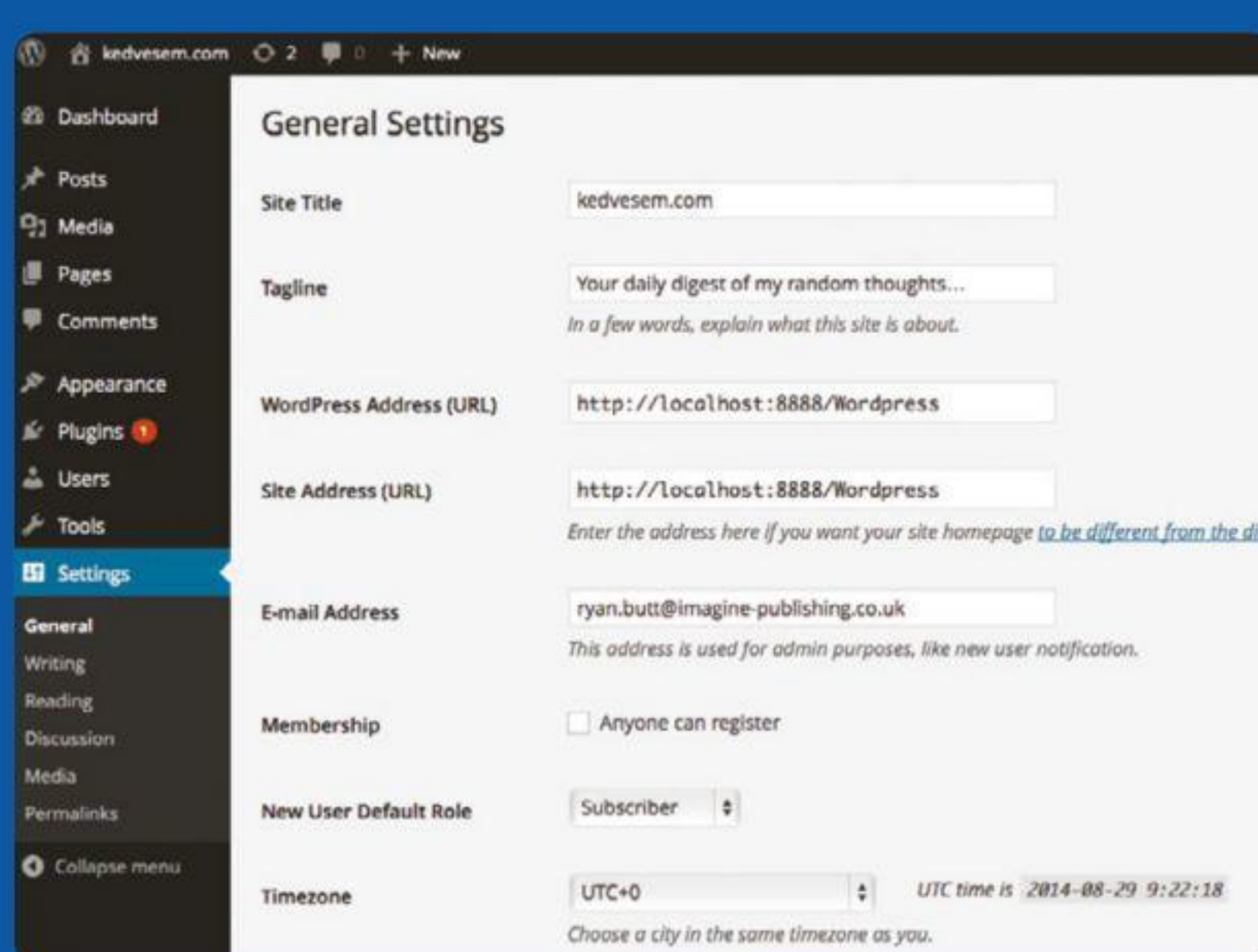
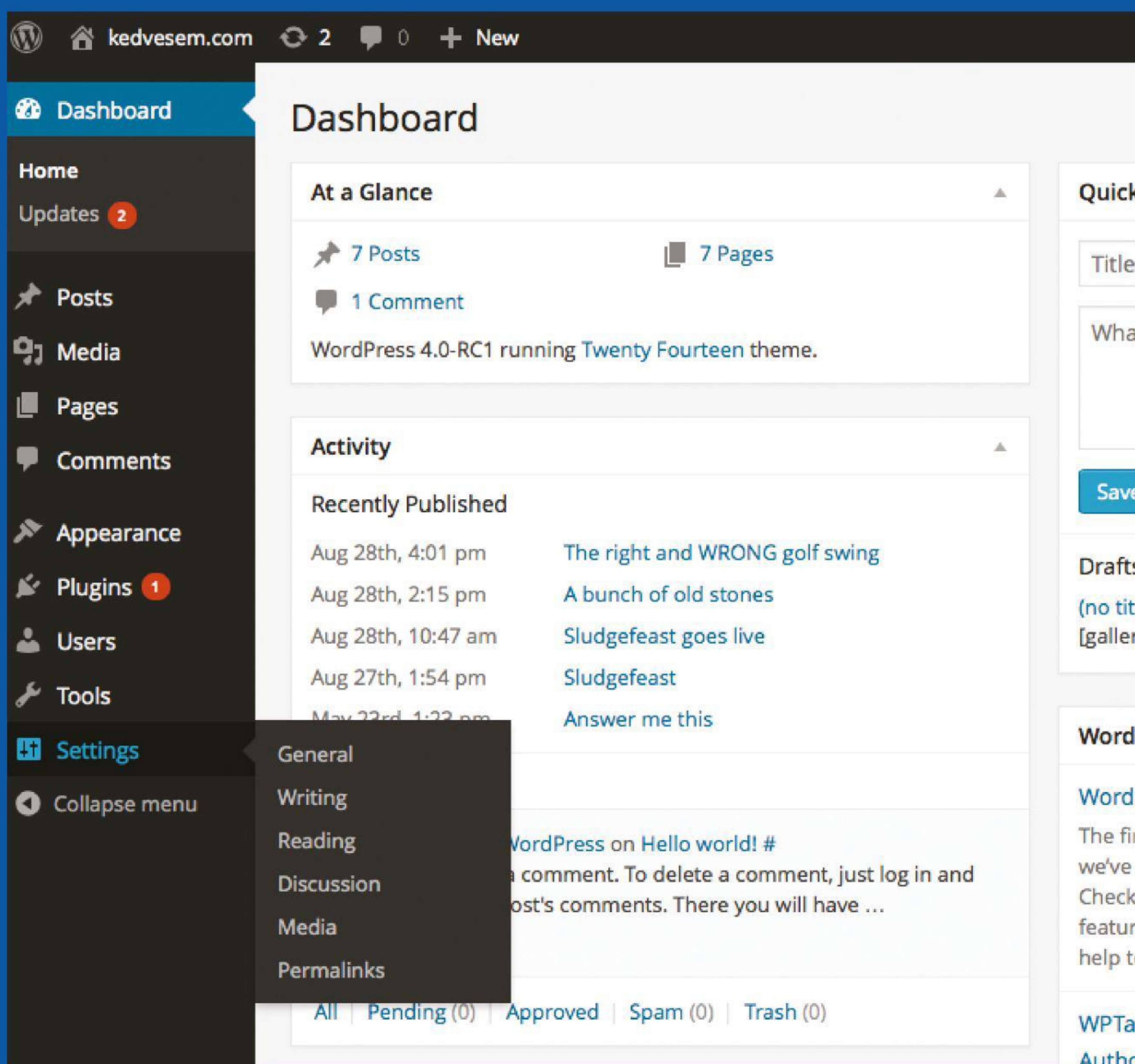


# The Settings panel

## Getting to grips with the most common settings for your new install

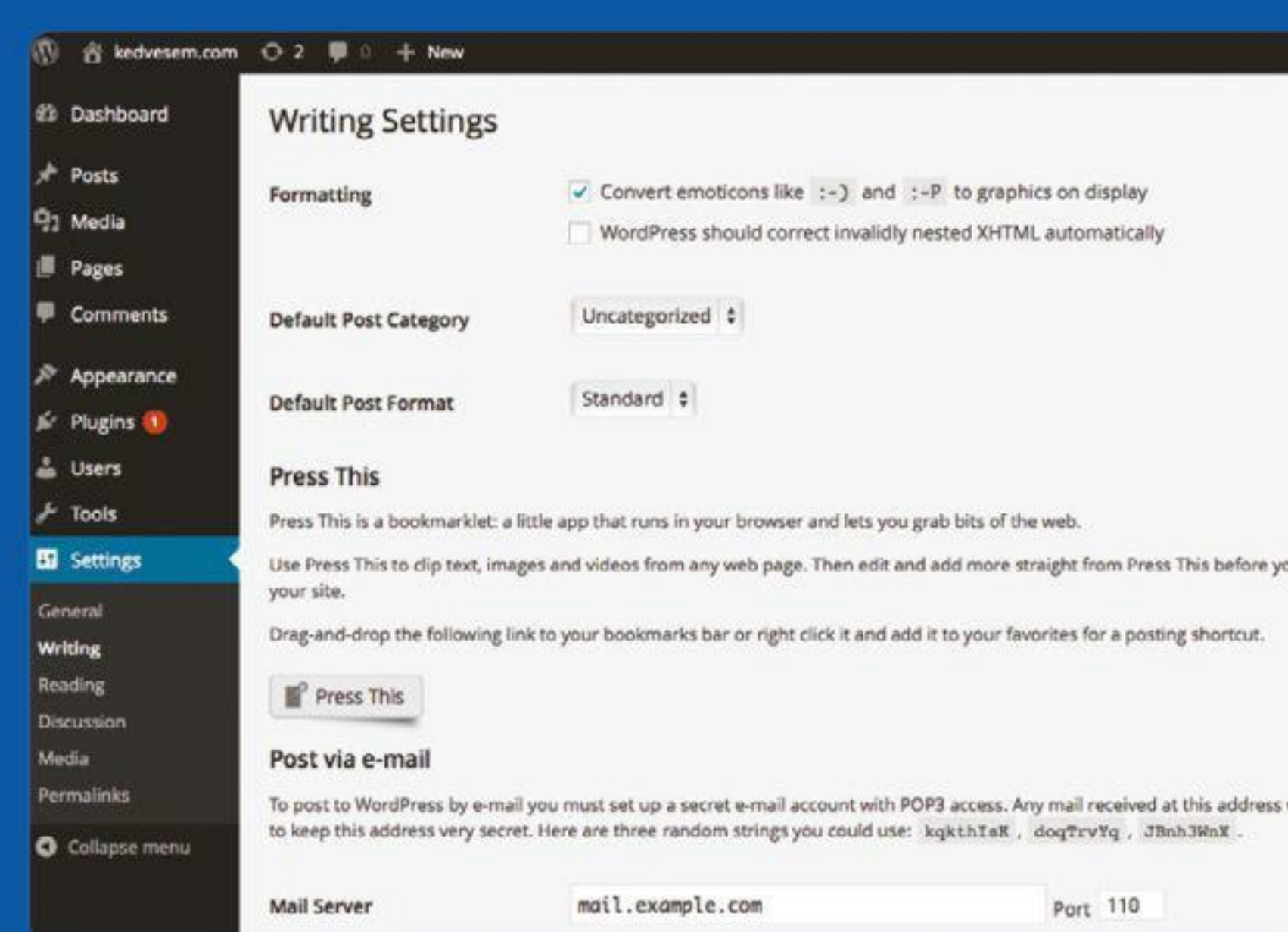
In this tutorial we are going to make some small changes to the settings of our theme. So from a fresh install, log in to the admin panel and within the dashboard you will see the Settings Panel on the bottom left. The Settings panel should be the first place we come to once our initial installation has been done because there are certain things that need to be set up from the very start. In here we have seven options that we can make changes to: General, Writing, Reading, Discussion, Media, Privacy and Permalink. However, we only really need to make small adjustments to a few of these settings and some are more important than others, like the Permalink settings. So, let's take it from the top and make the required changes for a solid install.

"There are certain things that need to be set up from the very start"



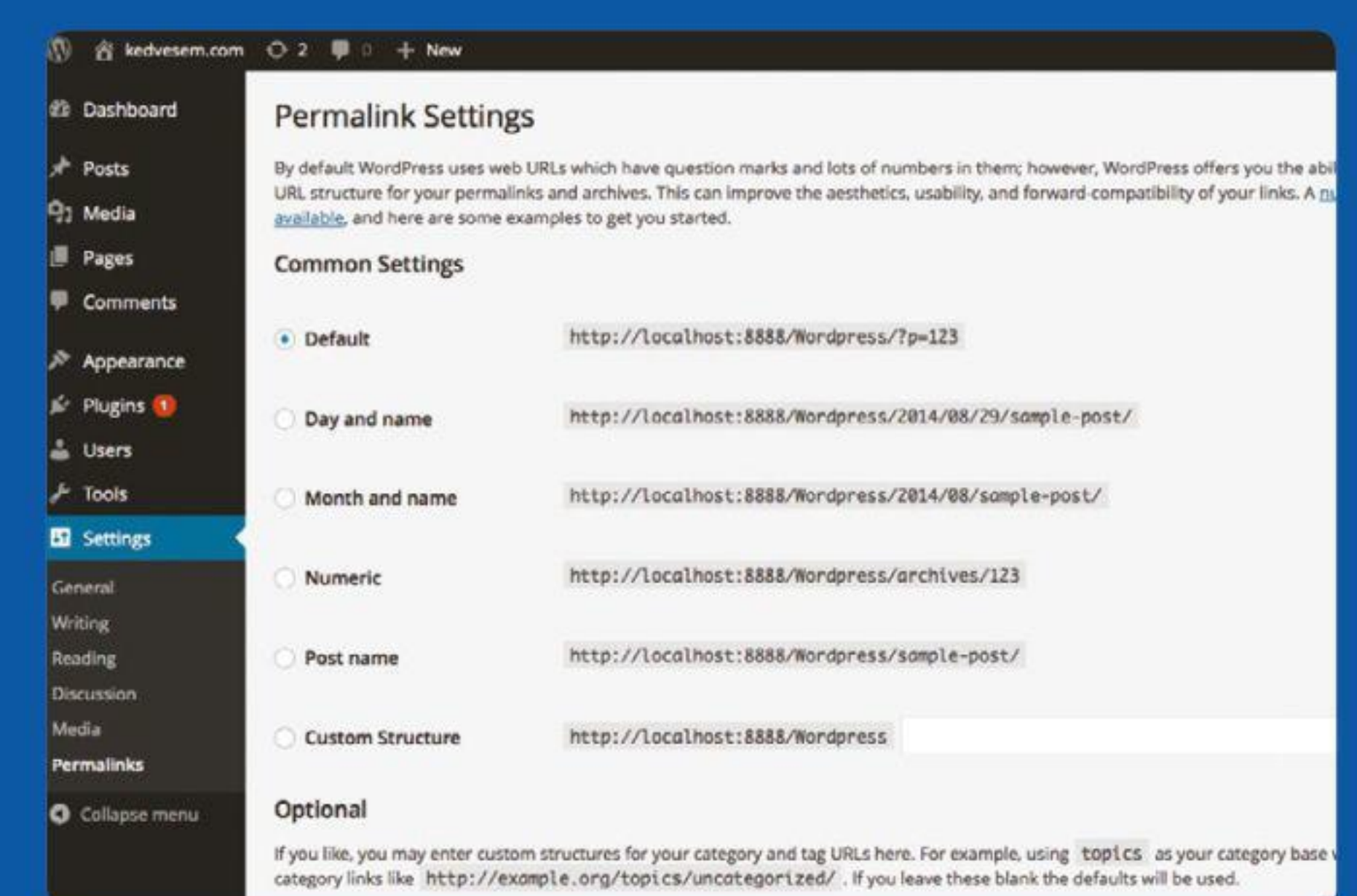
## 01 The General Settings

At the top of the Settings panel you will find the 'General' settings option. If you click to open that up you will see first and foremost an option to change your site's main title. You will also have an option to include a tagline here. These two options are really all you need to change. Once you have added in your website's title and perhaps your tagline, you can scroll down to the bottom and click the Save button.



## 02 The Writing Settings

The next option down in the Settings panel is the 'Writing' option. Click that to open up our Writing panel. In here, among other things, you have the option of changing the number of lines you have to work in when you're adding a new post to your blog. By default it is set to ten lines, but on a small screen this can seem quite cramped. So you can, for example, set it to 20 lines to allow yourself more space when adding content to posts or pages.



## 03 The Permalink Settings

The other options in Settings are not really important enough to warrant an explanation and can be left as is. But the last option, the 'Permalink' settings, certainly does, so let's open that up to take a better look. You have different ways your posts will be shown inside the URL and by default the top one should be selected. However, the best ones to use here are the second or third option as these include the 'slug' of your post which is good for SEO purposes.

## View and organise WordPress dashboard modules

Discover how to keep your WordPress dashboard tidy and useful so you can edit your site, manage comments, post with ease and arrange modules in an order that suits you

One of WordPress's many strengths is its simplicity, and the Dashboard is an area where this simplicity truly shines. Offering everything you need right from the get-go, you can quickly get on with the actual work of editing and posting to your site without distraction. As well as a side panel that offers navigation, the Dashboard is made up of modules. These are small widgets that provide you with information from various portions

of your site, such as comments and links. As with most elements of WordPress, the Dashboard is customisable so you can set it up exactly as you

“You can set your dashboard up exactly as you wish”

wish and position the most important elements within easy reach.

Over the following nine steps we will show you how to determine which modules are shown on your Dashboard, where they are placed and how they are displayed. You will also learn how to save space on your Dashboard by expanding and collapsing your modules, as well as the side panel itself.

### Dashboard modules

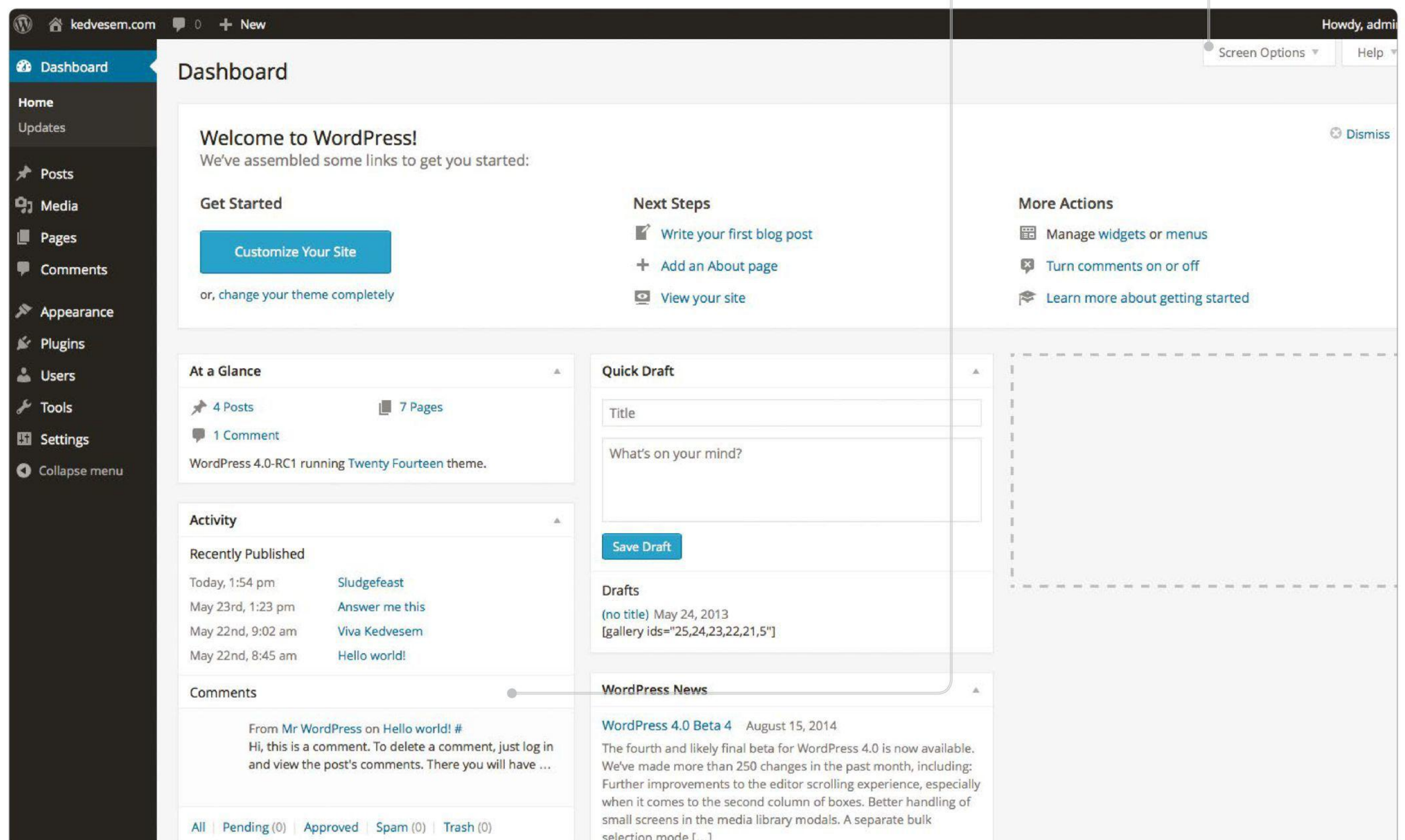
Keep the ones you like, and get rid of the ones you don't

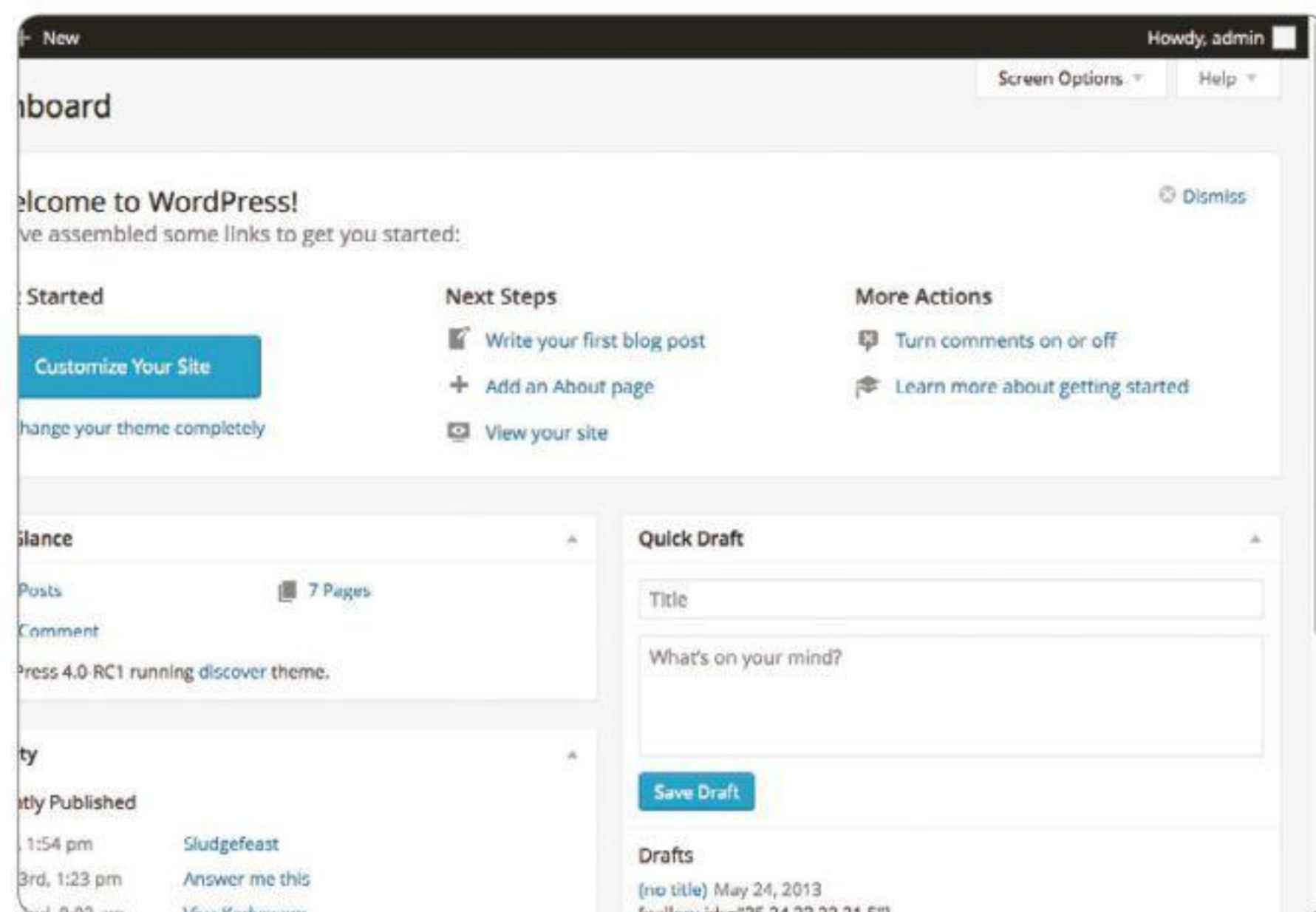
#### Comment module

If you don't receive many comments or you don't want to see the ones that you do, uncheck its 'Show on Screen' box in Screen Options and you won't have to worry about it

#### Screen options

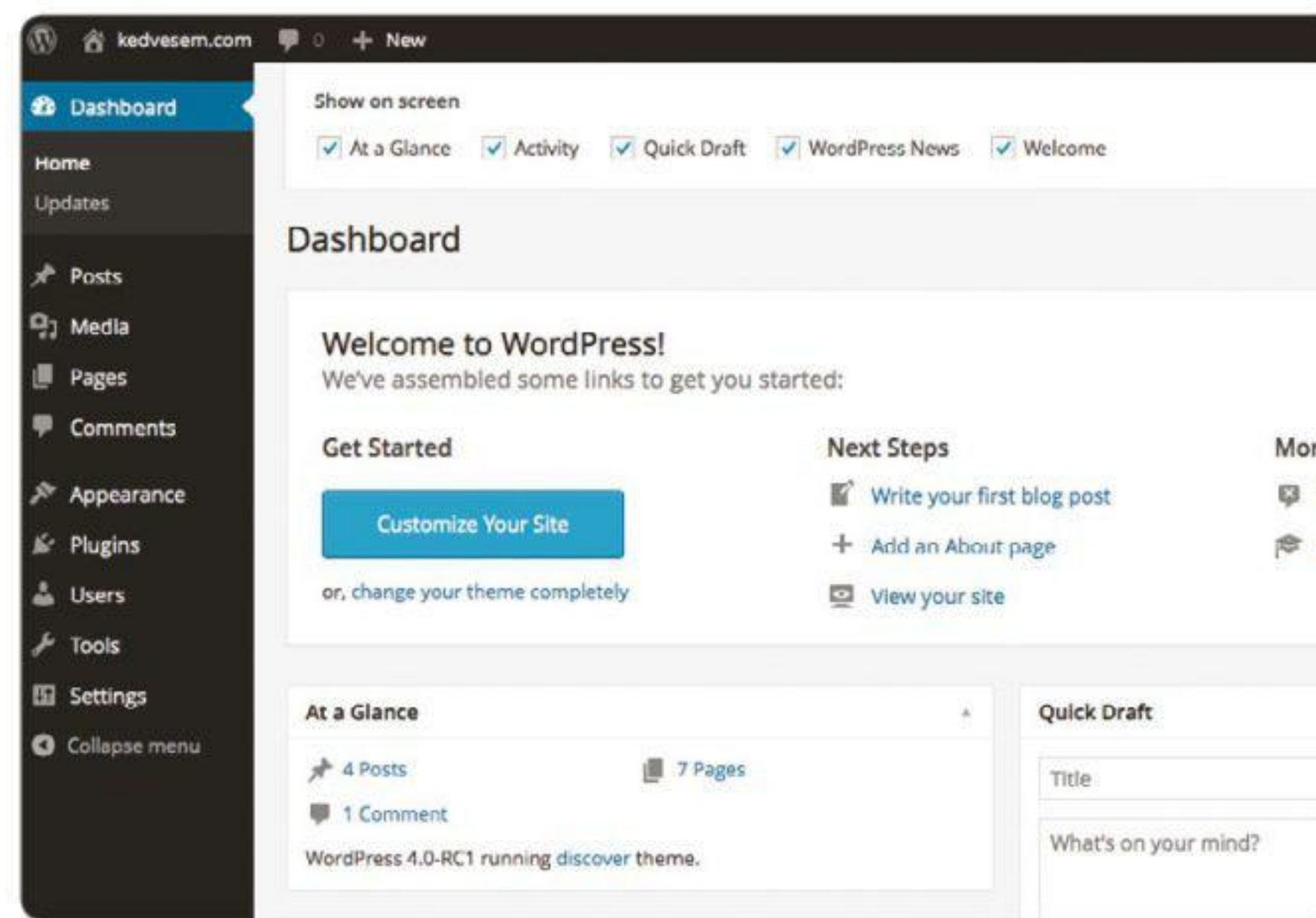
Click here to access all the options for customising your WordPress dashboard. From here you can delete modules or arrange them in a specific order





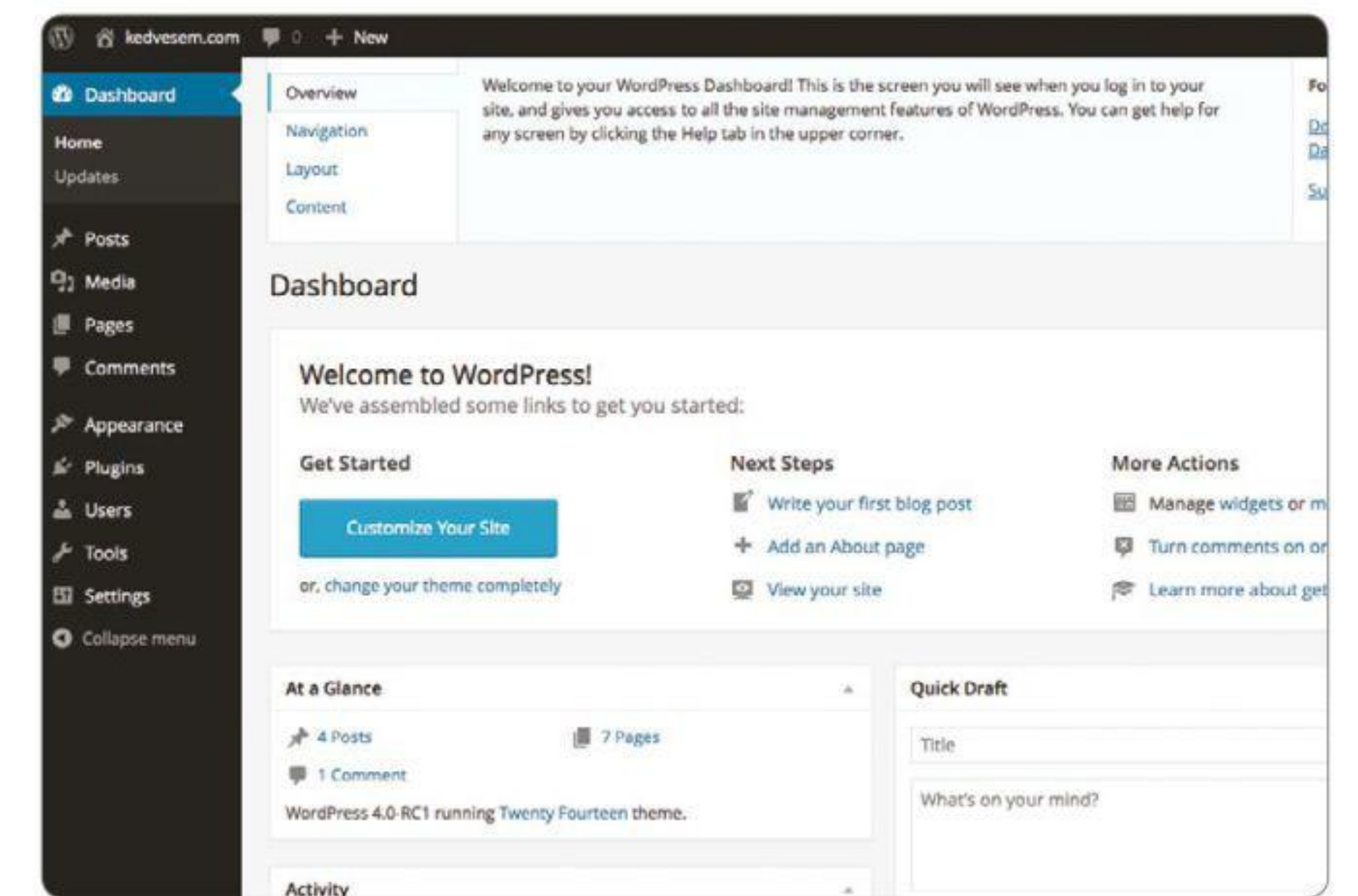
## 01 Log in to WordPress

Begin by logging in the normal way. The first page you hit will be your Dashboard. At the top of the screen you will see a Screen Options button. You need to click on this button to begin adjusting the way your Dashboard is set up.



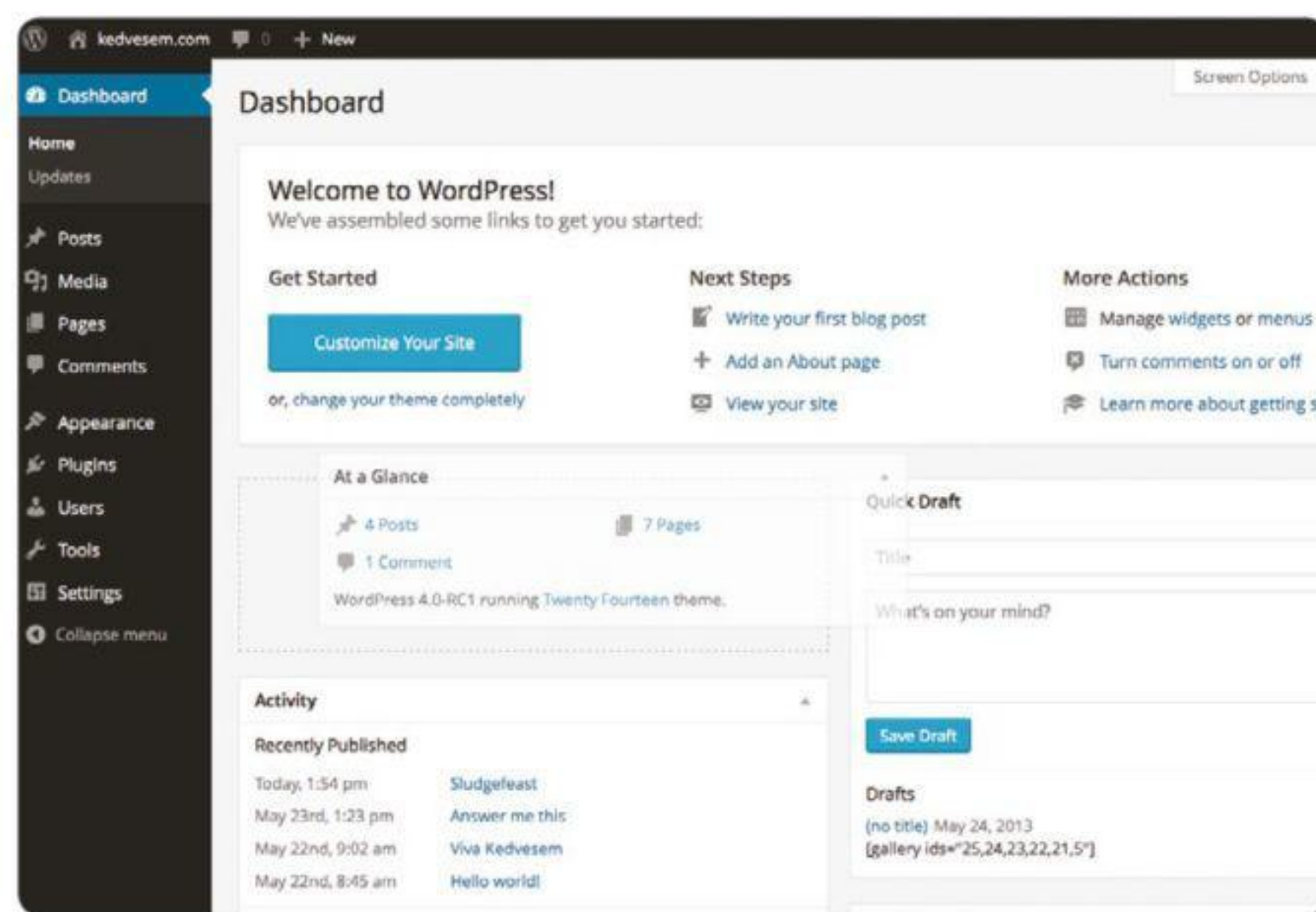
## 02 Screen options

The check boxes under the 'Show on screen' section on the Screen Options menu determine which modules will be displayed by default on your Dashboard. Check or un-check a box to add or remove the module from your Dashboard.



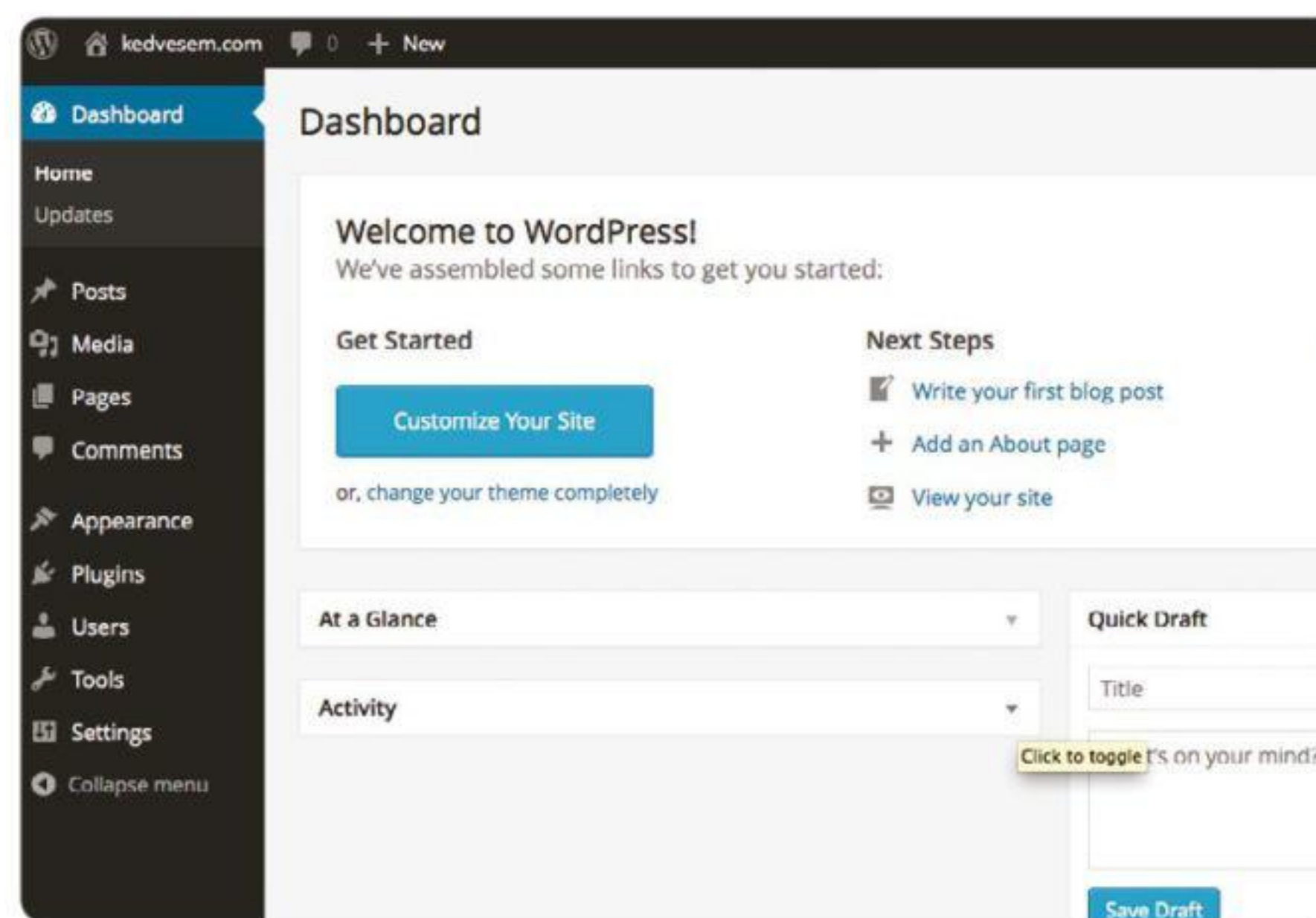
## 03 Help options

Click on the Screen Options tab again to close the dashboard. Once done you will also see a Help tab in the top-right corner of the main Dashboard screen. Click on this to get assistance with all aspects of your WordPress Dashboard.



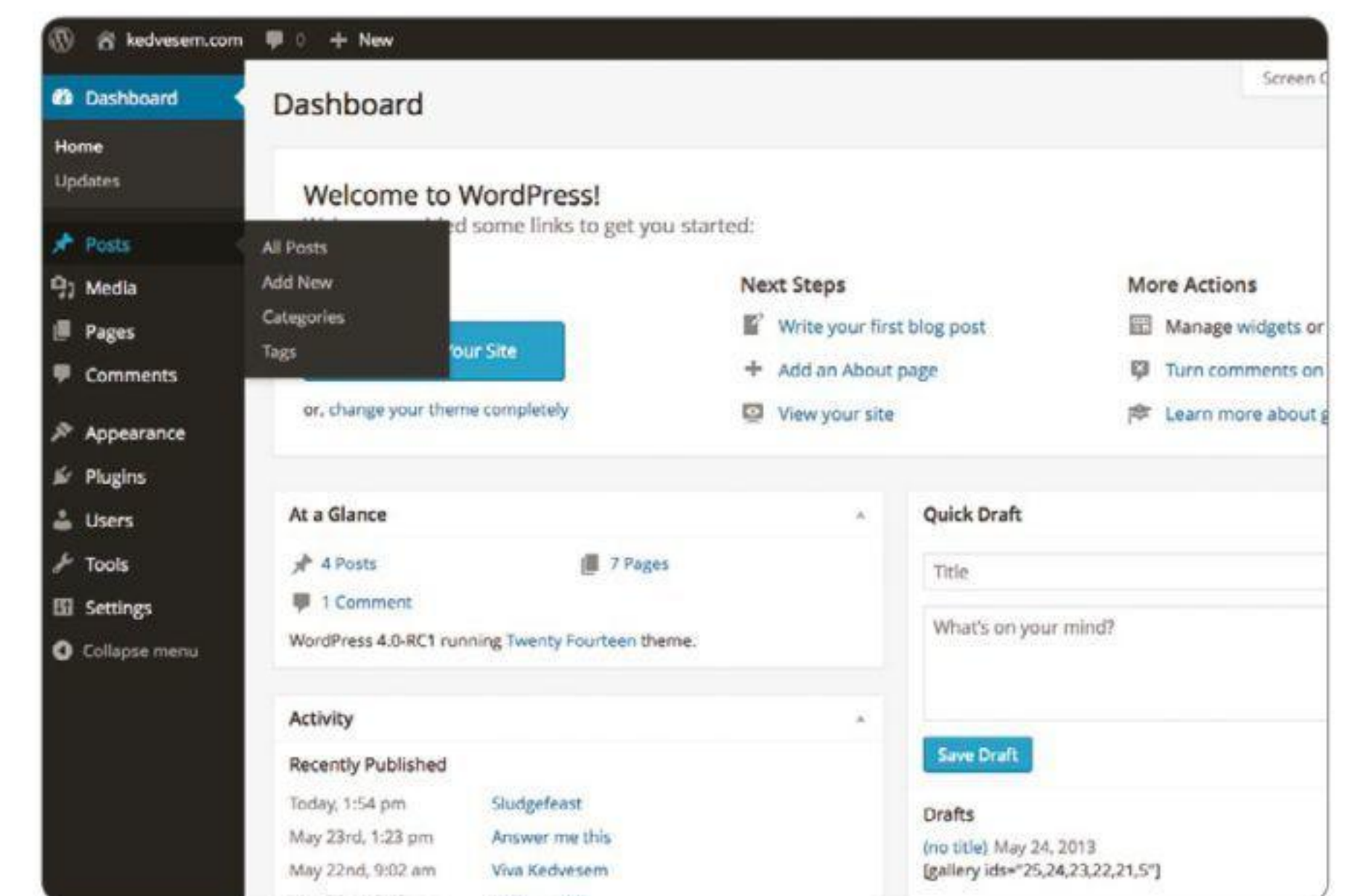
## 04 Drag and drop

You can now click on Help again to hide the window and return to your Dashboard. With your preferred modules in place, you can organise them. You have to click the title of a module and drag it to a new location.



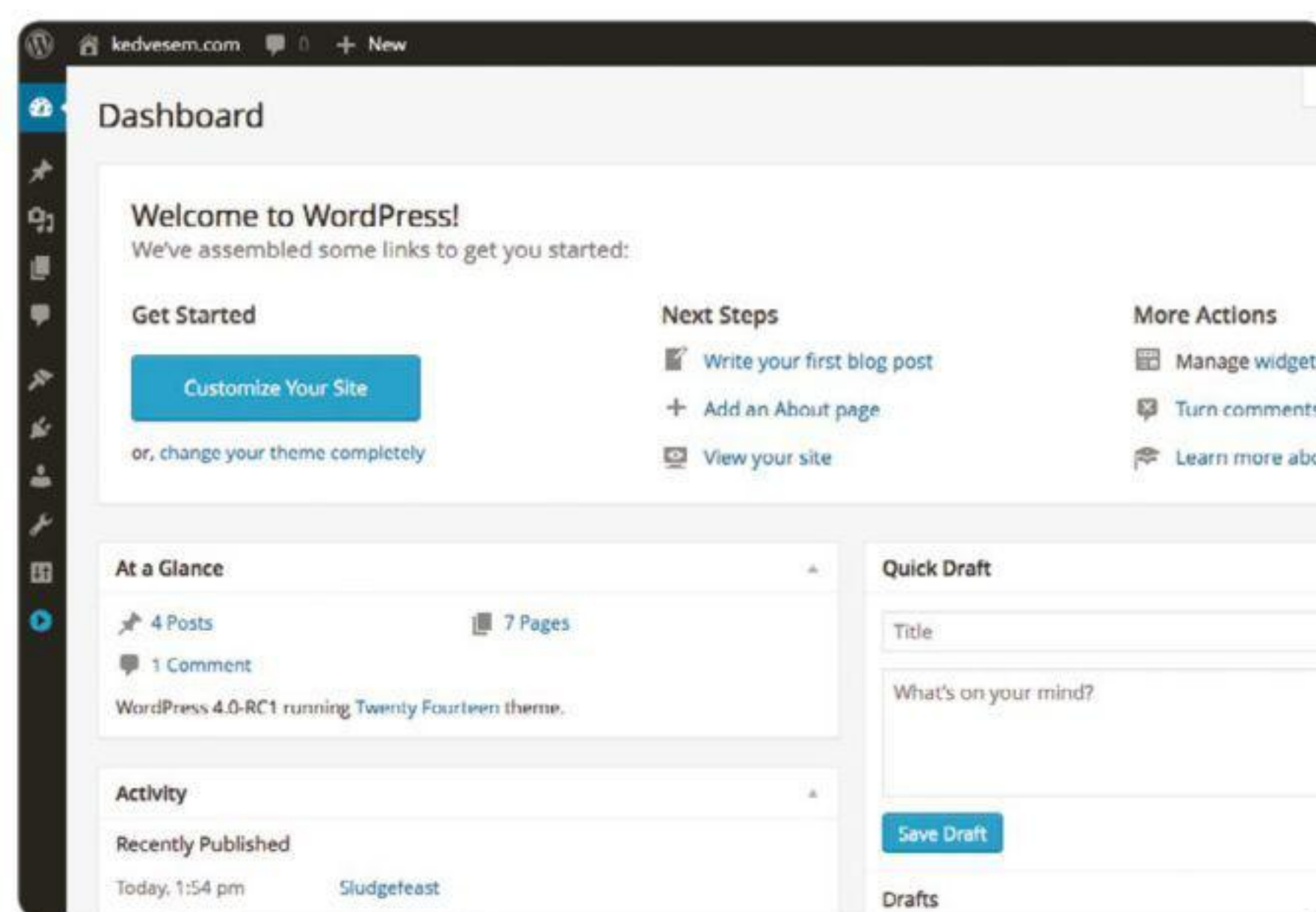
## 05 Expand and collapse

If you don't need to access a module all the time but you still want it to be available on your Dashboard, you can collapse it until you need it. To do this, hover your cursor over the title of your module and click on the triangle that appears.



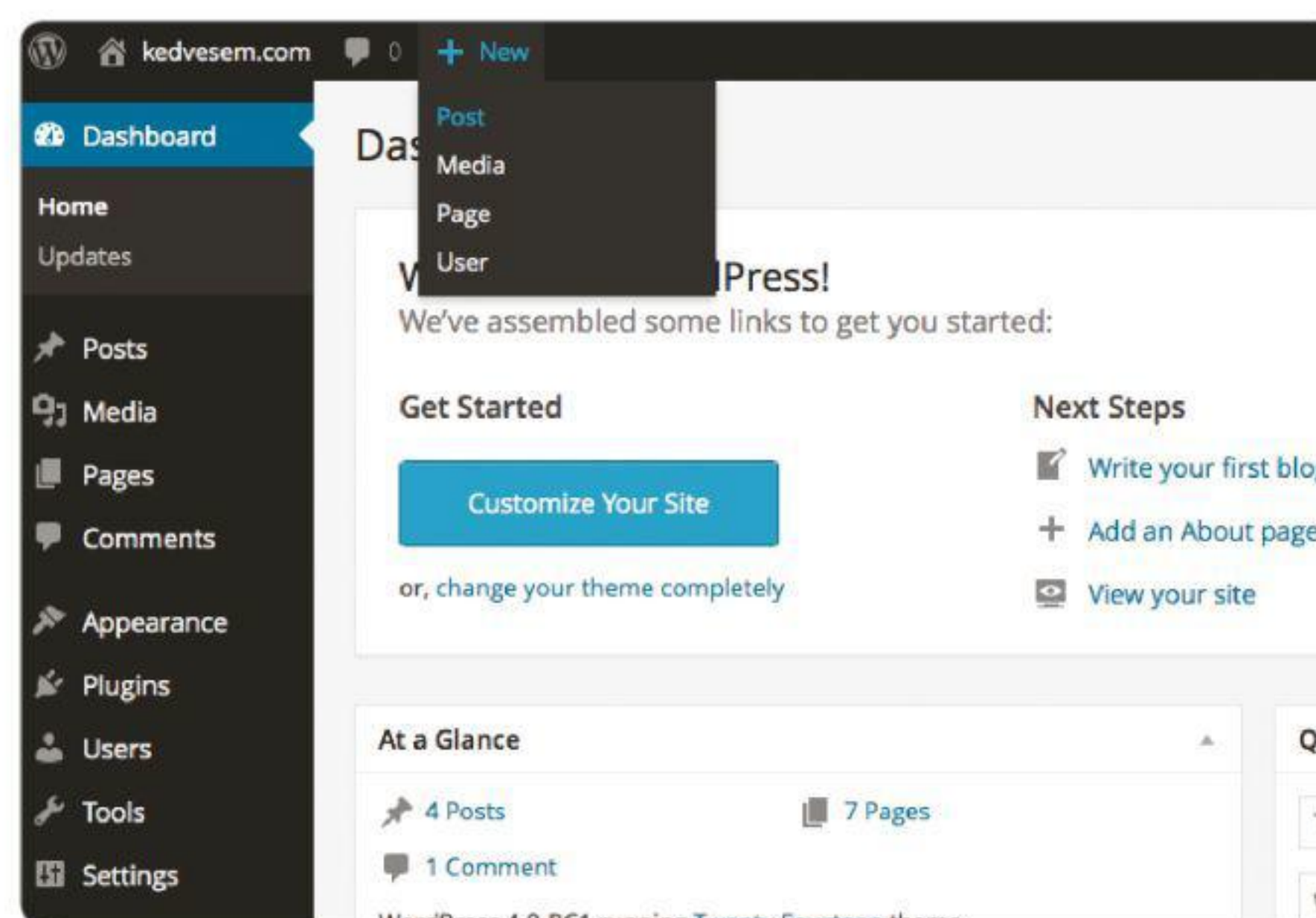
## 06 Side panel

The side panel, which includes Posts, Media, Links, Pages and Comments, works in the same way as modules when it comes to expanding and collapsing. You need to hover over the title of the side panel element and use the triangle.



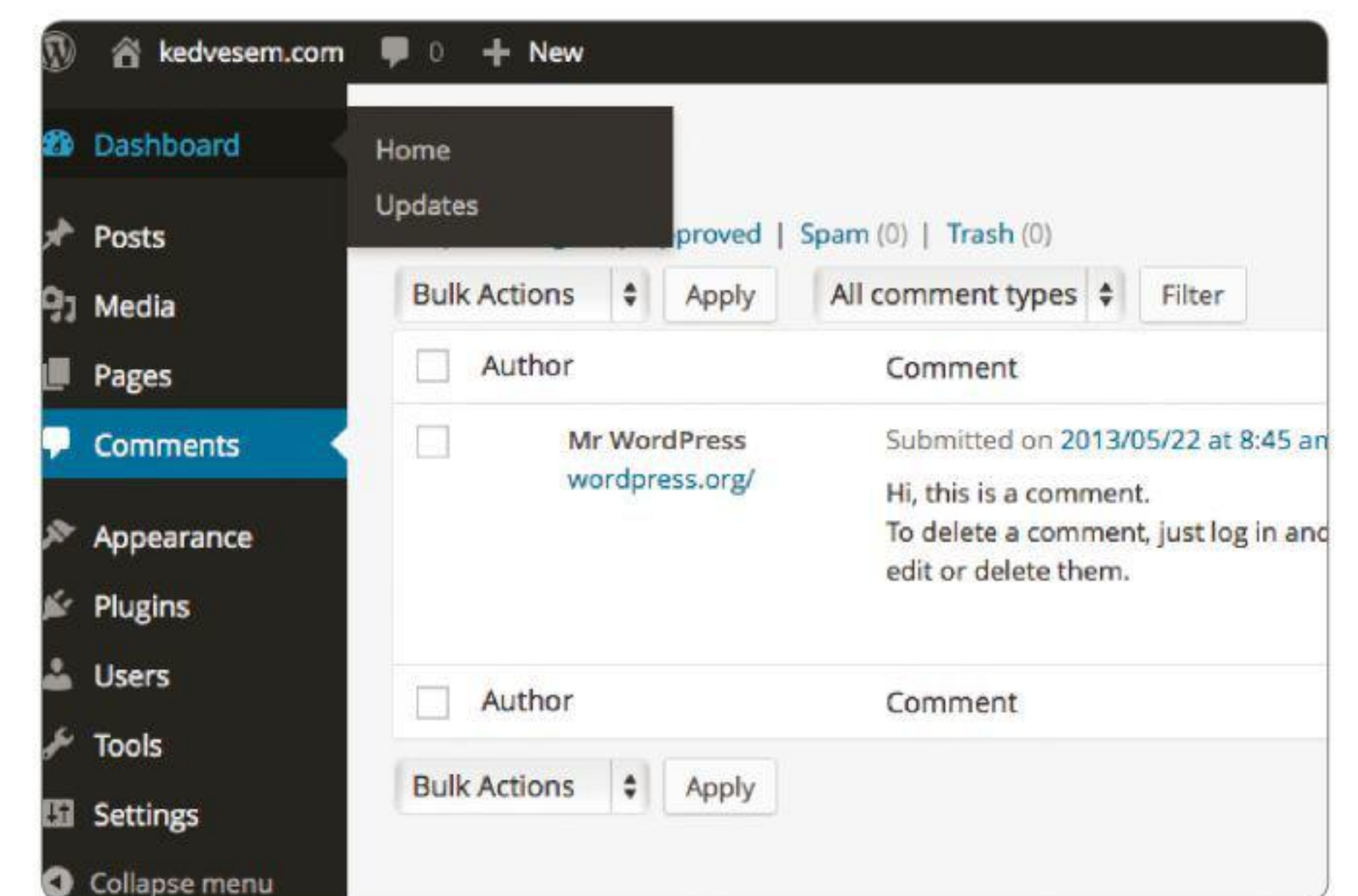
## 07 Hide the panel

If you want more room to work with your modules, you can choose to hide the side panel and see its contents as small buttons. To do this, click on the arrow found below the side panel called 'Collapse menu'.



## 08 Easy access

If you want to jump straight in without using modules on your Dashboard then you can click on the New button at the top of your Dashboard screen and choose Post to begin writing, or click on one of the other options.



## 09 Back to dashboard

The Dashboard button is found on all of the pages you will use in WordPress. If you move into another section of WordPress, such as Comments or Posts, you can always head back to your Dashboard by clicking this button at any time.

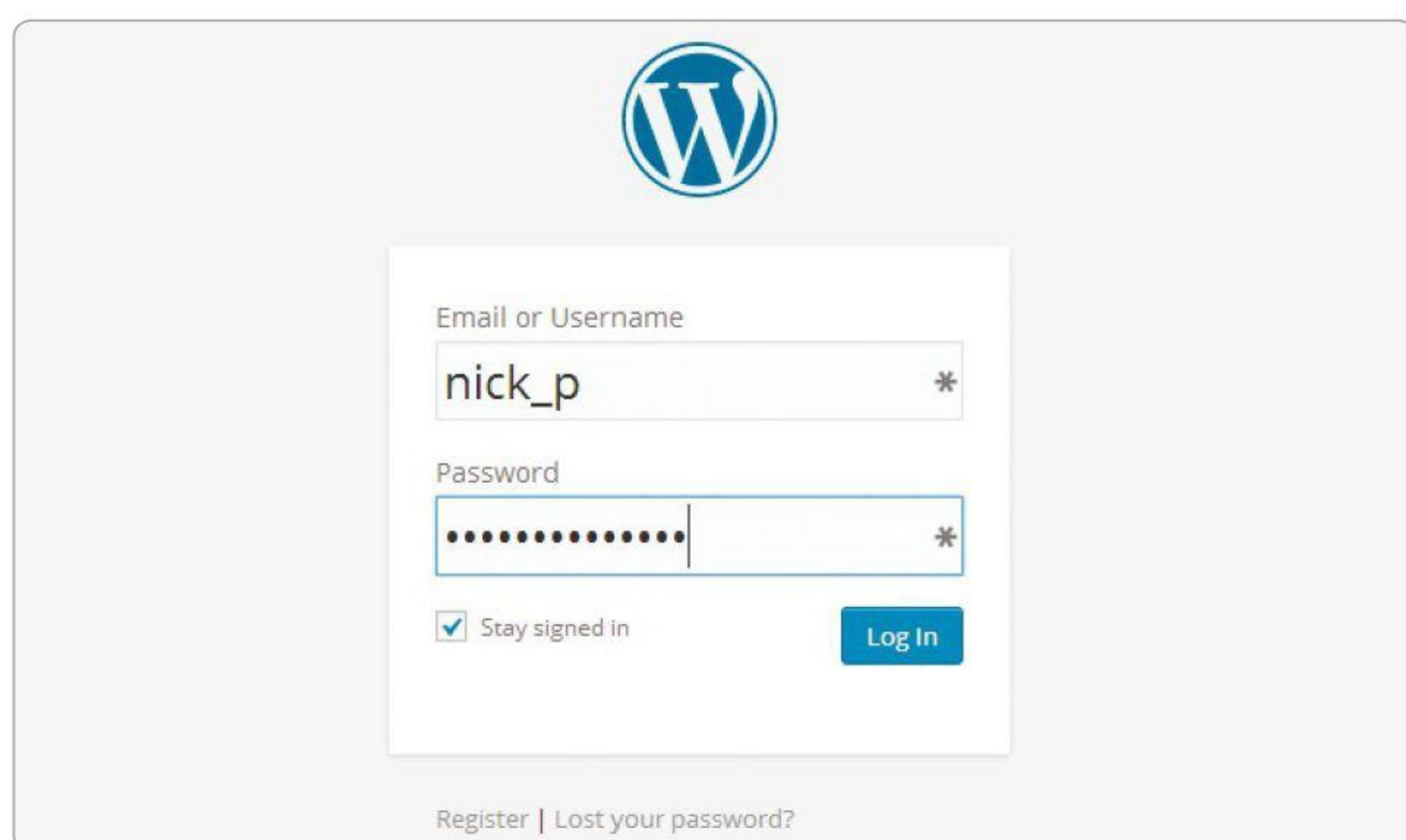
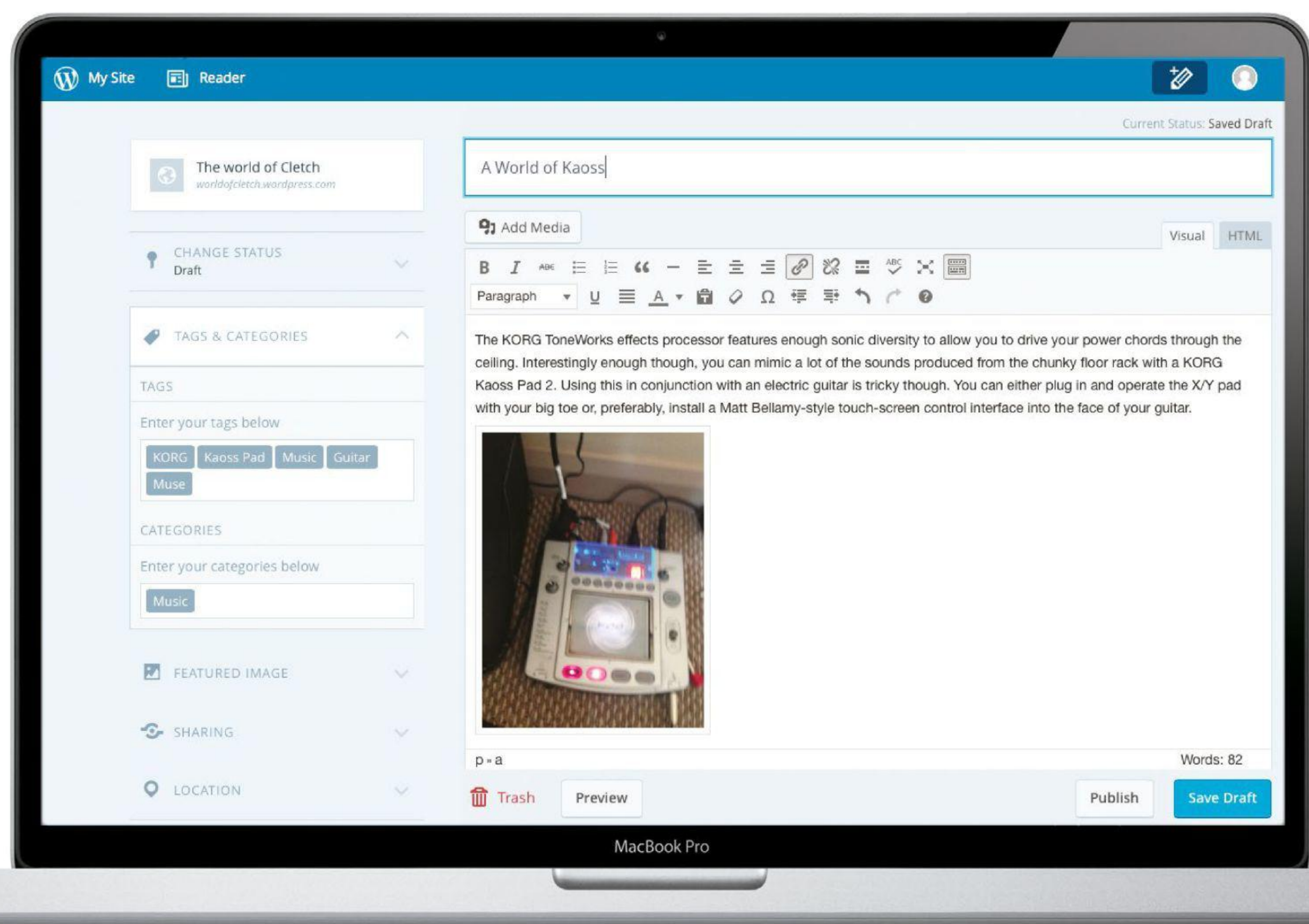
## Take your first steps in creating a WordPress blog

Every good WordPress blog consists of top-quality posts. Here we show you how to create well-worked posts with text, images and video

**G**etting a WordPress blog up and running is much simpler than you might think. Once you've completed the initial installation process, getting a post online takes a matter of minutes.

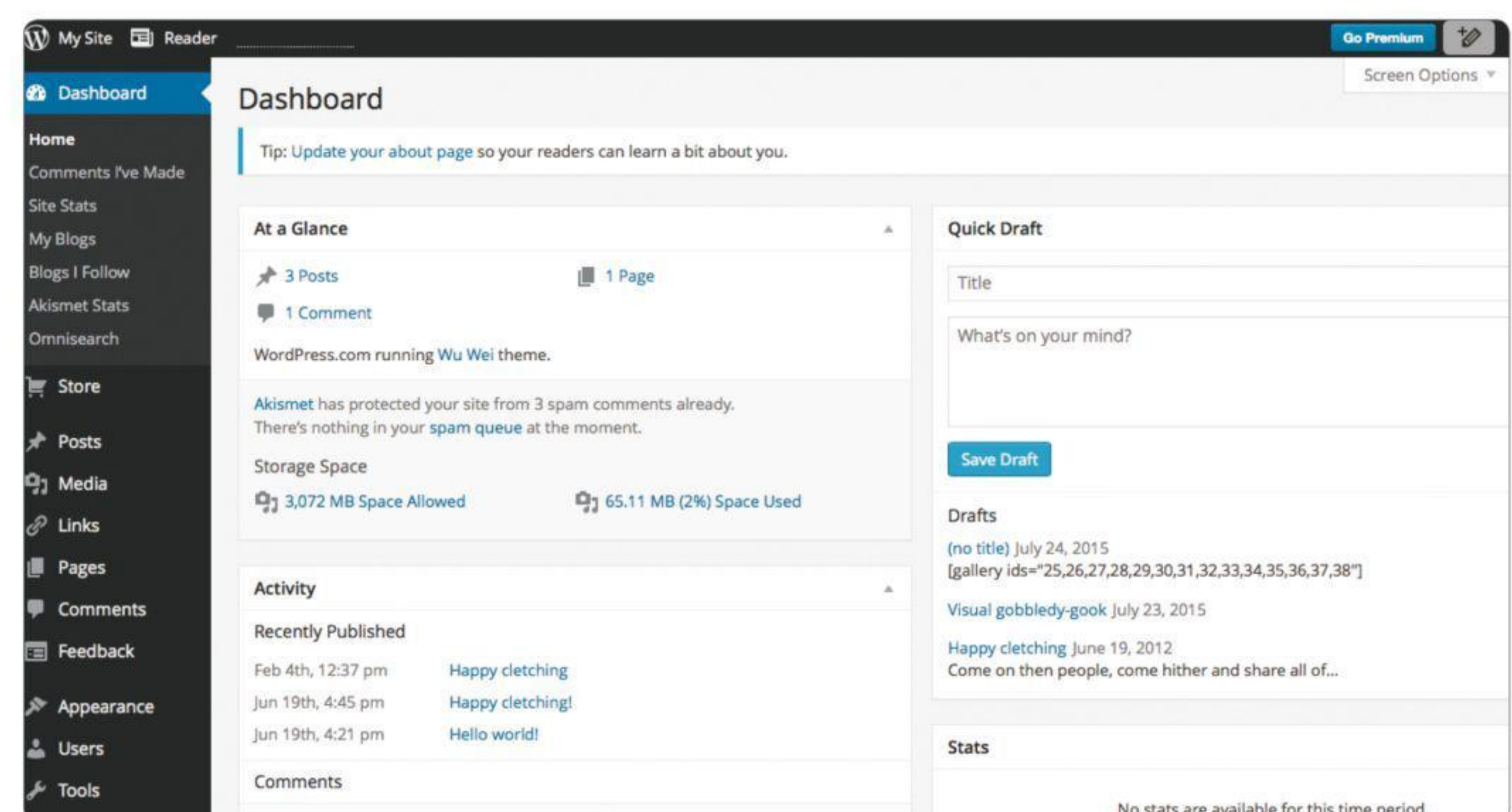
The foundation of any blog is its posts, and getting these right is paramount to a successful, informative and compelling blog. So ensure you have carefully considered every detail before you get going. It is worth noting that the styling of a blog post is predetermined to a certain extent by the current theme. Nevertheless, the Posts window provides enough ammunition to ensure your posts are well presented and neatly styled.

First things first: the title is perhaps the most important element of any blog post, so make sure it's relevant and appealing. Next is the text; again make this engaging and style it so it's readable. Beyond the text, images and video are worth considering to add colour and interest. Finally, before publishing, it's time to add in tags and create categories to make your posts more search-friendly.



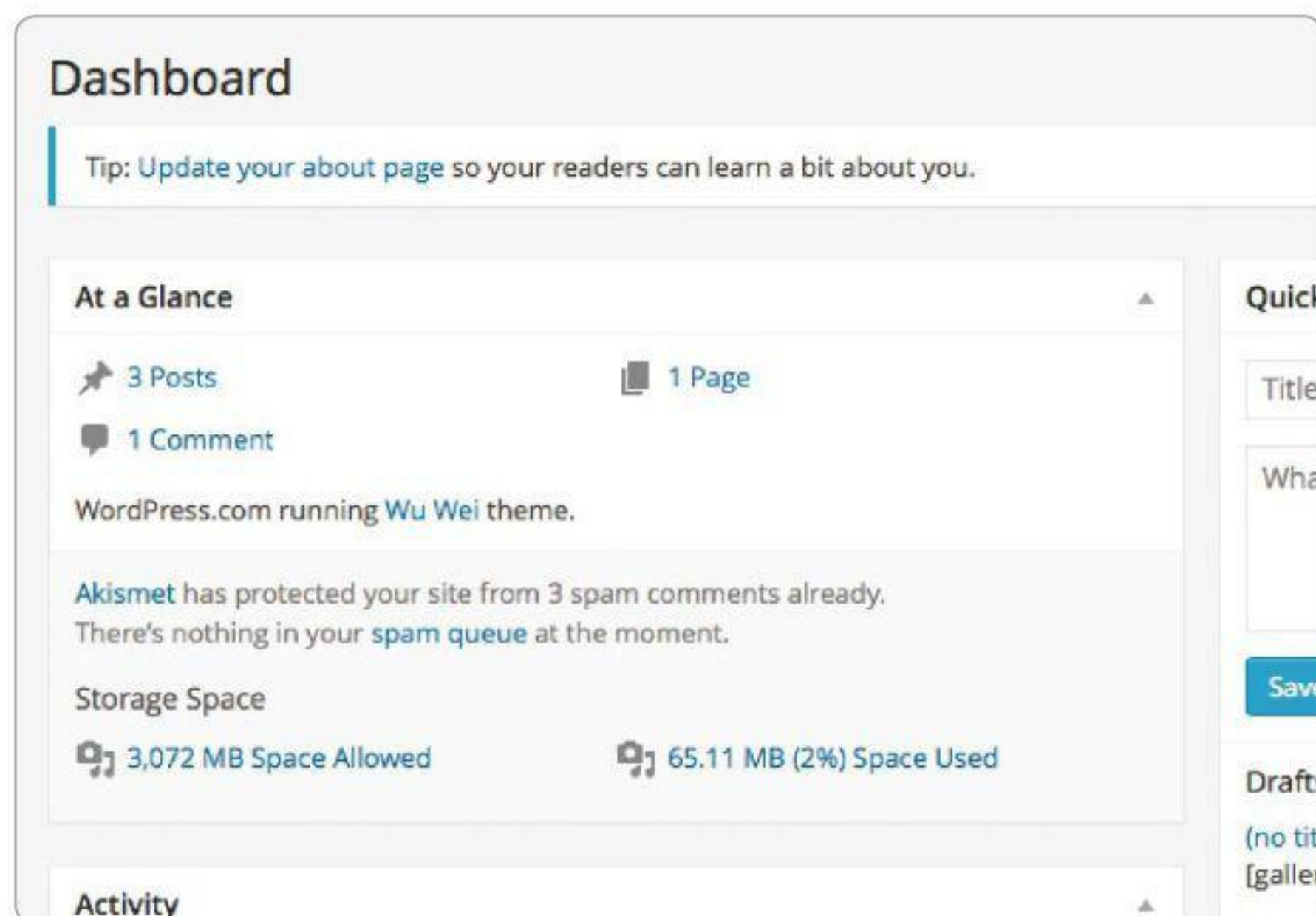
### 01 Log in

There are two options, first visit the URL of the blog, for example [www.myblog.co.uk/blog](http://www.myblog.co.uk/blog). If the default theme hasn't been changed it'll have a Log in link under Meta. Click this and add your details. Otherwise it can be accessed via [www.myblog.co.uk/blog/wp-login.php](http://www.myblog.co.uk/blog/wp-login.php).



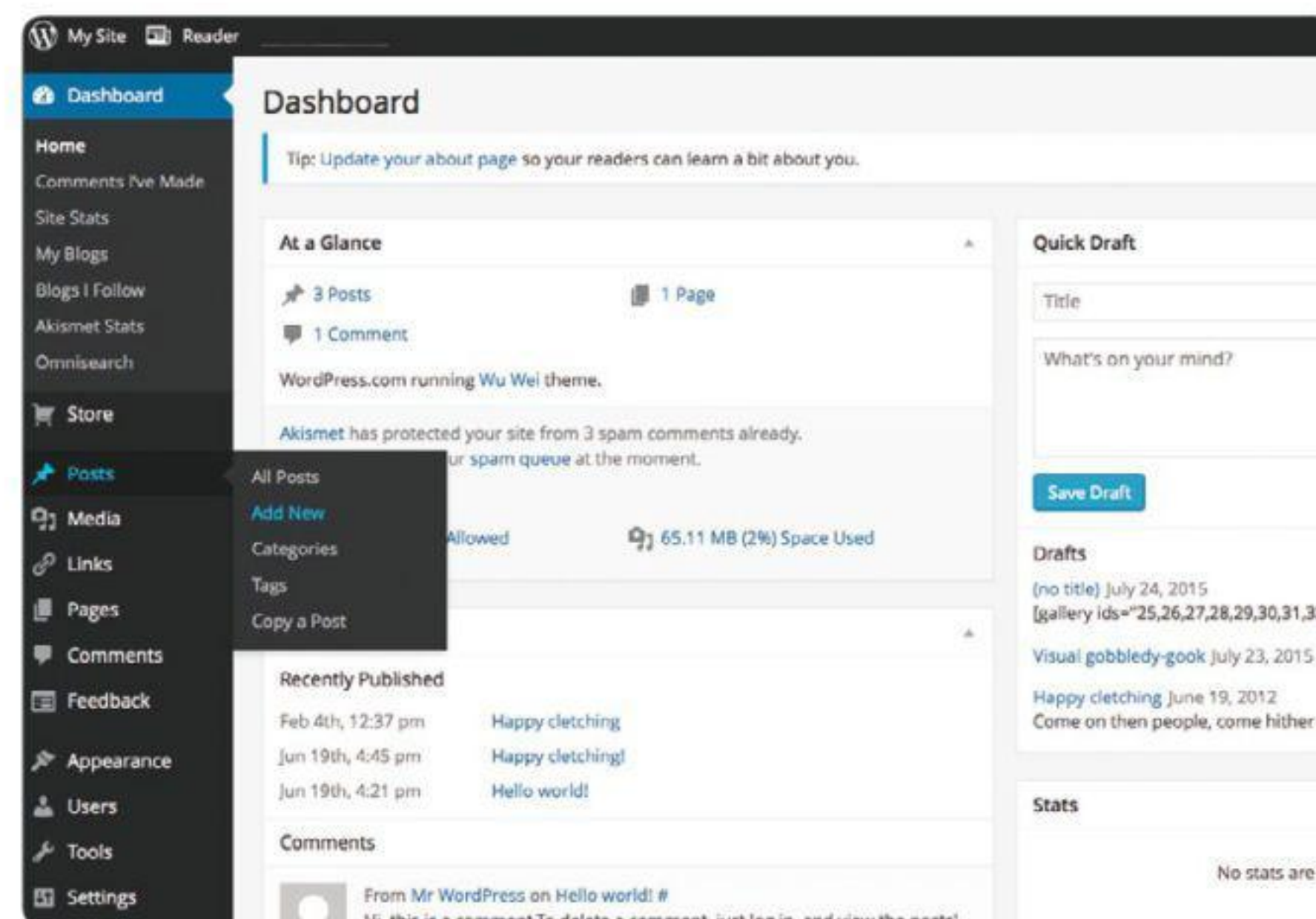
### 02 The Dashboard

In the Dashboard, users will need to pay attention to the menu on the left and to a lesser degree At A Glance and QuickPress. The other modules Incoming Links, Other WordPress News etc, can be hidden to free up screen space. Click Screen Options and the check boxes of the modules you want removed.



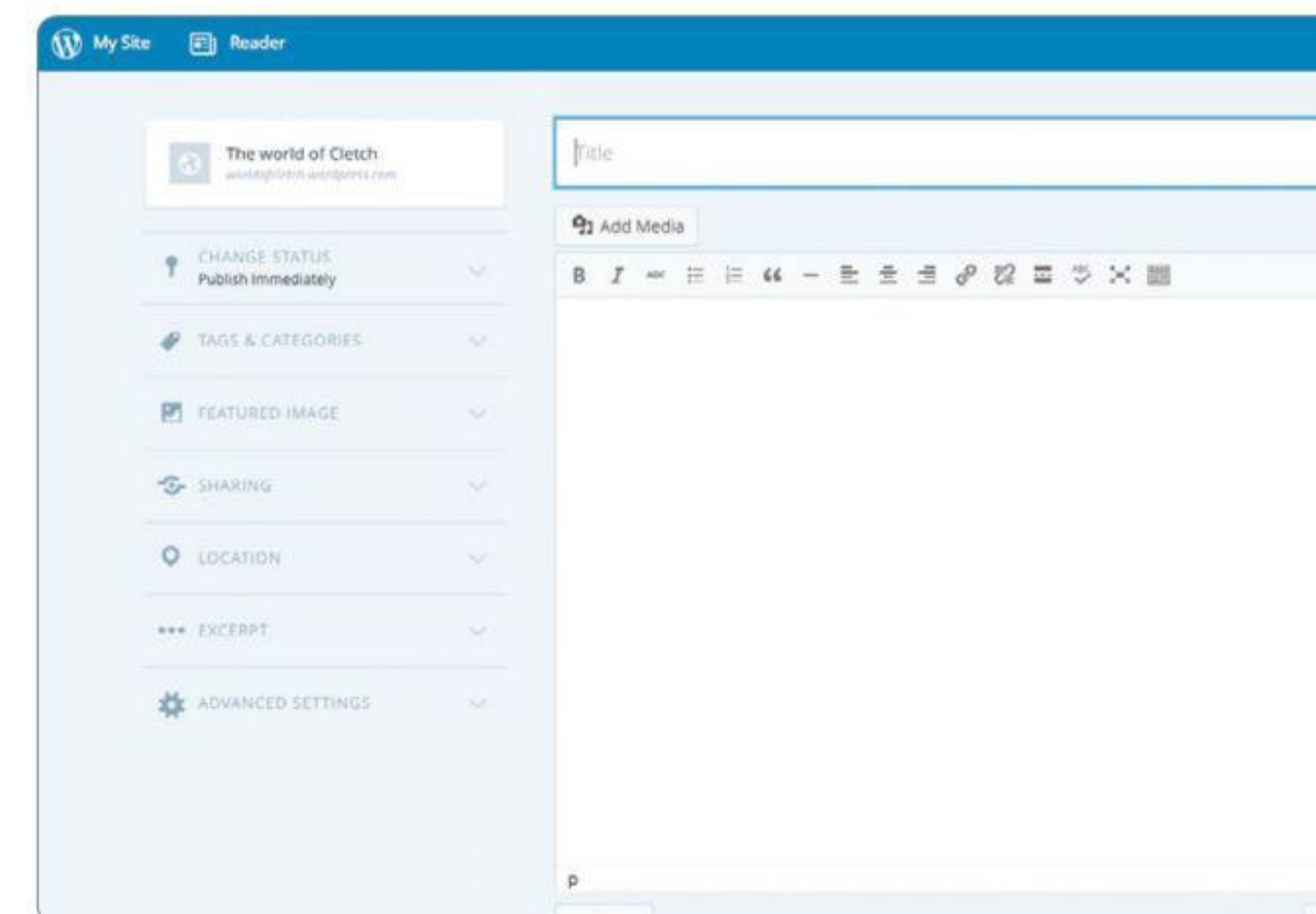
### 03 At a Glance

The At a Glance module gives users a quick summary of the current state of the blog. All the elements in the Right Now module link directly to its related counterpart. Click the title bar on a module to expand/collapse.



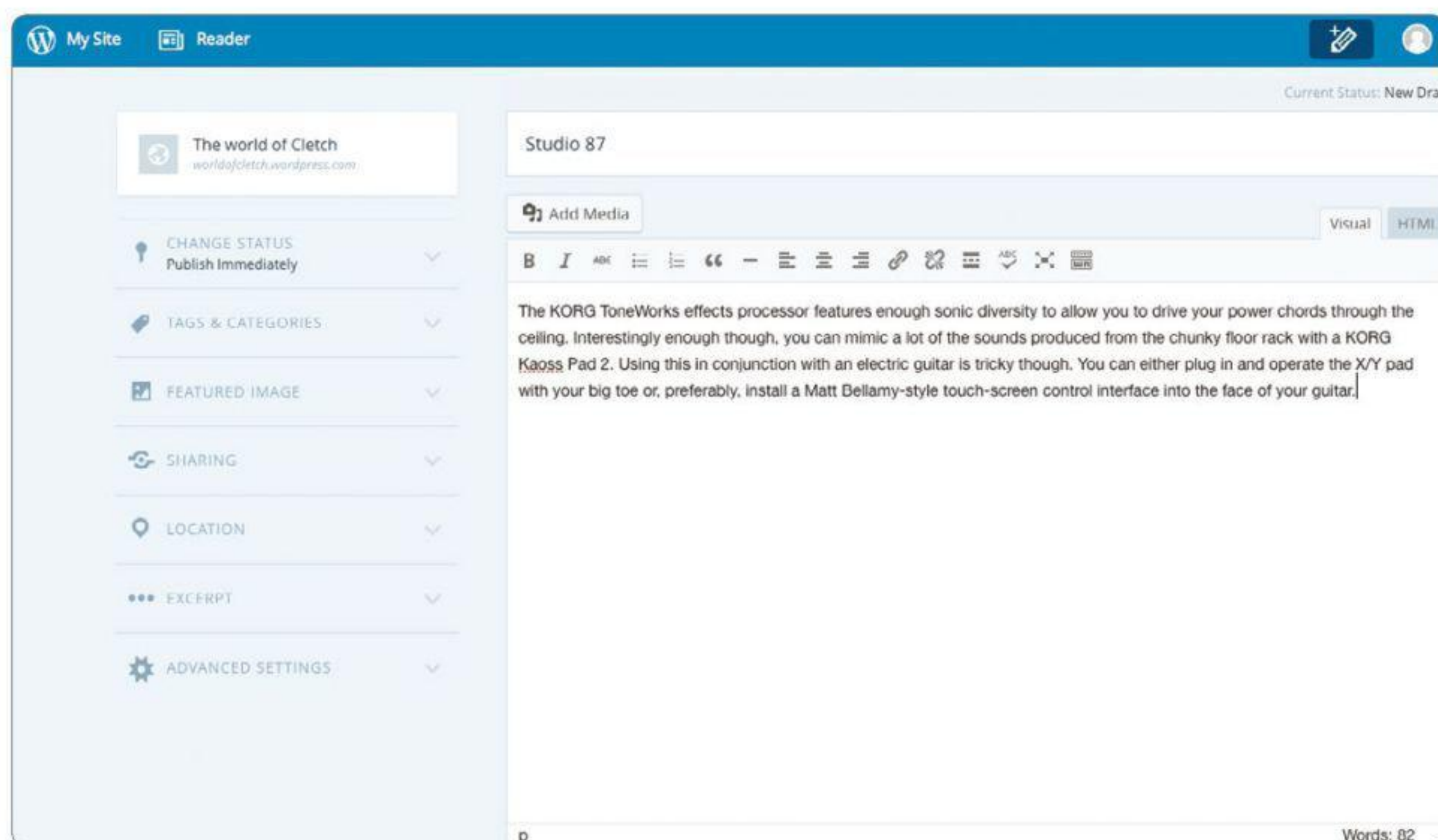
### 04 The Posts menu

To add or edit posts, the Posts menu is the place to start. Click the Posts title bar and the menu will expand to reveal the post options. To edit a current post, click Edit and all the posts stored on the database will be revealed.



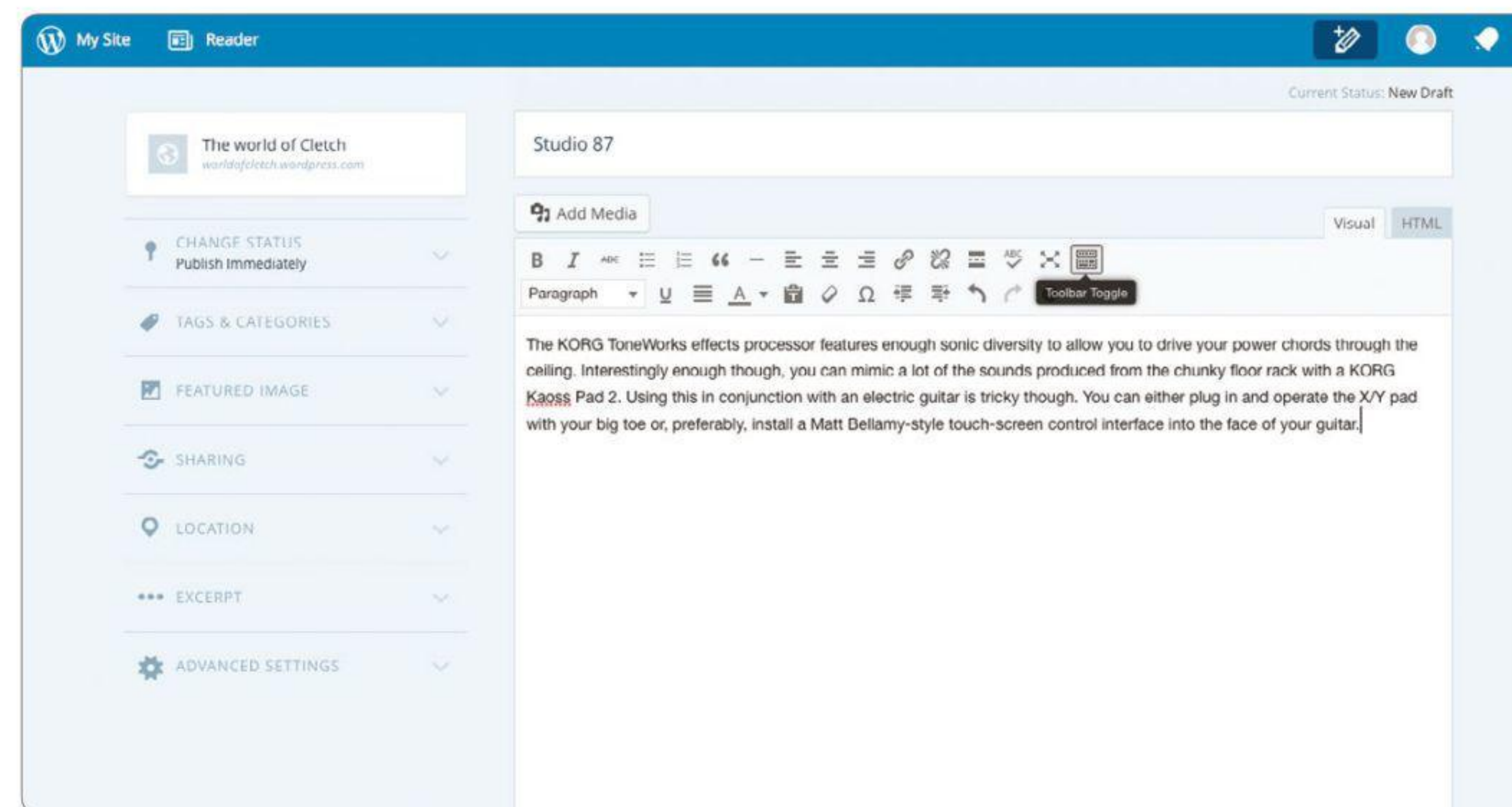
### 05 New post

The new post window is divided into two sections, the title and the body. The first text box in Add New Post is where the title goes. Remember, the formatting will differ from what you see as this is determined in the style sheet.



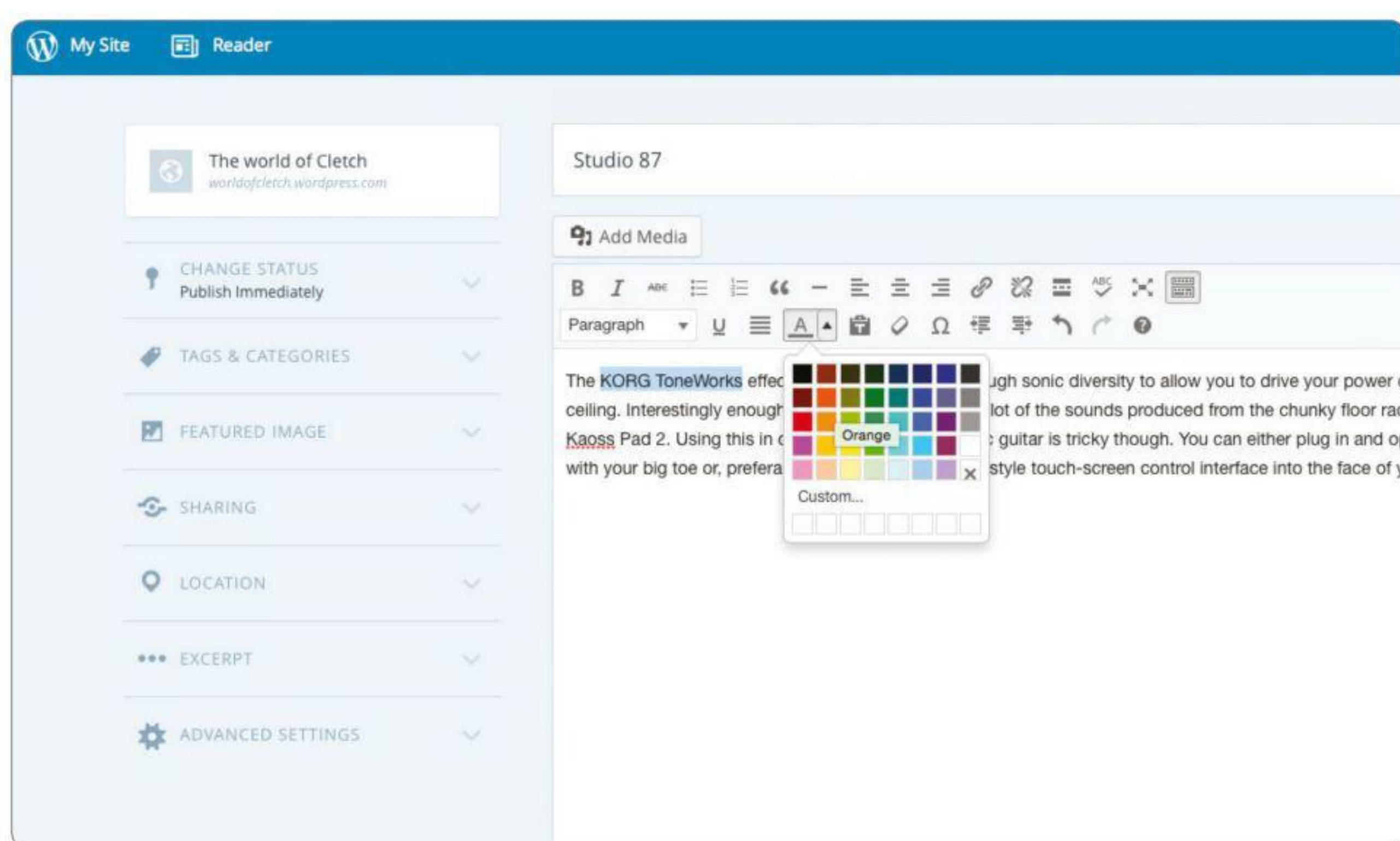
### 06 Post text

The body of the post is placed in the second text box and this will contain all the text and images found in a single post. To add the post text, type in the desired text like you would do in any other document. Remember to abide by any standard grammar rules, such as paragraphs and so on.



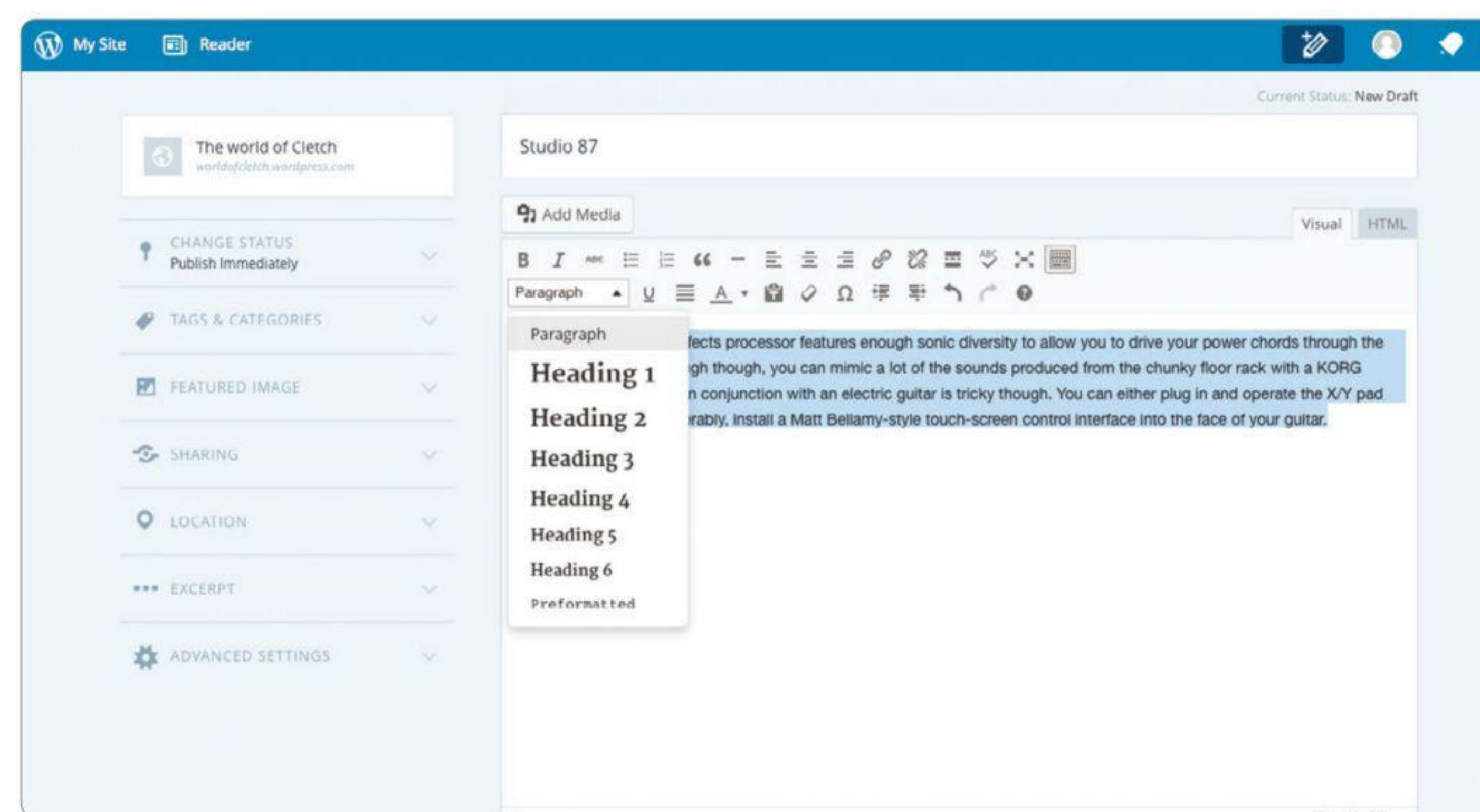
### 07 Simple styling

The Visual post editor is a simple editor, it is much like using word processing software such as Microsoft Word. Click the last icon on the toolbar, it's called Toolbar Toggle, to view all options. To bold the first sentence, select the text and press B, alternatively use the keyboard shortcut Ctrl/Cmd+C.



### 08 More styling

To add more styles to the text, select the appropriate button. 'I' adds the italic effect, 'ABC' chooses a language, 'U' adds an underline and 'A' allows users to choose a new colour for the text. Use the Align buttons to place your text left, right or centrally.



### 09 Resizing text

The text in a post can't be resized in the traditional sense. The text size is predetermined by the theme in use. However, the Paragraph drop-down list has a number of options, such as Paragraph, Heading 1, Heading 2, etc. Heading 1 is the largest, 6 the smallest and Paragraph normal.

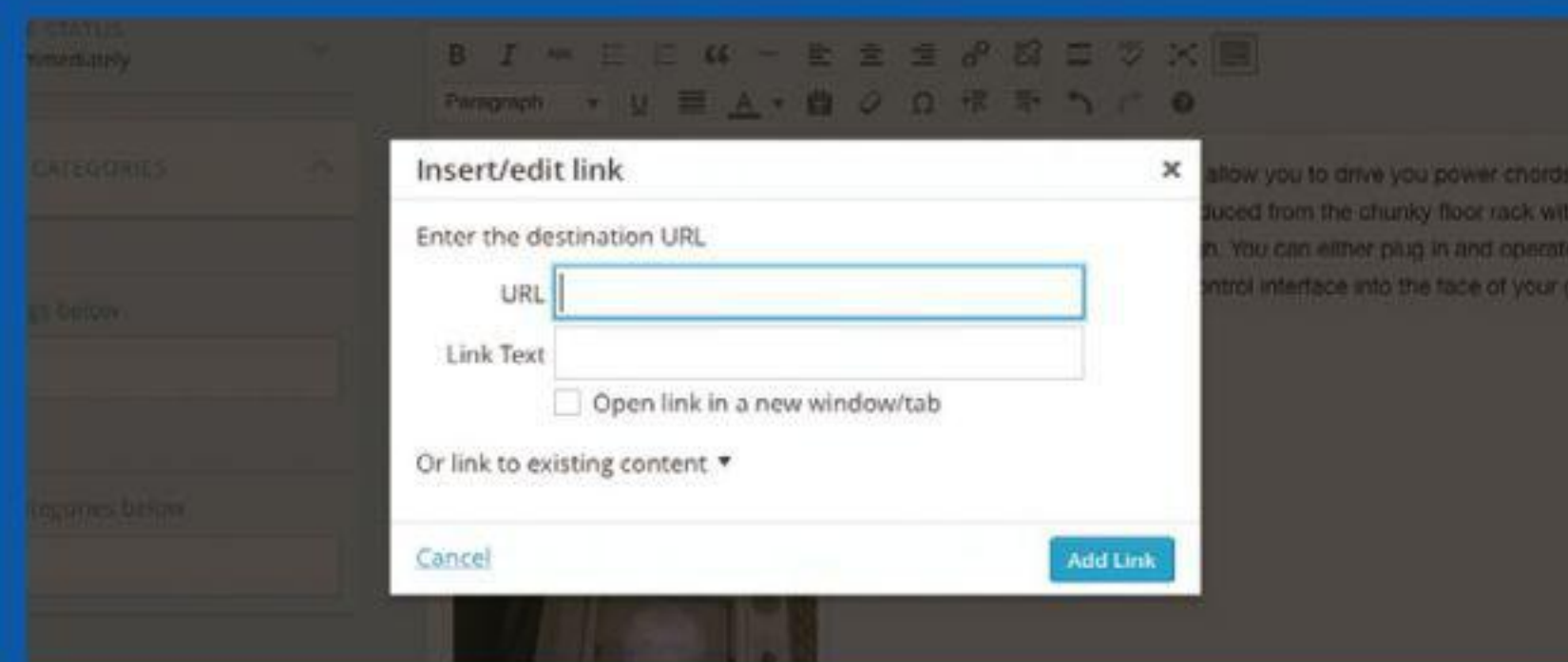
## Learning how to manage your blog

Here we include a few more tips and techniques you will need to know

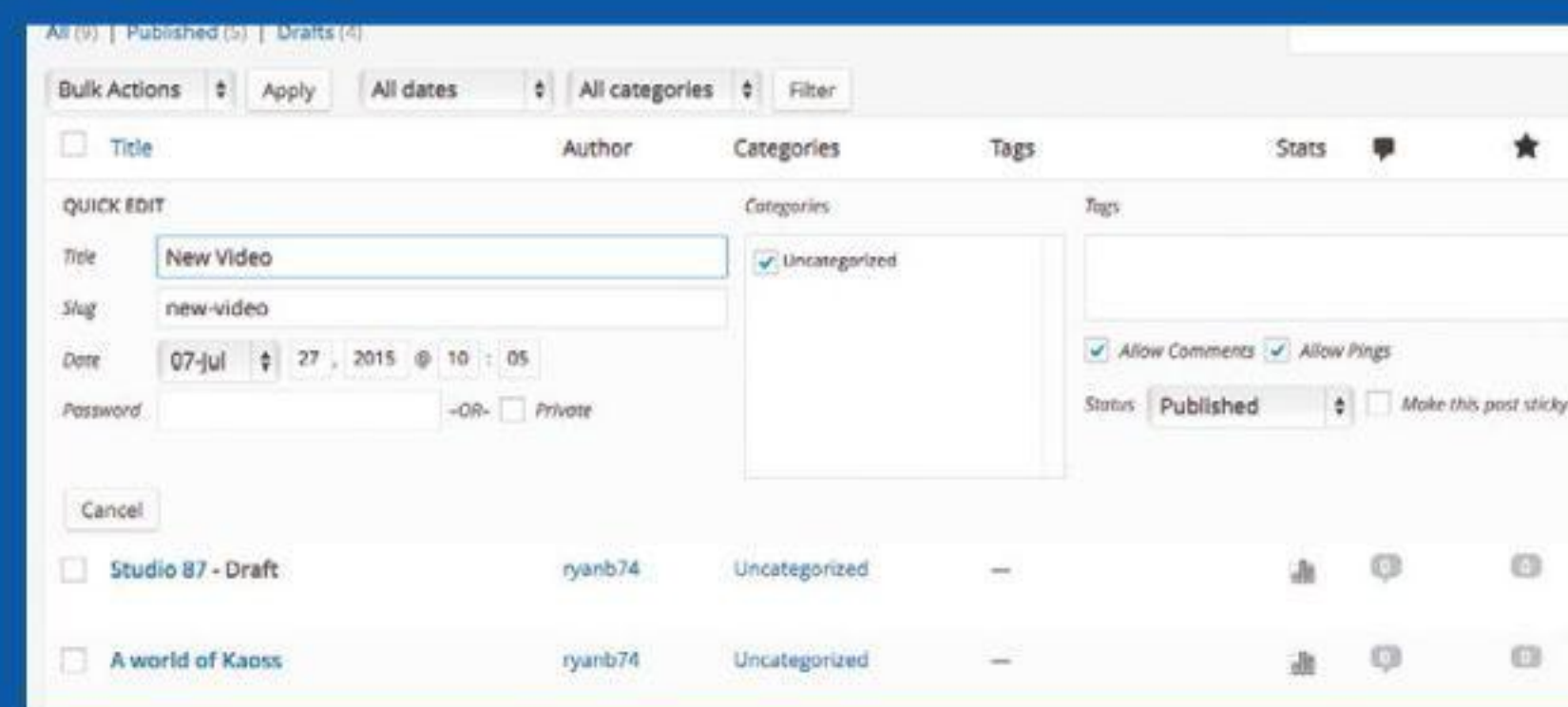
Getting posts on to a blog is the main priority for many bloggers and the WordPress (2.7 onwards) Dashboard provides a quick and easy answer. QuickPress allows users to create and publish a post directly from the Dashboard. This is a slimmed down version of the standard Add New Post page and provides all the essentials without the need to go beyond the opening page. Users can add a title, text, insert images, video, audio etc and add tags.

Editing and updating posts is a simple but essential task and a visit to Edit>Posts will reveal all the posts in a blog. Each post is assigned a number of quick access options that only appear when the cursor is placed over the post title. The options on offer are Edit, Quick Edit, Delete and View. Edit takes a user to the standard post, allowing users to edit as normal. Remember, when you've finished editing a post, hit Update Post to save any changes. The Quick Edit option works within the Edit Posts window and allows users to neatly and quickly change categories, tags, title, etc. The Delete and View options do exactly what they suggest.

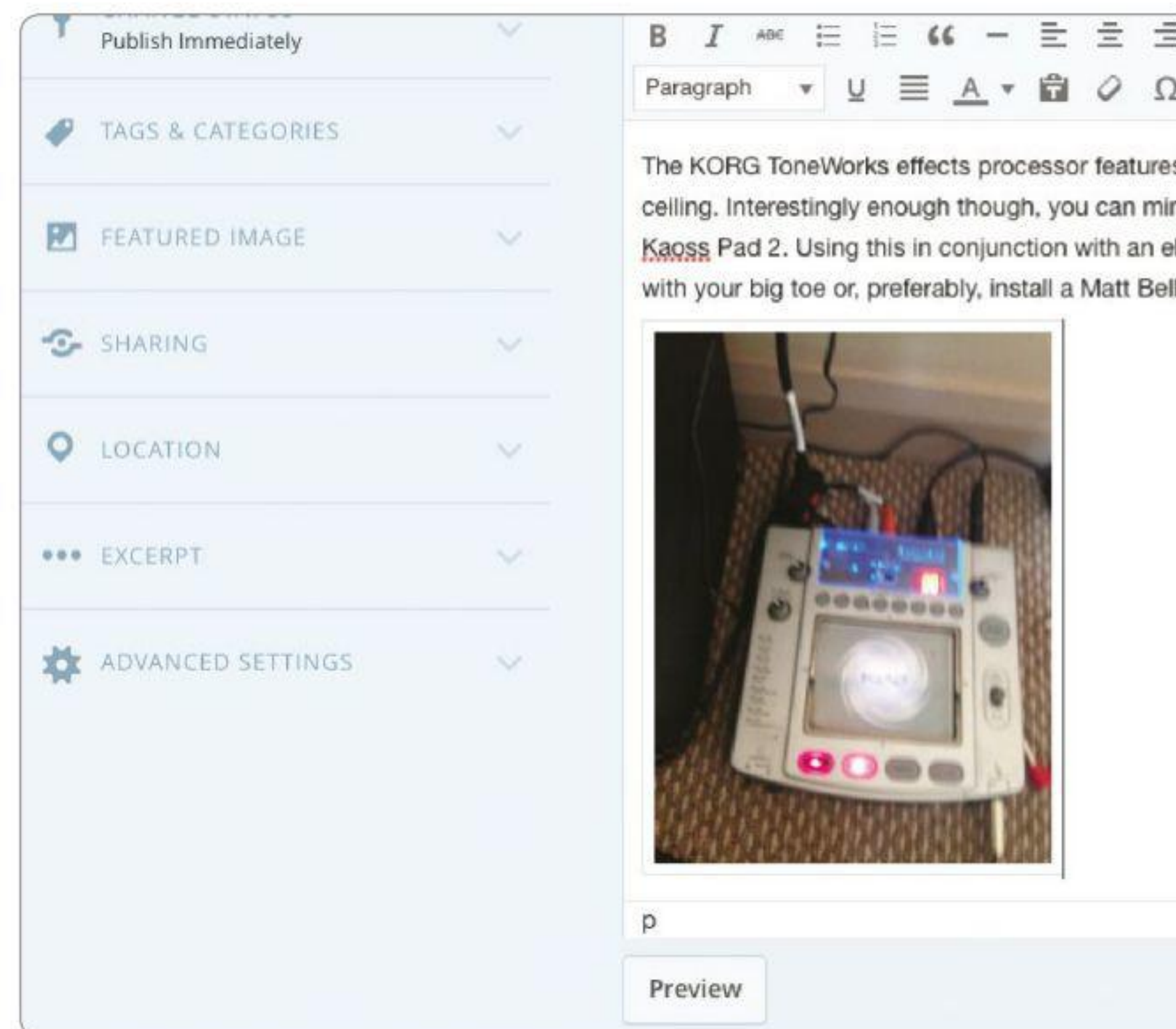
Beyond editing a post there are a few additions that we have yet to mention. Links are a key component of a website, and WordPress is no different. The standard toolbar includes two link options, Insert/edit link and Unlink. To add a link select the desired text and press the Insert link button (top row). In Link URL add the URL to link to (needs http:). By default, WordPress includes http://, so if copying in a URL remember to check that the http:// has not doubled up. Target allows the user to choose if the link URL opens in the same window or new window. There is the option to add a title, and to add a class. This effectively styles the link using a predetermined style.



Use the Quick Edit option to quickly change categories, add tags and modify the title

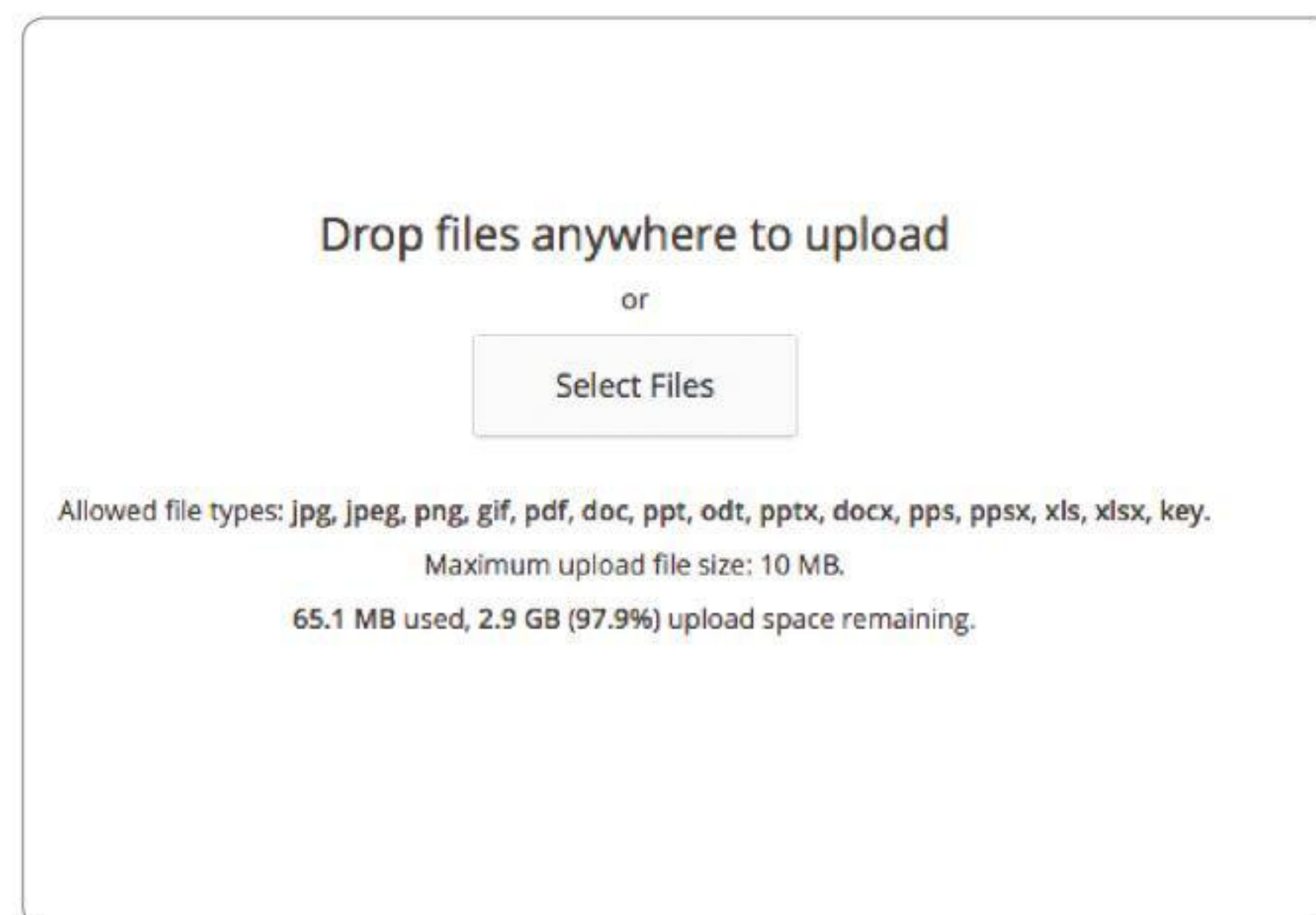


The Insert/edit link window allows users to link to internal posts or pages



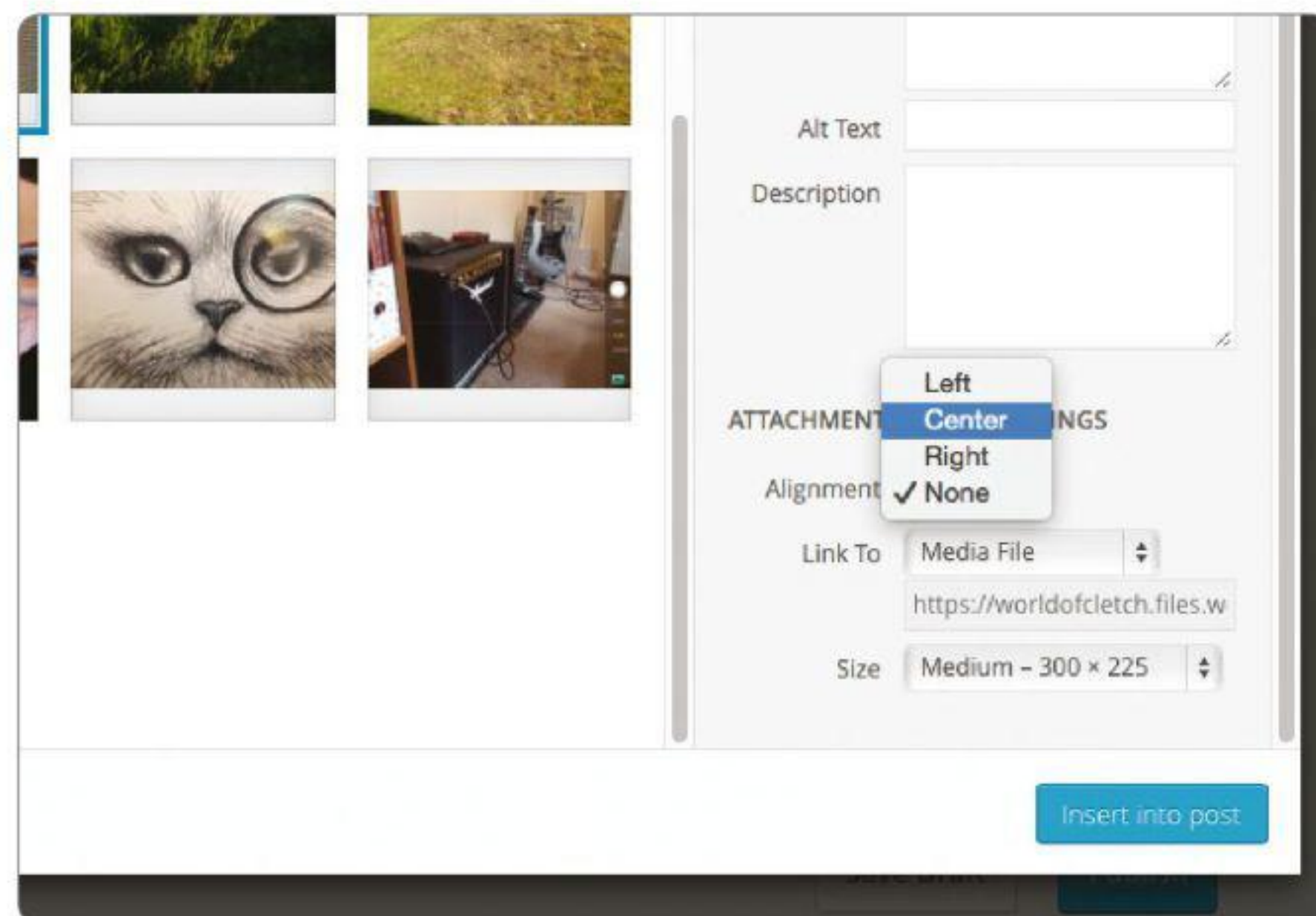
### 10 Preview post

The post is now beginning to take shape. Click Preview in the Publish module, this will open another window to display the selected post. Keep the window open and refresh when more has been added to the post.



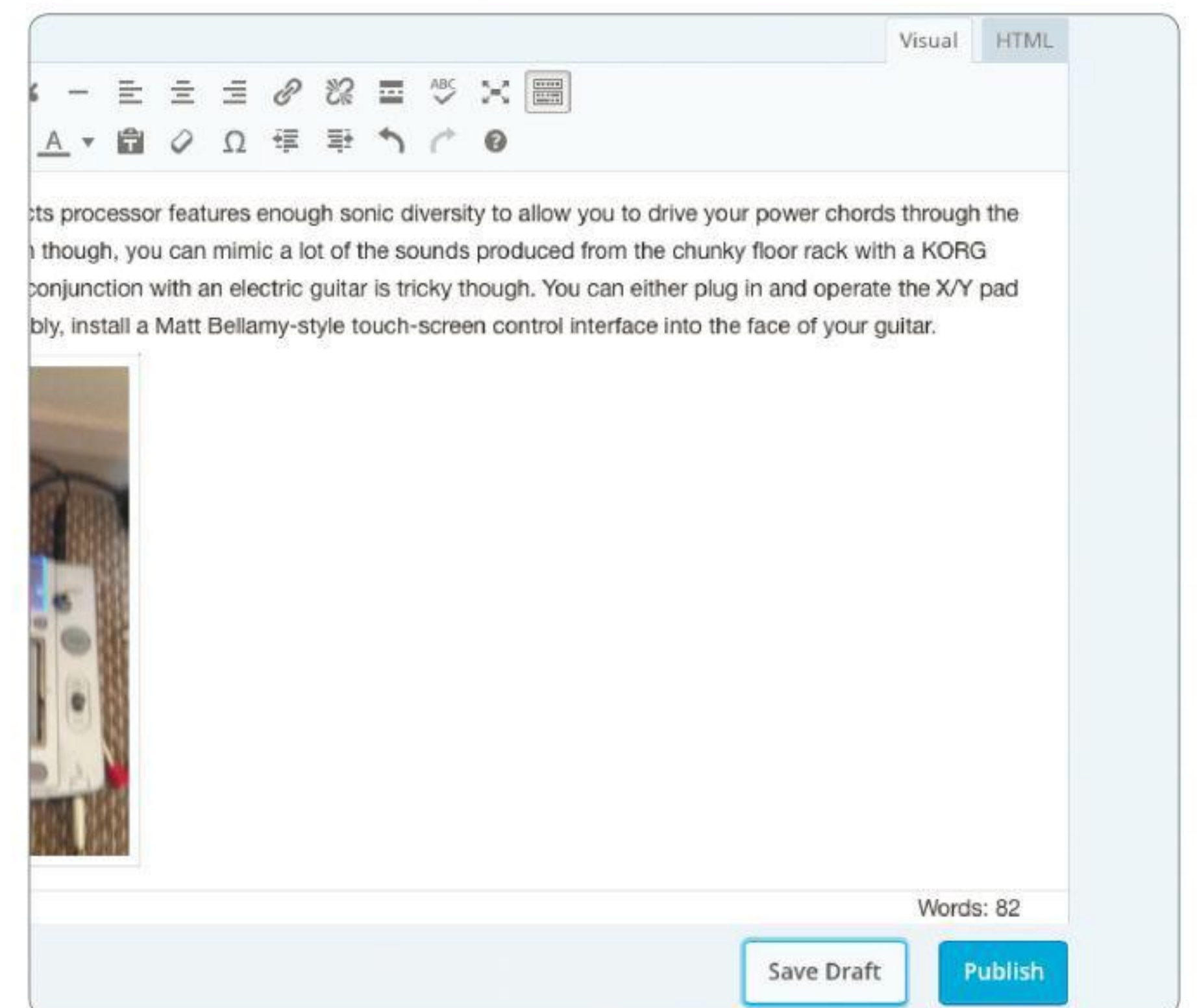
### 12 Upload an image

Post text is often accompanied by an image. To insert an image, place the cursor in the position where the image is set to appear. Click the Add Media icon, then Select Files, browse to the location of the image, select it and press Open.



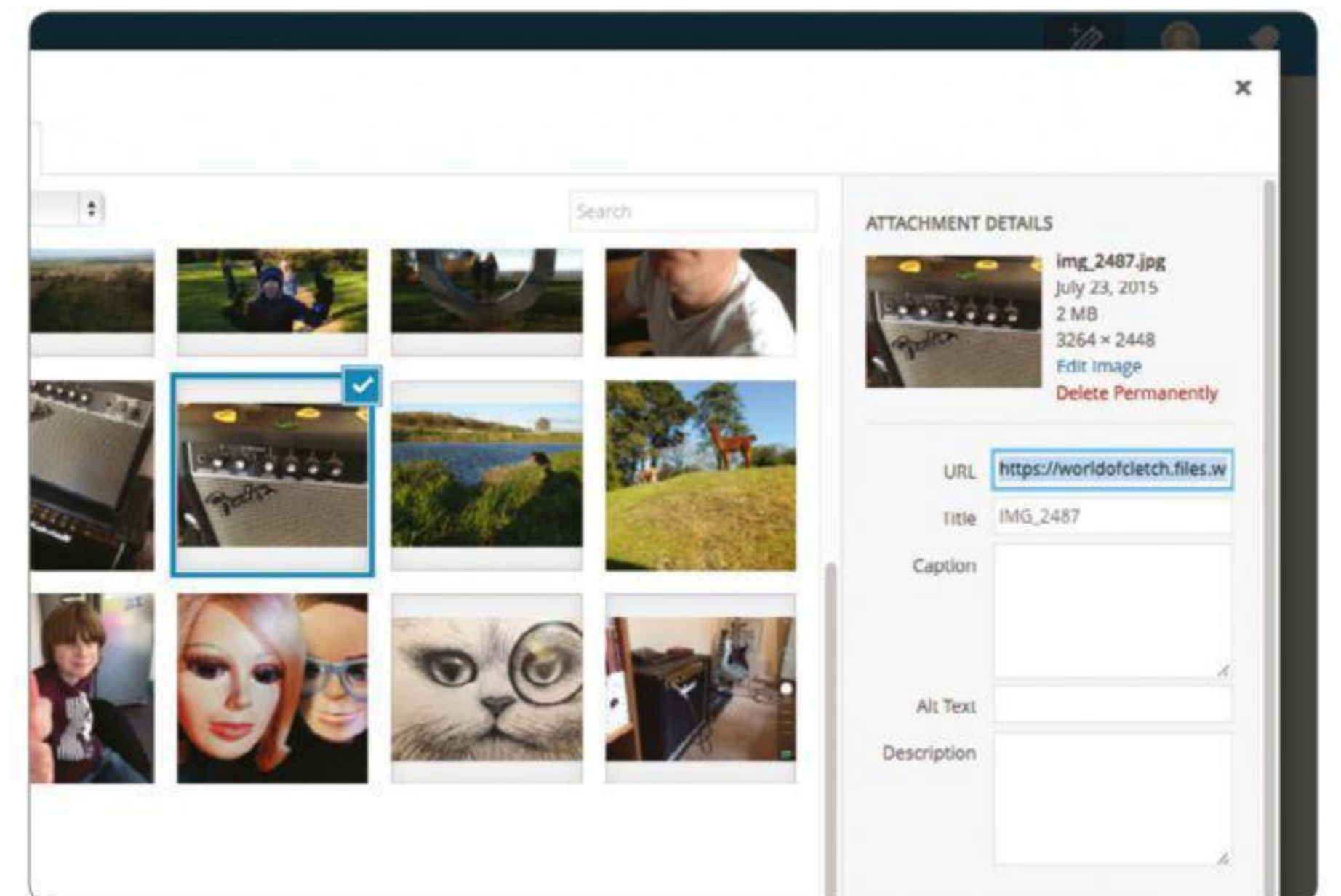
### 14 Image alignment

Before inserting an image the alignment options need to be determined. If the Alignment option remains as the default (None), all text will be placed above and below the image. Left, right and centre will wrap text around the image.



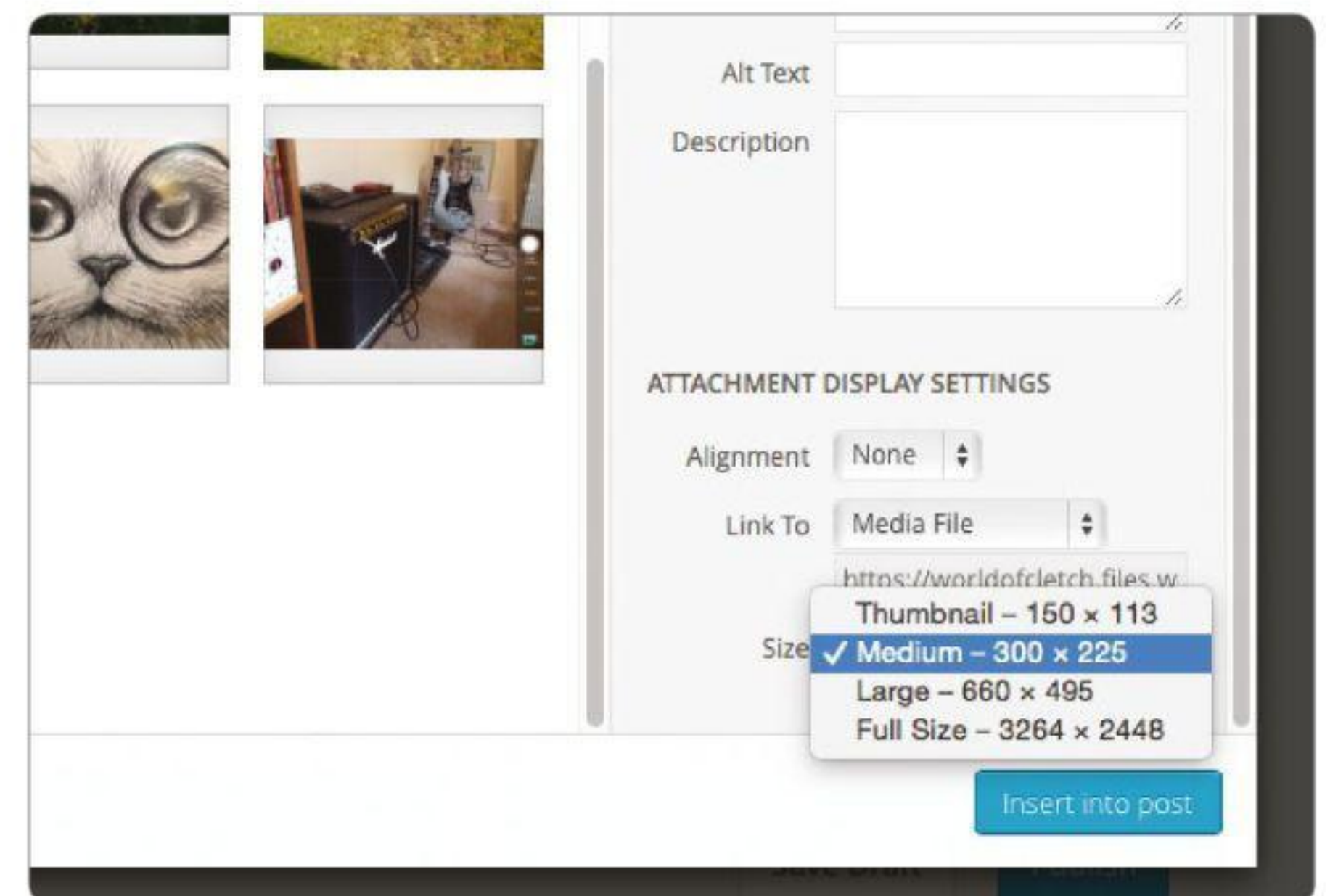
### 11 Save Draft

If the post is in good shape, save a draft by pressing Save Draft. This will save the post and reload the page, allowing the user to continue adding to the post. The draft of the post can be found via Posts>All Posts.



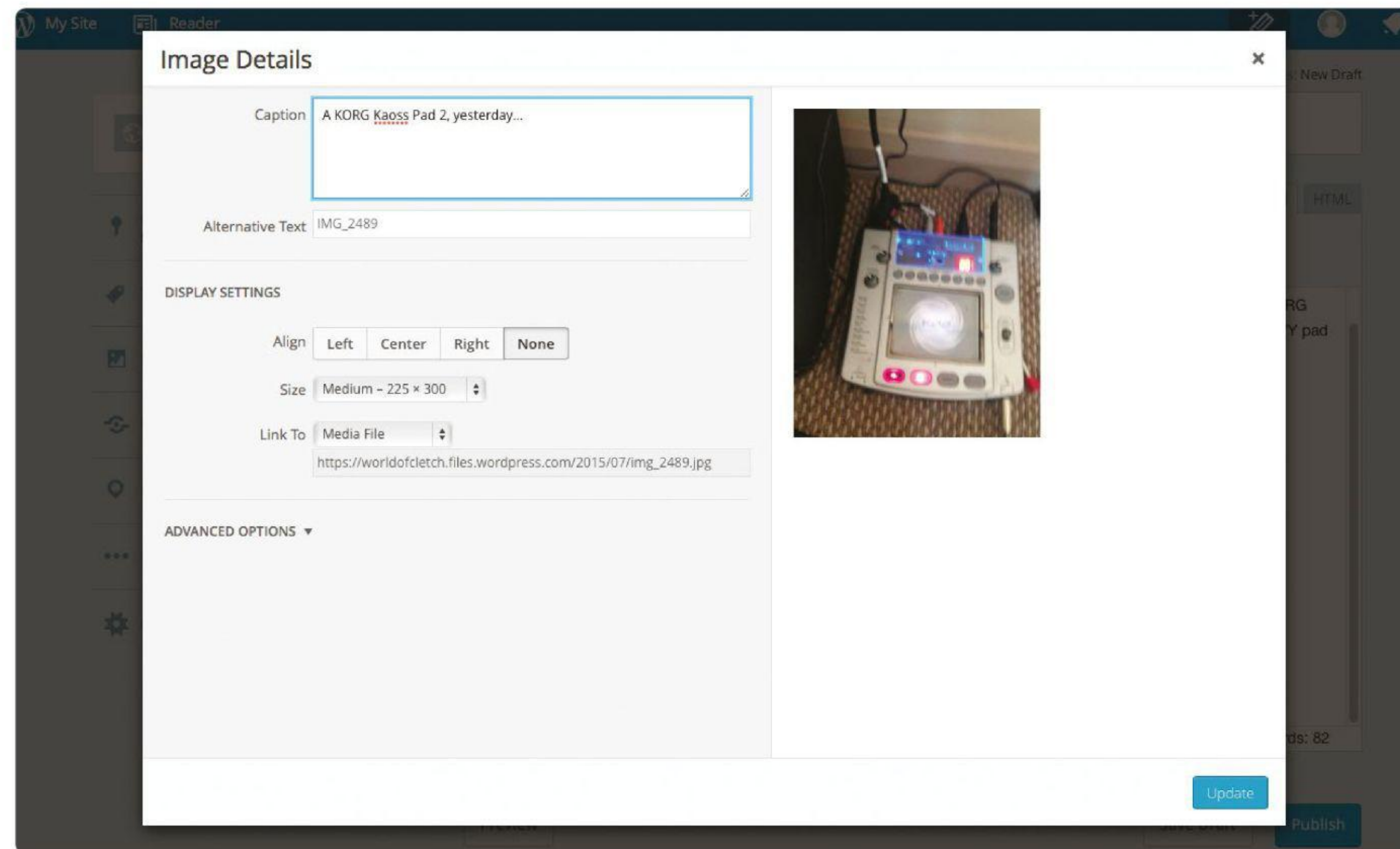
### 13 Insert options

There are a whole host of image options. The name of the image is used as the title, this is the text that will be seen in the browser when the cursor is placed on the image. Caption text will appear directly underneath the text.



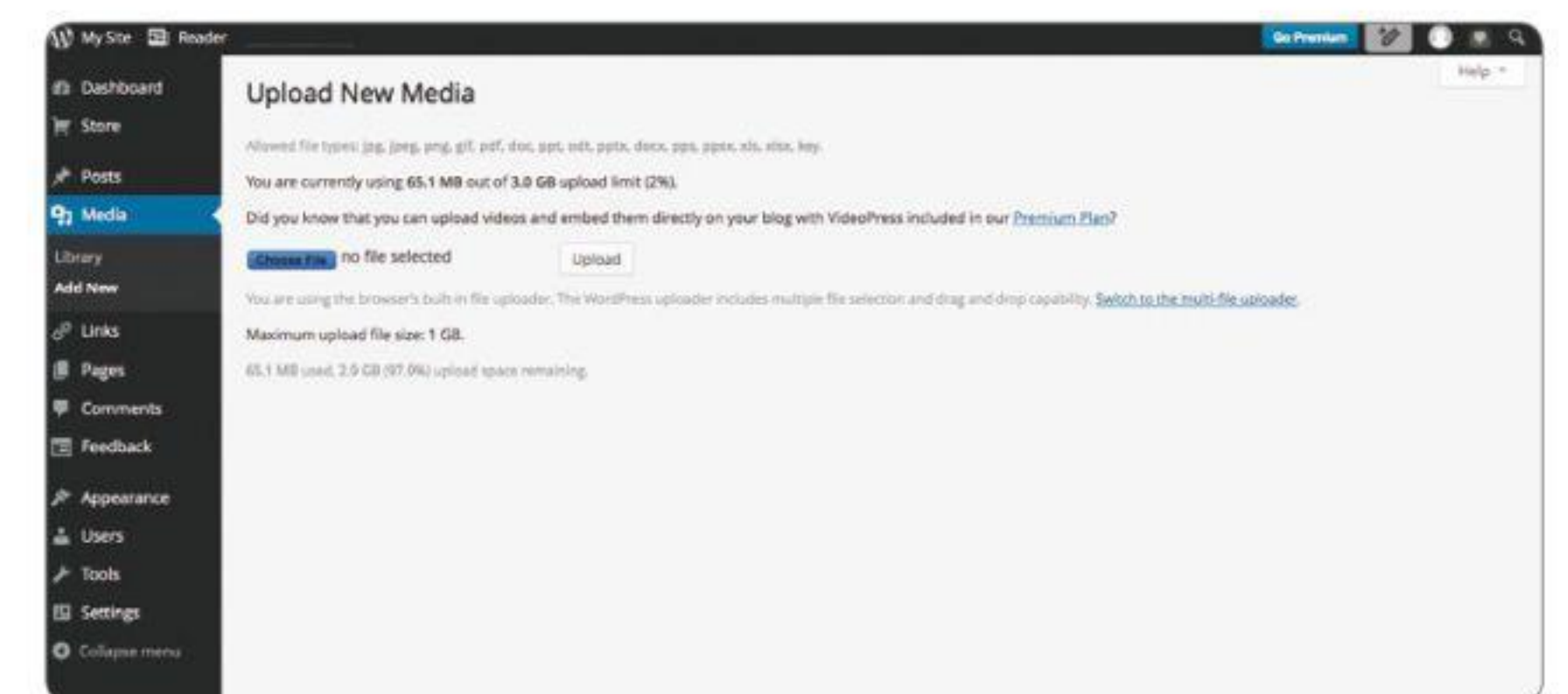
### 15 Image size

Users can choose to select an image size before adding to a post. Full Size is the actual size of the image. The remaining options – Thumbnail and Medium – have their sizes predetermined by the current theme.



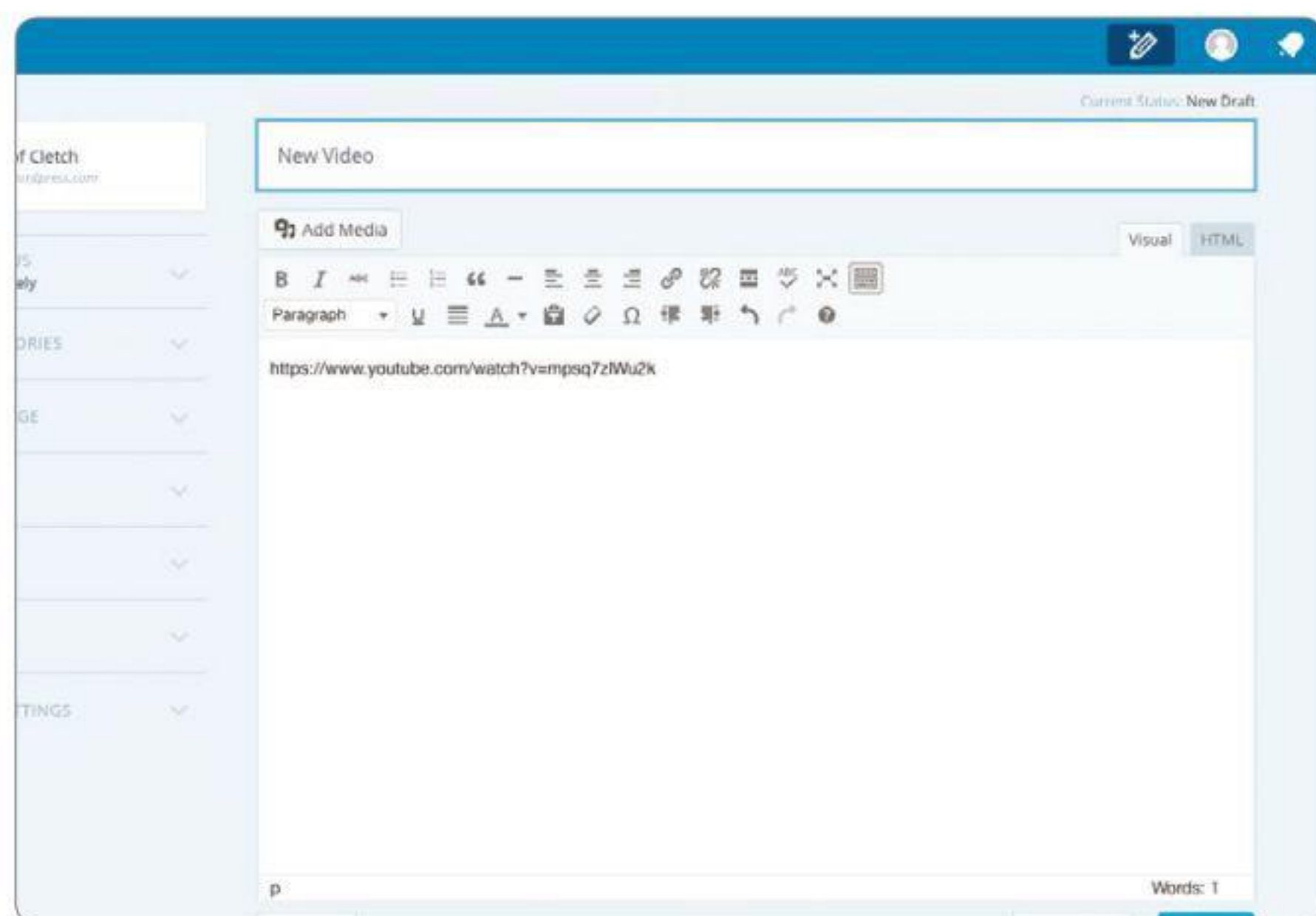
## 16 Edit image

An image in a post is still open to editing. Click the image and select the icon to the left to open the Edit Image window. Here users can choose to resize and more. Press Update to initiate any changes.



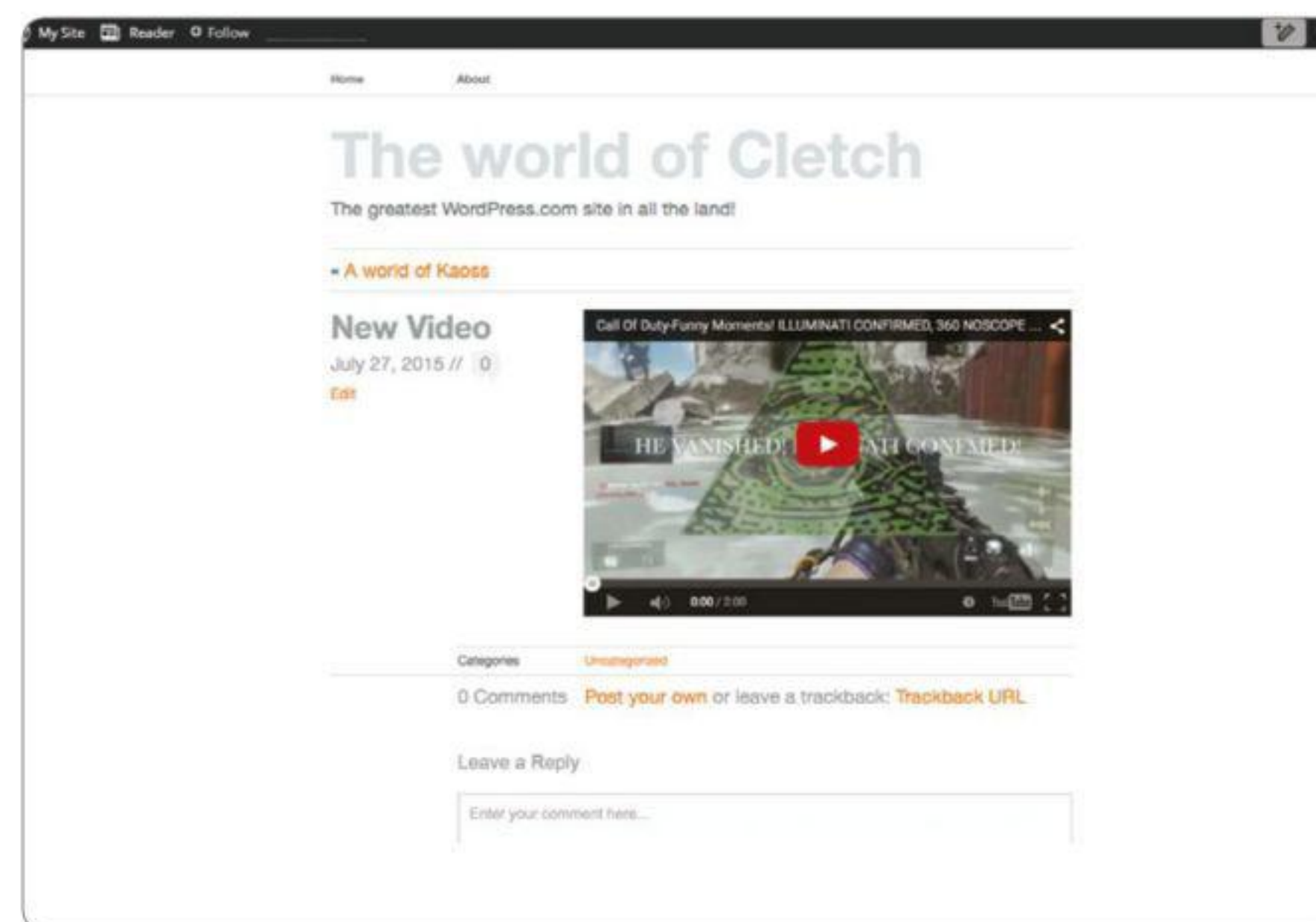
## 17 Browser upload

WordPress allows users to add an image directly from a web location. The first step is to get the URL of the desired image. Once the URL has been located, copy and paste into the 'Insert from URL' field. The images will appear underneath.



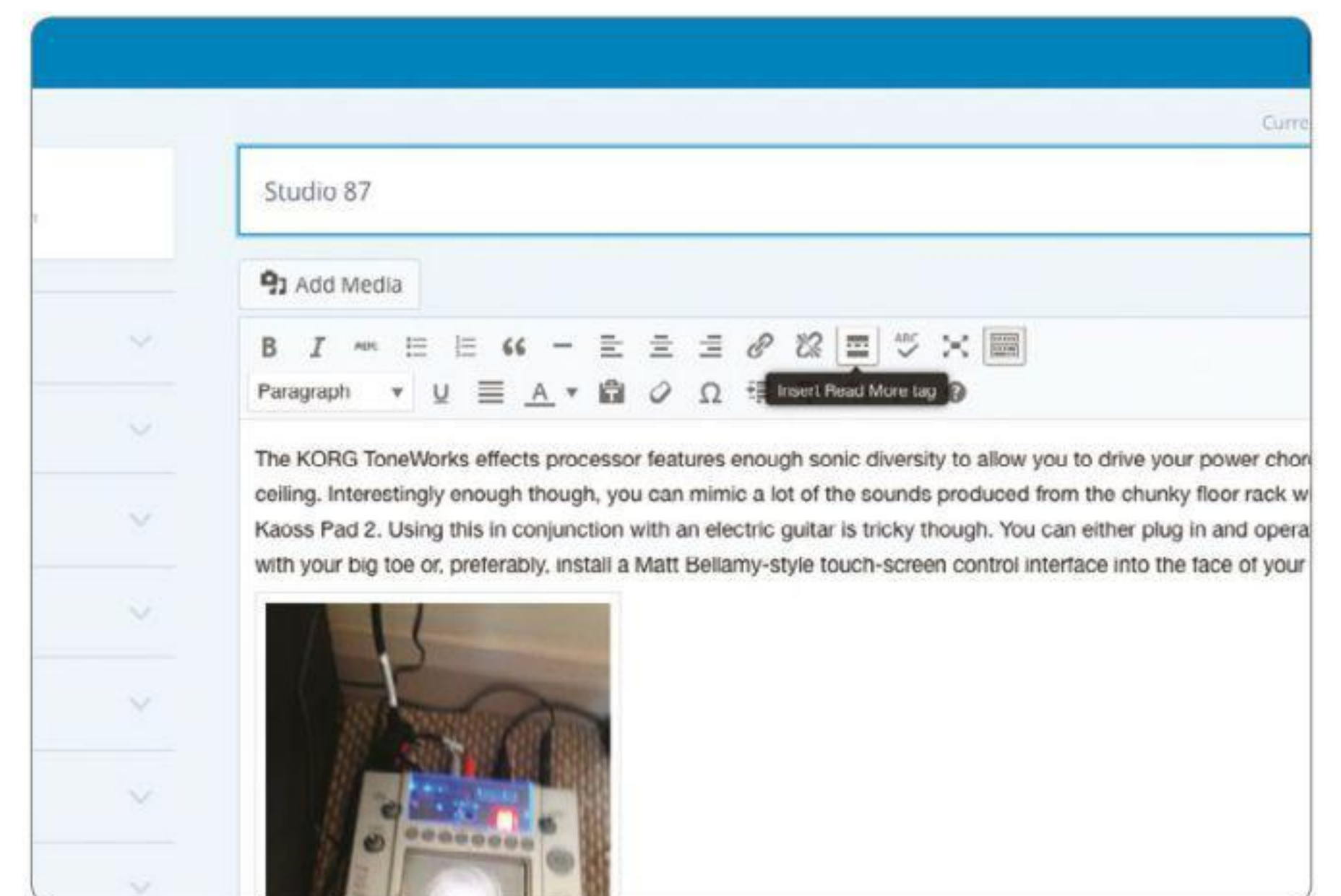
## 18 Video options

Place the cursor in the position where the video is to be added. Click the Add Media button, select the video and wait for it to upload. Click the video to view the different options. Add a Title, Caption or Description and click Insert into Post.



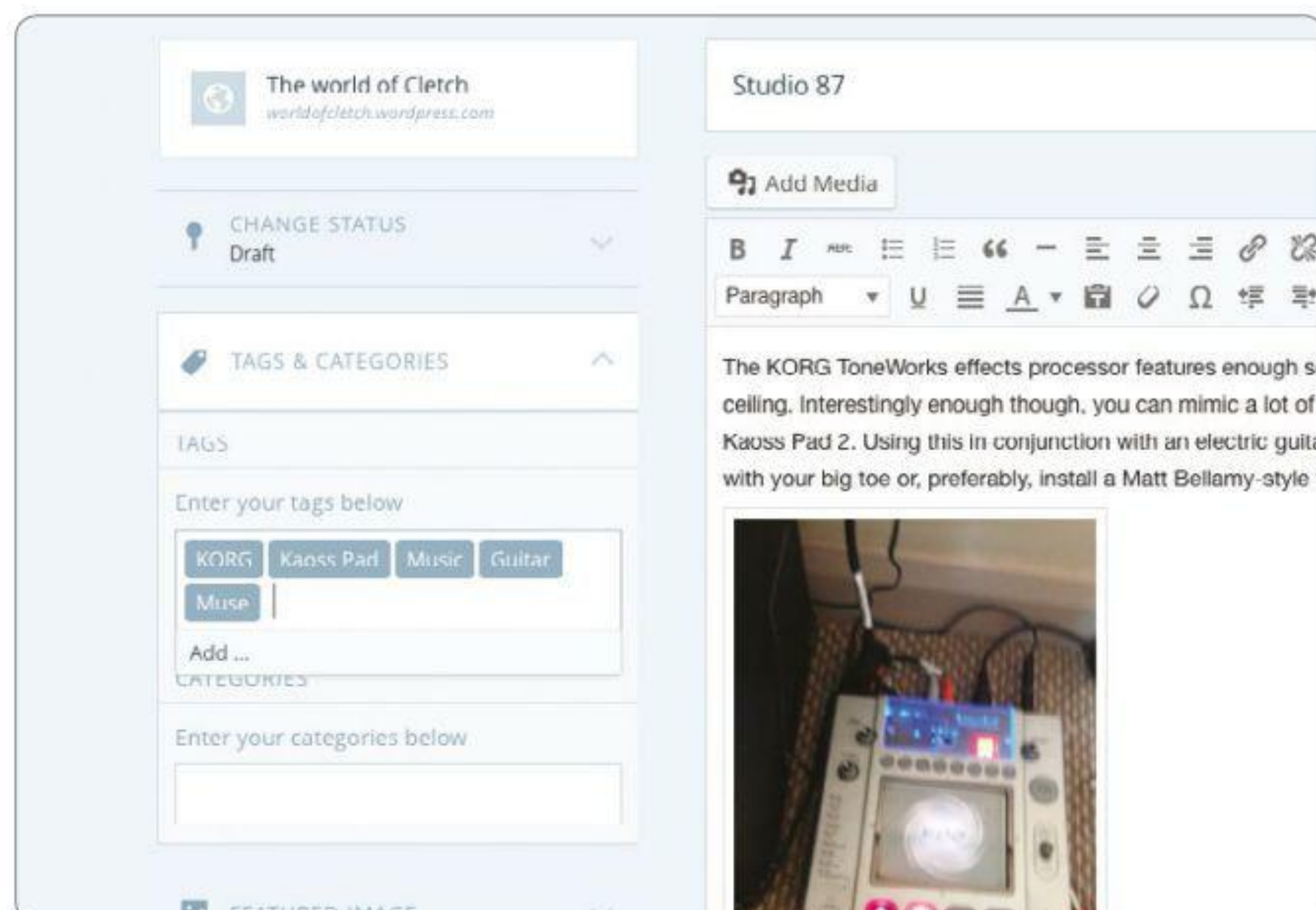
## 19 Add a YouTube video

Head to YouTube ([www.youtube.com](http://www.youtube.com)) and search for a video. Underneath the video is a Share button, click to reveal the Embed button. Copy the code, head back to WordPress, switch to the HTML view and paste the code into the post.



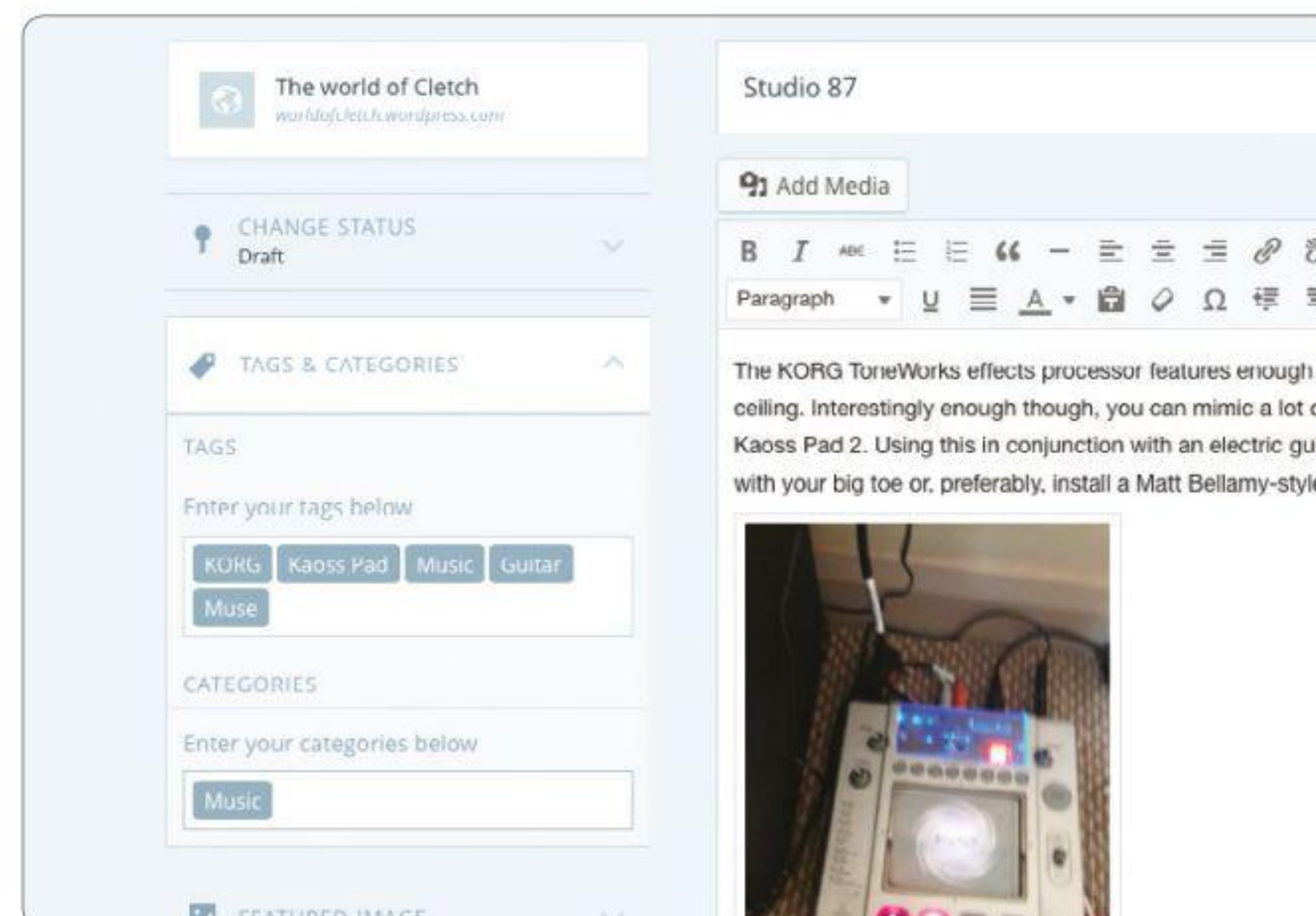
## 20 Read more

A post will display all the text and images on the front page of a post. To reduce the amount of post text on the front page, the More tag can be inserted. Place the cursor in the desired position and press the Insert More tag button.



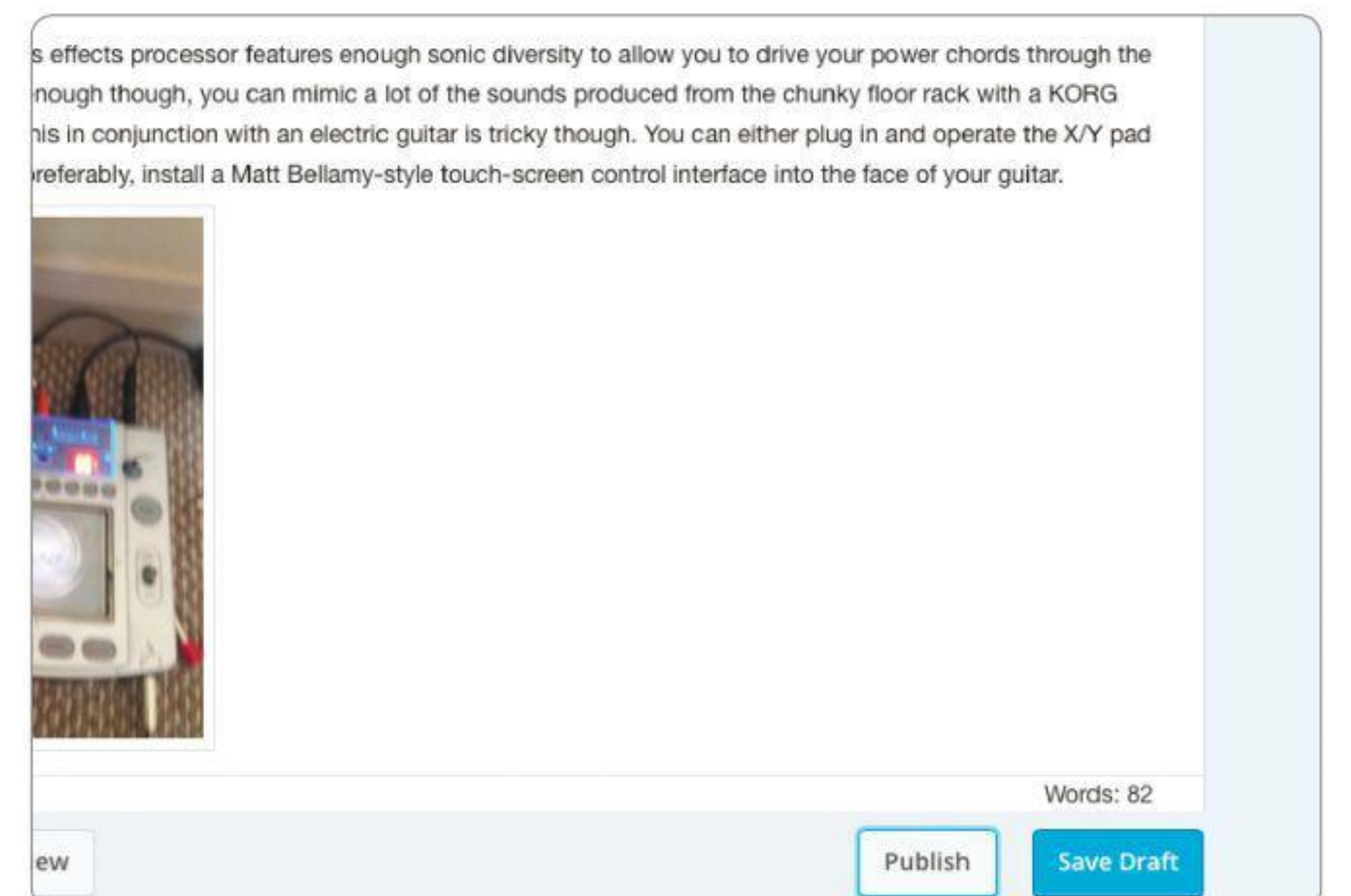
## 21 Tags

Adding tags helps identify the content of a post and helps visitors find a specific post. To add a tag simply enter the descriptive text in the Post Tags text box and press Add. Repeat to add more tags. To remove a tag click 'x' next to the tag.



## 22 Categories

Categories help define where a post can be found. Create a new category by clicking Add New Category, adding the title and pressing Add. By default all new categories are selected. Choose the relevant category or categories for the post.



## 23 Publish

Finally, the time has come to publish the post. Check the post via the Preview button, make any adjustments and hit Publish. The post will now appear on the blog front page. Head back to Posts>Add New and start populating your blog.

## 8 security tips for WordPress

Learn how to prevent, deter and recover from attacks on your WordPress website with these must-know tips



### 1 Added security to user accounts

A great deal of vulnerability comes from the user accounts that intentionally give access to your site, particularly administrator and editor roles. If a hacker gains access to one of these accounts, of any user on the site not just the main admin's one, then they can make changes at will on the website.

Always make sure accounts only have the access they need. For example, if a user is only going to be writing articles, consider giving them only contributor or editor access, never administration. Keep in mind the level of ability of your users, ensuring that anyone with admin or editor access is fully trained to use all the account's features to avoid accidents.

You can add features to allow temporary access to a certain role level, ie if you have a contractor working on the site and they need temporary admin access, you could give it to them with a set time to expire so that you don't need to remember to revoke their access later down the line.

If a certain role level does not need all of the default permissions, you can install a roles and permissions plugin to turn off certain permissions that will never be used. You can also create other roles with only specific access. Restrict users to only the permissions they need to avoid accidental or intentional misuse of a feature.

To help prevent attacks coming from user logins, put a limit on the number of times an account can make a failed login attempt before that username is locked out for a period of time. This mostly

catches out bots who are guessing passwords, but remember to warn your users that they should not attempt to log in more than the number of times you set in a row. If they can't remember their password, and if they forget their password, they should reset it instead of trying to guess!

It's also good practice to remind users to use secure passwords (over eight digits, with upper, lowercase, numbers etc), and to change them every so often. Remind them never to write their passwords down, and log out when they are

finished with their session to avoid unauthorised access to their accounts.

Two-factor authentication is an extra level of security that can be added to logins. They require users to use their authenticators when logging in to increase the number of credentials needed from just the standard. Users will need an extra code or pin to log in, usually randomly generated by an app or sent to a phone by text. It can feel like an extra barrier to login for users, but it's also an extra barrier for hackers.

“If a certain role level does not need all of the default permissions, you can install a roles and permissions plugin”





## 2 Change old defaults

New WordPress installs make you choose a custom username for your admin account, but if you installed your site a while ago, your admin account may have the default name of 'admin' – this makes it easier for hackers to guess your login credentials as half the work is already done for them. Change the default admin username to something else to improve security. You can do this manually via the database in the

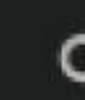
wp\_users table, or you can create a new admin profile and delete the old one via the Admin panel (be sure to attribute all the old account posts to the new one).

You can also change the default database prefix to something other than wp\_ to add a further layer of obscurity to your default setups. The easiest way to do this on an existing install is via a plugin, but backup your databases first.

| Table                                          | Action                                    |
|------------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> wp_commentmeta        | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_comments           | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_itsec_lockouts     | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_itsec_log          | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_itsec_temp         | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_links              | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_options            | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_postmeta           | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_posts              | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_termmeta           | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_terms              | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_term_relationships | Browse Structure Search Insert Empty Drop |
| <input type="checkbox"/> wp_term_taxonomy      | Browse Structure Search Insert Empty Drop |



Search WordPress.org



Showcase Themes Plugins Mobile Support Get Involved About Blog Hosting

### Download WordPress

Stable Download

Requirements

Beta Releases

Nightly Builds

Download Counter

Release Archive

Source Code

The latest stable release of WordPress (Version 4.9.4) is available in two formats from the links to your right. If you have no idea what to do with this download, we recommend signing up with one of our [web hosting partners](#) that offers a one-click install of WordPress or [getting a free account on WordPress.com](#).

#### What's Next?

With our famous 5-minute installation, setting up WordPress for the first time is simple. We've created a [handy guide](#) to see you through the installation process. If you're upgrading your existing installation, we've got a [guide for that](#), too. And should you run into any trouble along the way, our [support forums](#) are a great resource, where seasoned WordPress experts volunteer their time to help you get the most out of your blog.

#### Looking for a Mobile App?

You can find the right app for your mobile device on our [mobile apps](#) page or use the button below to find the app in the app store on your device.

Get a Mobile App

Download WordPress 4.9.4

.zip — 8.9 MB

Download .tar.gz — 8.2 MB

#### Release Notification

We've got a handy mailing list that we send a friendly message to whenever there's a new stable release for you to enjoy.

Join

## 3 Keep WordPress updated

WordPress is always updating and improving its built-in security, so make sure that your version is the most up to date to stay ahead of old vulnerabilities and exploits. Most WordPress installations update automatically, but if yours doesn't, keep an eye on your Admin panel or Inbox to be notified of when new updates are ready to install. Hackers are on the lookout for sites that haven't been updated, and only 22% of WordPress sites are running the latest version. Since WordPress runs almost 30% of all websites on the web, that's a lot of outdated websites! (<http://bit.ly/2G6b1JF>)

If you're running a staging site, you can test all updates for compatibility with your current theme and plugins before pushing live. This is good practice to avoid any automatic updates accidentally conflicting with existing installations. It gives you a chance to catch any problems before going into production. Don't forget to update your Plugins and Themes too. It's not just old core WordPress vulnerabilities that can give hackers a way in; anything you install on your WordPress website needs to be secure as well. The next tip will tell you more on choosing trustworthy plugins.

“Most WordPress installations update automatically, but if yours doesn't, keep an eye on your Admin panel”

## 4 Install trusted plugins and house clean regularly

There's a temptation to install as many plugins as you have problems to solve, but too many plugins can cause bloat and one unreliable plugin can cause a security risk. Always check that plugins are trustworthy before installing. Download through the official WordPress interface or website, and always check the star rating and reviews for negative feedback that may indicate a security flaw.

Plugins are created by developers with all different levels of ability. Even though plugins are vetted before being added to the WordPress site, you should always do your own research to make sure the code you are installing is solid.

The WordPress website will tell you how old a plugin is, when it was last updated, and most importantly, if it's compatible with your version of WordPress. A plugin that has not been updated

in a while is not necessarily a bad one, it may just mean it hasn't needed an update in that time. Check for recent reviews to confirm the plugin is still viable, and that it's still compatible with your version. An old plugin with recent low star reviews and an unknown compatibility is worth avoiding.

Regularly delete unused themes and plugins, as even a deactivated plugin can be a security risk if a vulnerability is found and exploited. Keep your plugin directory clean. You should only have plugins installed that you are currently using. Check older plugins when you update to see if they're still compatible.

Review your plugins periodically to make sure you still have the best one for the job. There could be a new plugin that combines the features of a few that you already have and might be better supported, more secure and easier to maintain.



## 5 Managed hosting

It's not just the security of your own site you need to think about. If you host your sites on shared servers, you run the risk of cross-server contamination, where hackers gain access through a different site and are able to damage other sites sharing the same space. Consider managed hosting or Virtual Private Server (VPS) hosting to eliminate this threat, where your site is hosted separately.

Cost is an obvious implication, but for sites with high loads and traffic, dedicated servers can improve performance as well as security. Different hosts have different solutions; compare a few to assess which best suits your needs.



## 6 Mask, lock and hide

Hackers have less leverage if they don't know where to start. Hide your WordPress version number from your code so only admins know which version of WordPress you're running. That way, hackers don't know which vulnerabilities are present to exploit.

Move your login page from /wp-login to something that's not default. This makes a huge stumbling block for DOS and brute force attack bots that trawl sites looking for login forms to target. It also adds a more aesthetic value, in that you can change the URL to something more memorable for your users.

Deny external access to wp-config.php and .htaccess using the following code in your .htaccess file:

```
<Files wp-config.php>
order allow,deny
deny from all
</Files>
<Files .htaccess>
order allow,deny
deny from all
</Files>
```

You can also disable file editing from the Admin panel if you know that your themes are only going to be edited via file uploads on an FTP. This prevents anyone with access to the Admin panel from directly editing files accidentally or as a hacker with malicious intent. Insert the following into your wp-config.php file:

```
1
2 # BEGIN WordPress
3 <IfModule mod_rewrite>
4 RewriteEngine On
5 RewriteBase /wordpress/
6 RewriteRule ^index\.php$ - [F]
7 RewriteCond %{REQUEST_FILENAME} !-f
8 RewriteCond %{REQUEST_FILENAME} !-d
9 RewriteRule . /wordpress/index.php [L]
10 </IfModule>
11
12 # END WordPress
```

“If you host your sites on shared servers, you run the risk of cross-server contamination, where hackers gain access”

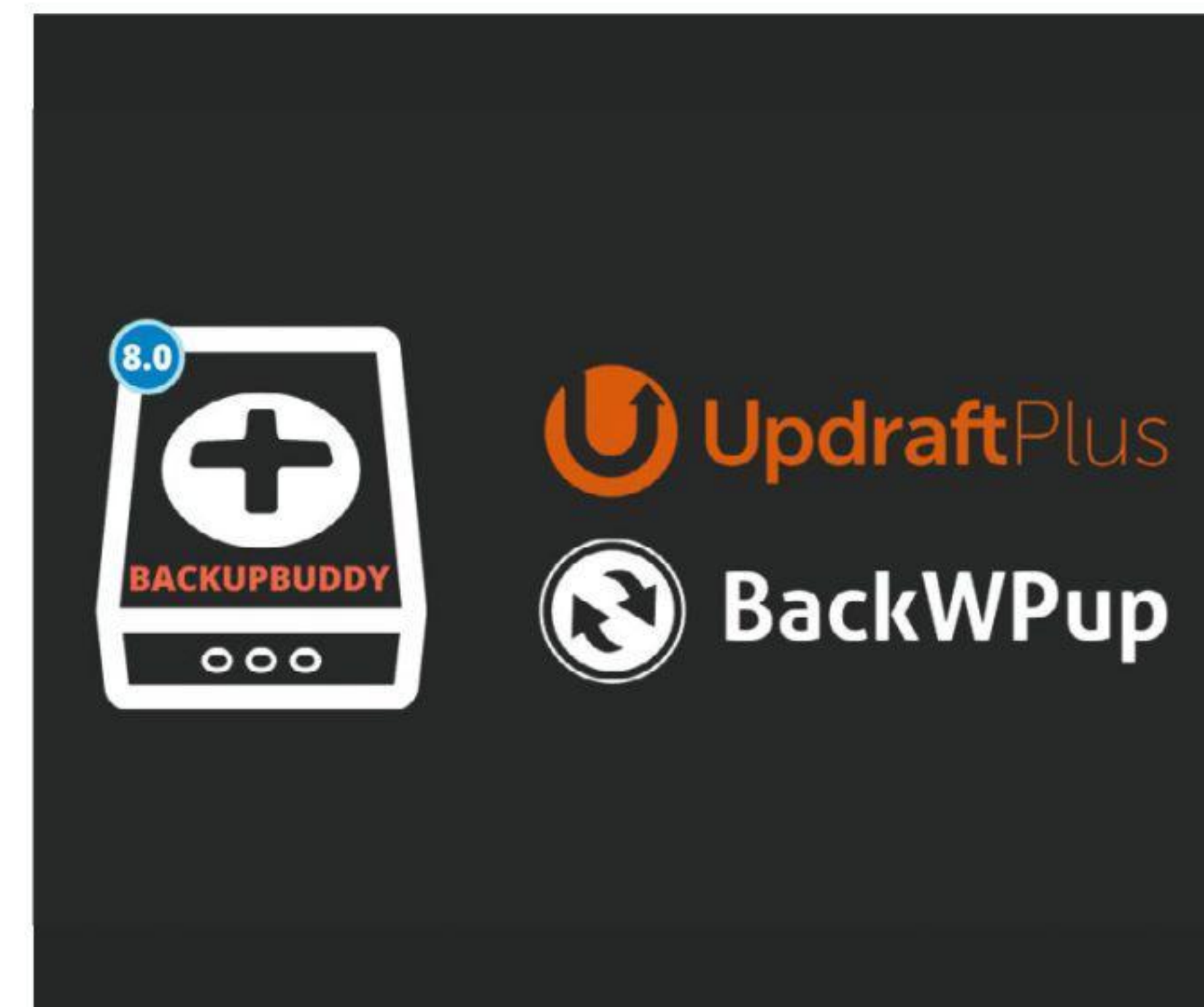
## 7 Run backups frequently

Make sure that your site is backed up in the event that your site is hacked and you need to roll back to an earlier clean version. How often you should run backups depends on how often your site is updated.

It's integral to back up in a place where your site isn't hosted to avoid any malicious activity on your WordPress hosting from infecting your backups too. Backups can be stored on your own computer or a cloud-based service like Google Drive, Dropbox or Amazon S3. Backing up in a location that is not your current server also helps if you have an unresolvable plugin or theme conflict and can't access your site,

or if there's a catastrophic server malfunction and you lose all your work.

Dedicated backup plugins exist to help you keep on track, most with options for scheduled or manual backups. Free and premium versions give you various options, BackupBuddy being the most popular paid service as they have their own third-party storage for your files, plus the ability to restore from a backup directly. Compare other plugins like UpdraftPlus and BackWPup for their free and premium versions to see which has the features you most value.



## 8 Install security and anti-spam plugins

Many security features can be added with a comprehensive security plugin, such as iThemes Security or Sucuri, both of which both have free and premium versions. Security plugins come with a suite of tools to lock down vulnerabilities on your site such as those already mentioned in this article; from masking your version number, to installing two-factor authentication for logins, the feature lists are often extensive.

These types of plugins can be invaluable in making your WordPress site more secure, and most security plugins are easy to use with single-click installation for the most important features, and optional installation for the more advanced or complex features. This makes them perfect for WordPress beginners, as there's no coding needed to get a well-protected site in minutes. More advanced users will have access

to features that can further secure your site, such as closing down unneeded access to protocols such as XML-RPC, and updating the WordPress salts used in encoding.

Such plugins will help to protect your site against brute force and DOS attacks, which can take your sites offline if there is too much load on the server. They can also firm up the login process with additional levels of security to prevent your user accounts being used as a method of attack. Malware scanning and activity logs keep records of any suspicious behaviour or corrupted files for review, warning you of any attacks in progress and giving you an idea of where your site's vulnerabilities lie so you can resolve them.

Some security plugins also come with backup options, for that all-inclusive service. Having all of your security needs organised by

one plugin means that the features are easy to organise, with less risk of conflict between similar plugins. Make sure you do your research, however, as this plugin is going to be the thing standing in the way of your site and anyone wanting to cause it harm. You will need to pick one that will do the job admirably.

Additionally, an anti-spam plugin such as Akismet will keep spammers from clogging up your site with unrelated comments. If your security plugin isn't already doing so, it can assist the security plugin by adding an extra layer of security to your community interaction by using validation tools like CAPTCHA and other anti-bot devices to make sure only real people are commenting. An anti-spam plugin helps keeps your site clean, as well as your database behind the scenes. Screening for valuable comments has the added bonus of giving your content more weight by only showing proper engagement from readers.

Each plugin comes with its own different tools, so compare the options for something that suits your needs. Consider premium versions of plugins for additional features since this is an integral part of your site and generally speaking, paid plugins will give you the most comprehensive service. Ideally you want a suite that covers at least the basics of security, such as the other tips named in this article.

“Security plugins come with a suite of tools to lock down vulnerabilities”



# Understanding SEO

## 094 SEO today

An essential collection of the latest tips, techniques and tools to send you on the path to success

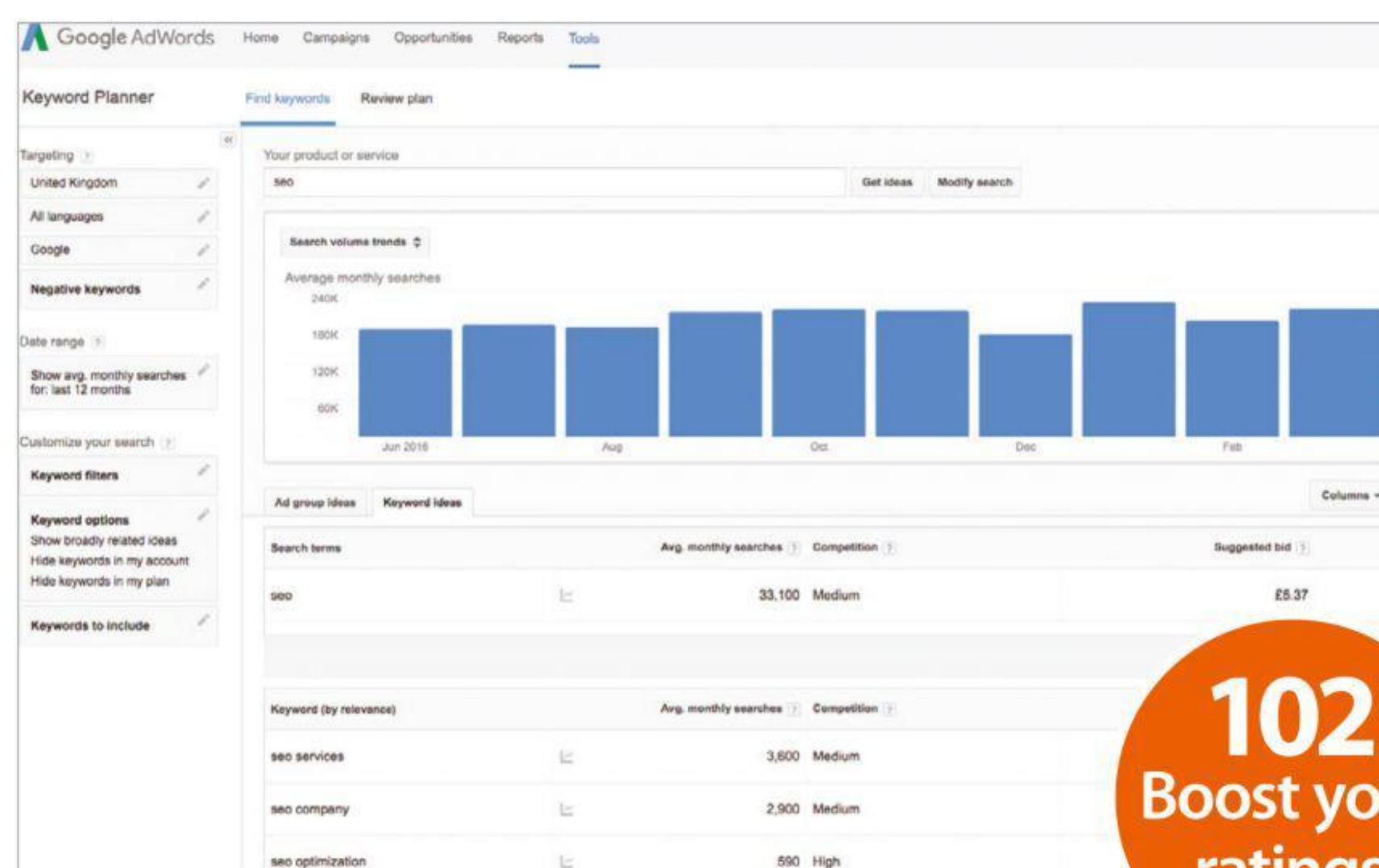
## 102 How to strip back SEO to boost your rankings

Better understand what search engines are looking for

## 106 Use Google Analytics to understand your audience

Increase your visitors with this powerful tool

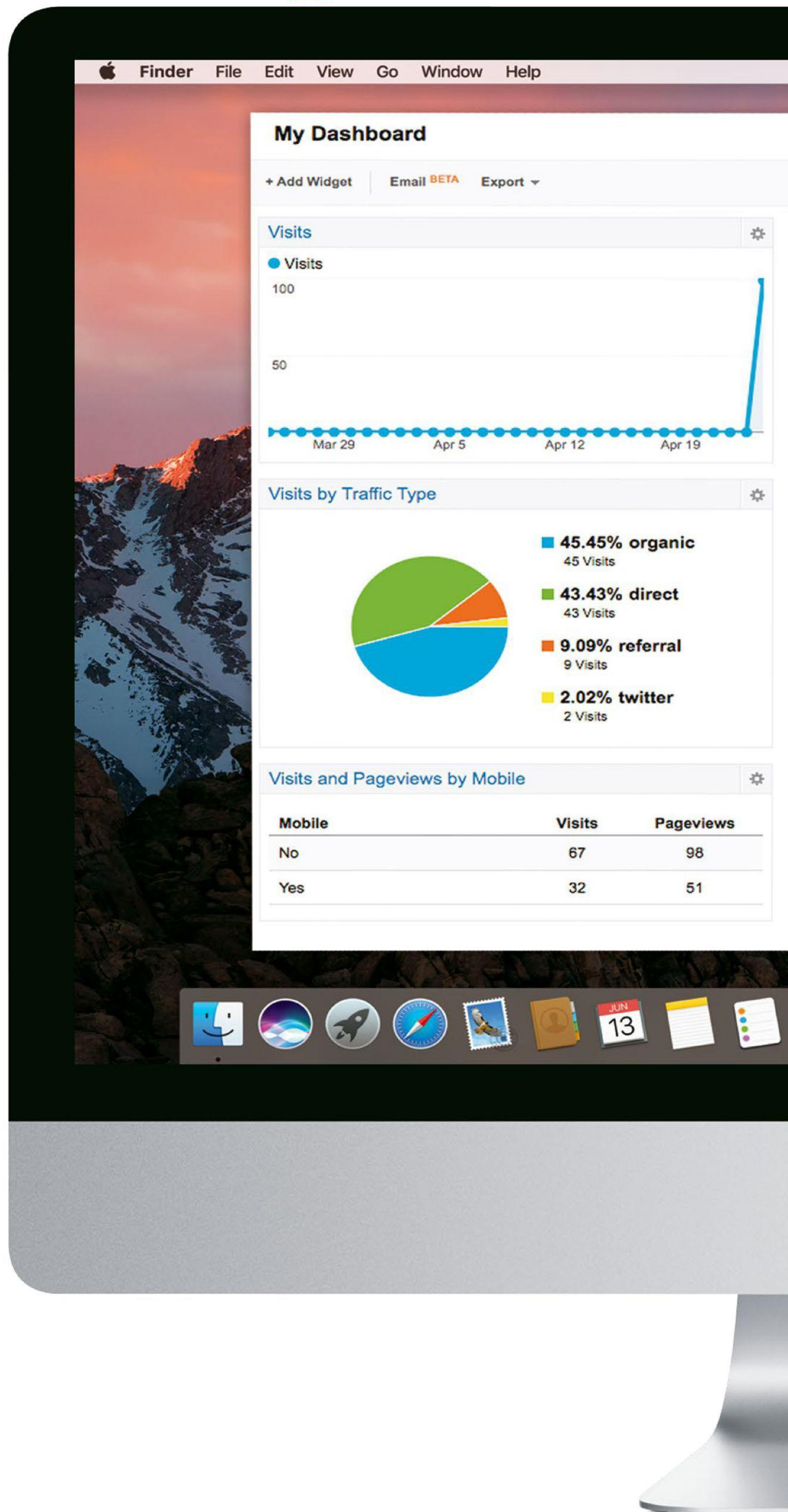
94  
SEO  
today



102  
Boost your  
ratings

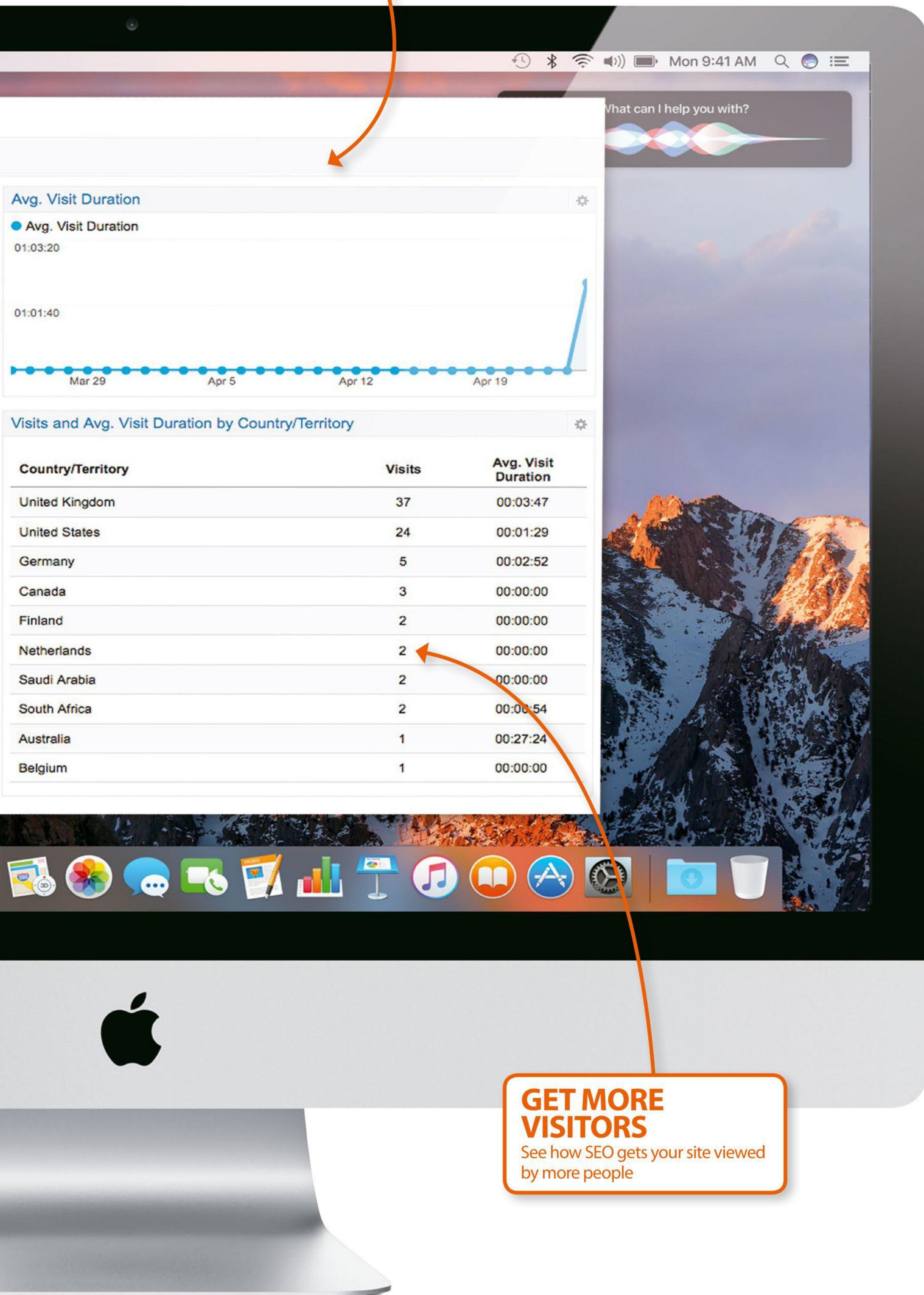
## WHAT YOU'LL LEARN

It's the smallest section in our book, but it may well be the most important. Understanding SEO will help you get people visiting your site – hopefully over and over again. After all, your website could look amazing and function perfectly, but if no one knows that it exists, then there's no point in it being there. You'll learn key things to help improve your SEO (Search Engine Optimisation), how to make the most of Google Analytics, and how to speed up your website's performance for better user experience.



## GOOGLE ANALYTICS

Make the most of this powerful tool with our guide



# SEO TODAY

An essential collection of the latest tips, techniques and tools to send you on the path to search success

**W**ith the ever-changing nature of the Google algorithm and the need to keep up to date and informed with the latest SEO techniques, the following tips, techniques and tools will help you have a better understanding of what the search engines are looking for, and how you can ultimately improve your rankings.

This essential collection will align your focus on what actions are needed to achieve those gains, effectively future proofing your website without being penalised.

Highlights include how to optimise for both your audience and the search engine crawlers; getting to grips with technical SEO; website

speed; mobile optimisation; and making it easier for the search engine crawlers to understand who you are and what you do.

We'll look at the power of on-page SEO, plus the use of primary and secondary keywords and how utilising them with content relevancy can help you grow your audience. Truly understanding who your key audience is should be at the forefront of your decision making. We'll help dig that bit deeper for you.

Other opportunities include schema data, featured snippets, voice search, visual content, social signals and links. All play a part in increasing your search success. Read on and stay one step ahead.

# 01

## Set your SEO foundations

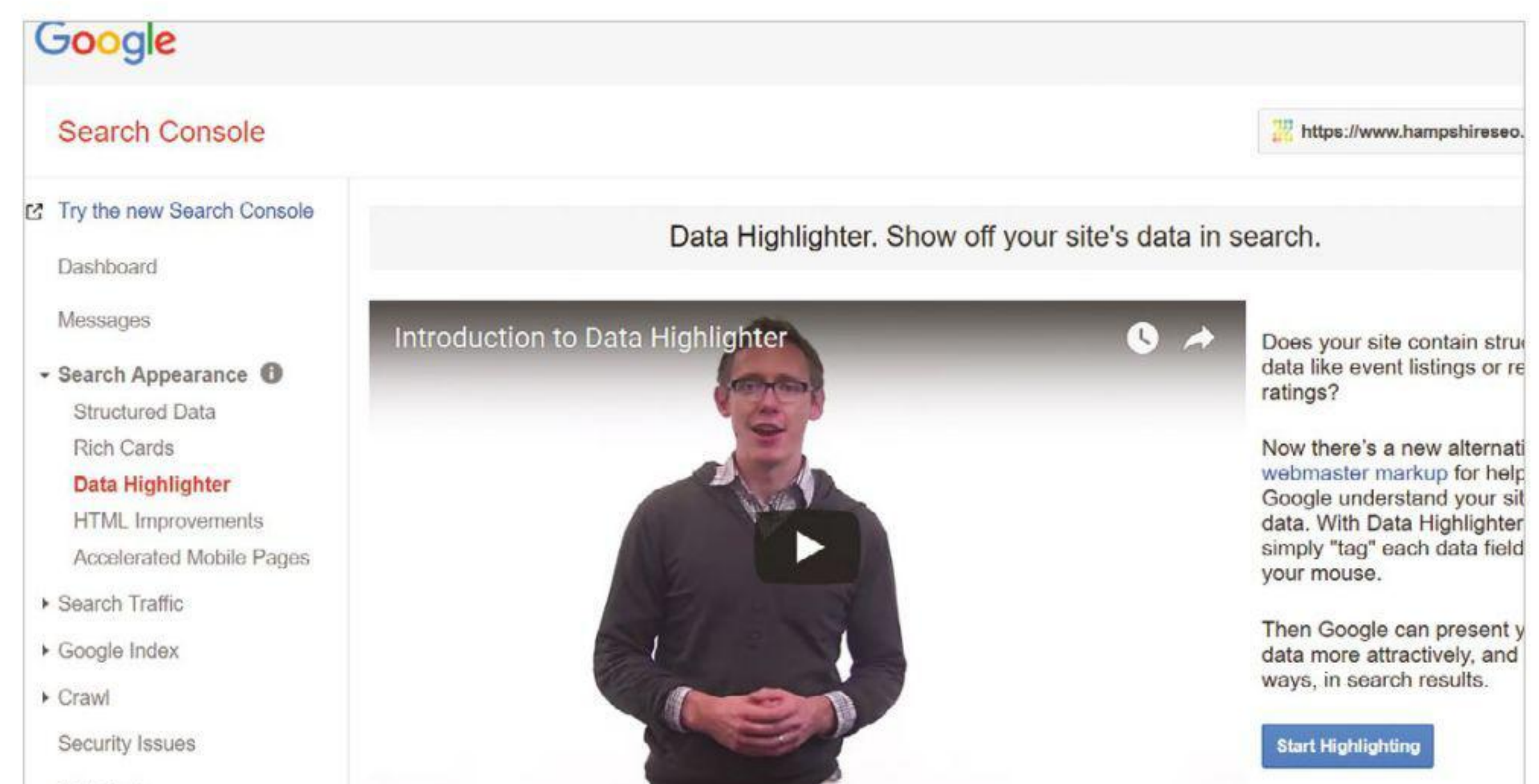
For your website to rank successfully, On-Page SEO is an absolute must. Focus on optimising your metas such as your titles, descriptions, headers and image alts with your targeted keywords and phrases. Combine this with a good URL structure and content relevance to the targeted search term or phrase.

It's also the perfect opportunity to include location, product and service terms within these metas. This is a compelling reason to choose you over the competition (the meta title and description being key to encourage the click).

# 02

## Stand out more with Schema

Future proof your website SEO and stand out more with Schema data markup. Schema markup is used to tag entities in your pages and content; this includes products you sell and services you offer. It makes it easier for search engines to understand who you are and what you do, but more than that it



enhances your potential visibility and search engine real-estate. Add this to your HTML, via the Data Highlighter in Search Console and improve the way your pages are represented in SERPs.

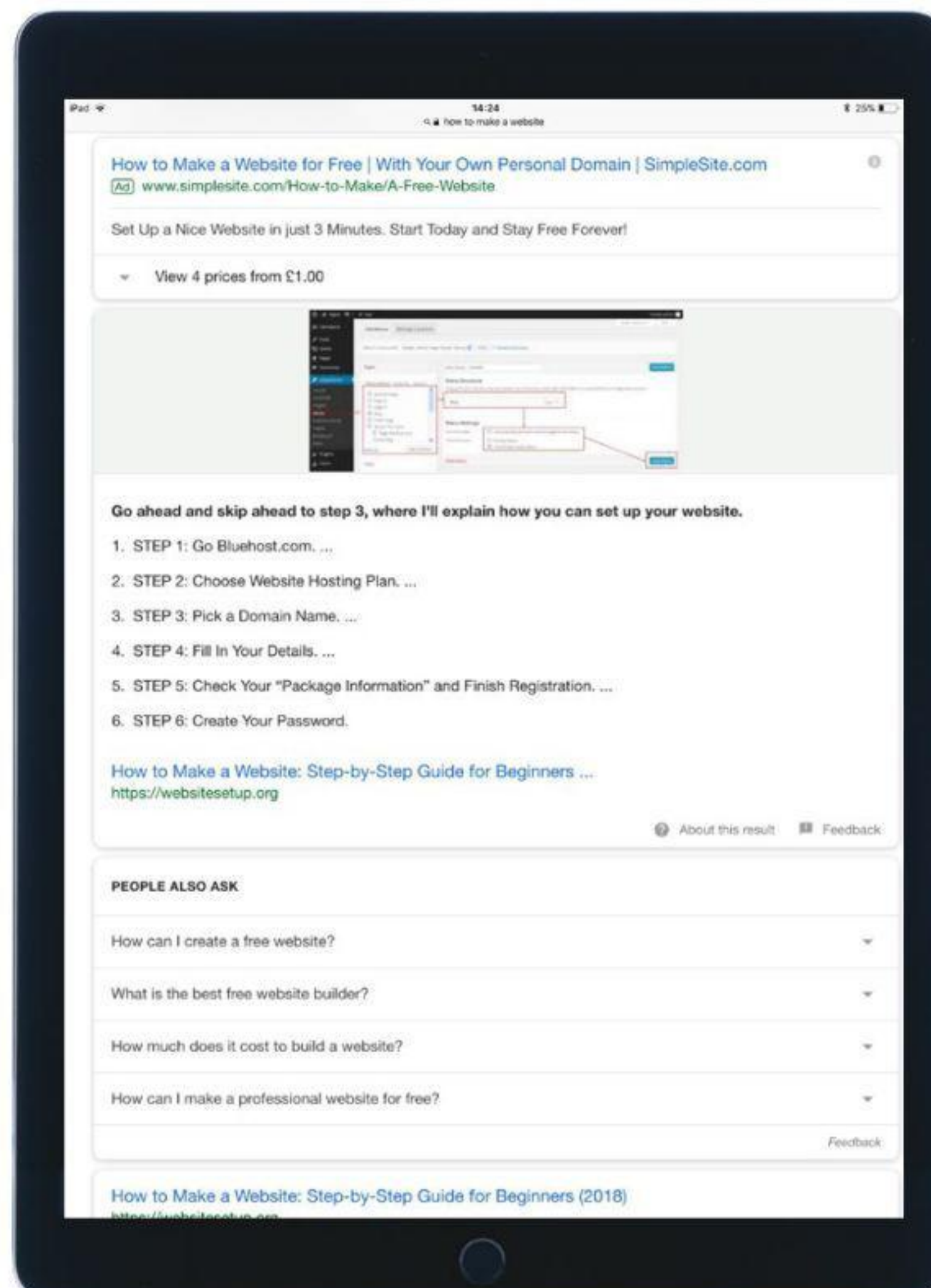
You can find out much, much more at [www.google.com/webmasters/tools/home](http://www.google.com/webmasters/tools/home).

# 03

## Help the search engine spiders

Search engines will not rank your site unless they can find it, so it's therefore extremely important to make sure search engines are able to discover and crawl your website's content quickly and easily. Without it, nothing else really matters – we want search engine spiders to successfully crawl and access our URLs, with the intention to crawl and parse our website content.

Keeping a Logical Site Structure, resolving 404 errors and utilising 'rel=next' and 'rel=prev', will help with this greatly. Make it easy for the search engines to add your pages into their web index.



# 04

## Leverage rich answers

Rich answers can provide your website with a new chance of page one visibility. A rich answer is a snippet that contains a brief answer to a search query; it appears above other organic search results and thus enjoys more exposure.

In addition to the featured snippet, the rich answer box will provide a direct link to your page from where the answer came.

Identify questions you might answer on your website (a good example is FAQs). Make sure that you create answers that are informative and engaging and then amplify its reach to increase your chances of appearing.

# 05

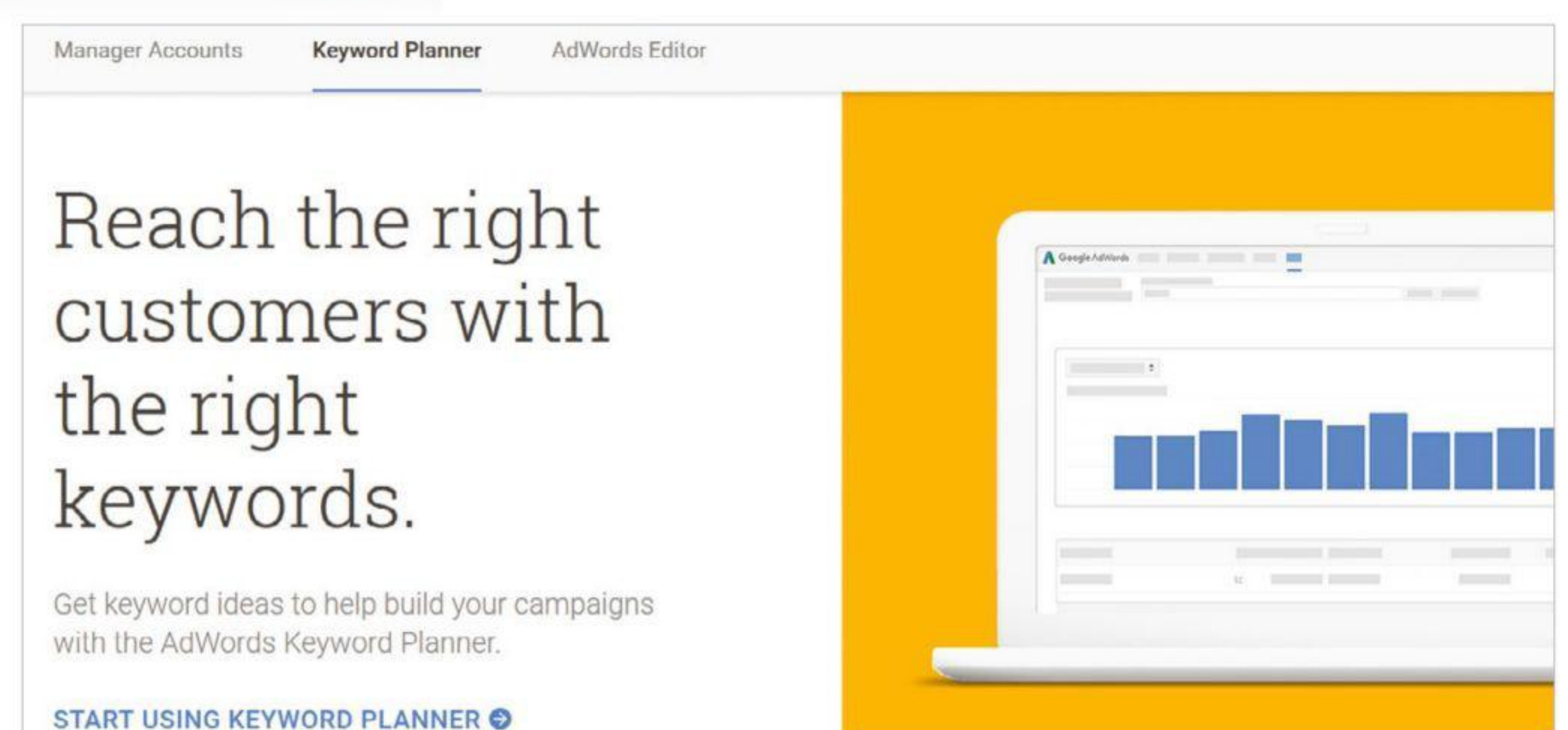
## Set primary and secondary keywords

Ranking for the right keywords can make or break your website. By researching your market's keyword demand you can not only learn which terms and phrases to target with SEO, but also learn more about your customers as a whole. Select a primary keyword and a set of related secondary keywords that share your searcher's intent (understand what their motivation is). The intent behind these keyword terms and phrases should be the same, so the same content can ultimately serve it. Employ these primary, secondary and related keywords in the page's content, metas and links.

# 06

## Have empathy for your audience

One of the most important elements in building an SEO marketing strategy is empathy for your audience. Once you grasp what your target market is looking for, you can effectively reach out and keep those users. Therefore the main focus of your content should be aimed at the audience group that contributes to the success of your business.



Develop your content and focus, by outlining what your target customer is thinking during their buyer journey. This includes their Awareness stage (inspiration-pain points), Consideration stage (research-comparison) and Decision (purchase-advocacy).

Read more at: <http://bit.ly/2D7oRtl>.

# Understanding SEO



## 07

### Video engagement and expectancy

Don't get left behind – our online interactions have evolved to become far more visual. There is a general public desire to engage with more images and videos, which has led to a surge in visual online interactions. Your audience will expect you to offer video content, so show them your personality as

you connect with information that meets their needs. This will ultimately have a positive impact on reach, engagement and conversions.

YouTube is the obvious choice, so create and optimise content specifically for this channel and you will ultimately own more Google real estate.

## 08

### Take advantage of SERP features

Increasingly, SERP features such as local packs and featured snippets are taking away searchers attention and clicks from organic listings. With the evolution of SERP features and a more personalised approach to search results, you cannot solely rely on a page 1 ranking to get you as much traffic as possible. Investigate the SERP and review what Google believes is the most relevant to your keyword search. Can you position yourself in the local pack? Can you get a featured snippet for this query? Can you add any structured data.

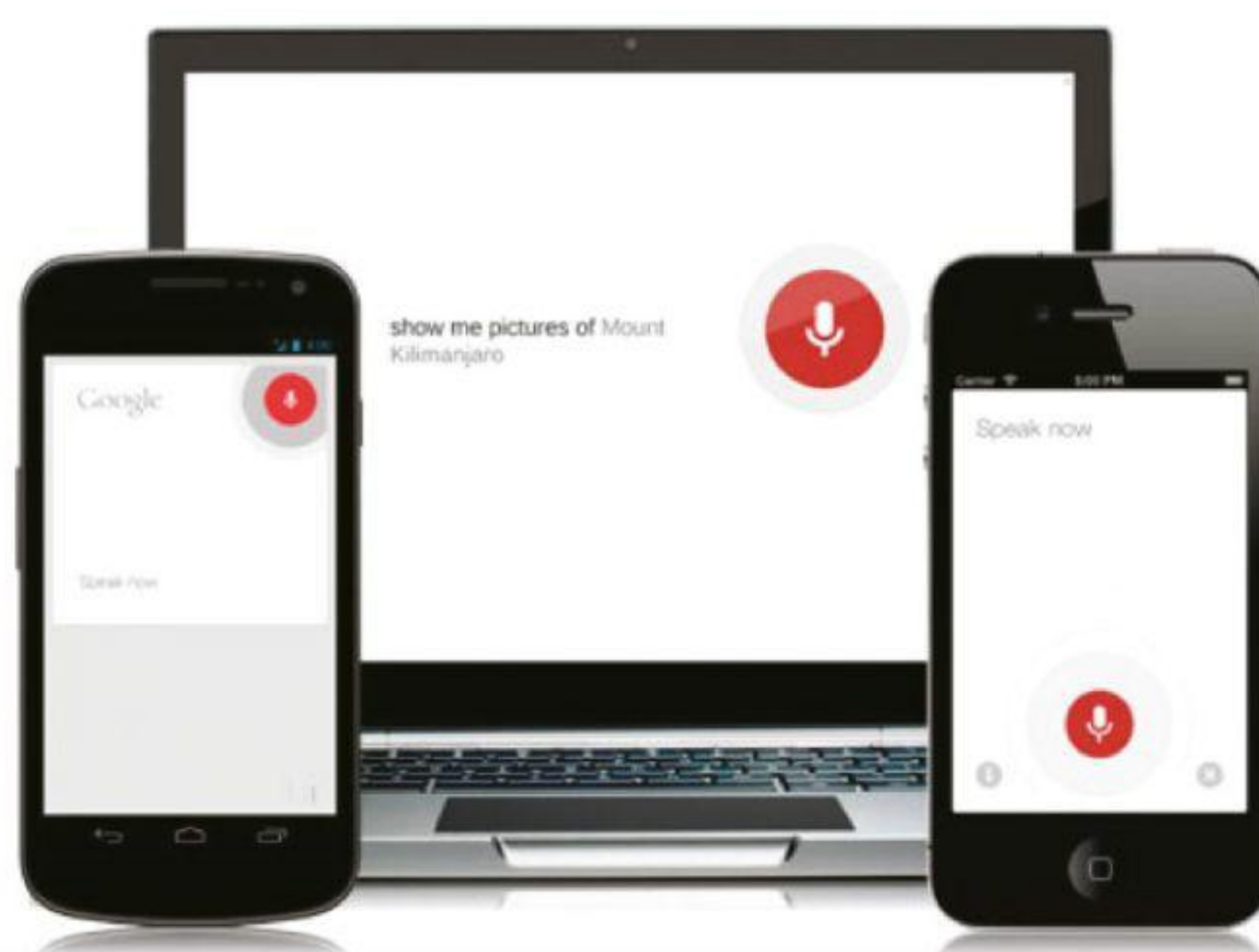
Read more at: <http://bit.ly/2GhSHx5>.

## 09

### UX metrics and personalisation

UX-related metrics have made their way into Google's ranking algorithm. For example, website speed, mobile-friendliness and the HTTPS protocol. Your website audience will also demand a more personalised experience; provide this to them with content-centred experiences and personalisation (such as chatbots and push notifications).

Improve your audience's experiences and embrace the future of voice-activated interfaces and augmented reality. Having the right mix of content and technology should be a big part of your website design and user experiences (UX) in the future.



## 10

### Voice Search optimisation

Voice Search is too good to miss, a recent Google report highlighted 55% of teens and 40% of adults use voice search daily. This is an exciting opportunity for businesses and marketers to increase conversion and its actively shaping the future of local SEO.

As it's rapidly becoming the way customers will find your business, and it recognises 'near me' searches, ensure your Google My Business listing is up to date (as this populates the results). Also ensure your website is mobile friendly and optimise for natural language queries (long-tail keywords, full sentences and questions).

"RankBrain uses AI to find phrases and terms that are similar to what a user has typed in order to better understand what the intent is, returning related results"

## 11

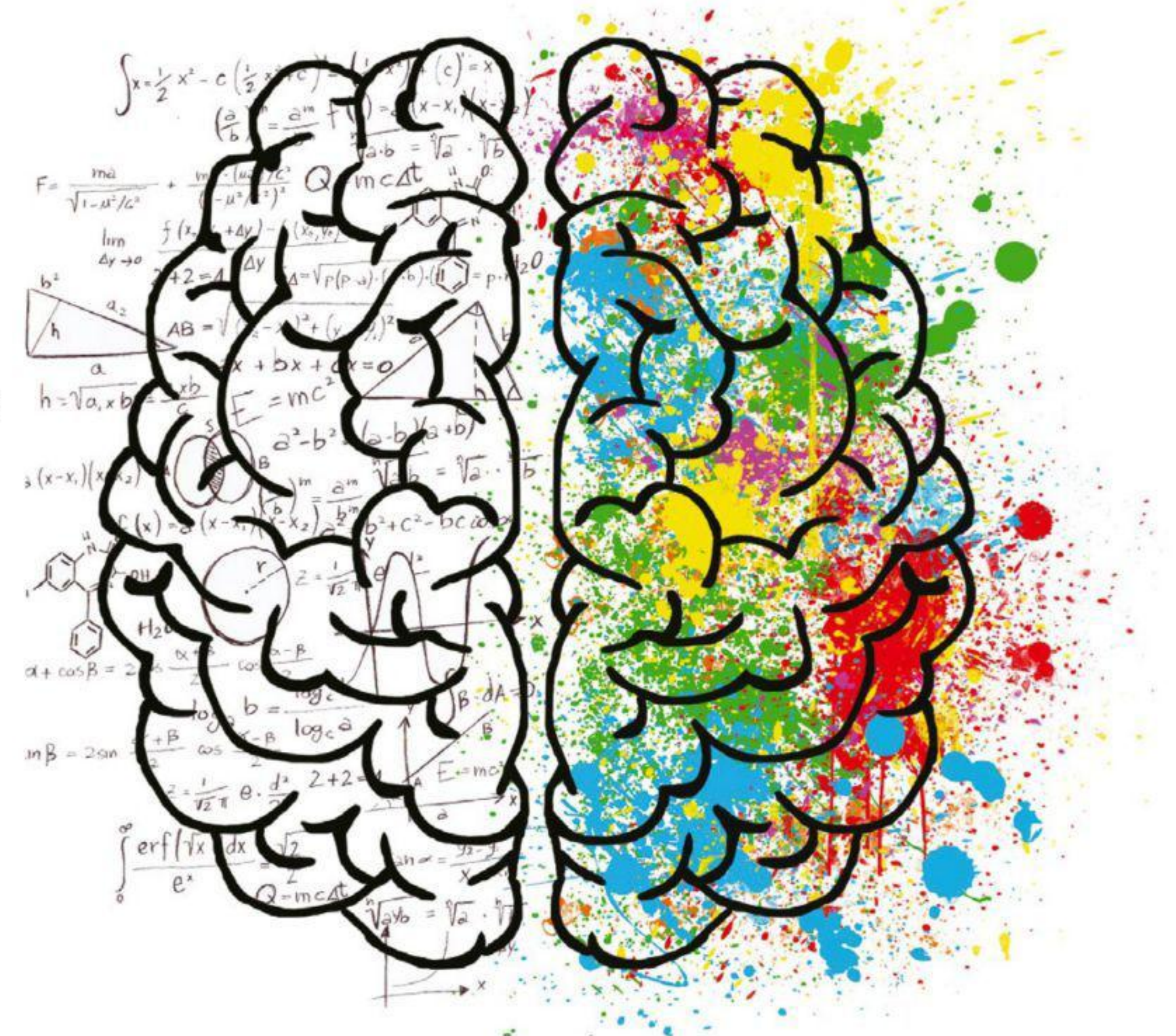
### Setting a new precedent for SEO

As Google refines its algorithm, RankBrain is becoming even more important in how a website is ranked. RankBrain uses AI to find phrases and terms that are similar to what a user has typed in order to better understand what the intent is, returning related results.

RankBrain is constantly teaching itself by paying attention to certain metrics such as bounce rates, time on page and CTR.

Make the most of these metrics by increasing your average dwell time and CTR with engaging and unique content.

Read more at: <http://bit.ly/2hWVYaA>.







## Content is still King

In today's content driven world of digital marketing, it's a marketer's goal to persuade a content saturated audience to consume their content, share it with their network, or make a purchase. Your website copy and language will steer your audience to take action, to click a button to buy, download or move onto the next step.

Content is therefore paramount, although it's going nowhere unless people can search and find it. It should be written with an understanding of factors such as SEO, latent semantic indexing and aimed at the right audience groups.

Create useful, expert-level unique content and present it in the most engaging form possible.

Credibility and relevance is key for your audience and its success in search, making amplification, link building and social sharing more likely.

When writing your content serve the searcher's goal (keyword research on terminology) and our own goals (contact/conversion/advocacy), giving them a reason compelling enough to take action by adding value and relevancy.

You also need to be aware of the pitfalls, such as Google's Panda ranking algorithm update, which sifts out pages with thin, non-authentic, low-quality content. De-duplication of content (canonicalisation) will also help, as well as preventing cannibalisation and making better use of your crawl budget.

## ESSENTIAL TOOLS

### Take the mobile test

<http://bit.ly/2rQpFRI>

Test how easily a visitor can use your page on a mobile device by using Google's mobile-friendly test. Simply enter your page URL to see how your page scores.

### Test your page speeds

<http://bit.ly/1RBjMsy>

Enter a webpage URL into Google's PageSpeed Insights tool for it to carefully analyse the content of your web page. It will then generate suggestions of how to make that page faster.

### Add Schema data

<http://bit.ly/1UjXtMX>

Use this guide to provide explicit clues about the meaning of your website pages to Google. It will help you to include structured data on your pages.

### Keyword research

<http://bit.ly/2gt3tmS>

Reach the right customers for your website with the right keywords. Get ideas to help build your campaigns with the AdWord's Keyword Planner.

### Maintain your Google-friendly website

<http://bit.ly/17WOXzv>

Get the data, tools and diagnostics needed to create and maintain Google-friendly websites with Google Search Console. Analyse clicks, get alerts on errors and test if Google understands your content.

# Understanding SEO

## 13

### Confidence with social proofing

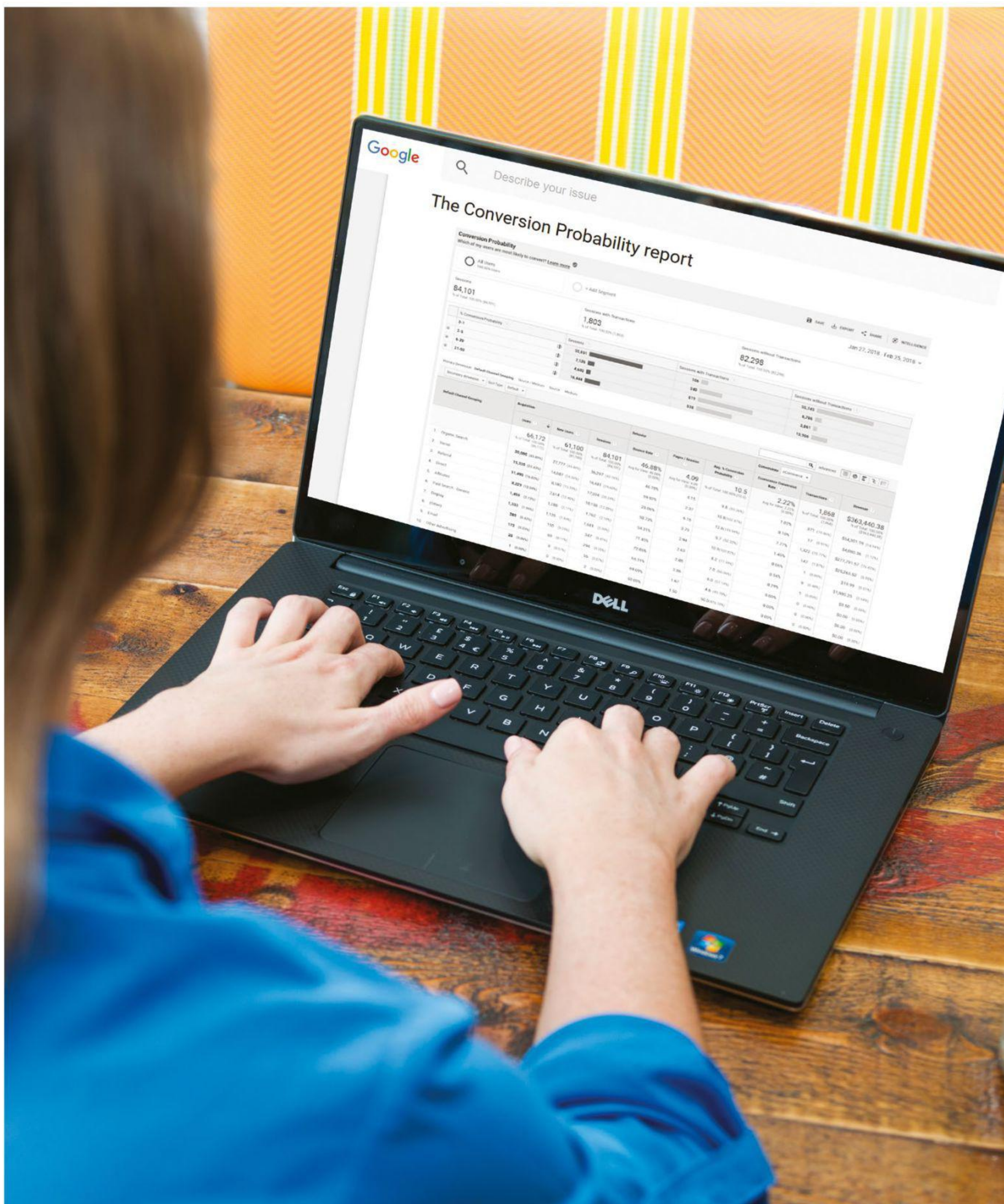
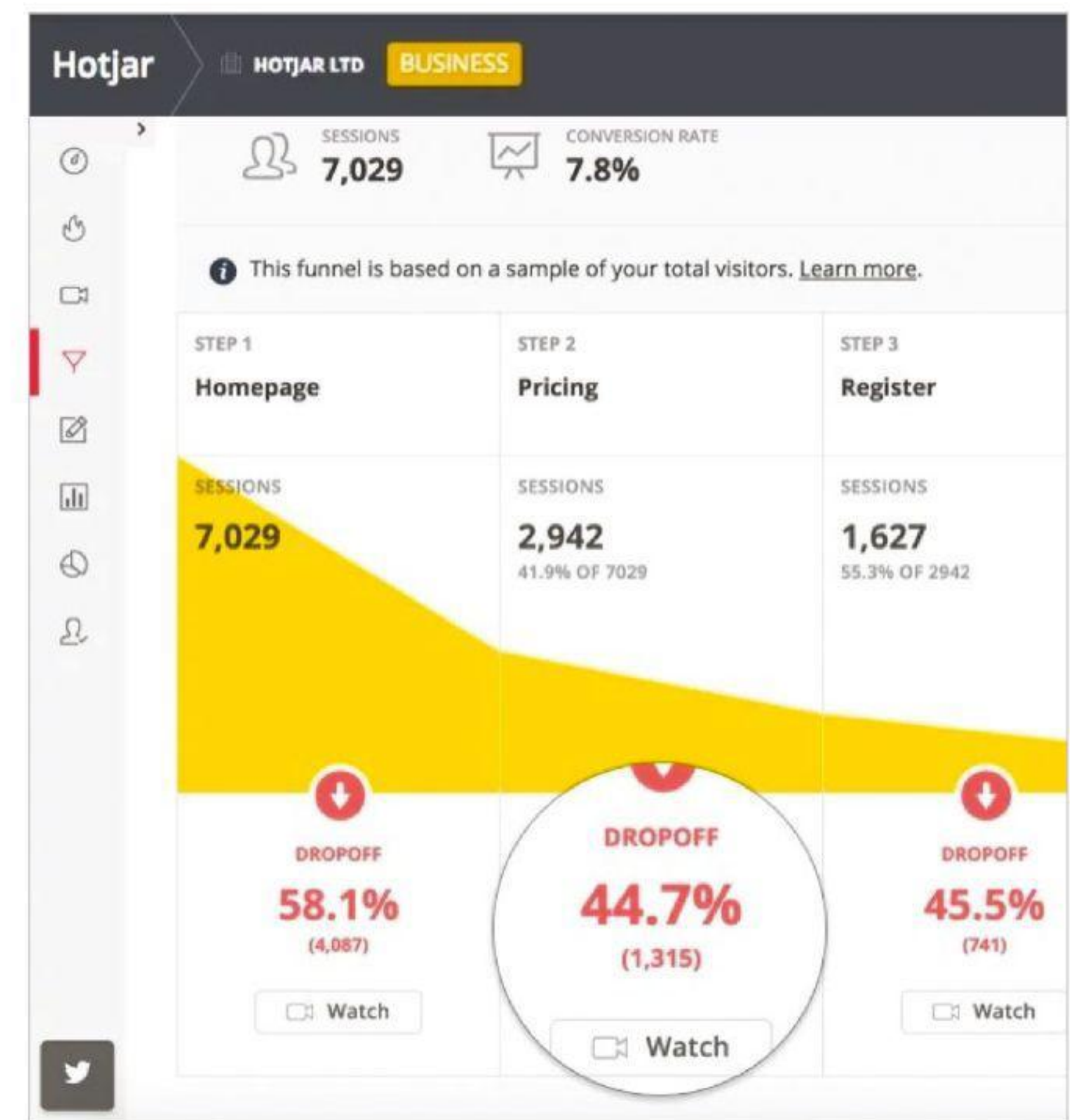
Social proofing is another trust signal that builds confidence with your website visitors. It highlights how other like-minded individuals have purchased your products or services and are happy with their decision to do so. Consumers are actively looking for social proof statements, and they are actively impacting their decision-making process. Focus on eliminating any fears and overcoming objections. Add testimonials, reviews, number of items sold, the number of customers purchased in the last hour/day/week on your site. All will have a positive impact on sales and conversions.

## 14

### Conversion rate optimisation

Convert more of existing traffic by focusing on what you already have. Analyse your user's experiences and identify any obvious barriers for conversion. Then ease the journey of your audience so they can quickly and confidently reach a converting decision.

By increasing the percentage of website visitors who take your desired action, we increase both micro and macro-conversions. Micro-conversions are your smaller conversions, such as filling out a form or signing up to an email. And macro-conversions are your primary goals, such as your users purchasing a product or service.



## 15

### New advancements in Google Analytics help you understand your user's journey better

There is more of a focus on user behaviour in standard reports, and Google will continue to improve the accuracy of user-level data. Take advantage of the default option to analyse users alongside sessions. Google has also added a new tool to help us analyse visitors individually, enabling you to measure lifetime metrics and dimensions for individual users. Providing more accurate data than before, you can see a variety of data on past (historical), present and predicted future behaviour. This helps you to deliver a better experience for your users, tailoring your marketing activities and messaging accordingly.

Audience Reporting is another new feature that enables you to connect your data more clearly, allowing you to see trends and opportunities. It uses Audience as its primary dimension and permits you to compare performance across different segments. Use these audience lists in your CRO tests.

Conversion Probability is a beta feature that uses machine learning to provide more analytic intelligence on users who are most likely to convert, which you can then use to create audiences for analysis and remarketing. Take advantage by creating re-marketing lists that target prime users that have a higher probability of conversion. Focus on reaching out to these audiences via AdWords.

Find out more at <http://bit.ly/2D0OA6F>.

# 16

## Location, location, location

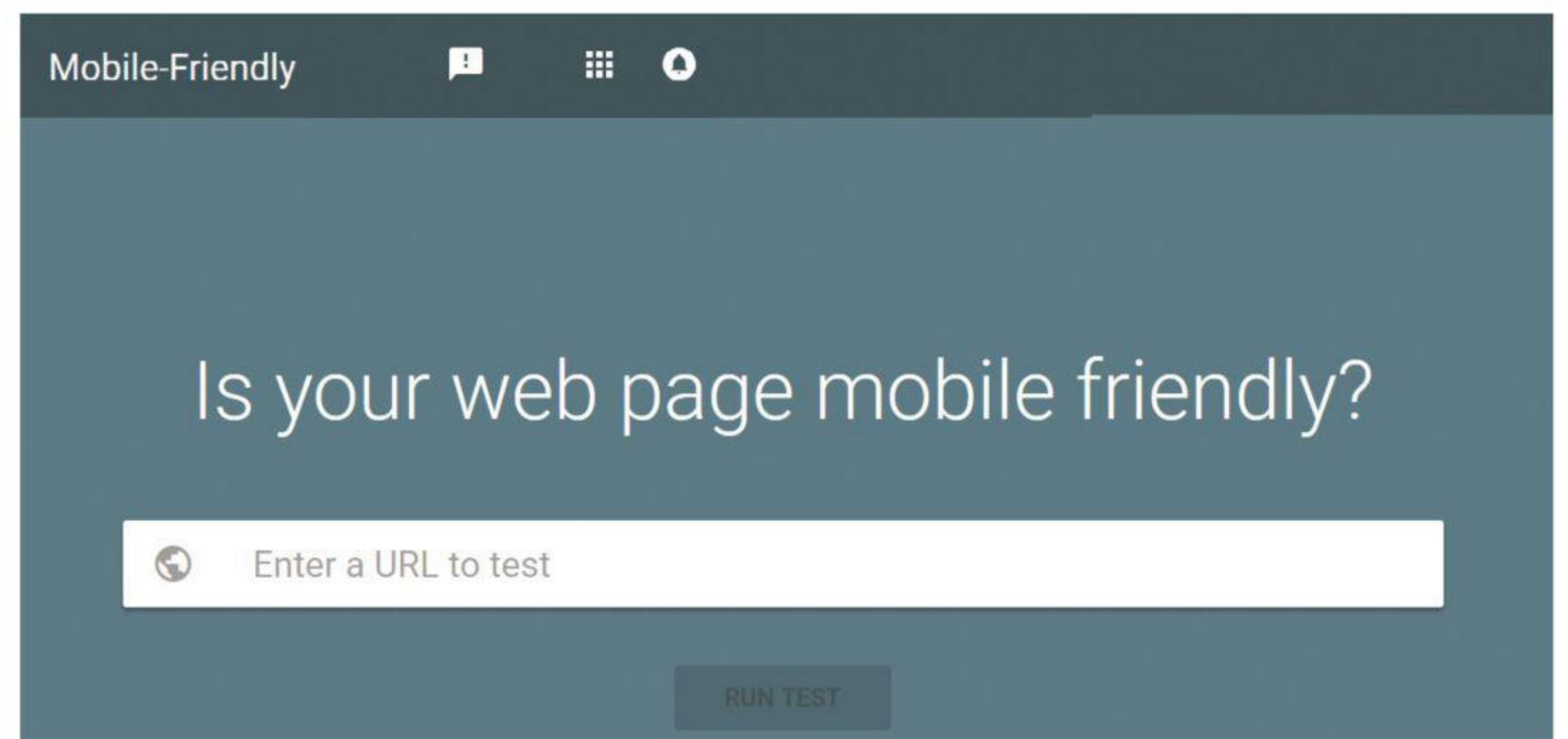
One out of every three searches on mobile is related to a location. Given the sheer dominance of mobile it's imperative to capitalise on these audiences locally. Good marketing does not attempt to reach everyone; its targeted to connect with a few specific and defined audiences – 'local' being one of them. Google My Business (previously known as Google Places – find at [www.google.co.uk/business](http://www.google.co.uk/business)) capitalises on this local buying intent and enables you to boost your visibility. Optimise your Google My Business listing and create incentives to get more positive reviews and citations across the web.

# 17

## Mobile first

You cannot ignore the importance of mobile SEO. The statistics already show that over half of Google searches come from a mobile device – and this is only going to increase. If your site pages are not optimised for mobile, they are likely to be discarded from mobile search results. With the rise of voice

search, the impending mobile-first index and mobile-friendliness being a ranking factor, you need to focus on improving the responsiveness of your pages for all devices. Your content should also be consistent across desktop and mobile, as mobile will be favoured.



# 18

## Review and analyse your competitors

Competitive analysis is a critical part of any marketing plan. Insight into what your competitors are doing well can help you capitalise on it. Add yourself to their email newsletters, social platforms and set up Google Alerts. Review the top performing websites around your targeted keywords; you can take advantage of what works and replicate it.

Understanding the competition's focus on content and keyword terminology will also help to close the gap between those terms you are not taking advantage of and ultimately increasing traffic to your own domain.

# 19

## Improve and optimise site speed

Google has officially confirmed that it uses page speed in its ranking algorithm. Not only is it a ranking signal, it's also a major UX factor. In turn this impacts your website rankings and usability.

Focus on optimising your pages to load faster (take Google's Page Speed Test, which you can find here – <http://bit.ly/18oQqhi> – to determine

what can be improved). Opportunities can include optimising images and reducing server response time. You can also consider implementing AMP (Accelerated Mobile Pages), a slightly-controversial Google initiative to help build a more user friendly mobile web.

Get an in-depth look at [www.ampproject.org](http://www.ampproject.org).

### PageSpeed Insights



Make your web pages fast on all devices.

Enter a web page URL

ANALYZE

#### Web Performance

Learn more about [web performance tools at Google](#).

#### Give Feedback

Have comments or questions about PageSpeed Insights? [Discuss on our mailing list](#).

#### About PageSpeed Insights

PageSpeed Insights analyzes the content of a web page, then generates suggestions to make that page faster. [Learn more](#).

“Don't be ignored start by optimising your landing pages, its content, metas (to include titles and more importantly meta descriptions) and by reaching out to your network”

# 20

## Improve click through rates

Striving for greater engagement and higher click-through rates will bring your website better rankings as well as indirect SEO results in the form of attracted links, shares and mentions. A focus should be on encouraging engagement – your results need to stand out from the crowd.

Don't be ignored – start by optimising your landing pages, its content, metas (to include titles and more importantly meta descriptions) and by reaching out to your network. Establish connections with influencers – anything you can do to raise interest among all the noise and encourage the click.



# Understanding SEO

## ESSENTIAL TOOLS

### Convert more of your existing traffic

<https://www.hotjar.com>

Utilise heat-mapping tools to review the reading and scanning habits of your users. By understanding how they interact with your pages you can start the conversion rate optimisation process better.

### Local map listings in the SERPs

[www.google.com/business](http://www.google.com/business)

Attract new customers with your free Google listing. Claim it and then optimise. Without it you won't appear on the local map listings in the SERPs.

### Review and build on your link profile

<http://bit.ly/210Ey9f>

A powerful website backlink checker that shows all links pointing to your domain and their quality, as well as helping you to discover everything about your competitors' backlinks.

### Google alerts

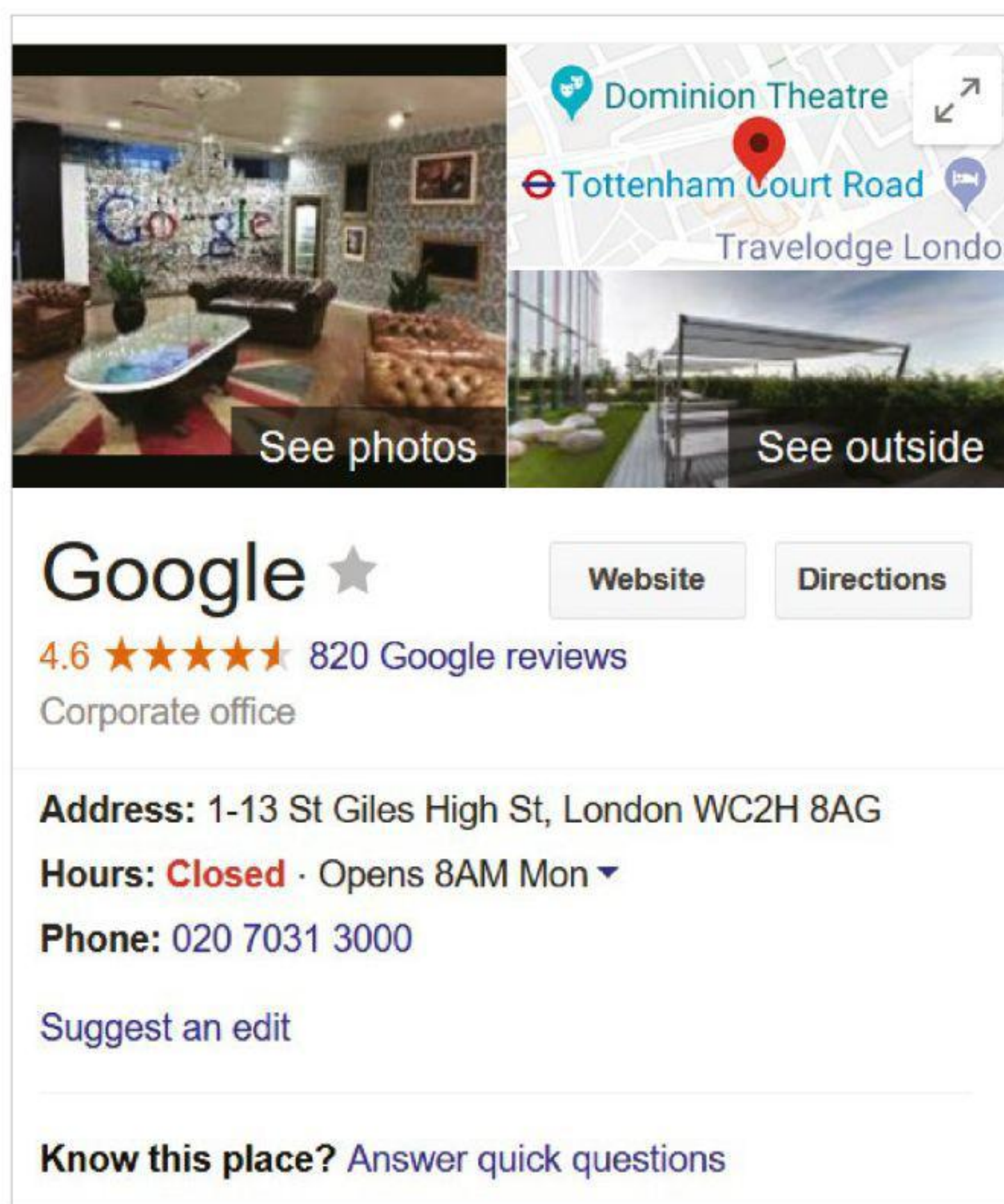
<https://www.google.co.uk/alerts>

Monitor the web for interesting new content and mentions of your business and that of your competitors. Simply create an alert, and have it emailed to you directly.

### Google Analytics

<https://www.google.com/analytics>

Measure your website, app, digital and offline data to gain valuable customer insights into the impact of your marketing activities.



## 21

### Online Reviews: increase trust

Consumers are actively using these review scores more than ever in their decision-making process. Focus on actively gaining, monitoring and responding to reviews on social platforms, in particular 'Google My Business' as these are shown in Google results when searching for your business. Encourage users to leave a review, as well as commenting on your blog – this will build an active community for your brand and website. It will also help you to have a better understanding of your user's experiences, take what works and expand on it further.

## 22

### Be consistent

Clean and own your business information and data across the web, including mentions of your business's name, address and phone number (NAP) on other webpages. Being consistent is imperative, across these citations and all other touch-points such as: natural landing pages, Google Maps, schema data and paid ads. These all rely on the accuracy of the information they are being fed, and if not done correctly, can have a negative impact on your brand and awareness. Review placements on localised and industry directories, affiliates, referrals, blogs, exhibitions, shows, awards and so on.

## 23

### Increase your search engine real estate

Bully the page and push the competition down by supporting your natural SEO efforts with a paid campaign across Google and Bing. Attract the right customers immediately, with the products and services they are actively searching for.

Keywords are still the primary, but voice search will start to impact terminology as well as a real focus on audience insights. Keep an eye on the next 12 months for further exciting opportunities, in particular how Google Ads will connect us to more and more businesses. Read more at: <https://support.google.com/adwords>.

## 24

### Earn social signals

Keep on top of your wider web presence and drive extra traffic and search engine real estate with the aid of social. For example, your Google+ posts or tweets can make it to Google's organic search results, which is a great opportunity to drive extra engagement and more page placements in search. Attract social links and shares with viral content that is easy to share. Add social buttons to your pages and use Open Graph metas. And don't forget to engage – this is a primary opportunity to build relationships and nurture buyers and advocates.

Tag	Description
<code>og:url</code>	The canonical URL for your page. This should be the undecorated URL, without session variables, user identifying parameters, or counters. Likes and Shares for this URL will aggregate at this URL. For example, mobile domain URLs should point to the desktop version of the URL as the canonical URL to aggregate Likes and Shares across different versions of the page.
<code>og:title</code>	The title of your article without any branding such as your site name.
<code>og:description</code>	A brief description of the content, usually between 2 and 4 sentences. This will be displayed below the title of the post on Facebook.
<code>og:image</code>	The URL of the image that appears when someone shares the content to Facebook. See below for more info, and check out our <a href="#">best practices guide</a> to learn how to specify a high quality preview image.
<code>fb:app_id</code>	In order to use Facebook Insights you must add the app ID to your page. Insights lets you view analytics for traffic to your site from Facebook. Find the app ID in your App Dashboard.



# 25

## Content and links go hand in hand and are at the heart of SEO

The number of backlinks and linking domains is still a major ranking signal, and will have a massive impact on your ranking potential. The more high-authority backlinks and quality citations a website has across the web, the better positioned it is to gain higher search engine rankings and expand its overall reach.

Before reaching out, be mindful of the Google Penguin ranking algorithm by ensuring your backlink profile looks natural. Authoritative links should be earned through others quoting, referring to or sharing your content. It's also prudent to run regular link audits to spot any dangerous links early on, and have them removed in time.

Start by claiming your local business listings, and adding yourself to the local directories. Content then follows; without amazing content, you will never get the links you want. And without the right promotion, content fails. Understand where your audience lives and let them know you exist, target influencers that can share your content and increase your outreach to already engaged communities.

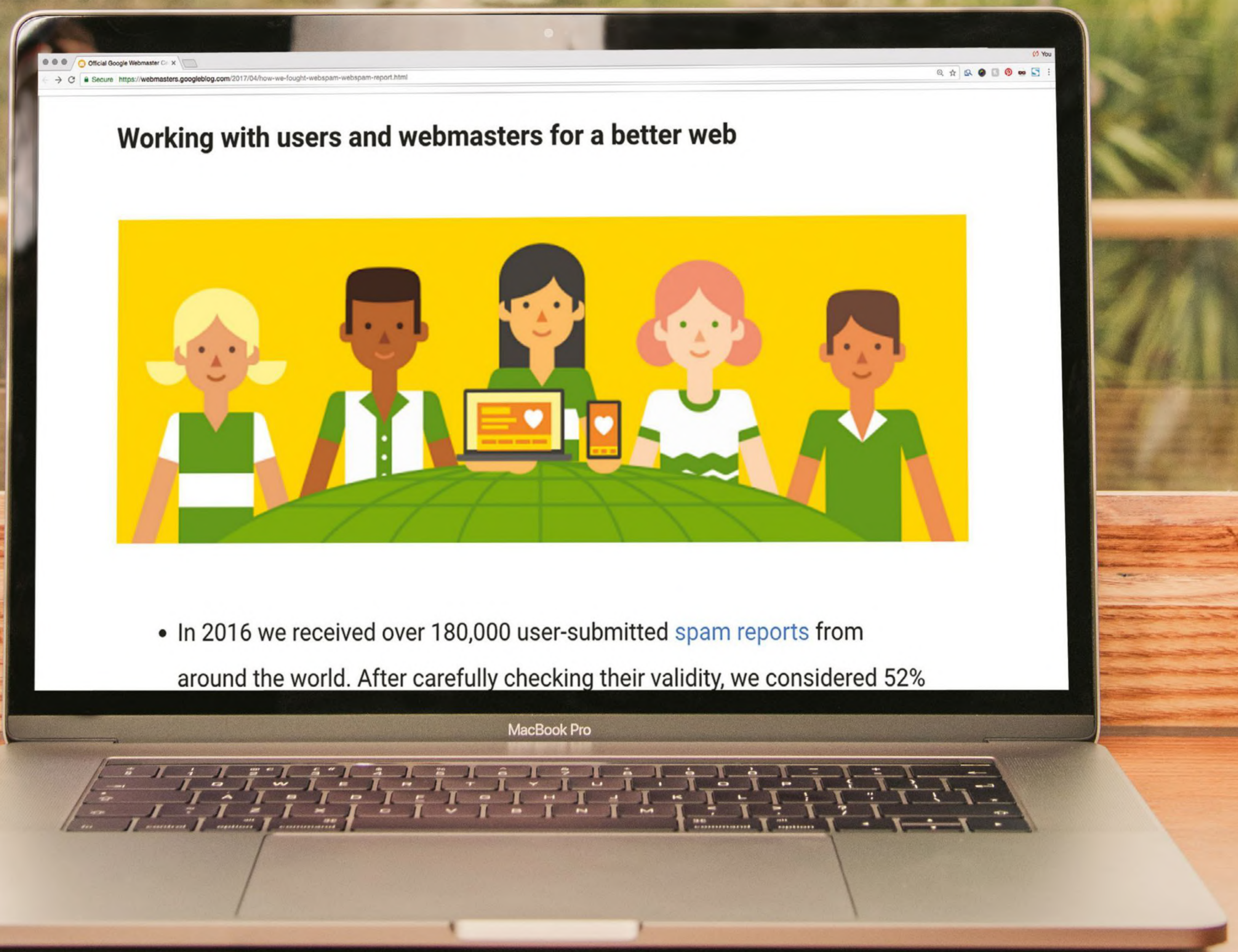
You can also cut corners by looking at your competitor's profile and trying to win some of their links for your own website. It's also worth tracking mentions of your brand, as well as focusing on PR, reputation management, brand awareness and online reviews.

“Without amazing content, you will never get the links you want. And without the right promotion, content fails”

# Understanding SEO

## How to strip back SEO to boost your rankings

Better understand what search engines are looking for, and discover how you can ultimately improve your rankings



**S**earch Engine Optimisation (SEO) is the practice of making websites as search engine friendly as possible, so when users are searching for terms that are relevant to your business, your website will appear higher in the list of results. You can't pay for this as it's organic – it's a mixture of skill, relevancy and some would say black magic!

Naturally, people will be better in certain areas of SEO than others, although each of us will always benefit from ongoing improvement, understanding and refinement. It takes resourcefulness, dedication, persistence and creativity to hit the top spots; this is particularly relevant with the ever-changing nature of the Google algorithm and the need to keep up to date and informed.

The following will help you to have a better understanding of what the search engines are looking for, and how you can ultimately improve your rankings. By stripping back SEO and breaking it down to what matters, we can focus our attention on what's needed to achieve those gains, without being penalised.

We will start with what really matters, understanding Google's latest 2017 ranking signals, and how to optimise for both humans and the search engine crawlers. We then create a workflow and move onto various tasks associated with it. Let's get started.

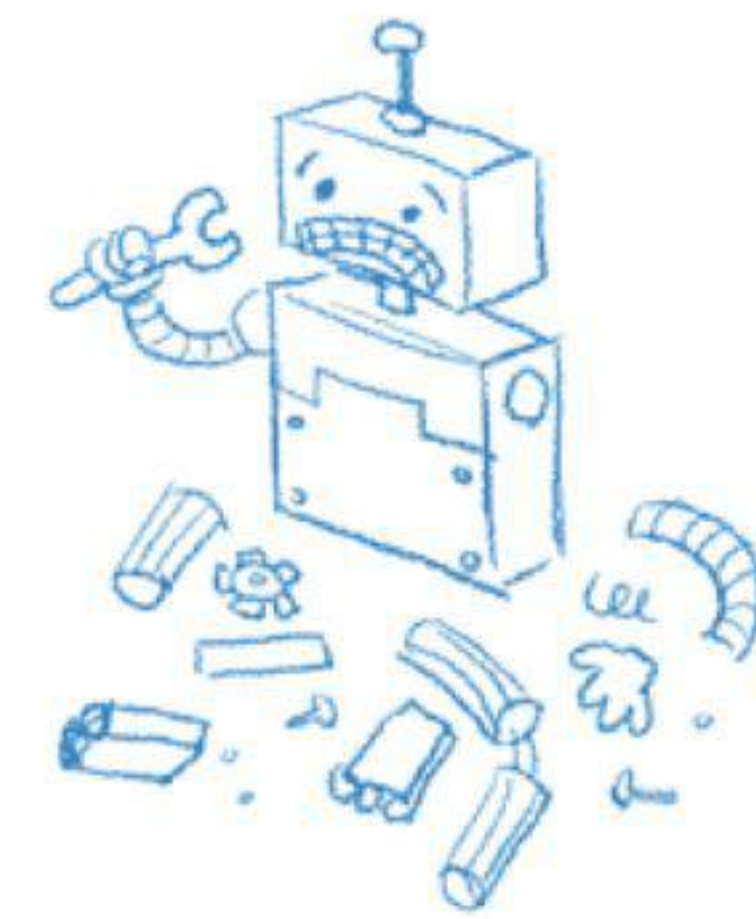
## 01 On page SEO is an absolute must

Google's ranking is made up of 200+ components, or 'ranking signals'. On page SEO is a critical element to fully take advantage of. Content relevance has to be both original and relevant to the search phrase to rank well, as well as optimising meta titles, descriptions, headers, image alts and the URLs.



404. That's an error.

The requested URL /404 was not found on this server.  
That's all we know.



## 02 User experience and trust

SERP (Search Engine Results Page) click-through rates can have a massive impact on rankings. The only efficient way to make your listing earn actual clicks from real users is to make it appealing and click-worthy. We utilise the meta tags for this with clear CTAs, combined with great user experiences to gain trust.

## 03 Pay attention to technical SEO

If your page isn't optimised for mobile devices, it's likely to be discarded from mobile search results completely. Google has also officially confirmed that it uses page speed in its ranking algorithm, which can influence your SEO indirectly. 4xx and 5xx errors will also affect your site's indexation and have an impact on user experience.

## 04 Take advantage of backlinks

The number of backlinks and linking domains is still a major ranking signal and has a massive impact on your ranking potential. Run regular

link audits to spot any dangerous links early and have them removed in time. To acquire more high-authority links, look at your competitors' profiles and try to win some of their links for your own site.

## 05 Create a workflow

From these search engine algorithm insights we create a workflow of actions, to actively execute your marketing strategy. These actions include: goals, actions, insights and reporting – the tasks that follow are associated with your workflow.

## 06 A good strategy starts with goals

When you have a clear idea about where you want to go, it's easier to get there. Begin your marketing strategy by outlining what you would

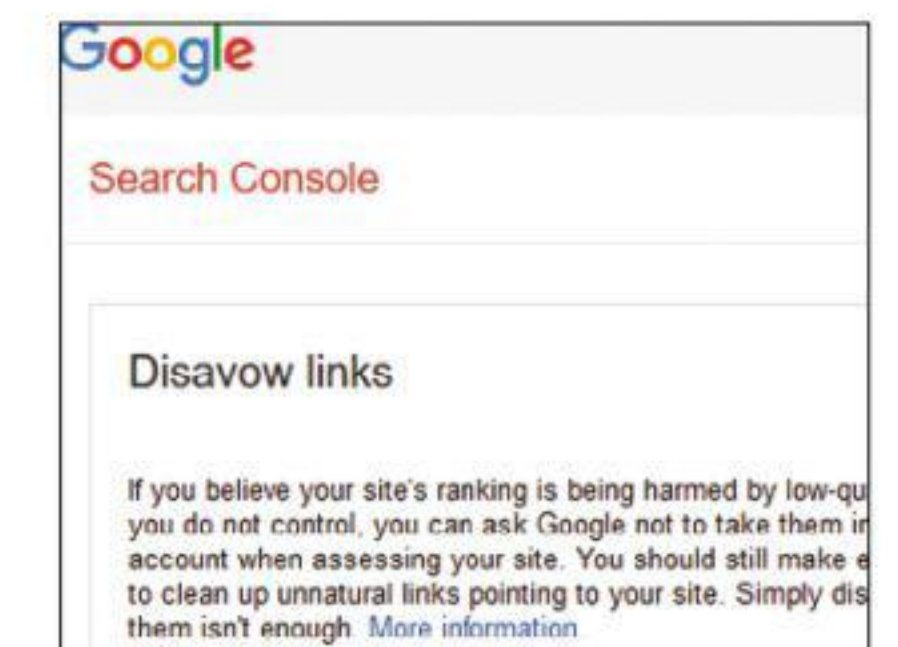
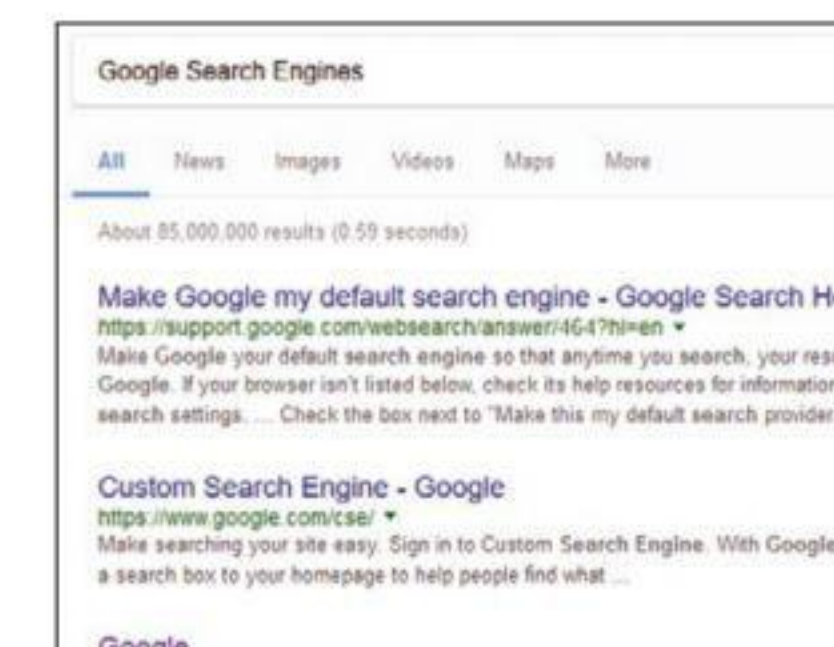
### TREE-LIKE STRUCTURE

Ensure your most important pages are reachable from the homepage and they are arranged in a logical tree-like structure. The names of your URLs also reflect your sites structure and use breadcrumbs to facilitate navigation.

```

1 <!DOCTYPE html>
2 <html class="google spa" dir="ltr" lang="en-GB">
3 <head>
4 <meta charset="utf-8">
5 <meta content="initial-scale=1, minimum-scale=1, width=device-width" name="viewport">
6 <title>
7 About Us | Google
8 </title>
9 <meta content=
10 "Google's mission is to organise the world's information and make it universally accessible and usef
11 name="description">
12 <link href="//fonts.googleapis.com/css?family=Roboto:100,300,400,500,700&lang=en-GB" rel=
13 "stylesheet">
14 <link href="/about/assets/css/main.min.css" rel="stylesheet">
15 <script async defer src=
16 "/www.google.com/insights/consumersurveys/async_survey?site=zohcrlcv mavjct24cpw6ns7oy">
17 </script>
18 <meta content=
19 "Google's mission is to organise the world's information and make it universally accessible and usef
20 property="og:description">
21 <meta content="About Us | Google" property="og:title">
22 <meta content=
23 "https://lh3.googleusercontent.com/Jr961DhWvsqwifxjUHxCNPcqlRjrlmbyPIoItLqIDb6n2GYs9f-KlwTBFBkyyLRO1
24 property="og:image">
25 <meta content="600" property="og:image:width">
26 <meta content="315" property="og:image:height">
27 <meta content="website" property="og:type">
28 <meta content="//www.google.com/intl/en-GB/about/" property="og:url">
29 <meta content="summary_large_image" name="twitter:card">
30 <meta content="@google" name="twitter:site">
31 <meta content="About Us | Google" name="twitter:title">
32 <meta content=

```



### Top left

Meta opportunities pulled from the webpage source code, highlighting fields such as meta titles, descriptions, headers and image alts.

### Top right

Search engine results, detailing the use of appealing meta descriptions with clear CTAs to gain trust, and ultimately, clicks.

### Left

Run regular link audits to disavow unwanted links. This will help with your overall site health and avoid any penalties.

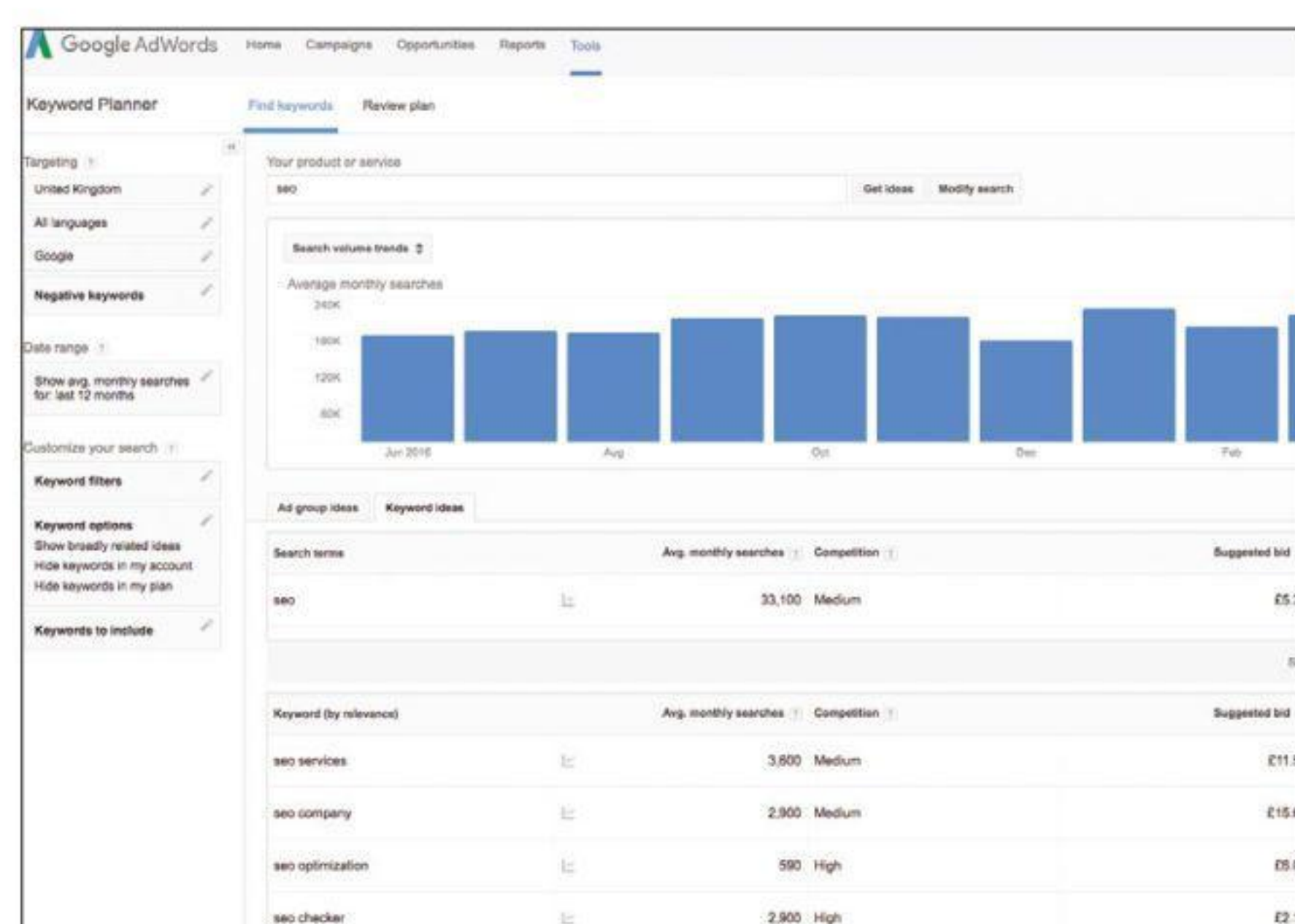
# Understanding SEO



like to accomplish. Once you pinpoint your goals, set clear objectives for each goal using SMART goal planning and create Goal and Event Tracking within Tag Manager and Analytics.

## 07 Develop your buyer's journey

One of the most important elements in building an SEO marketing strategy is empathy for your audience. Once you grasp what your target market is looking for, you can effectively reach



## ENCOURAGE ENGAGEMENT

After you publish a piece of content, your next goal is to get people to engage with it. People share content from sites they trust, so make sure to reach out to your network and establish connections with influencers.

and keep those users. Develop your buyer's journey, by outlining what your target customer is thinking during: awareness, consideration and decision.

## 08 Marketing channels

Understand the First to Last Interaction in line with the buyer journey. What digital touchpoints do your users engage with at each stage? For example, during the awareness stage, what is your customer experiencing as they become aware of a problem they are having? What are their pain points and where do they go?

## 09 Keyword analysis and research

Ranking for the right keywords can make or break your website. By researching your market's keyword demand you can not only learn which terms and phrases to target with SEO, but also learn more about your customers as a whole. It's not always about getting visitors to your site, but about getting the right kind.

## 10 Be findable by search engines

Search engines won't rank your site unless they can find it. It's extremely important to make sure search engines are able to discover your site's content, and that they can do it quickly

and easily. Keeping a Logical Site Structure and utilising 'rel=next and rel=prev' will help with this a great deal.

## 11 XML sitemap and RSS feeds

The XML sitemap helps search bots discover and index content on your site. Make sure it's up to date and added to webmaster tools. RSS feeds are another great way to notify search engines about any fresh content you add to the site.

## 12 Master Panda

Google's Panda ranking algorithm update sifts out pages with thin, non-authentic, low-quality content. Improve content quality by revising your brand messaging, aligning it with the projected path of your business and your target audience. Create useful, expert-level content and present it in the most engaging form possible.

## 13 Utilise canonicalisation correctly

Canonicalisation is a way of telling search engines which page should be treated as the primary version when several URLs return virtually the same content. The main purpose of this is to avoid internal content duplication on your site. Mark canonical pages using the rel=canonical attribute.

## 14 Improve UX and engagement

UX-related metrics have made their way into Google's ranking algorithm. For example, site speed, mobile-friendliness and the HTTPS protocol. Striving for greater engagement and higher click-through rates also tends to bring about better rankings, as well as various indirect



### Top left

The Google Panda algorithm update had a major impact on content, its creation and engagement.

### Top right

The Google Penguin algorithm update had a major impact on links – don't forget to keep it natural.

### Right

Answer your audiences queries with rich answers and appear above organic search results for free.



Google search for 'how to make pancakes'

About 33,900,000 results (0.51 seconds)

**Ingredients**

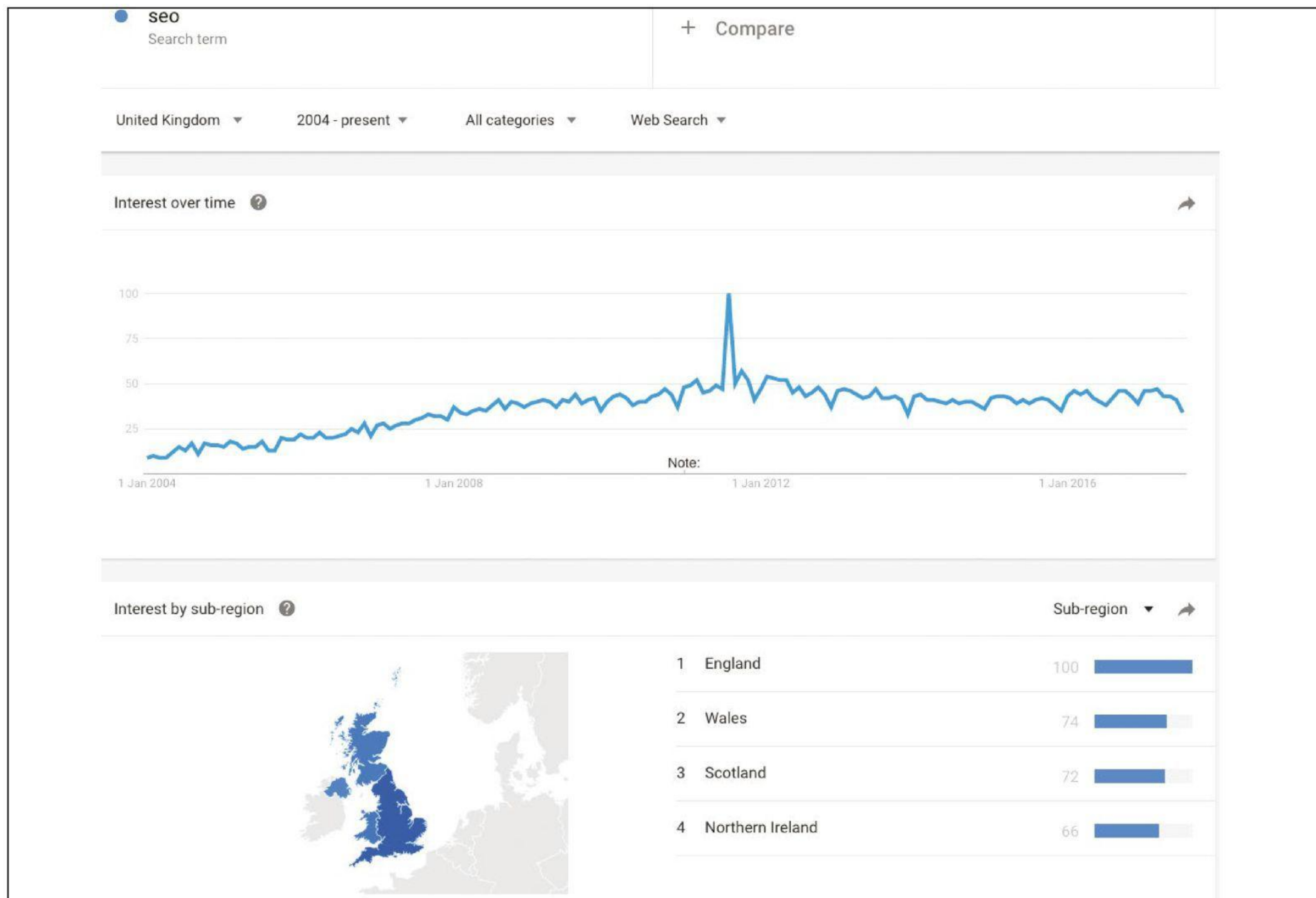
- 200g/7oz plain flour.
- 350-400ml/12-14fl oz milk, or ½ milk ½ water for a lighter pancake.
- 2 large eggs, lightly whisked.
- 1 tbsp vegetable oil.
- pinch salt.
- vegetable oil, for frying.

BBC Food - Recipes - How to make pancakes

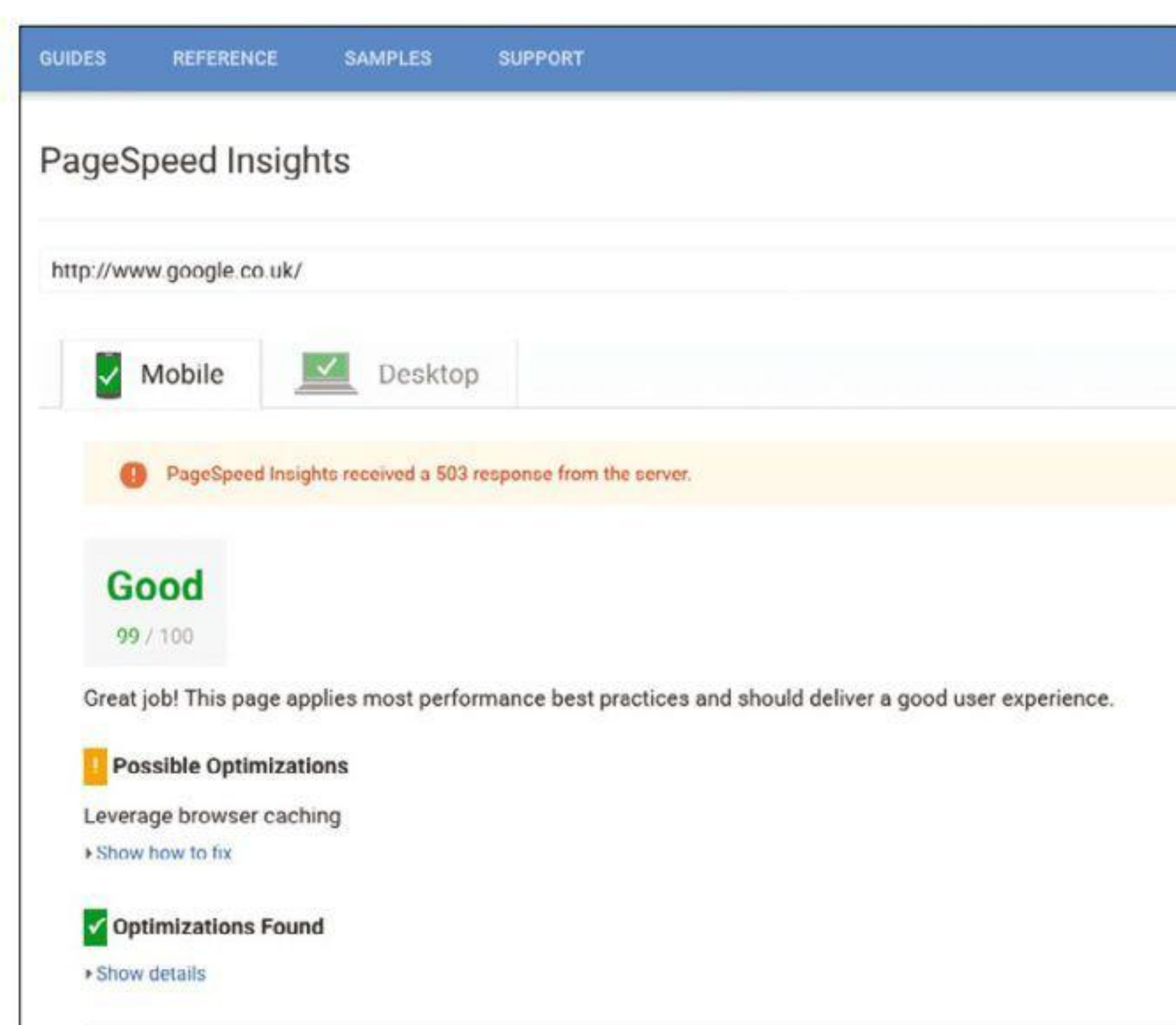


## Keyword research tips

Start by brainstorming your ideal customers search terms and establish a baseline list of keywords by using the free AdWords Keyword Tool. Go that little further by substituting in synonyms by going to **thesaurus.com** and gain new keyword ideas from Wikipedia articles around your existing keyword list. Take advantage of **ubersuggest.io** to generate a few different variations. This works by scraping the autofill suggestions Google gives you. Also, spend some time on Quora, as it will highlight how people speak in their niche communities. And don't forget to look at your competition and utilise Google trends, as it will show how keywords have evolved as a result of different factors like seasonality, geographic location and media coverage.



SEO results in the form of attracted links, shares and mentions.



### 15 Earn social signals

Your Google+ posts can make it to Google organic search results, which is a great opportunity to drive extra traffic and gain more real-estate. Attract social links and shares with viral content that is easy to share. Create incentives to get more positive reviews and citations across the web.

### 16 Leverage rich answers

A rich answer is a snippet that already contains a brief answer to a search query. It appears above

other organic search results and thus enjoys more exposure. Any website has a chance to be selected for the rich answers section. Identify simple questions you might answer on your website to increase your chances.

### 17 Make use of schema markup

Schema markup is used to tag entities (people, products, events etc) in your pages and content. Although it does not affect your rankings, it helps search engines better interpret your content and gives you more search engine real-estate. Never a

```
</div>
Product description:
0.7 cubic feet countertop microwave.
Has six preset cooking categories and convenience features like
Add-A-Minute and Child Lock.
Customer reviews:
<div itemprop="review" itemscope itemType="http://schema.org/Review">
 Not a happy camper -
 by Ellie,
 <meta itemprop="datePublished" content="2011-04-01">April 1, 2011
 <div itemprop="reviewRating" itemscope itemType="http://schema.org/Rating">
 <meta itemprop="worstRating" content = "1"/>
 1/
 5stars
 </div>
 The lamp burned out and now I have to replace
 it.
</div>
<div itemprop="review" itemscope itemType="http://schema.org/Review">
 Value purchase -
 by Lucas,
 <meta itemprop="datePublished" content="2011-03-25">March 25, 2011
 <div itemprop="reviewRating" itemscope itemType="http://schema.org/Rating">
 <meta itemprop="worstRating" content = "1"/>
 4/
 5stars
 </div>
 Great microwave for the price. It is small and
 fits in my apartment.
</div>
```

bad thing.

### 18 Combat Penguin

Google's Penguin ranking algorithm update detects artificial backlink patterns and penalises

sites that violate its quality guidelines. Keep your backlink profiles looking natural – earned through others quoting, referring to or sharing your content.

### 19 Review your local SEO plan

Good marketing does not attempt to reach all people; it's targeted to connect with a few specific and defined audiences. Capitalise on these audiences locally, by optimising your Google My Business listing (G+) and create incentives to get more positive reviews and citations across the web.

### 20 Don't forget reporting

Measurement is an imperative element of all marketing activity. Ultimately, any report needs to focus on your KPIs. Perform these regularly to gain insights for your next steps and tests; the most common source of traffic information that will help is Google Analytics.

### 21 What to look out for?

Consider implementing AMP (Accelerated Mobile Pages), a Google initiative to build a more user friendly mobile web. Also be prepared for HTTP/2 a new network protocol that should replace the outdated HTTP/1.1. In terms of SEO, you will be able to gain some ranking boost due to the improved website speed.

# Understanding SEO

## Use Google Analytics to understand your audience

You need to analyse your traffic to see what you are doing right – or wrong

**N**o matter how much effort you put in to a website or how great your content is, you need to understand what your audience is looking at and what they are interested in to keep growing your site.

You can use web services that claim to understand your traffic, but by far the most recognised service is Google Analytics. It can show you, in great detail, which parts of your site are successful and which parts require extra effort to receive attention from the masses. You can monitor

all aspects of your site, from social networking impact to the number of people visiting on mobile devices, and more general statistics including visitor numbers and when they visit.

The basic Google Analytics service is free and includes all of the features most webmasters will

need, but there are premium options available should you need specific features to take your analysing further. In this tutorial we will teach you how to set up Google Analytics for your site and how to make the most of the service to understand and increase your traffic.

“The basic service is free and includes all of the features most webmasters need”

### Highly analytical

Master the art of reading and understanding your website's statistics

#### Visits are a priority

The graph will quickly show you how well your site is doing over a period of time and at a glance let you know if you are growing more popular or losing appeal to the masses

#### SET YOUR GOALS

When you first build a new website, it is a good idea to have objectives in mind for where you want the site to go and how popular you are expecting it to become. Google Analytics includes a Goals feature, which lets you set up targets for your site in a number of areas. For example, you can choose to have a goal for the average duration of visits to be 60 seconds if they are low now, and a separate goal for the number of daily visitors. This gives you something to aim for and the Analytics service will automatically check your stats to see if you have reached your targets.

Once you have set up your goals, you can view your progress in the front graphs which show your goal conversion rate and the number that you have completed. Every business and its associated websites needs to have targets; the services offered by Analytics are quite simplistic, but they give you something to aim for and can greatly enhance your site if you put the effort in to reach the goals you have set for yourself. They are one of the most important parts of Google Analytics.

#### Customisation

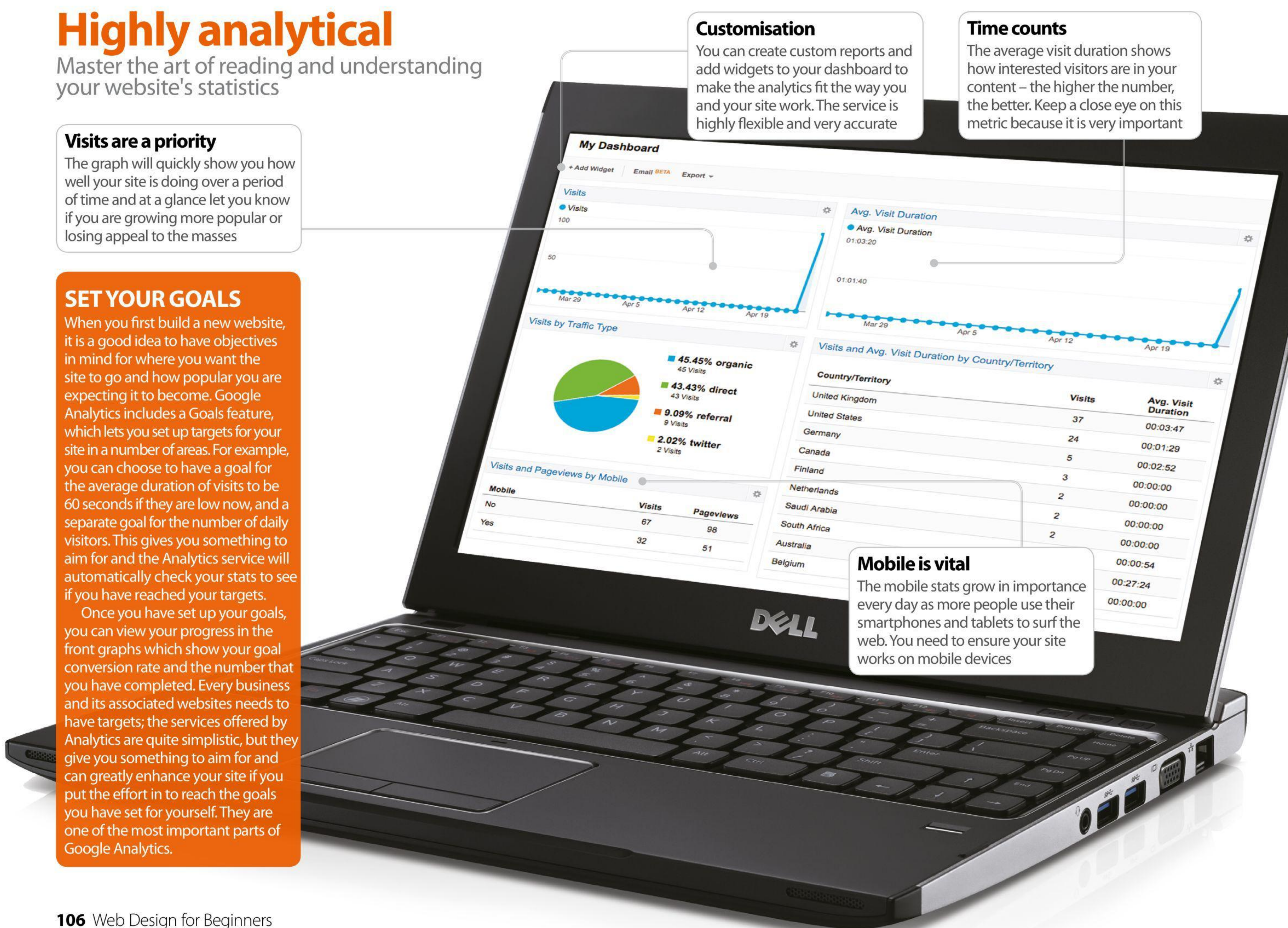
You can create custom reports and add widgets to your dashboard to make the analytics fit the way you and your site work. The service is highly flexible and very accurate

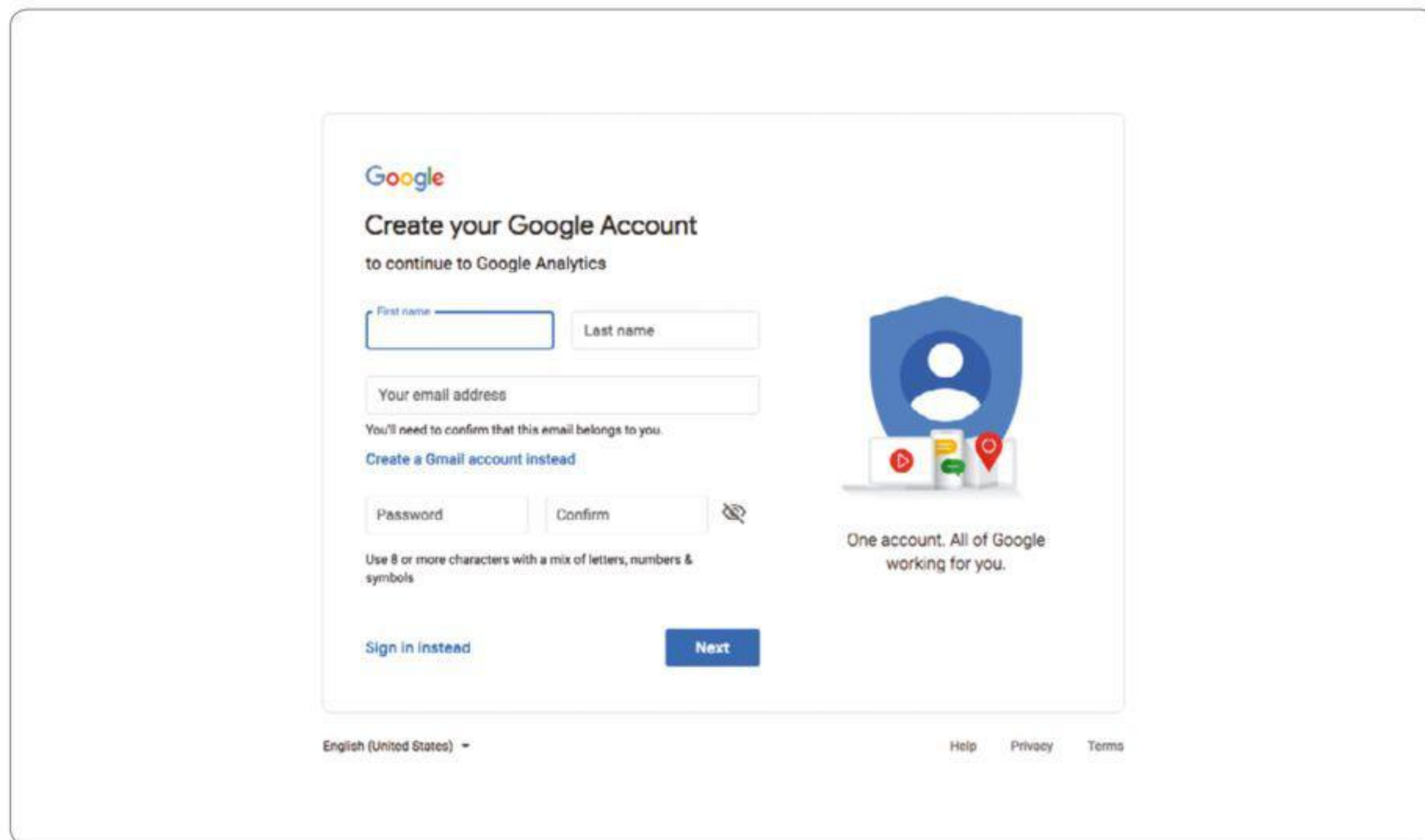
#### Time counts

The average visit duration shows how interested visitors are in your content – the higher the number, the better. Keep a close eye on this metric because it is very important

#### Mobile is vital

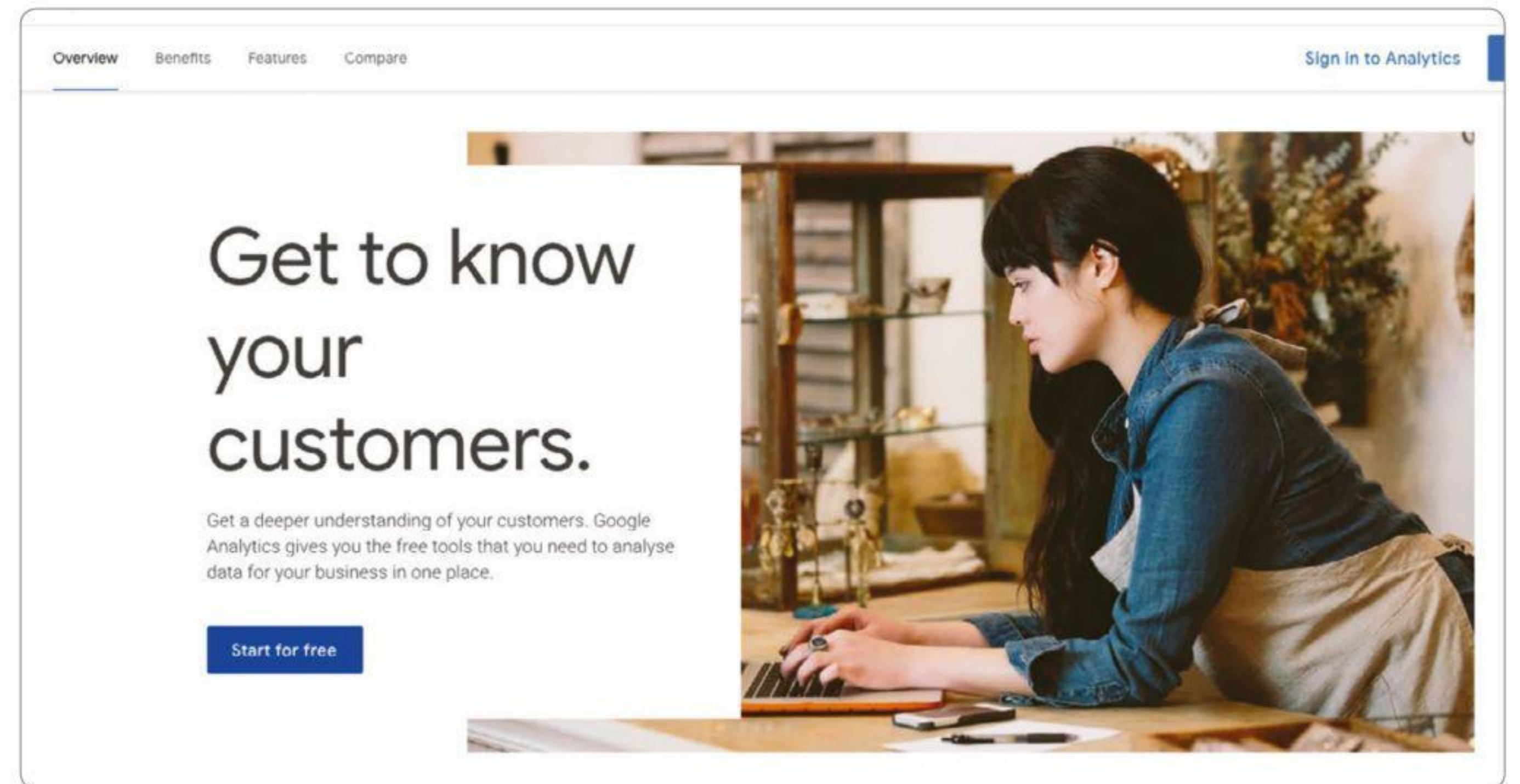
The mobile stats grow in importance every day as more people use their smartphones and tablets to surf the web. You need to ensure your site works on mobile devices





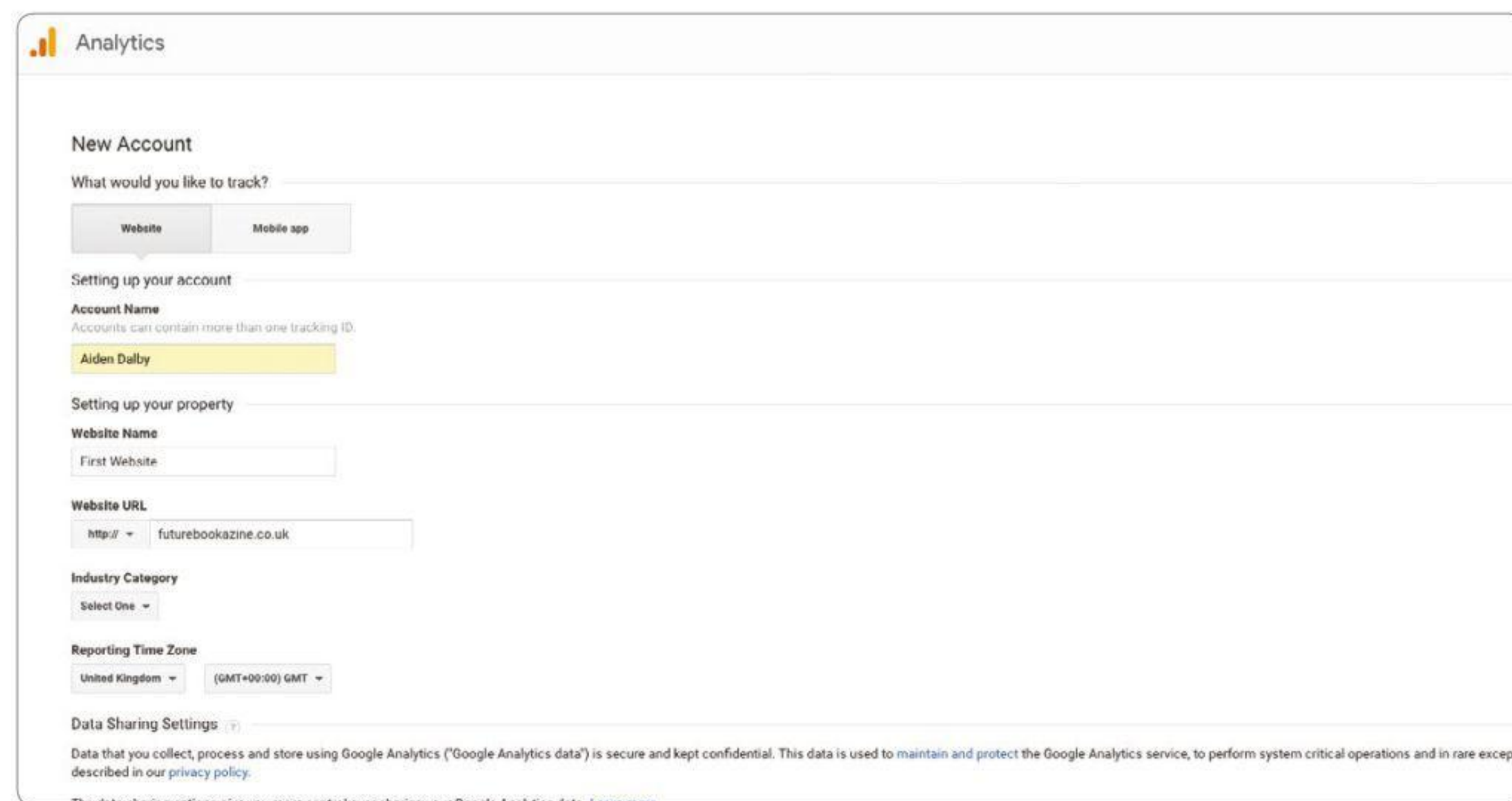
## 01 The first step

Go to [www.google.com/analytics](http://www.google.com/analytics). If you don't already have a Google account, click Create Account. Tap Sign up and enter the required details – try to make the password as secure as possible. Then click Create my account.



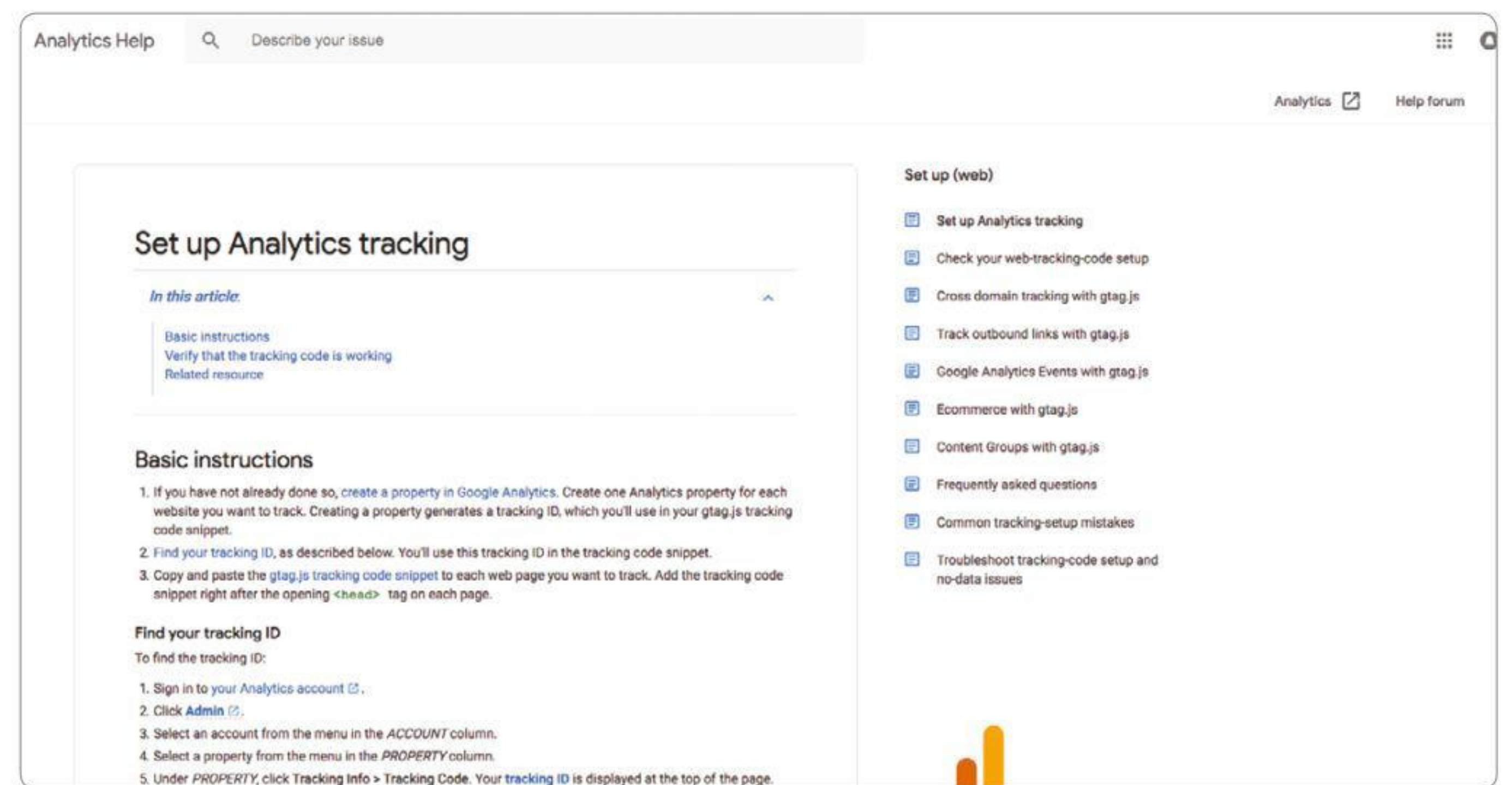
## 02 Sign up

Now you have a Google account, you'll be asked to sign up to Google Analytics. Tap the Sign up button and proceed to the next page. You now need to input your website URL and choose an account name.



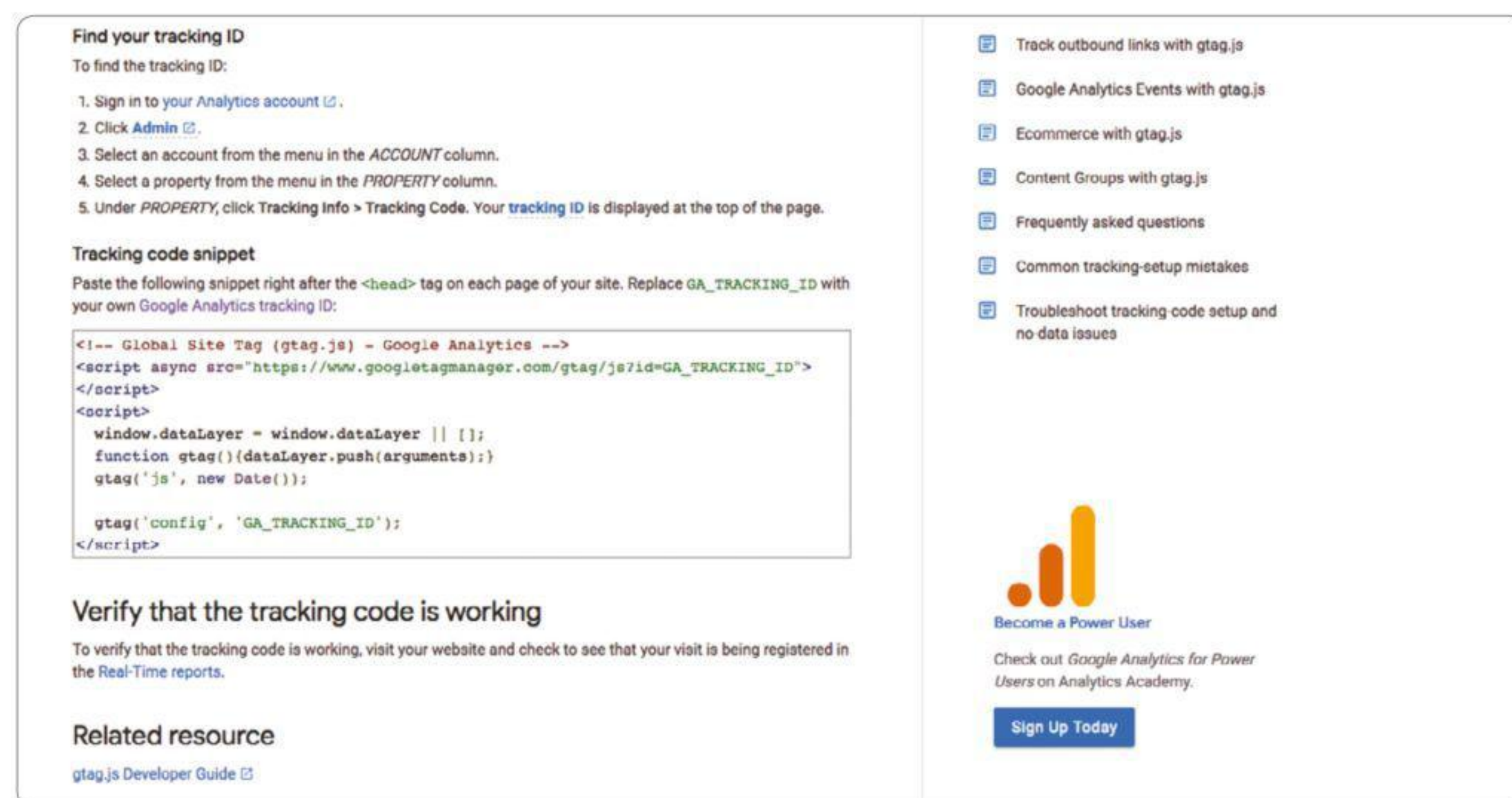
## 03 Starting the setup

On the next page, scroll down to the 'What are you tracking?' section and choose the correct option for your website setup. Most people will require the 'Single domain' option, but choose 'Multiple subdomains' if applicable.



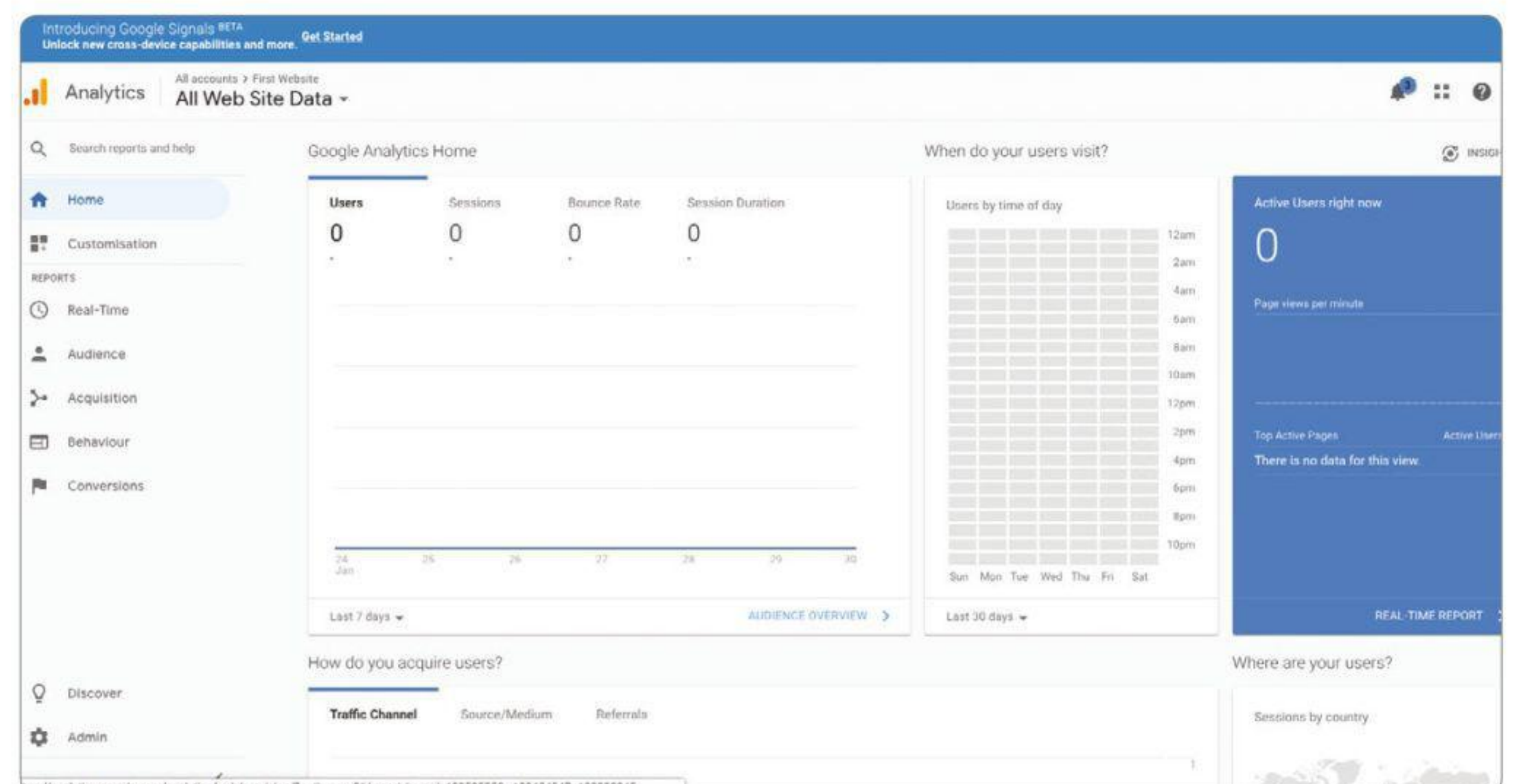
## 04 Time to jump

Now to find out how to insert the Analytics code for your site setup. Each service is different and you'll need to find the correct process for yours, whether it is WordPress, Squarespace or another web publishing platform.



## 05 Use the code

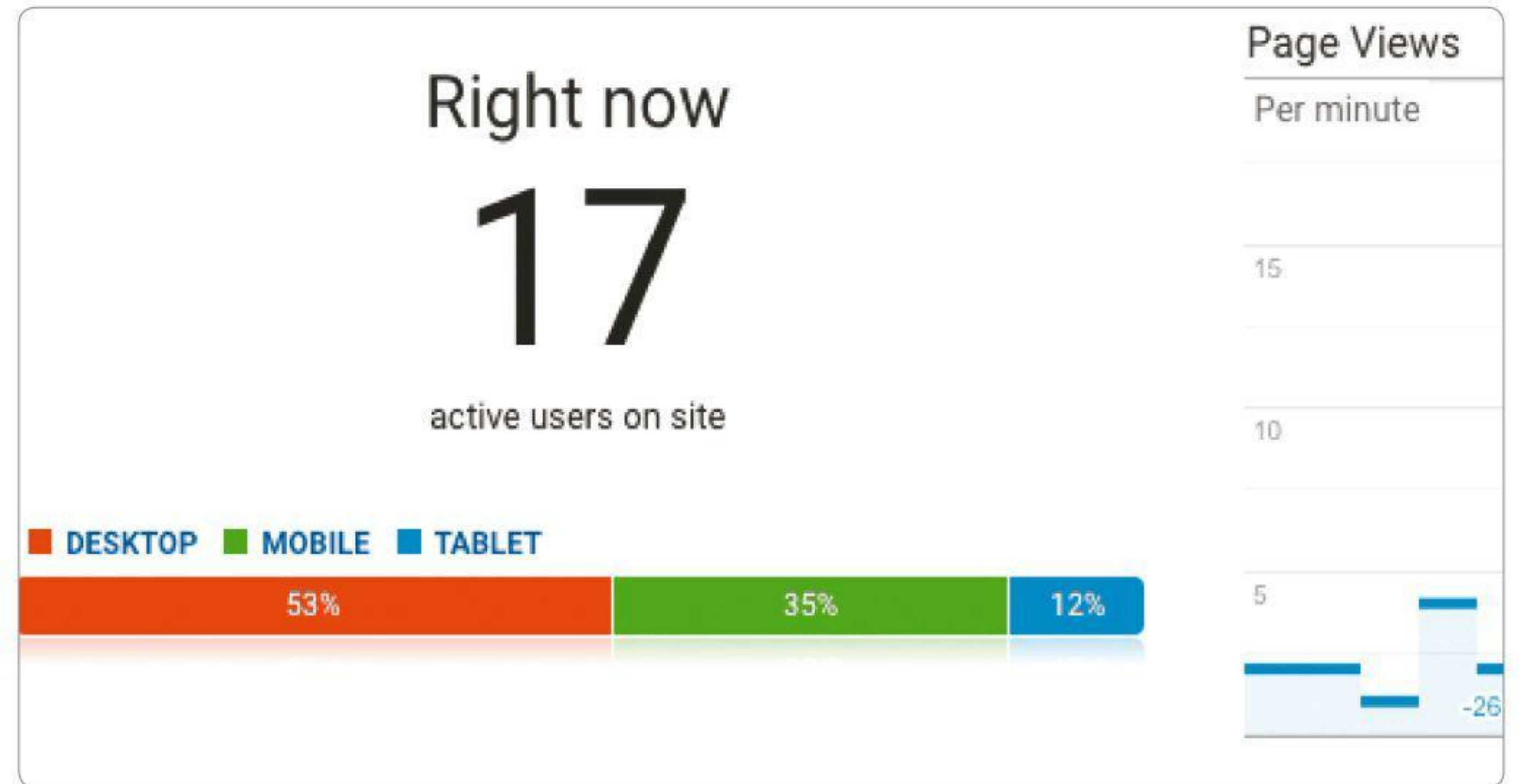
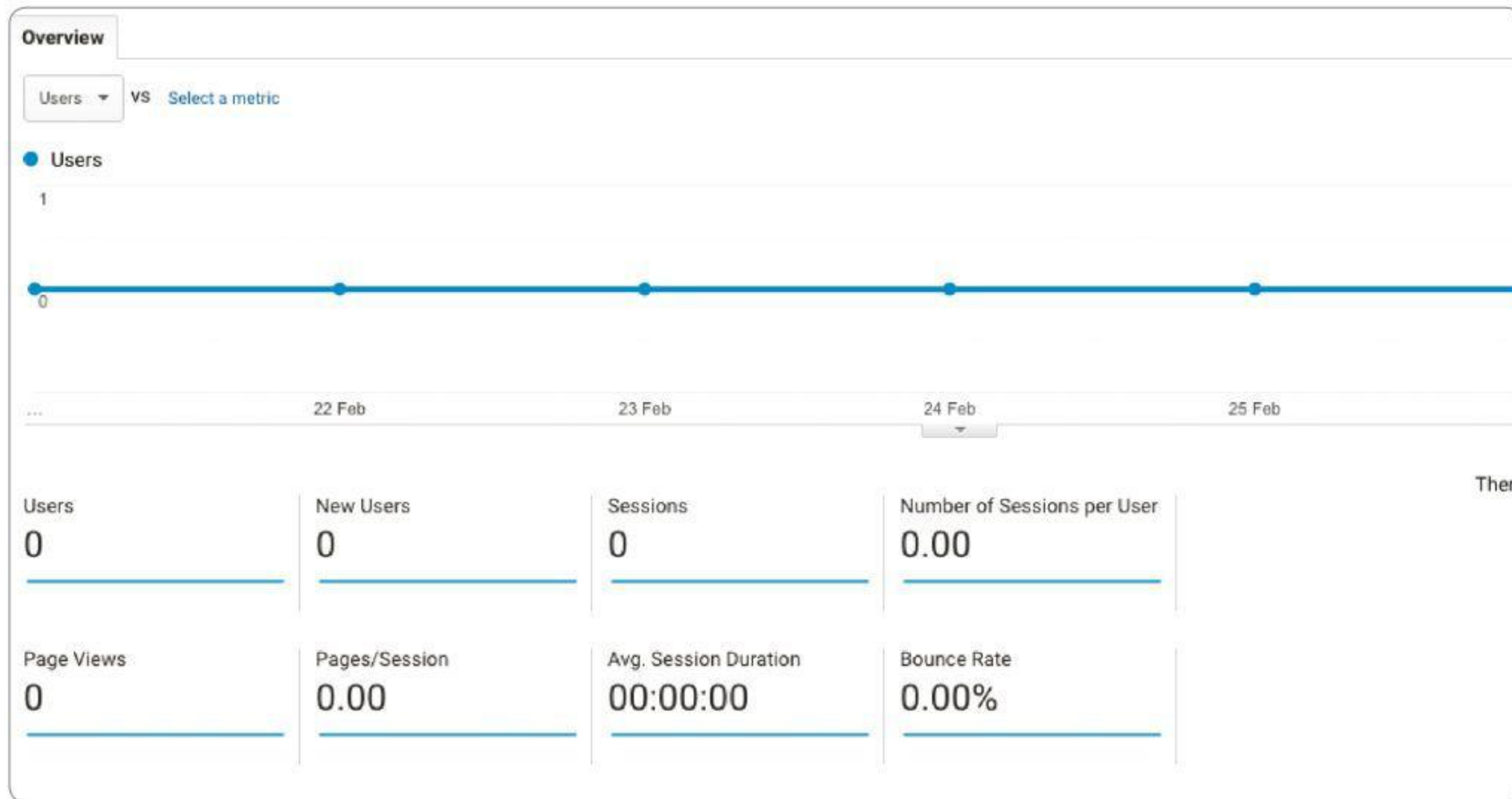
Scroll down to the Tracking Code and copy the code under 'Paste this code on your site'. Paste it into the required place on your site. Then, when you click Save at the bottom, you should see a Success button appear at the top.



## 06 No traffic

Click the Home button at the top to see a series of windows which will all show zero hits. Don't panic; it takes some time for the code to start showing traffic. Leave it for 48 hours before you come back and check your stats.

# Understanding SEO



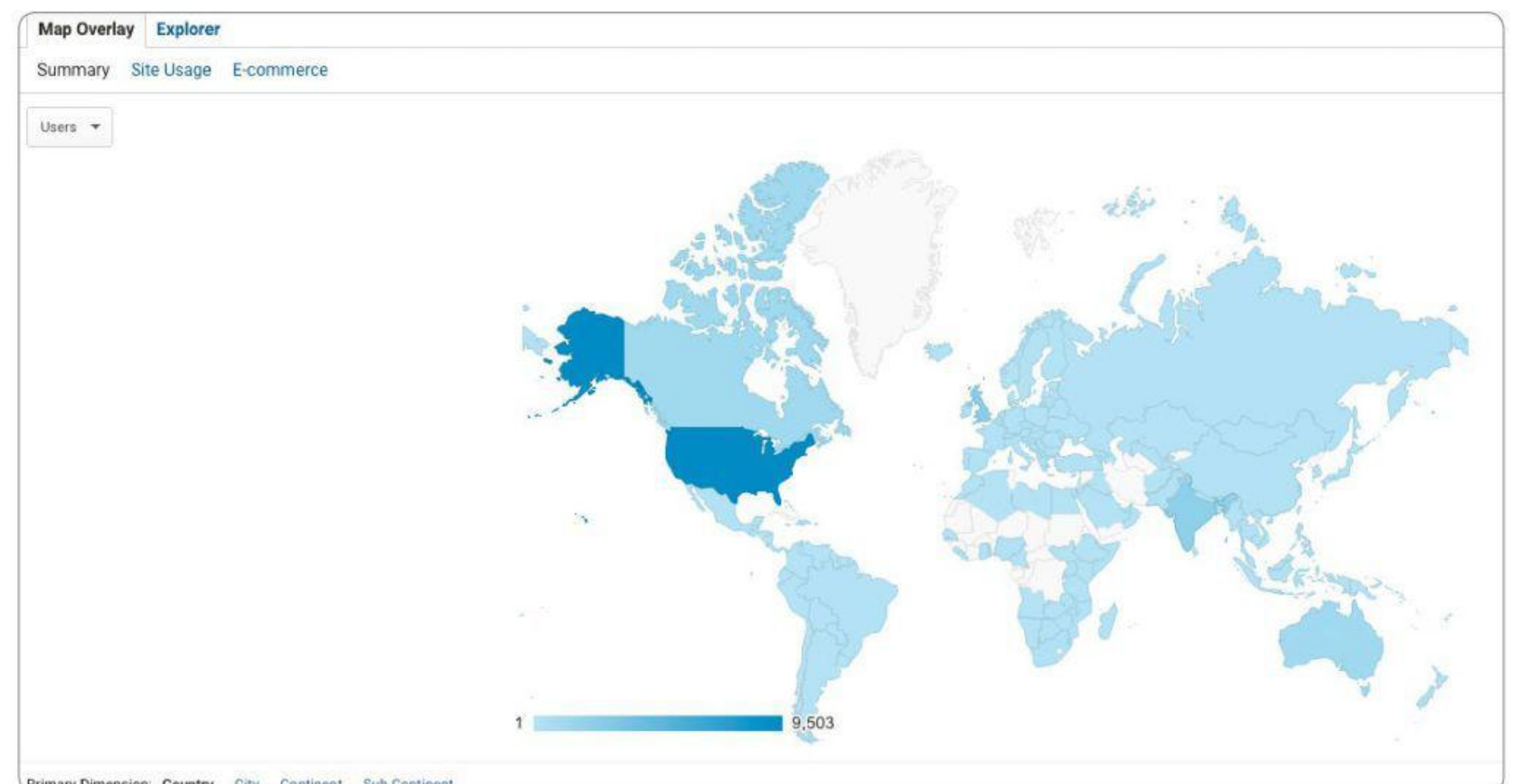
## 07 Your first stats

When you come back, you should see a series of graphs showing the traffic for your site. Don't worry if it's low, since Analytics tends to get more accurate over time, but you will need to spend some time looking at the graphs.

## 08 View active users

Watch current users visiting your site in real time. Numbers will continue to fluctuate, and this tool also allows you to monitor your users' preferred devices, allowing you to tailor your site appearance.

Source/Medium ?	Acquisition	
	Users ? ↓	New Users ?
	21,558 % of Total: 100.00% (21,558)	20,742 % of Total: 100.01% (20,739)
1. google / organic	15,998 (73.93%)	15,372 (74.11%)
2. (direct) / (none)	2,718 (12.56%)	2,606 (12.56%)
3. bing / organic	1,244 (5.75%)	1,209 (5.83%)
4. yahoo / organic	383 (1.77%)	371 (1.79%)

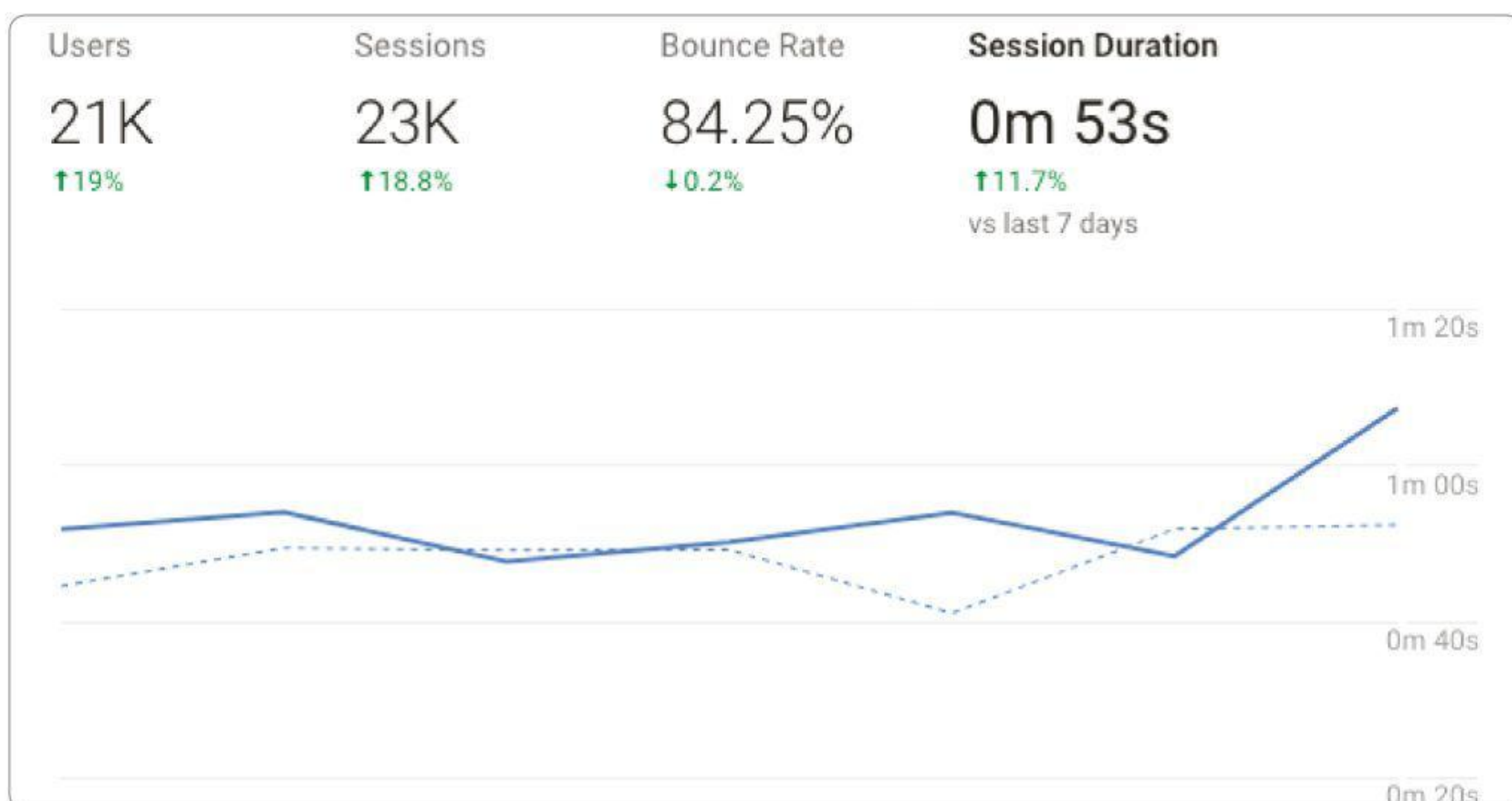


## 09 Study the data

It makes sense to check the Browser stats first, showing which browsers visitors are using. You should ensure that your site presents correctly in each, putting emphasis on the most popular browsers within your readership.

## 10 Check your audience

In the locations overview, you will see a global map indicating your where your users are. This will better help you understand your users and improve your content creation.



Default Channel Grouping	Acquisition		
	Users ? ↓	New Users ?	Sessions ?
	21,558 % of Total: 100.00% (21,558)	20,742 % of Total: 100.01% (20,739)	23,035 % of Total: 100.00% (23,035)
1. Organic Search	17,913 (82.60%)	17,180 (82.83%)	18,843 (81.80%)
2. Direct	2,718 (12.53%)	2,606 (12.56%)	3,042 (13.21%)
3. Referral	692 (3.19%)	641 (3.09%)	747 (3.24%)
4. Social	334 (1.54%)	295 (1.42%)	371 (1.61%)
5. Email	26 (0.12%)	17 (0.08%)	29 (0.13%)
6. (Other)	3 (0.01%)	3 (0.01%)	3 (0.01%)

## 11 Build interest

The 'Avg. Visit Duration' box details how long visitors stay on your site. Very short visits are classed as 'bounced' and can be ignored. The longer the average, the more interesting your content is to the readers – a good sign!

## 12 Delving deeper

Standard Acquisition>All Traffic shows the keywords searched for to get to your site. It also shows how much traffic is direct to the site and how much comes from search engines – ideally, you'll want to see the latter grow.

Source	Users	New Users	Sessions	Bounce Rate	Pages/Session	Avg. Session Duration
	1,025 % of Total: 4.75% (21,558)	936 % of Total: 4.51% (20,739)	1,118 % of Total: 4.85% (23,035)	80.14% Avg for View: 84.25% (-4.88%)	1.59 Avg for View: 1.35 (18.12%)	00:01:30 Avg for View: 00:00:54 (66.71%)
1. m.facebook.com	133 (12.94%)	125 (13.35%)	140 (12.52%)	90.71%	1.19	00:00:18
2. classroom.google.com	122 (11.87%)	106 (11.32%)	128 (11.45%)	72.66%	1.58	00:03:46
3. www.lewistown.edu.au	115 (11.19%)	107 (11.43%)	126 (11.27%)	76.98%	1.80	00:00:55
4. youtube.com	62 (6.03%)	60 (6.41%)	66 (5.90%)	68.18%	1.80	00:01:45
5. www.elfrance.com	52 (5.06%)	52 (5.56%)	55 (4.92%)	90.91%	1.11	00:00:17
6. ecosia.org	49 (4.77%)	48 (5.13%)	52 (4.65%)	90.38%	1.13	00:00:24
7. pinterest.com	37 (3.60%)	37 (3.95%)	39 (3.49%)	87.18%	1.21	00:00:31
8. t.co	31 (3.02%)	12 (1.28%)	44 (3.94%)	54.55%	2.50	00:04:23

## 13 Referrals

Also check the Referral stats, which show sites that are linking to you. This will show high-volume links and also sites that have completely copied your content with a link back. This is not good practice, so ask them to stop.

Apply to:  and  and 0 other views

Period:

Send me an email when this alert triggers.

**Alert Conditions**

This applies to:

Alert me when:  Condition:  Value:

## 15 Custom alerts

You can create custom alerts by selecting Intelligent Events on the left, then Customisation>Custom Alerts. Alerts can be set up to advise you immediately if you receive a lot of traffic or if it drops below a certain level.

**Create Custom Report**

**General Information**

Title:

**Report Content**

Name:

Type:

Metric Groups:

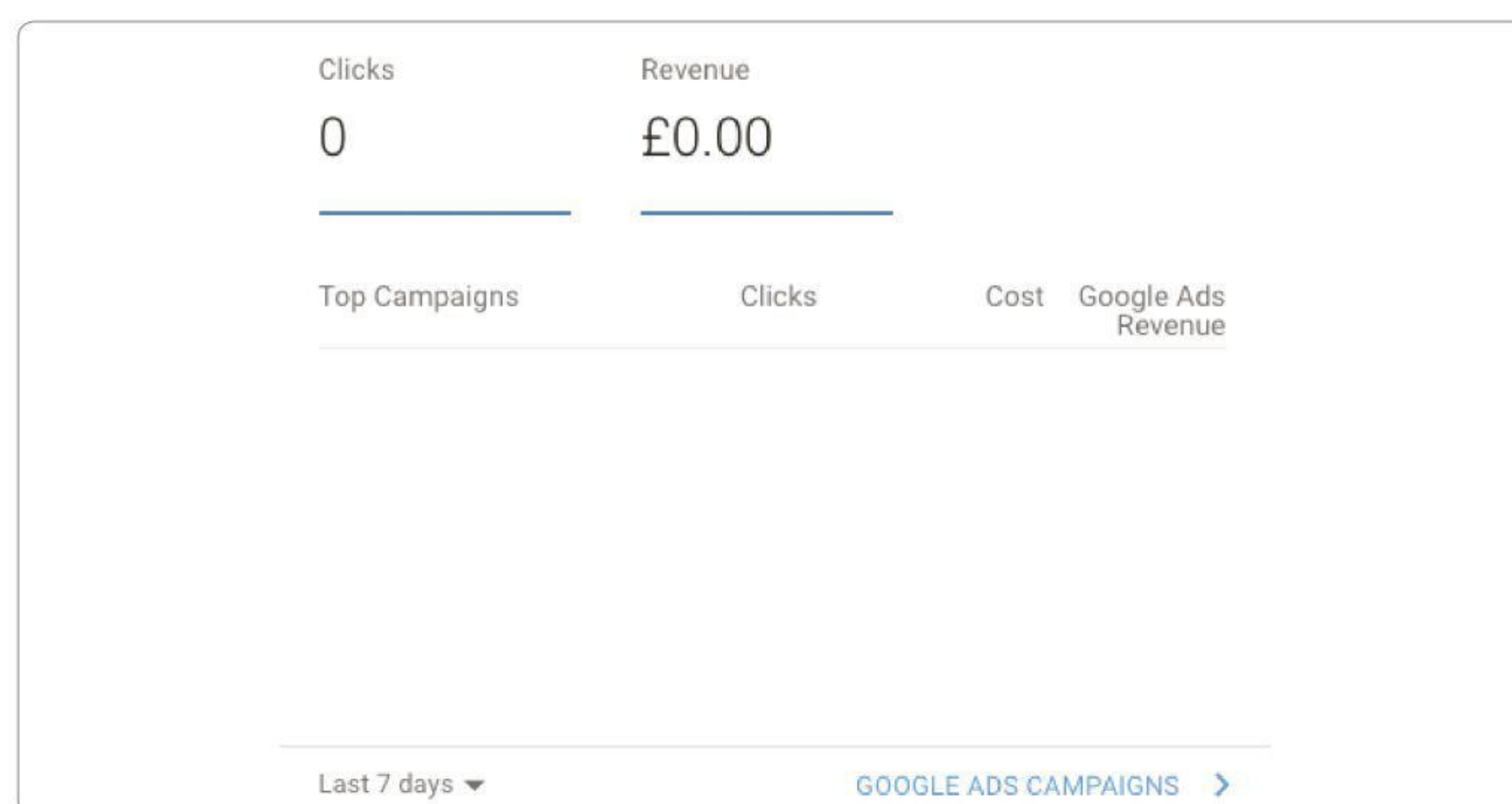
## 17 Custom reports

'Custom Reporting' lets you build reports tailored to your goals and the way your site is set up. You can create reports that cover all of your specific needs and this could potentially greatly speed up your traffic analysis in the future.

Social Network	Sessions	% Sessions
1. Facebook	199	53.64%
2. YouTube	66	17.79%
3. Pinterest	49	13.21%
4. Twitter	44	11.86%
5. Quora	3	0.81%
6. Blogger	2	0.54%
7. reddit	2	0.54%
8. Weebly	2	0.54%
9. Google+	1	0.27%
10. Instagram Stories	1	0.27%

## 14 Social stats

'Social' shows traffic from social networks, which will help you analyse how effectively you're using Facebook, Twitter, and so on. It's not too hard to make these stats grow to form a decent percentage of your traffic.



## 16 Advertising

Google Analytics also offers detailed Google Ads Campaigns reporting to help you see if your money is being well spent or if your methods need changing. Well-targeted ads can make a huge difference to traffic numbers.

**My Dashboard**

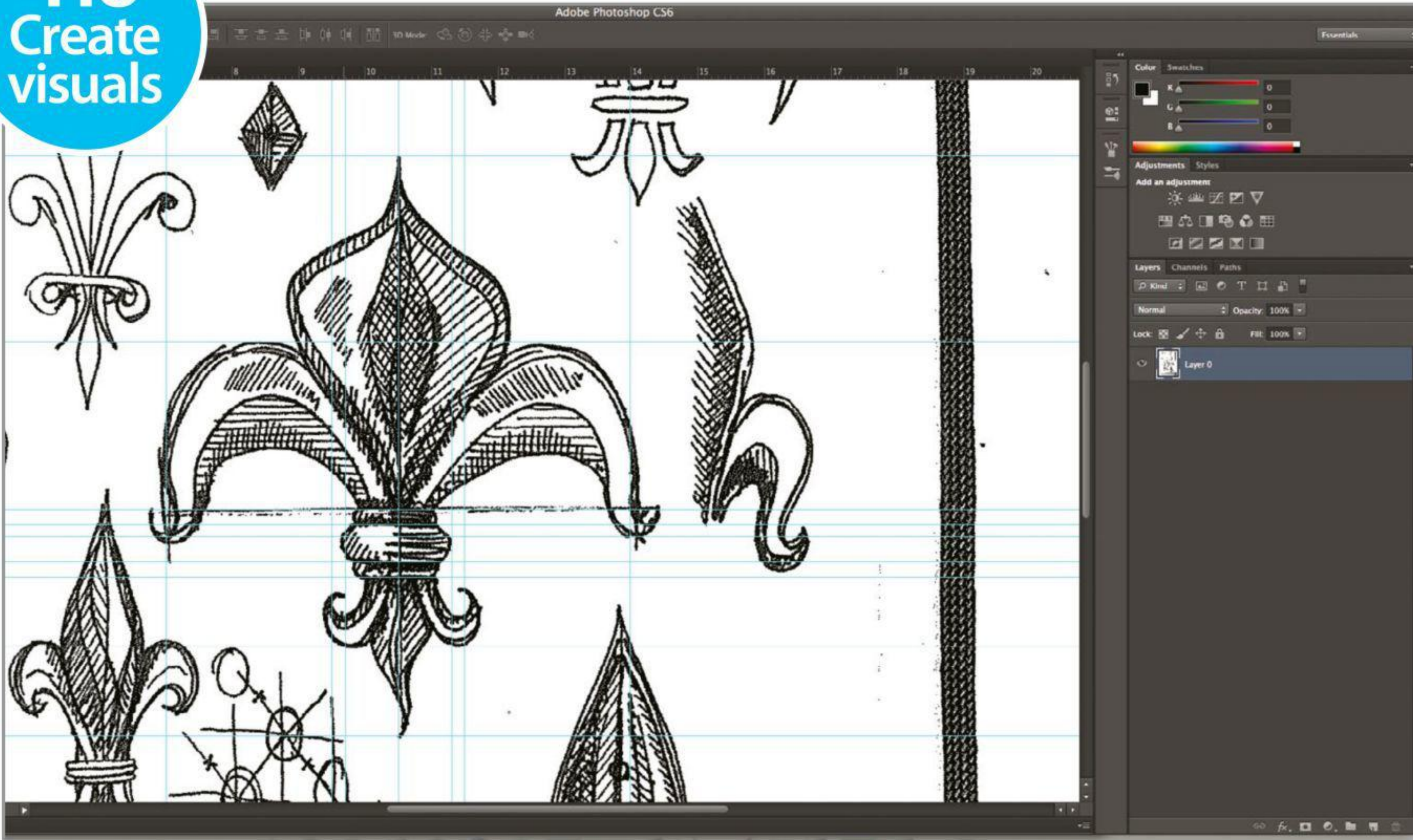
100.00% Sessions

## 18 Export your data

Use the Export option at the top to export your data in PDF format. This can be useful to share with potential advertisers or for data analysis – you can send it to specialists for advice on the best methods to grow your site.

# Photoshop & Graphics

118  
Create  
visuals



**112** New ways to work with Photoshop  
Get more from Photoshop with these tips

**118** Create great backgrounds  
Learn to make a great tiled background

**122** Design header and footer graphics  
Make your website memorable

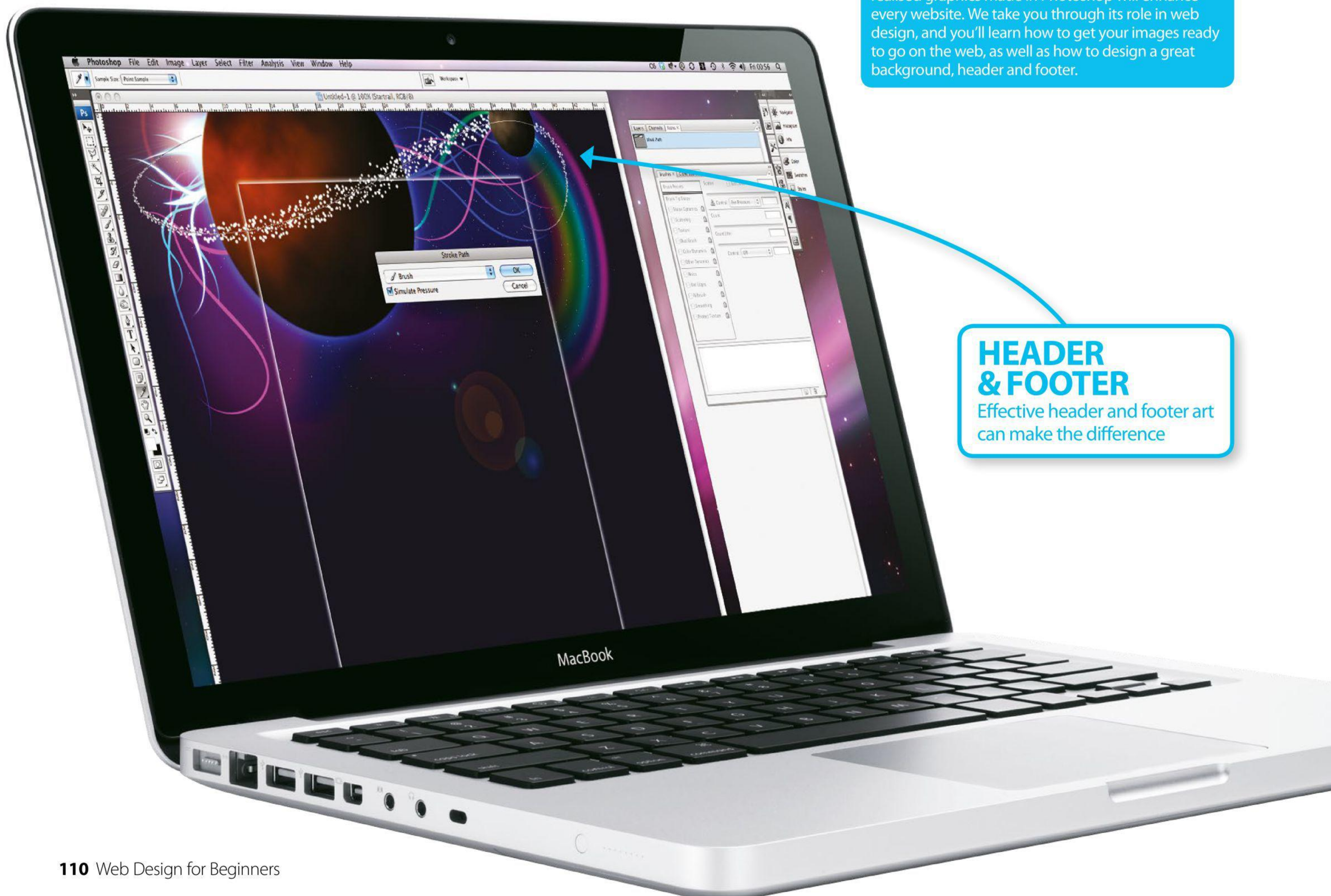
**126** Create a bright, neon text effect  
Build your own font from scratch

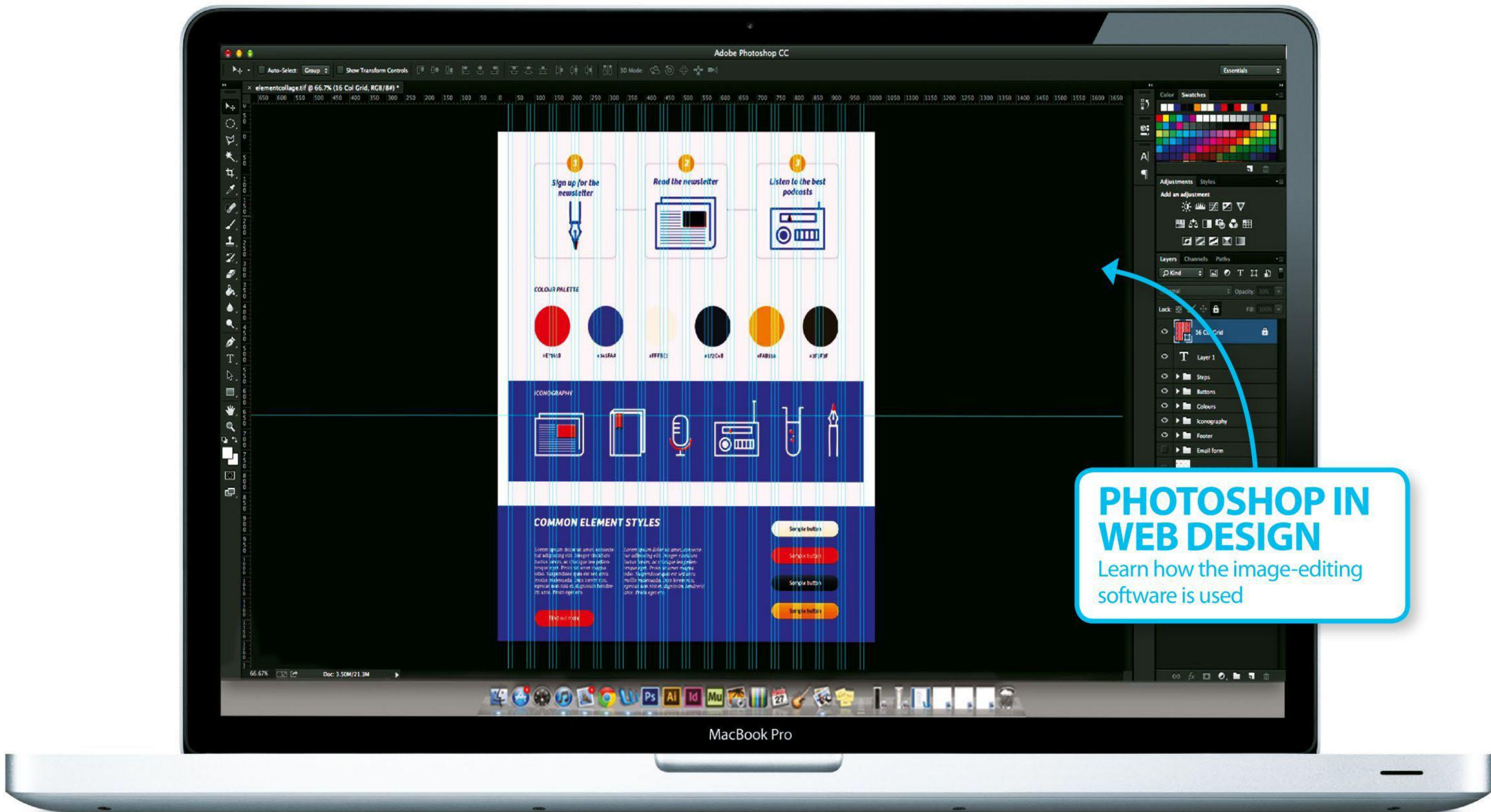
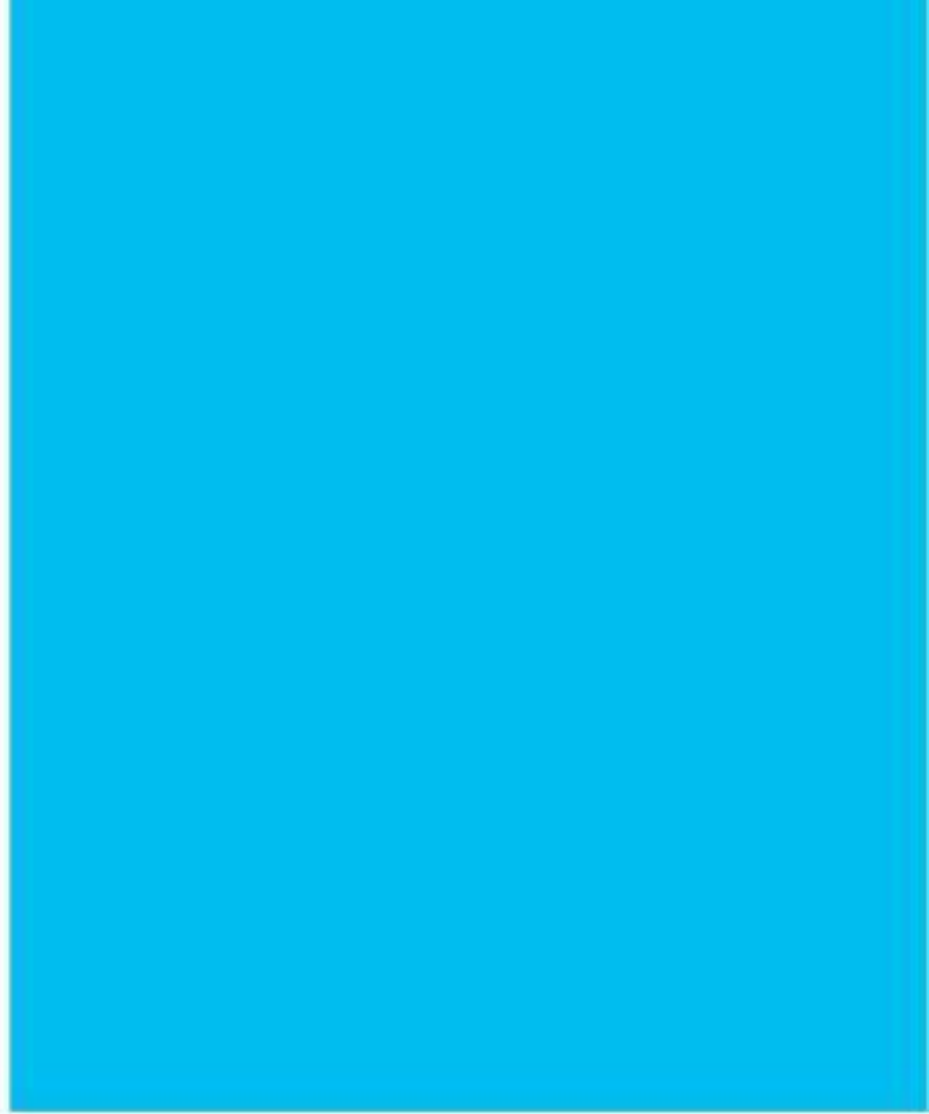
## WHAT YOU'LL LEARN

Although you're more likely to hear about it being used to retouch models or enhance landscapes, Photoshop is used a lot in modern web design. Although you can get a website online and viewed by many without even touching the software, well-realised graphics made in Photoshop will enhance every website. We take you through its role in web design, and you'll learn how to get your images ready to go on the web, as well as how to design a great background, header and footer.

## HEADER & FOOTER

Effective header and footer art can make the difference



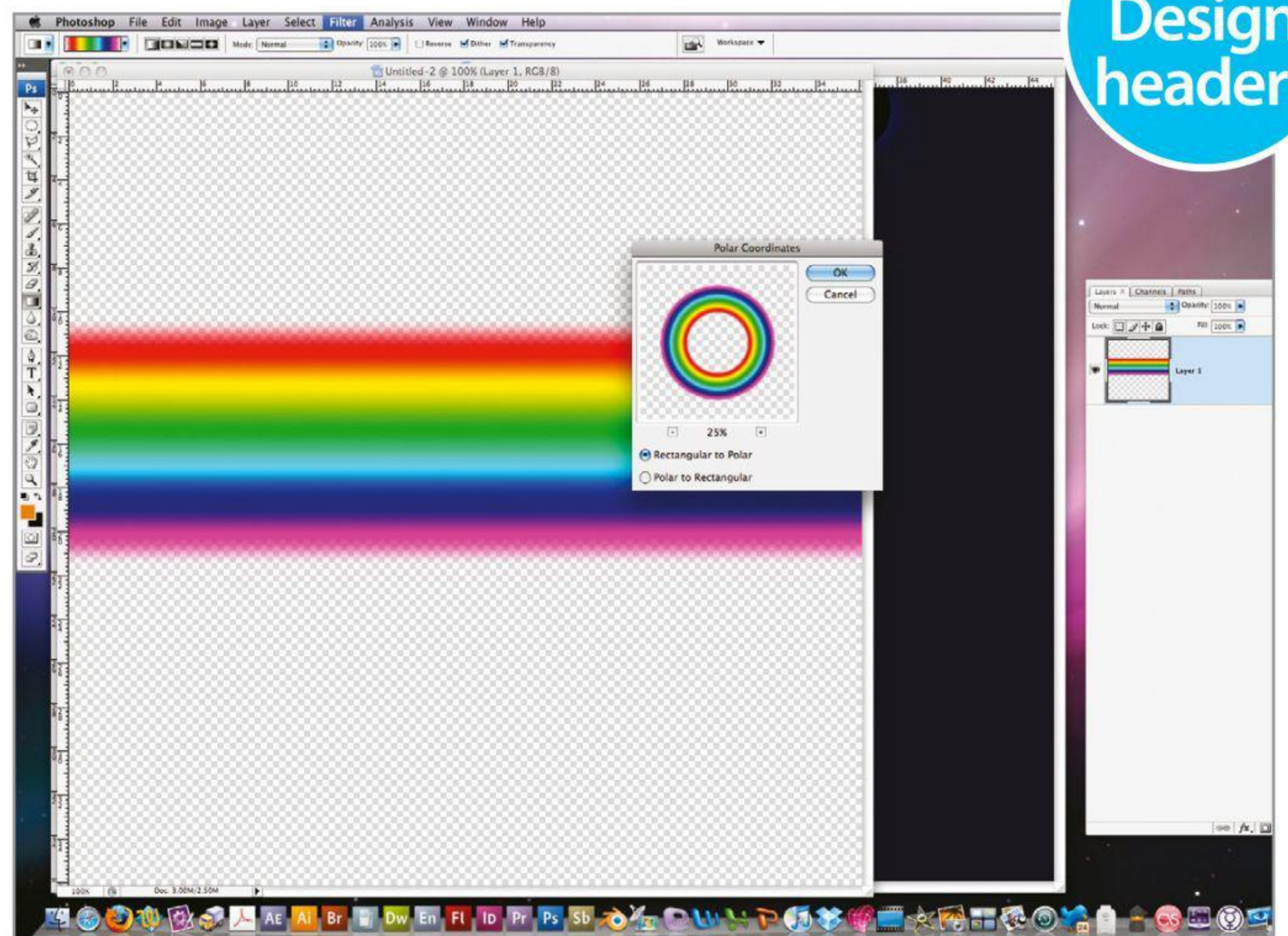


“Photoshop has found a place as a prototyping tool, allowing designers to present clients with ideas, palettes, styles and wireframes”

112 Best plugins



122 Design headers




# NEW WAYS TO WORK WITH PHOTOSHOP

A large, stylized graphic of the letters 'PS' in a light blue color. The letters are set within a thick, light blue rectangular frame. The background of the frame is a dark blue gradient. The overall design is clean and modern, with a focus on the 'PS' logo.

PS





War has long been waged over designing in Photoshop versus designing in the browser. But, maybe it's time we all just got along

**W**ith the development of HTML5 and CSS3, 'designing in the browser' has become common practice. Photoshop has taken a back seat for most web designers, as better standards and new technologies have allowed for more creative freedom when working with code. With the ability to create gradients, round corners, drop shadows and more with ease in CSS, it sometimes feels like Photoshop's bloated feature set is steadily becoming obsolete. However, a new movement has started, bringing Photoshop back into the web design fold and repurposing its powerful tools for brainstorming sketching and wireframing.

Many designers have criticised designing in the browser for what Andy Budd (CEO at Clearleft) described as, a lack of "even the most rudimentary tools, like the ability to draw lines or irregular objects through direct manipulation". The argument here is, although HTML and CSS are capable of rendering designed elements without the use of Photoshop, the lack of freedom to directly manipulate designs can be risky for creativity. Instead we should be using Photoshop to create mood boards and sketches at the start of the design process, allowing creative ideas to flow and develop without the abstraction of a text editor and strict standards to stunt them.

This year, Photoshop is 28 years old and, with the most recent update of CC, now in its 27th iteration. Over that time, Adobe's software has seen radical changes, developing from an image-editing application into a powerful design tool, with a huge and dedicated user base. With competitors – including Adobe's own Illustrator and Bohemian Coding's Sketch, popping up – Photoshop has had to battle to stay relevant. This has led to a repositioning of Photoshop. It's no longer the tool used to create polished, finished site designs to be sliced and rebuilt on the web. Instead, it's found a place as a prototyping tool, allowing designers to present clients with ideas, palettes, styles and wireframes that can be easily edited and don't involve hours of development time.

In response, Adobe and third-party developers have been building tools to bridge the gap between Photoshop and CSS, making the transition from prototype to product smoother. Here, we'll take a look at some of the tools, plugins and features that make Photoshop the perfect application for getting your ideas down, before you even open a text editor.

## Sketching in Photoshop

Designing in the browser can make it hard to quickly move elements around and try out new ideas. If you're struggling with this, why not turn to Photoshop? You can use familiar tools to mock up simple, visual layouts to explore ideas and see if they work. These don't have to look perfect and can be made up of simple shapes – the idea is to just get a feel for what works and what doesn't.

Photoshop's Vector Smart Objects are perfect for creating simple layouts to explore site designs. Once you've created something you're happy with, you can try it in browser and build out the details. This approach utilises the best of both worlds, using Photoshop to experiment fluidly with designs and HTML and CSS to implement the final product. This method is especially useful if you're having trouble with where elements should go in responsive layouts – it also avoids getting stuck staring at code, when a little bit of creative freedom could give you the answer.

## Best tool for sketches



**WebZap**  
[webzap.uiparade.com](http://webzap.uiparade.com)

WebZap is a fantastic Photoshop plugin that makes sketching mockups quick and easy. It lets you create fantastic looking UI elements, grid layouts (based on the 960 grid) and Lorem Ipsum text layouts all with a few clicks. You'll save countless hours searching for UI kits and templates with WebZap's fantastic library of tools. It only costs \$19 and could make the difference between spending hours on a mockup, rather than days. It also comes with a great little preview function that will have your mockups looking polished for the client.

## Better than the browser

Sketching ideas in Photoshop has many advantages over starting your concepts in HTML and CSS. There is more room for creative freedom and quick changes to modules and page elements without the abstraction of code. This is not to say you should be creating full-page comps in Photoshop and then translating them to the web – this method can still cause more problems than it solves and is best avoided due to the sheer amount of time it can take. Rather, Photoshop is the perfect tool for creating visual concepts that aren't confined by the CSS, helping to avoid the initial stumbling blocks of building the site in the browser.

“More room for creative freedom”

# Gauging the mood

Before jumping into the browser, to start putting together your site, it's important to determine a set of aesthetic guides for your designs. By creating mood boards, collages, wireframes and mockups you are more able to establish the mood and atmosphere you, and the client, are aiming for.

## Speaking the language

Photoshop's toolset isn't completely perfect for building layouts. Even in the sketching stage you'll find that sometimes it can be less than fluid for putting together designs. What it is perfect for, however, is creating and exploring the visual language of your designs: styles, effects, colour palettes, fonts and a whole lot more can be predetermined through experimentation in Photoshop, saving you valuable time when it comes to the code. This also allows the client to feed back on many of the basic elements before you devote a lot of time to building anything. Using collages, mood boards and mockups, you can explore the aesthetics of the site and develop a mood, while providing the client with a variety of deliverables.

## Getting in the mood

Creating mood boards can be a really useful exercise for establishing a visual direction, right at the beginning of a project. This is one step that can't be

done in the browser, so Photoshop is the perfect tool for getting all your ideas in one place, either for your own inspiration, or to talk over with the client to find the perfect feel for the project.

## Facing the elements

Element collages let you sketch out ideas for particular elements of a site without putting the whole design on paper. Dan Mall, the creator of element collages thinks they are useful because we don't often come up with an entire site design in one go, so full page comps aren't always a realistic concept. “An element collage allows me to document a thought at any state of realization and move on to the next,” he writes on his site. This method is useful as it lets you explore the visual language of the site through elements that are likely to appear in the final designs. It also gives the client something more solid to feed back on as the elements appear in context more so than in many other prototyping methods.

### DON'T GET CAUGHT UP IN PROTOTYPING

Make sure you don't get too obsessed with the finer details of prototyping. It's all too easy to waste too many hours in Photoshop polishing mockups.

## Wireframing and prototyping

Wireframes and page prototypes are usually basic representations of page elements, as they might appear in the final product. They should be simple, without detail and show the basic structure of the page. You can use these to establish the visual language of the site. Menus,

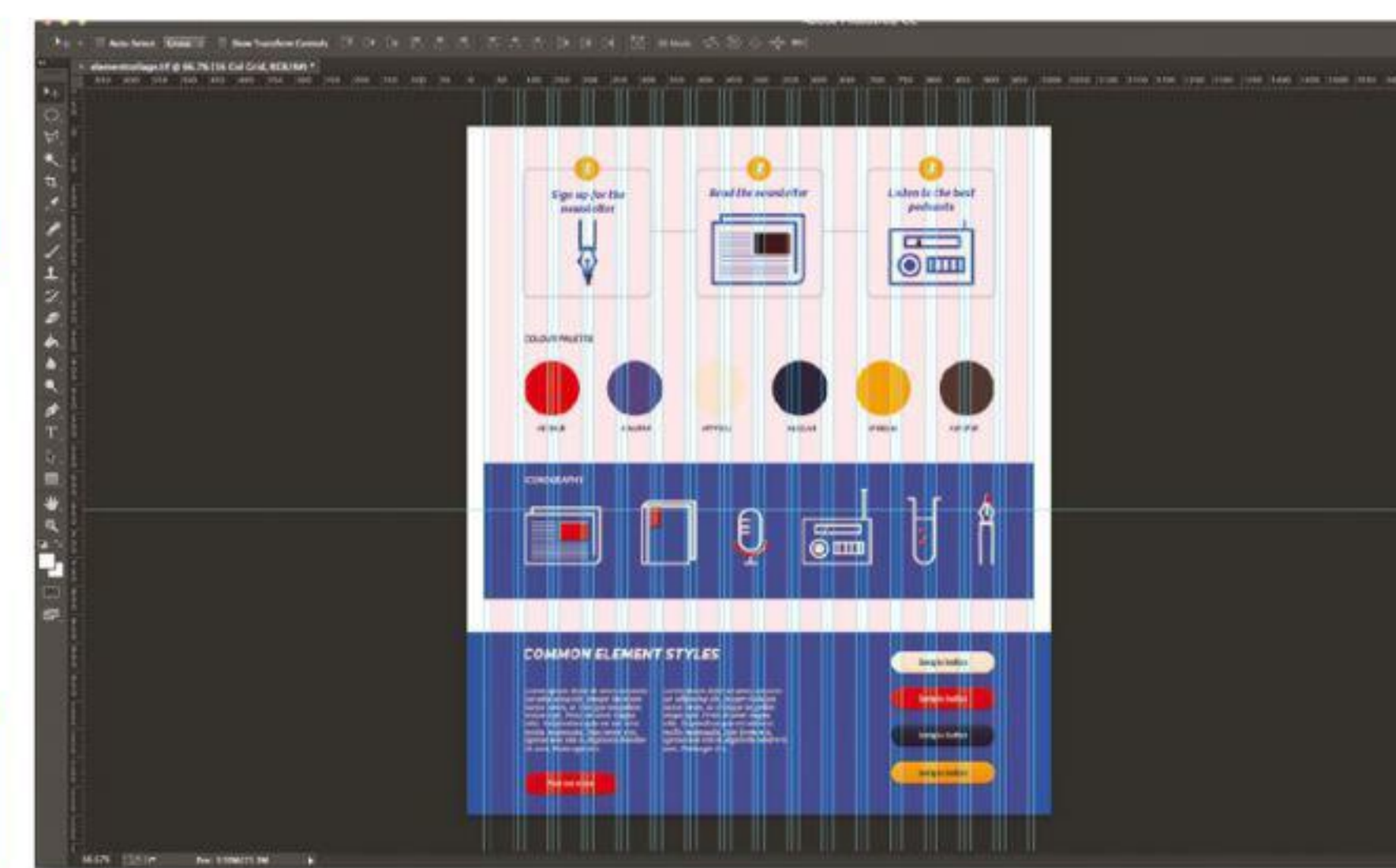
# 5 great plugins & tools



## Page Layers

[www.pagelayers.com](http://www.pagelayers.com)

Page Layers is a nifty little app that converts webpages into layered Photoshop files. You can open and edit entire webpages as PSDs, perfect for late stage editing.



## 960 grid

[960.gs](http://960.gs)

The 960 grid is a simple but effective grid system that comes with PSD and CSS templates to translate your perfectly proportioned site to the web with ease.

## EXPLANATION, EXPLANATION, EXPLANATION

Help your client out. It's sometimes hard to visualise how mockups will be realised later in the process. A little explanation goes a long way.

headers, and breadcrumbs might need to be differently styled to the other changeable page elements like text and sidebars. Often, the client might want to see a working prototype, in browser. For this purpose, Photoshop takes a back seat as it's relatively straightforward and normally quicker to build the working prototypes completely in the text editor.

### For discussion, not design

A combination of any of these prototyping techniques should be a perfect solution for getting your ideas down and translating them to the client. The most important thing to remember is that you're repositioning Photoshop in the design process, using it as a tool for creating a dialogue between you and the client or a collaborator – not for pushing out finished pages. It can still be used for creating assets to be implemented in finished designs but in a responsive world, static page mockups just don't cut it any more.

# Style Tiles

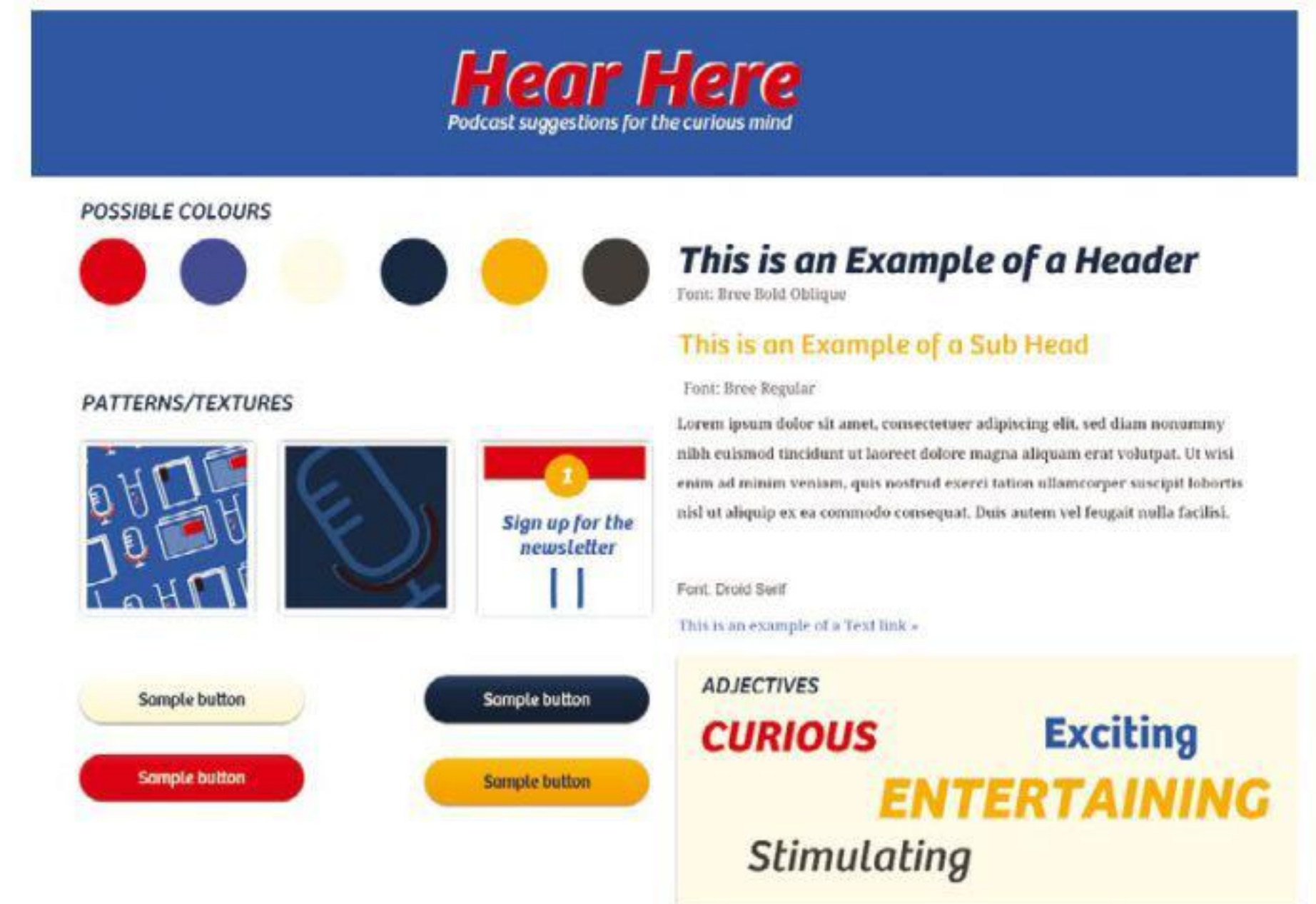
## What are they?

Style Tiles are the invention of Samantha Warren, who compared them to "the paint chips and fabric swatches an interior designer gets approval on before designing a room". They consist of styles for specific design elements, including fonts, colours and UI elements that together portray a brand's visual language for the web. They are great for starting and progressing discussion between designers and clients about the visual direction they want and can be extremely useful in establishing the basic aesthetics for a site design.

Creating Style Tiles helps to avoid the 'do four Photoshop mockups of different webpages' stage of the design process, which often just ends up wasting time and provides very little of any use. Using Style Tiles, the designer and the client can nail down many of the important interface choices needed to progress with a build. They are also a good alternative for anyone who thinks that mood boards are a little too vague.

## Creating Style Tiles

Just like any design process, using Style Tiles begins with a lengthy conversation with the client. Finding out what they want and then interpreting it can be a difficult task, but using Style Tiles helps to



Using Style Tiles is a great way to start crafting the visual language of any design

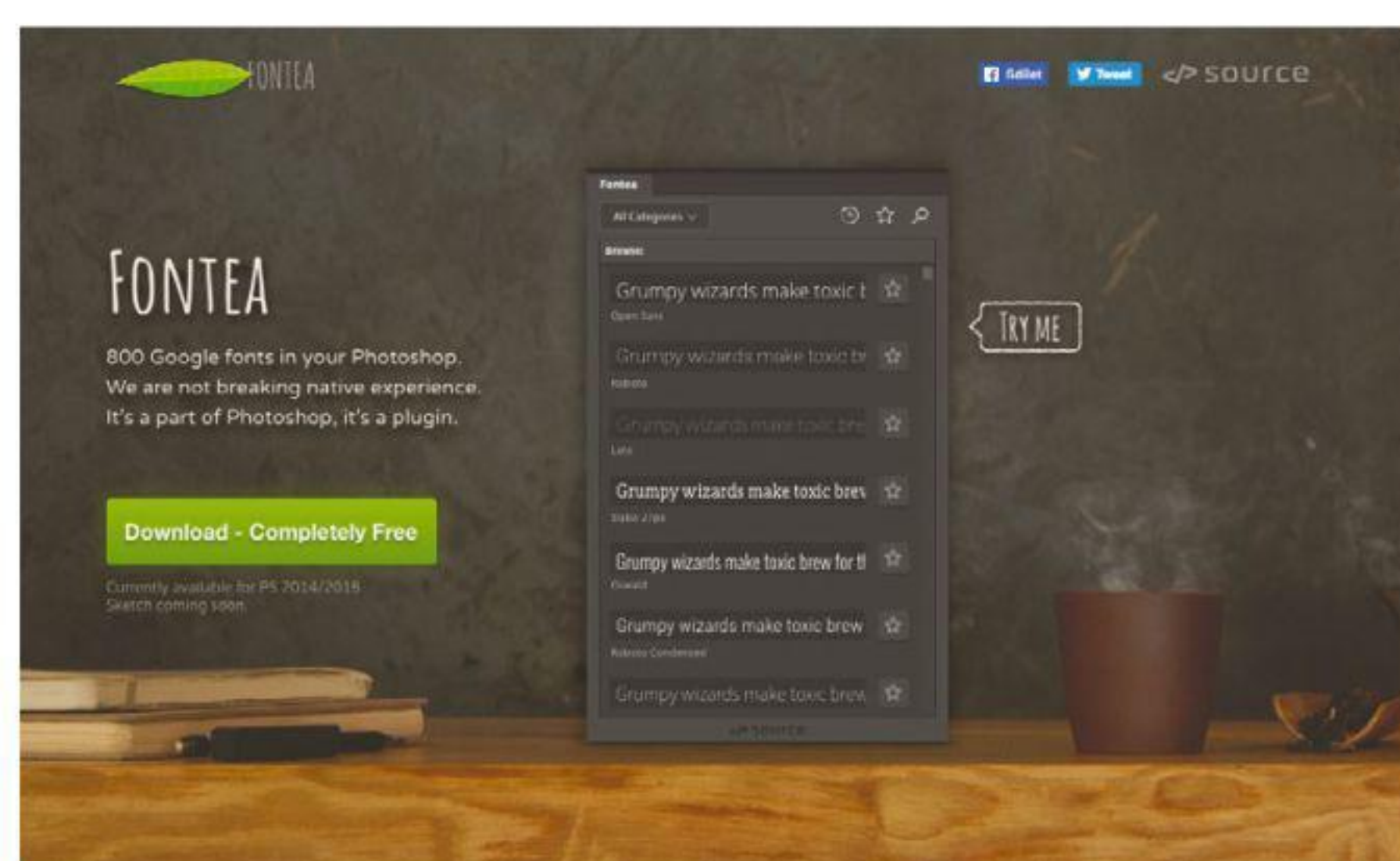
## NO CONTEXT

Remember, while they are great idea, Style Tiles lack context and are sometimes hard to visualise for clients. Element collages will solve this problem.

convey your ideas and get feedback to keep the revision process quick and efficient. With each round of feedback, you can develop the tiles until everyone is happy, but the various revisions here won't take anywhere near as long as a full comp.

Afterwards you can move on to the prototyping stage. You can download a handy Photoshop document from styletil.es to get started. Start experimenting with a bunch of different colours, fonts and imagery to begin building up a visual language. Then play around with the elements until you have three or four individual tiles that all say something different about the brand. Style Tiles are well suited to responsive design, because, rather than designing a fixed-width page layout, you're developing a system that can be applied in numerous ways, and used and developed throughout the site.

One of the many advantages of using Photoshop over alternative software is the huge number of built-in and third-party tools, available to help you out when you most need it



## Web Font plug-in

fontea.madebysource.com

Fontea is a handy tool that lets you use over 800 Google Fonts in Photoshop, meaning you won't have any nasty surprises when you move from PSD to CSS.



## Pixel Dropr

pixeldropr.com

Pixel Dropr lets you create libraries of various UI elements and images and instantly drop them into Photoshop as you're working. It's a great tool for prototyping.



## Cut&Slice me

www.cutandslice.me

Cut&Slice allows you to export assets for different devices quickly and efficiently. If you do have to slice up a PSD, then make sure to use this tool to improve your workflow.

## From PS to CSS

Once you've finished with all of the prototyping stages, it's time to take your designs to the browser. But what's the best way to go about translating from Photoshop to CSS?

Once you've done your sketches, created your Style Tiles and developed your element collages, it's time to take the visual elements you have established and translate them to web. In the past this was a difficult enough operation. You would create a huge bitmap in Photoshop, slice it up and reassemble it online. It could be painstaking and things often didn't turn out as planned. Then came CSS3 and implementing Photoshop style effects in the browser, without the use of images, became a reality.

That being said, it can still be difficult to get the exact look you had achieved in PS sometimes, when you're working with a whole different set of tools and variables in a text editor. It can be very time-consuming translating layer styles

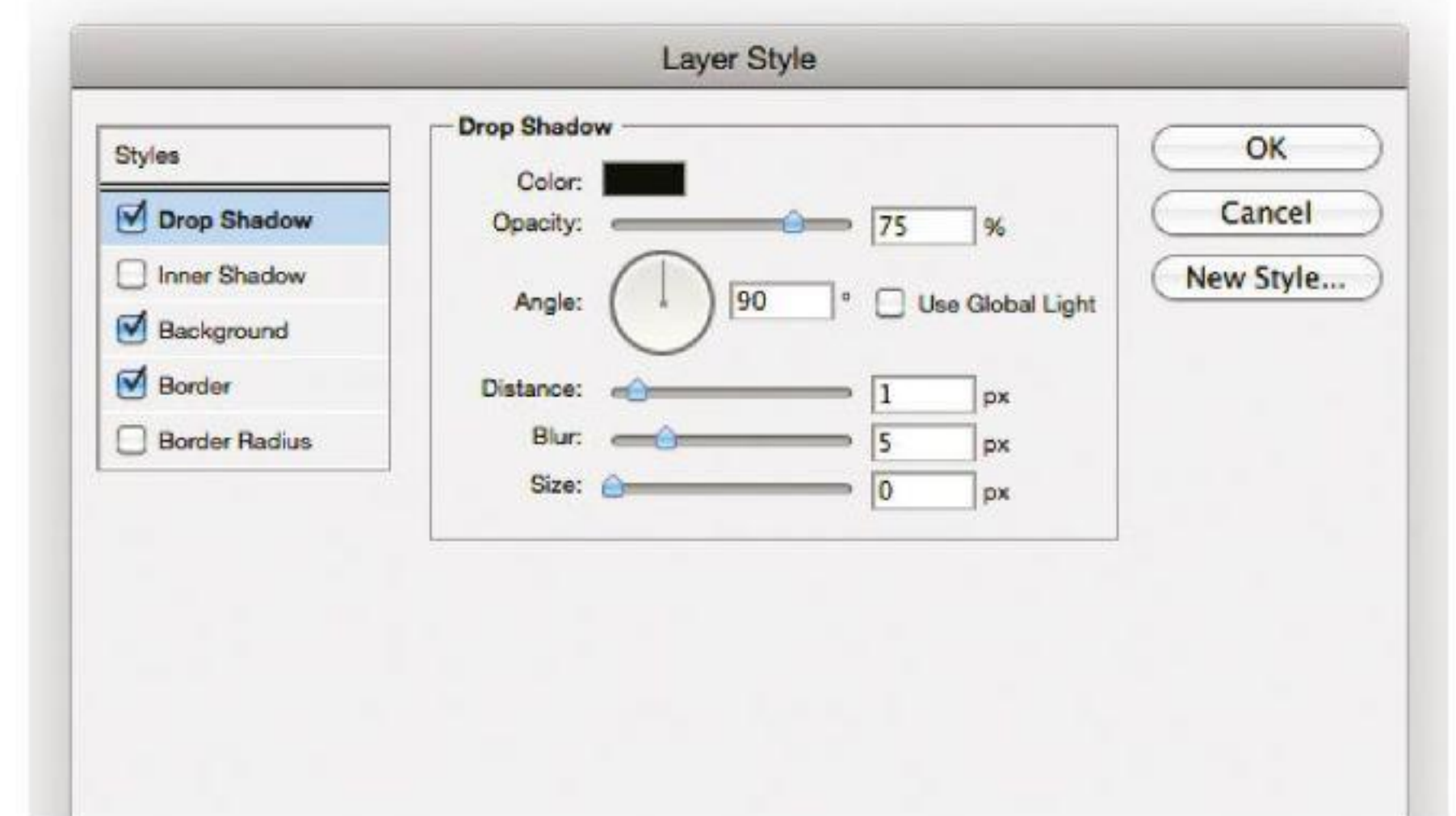
in Photoshop into CSS, which is just another reason why lots of designers started avoiding the Photoshop step completely.

These days though, there's a whole host of tools and plugins available to help you translate your ideas from canvas to browser as smoothly as possible. Some, that we'll look at in a moment, directly convert your layer styles to CSS, while others simply aid in the transition. **Layerstyles.org**, for example, is a totally web-based version of Photoshop's layer styles dialogue that lets you mock up the style you want and then export the result as CSS.

### The in-house method

As of version 13.1 (CS6 and above), Adobe has included a CSS export feature right inside the Photoshop package. Just select the layer that you want the CSS properties for, click on 'Layer' in the menu bar and hit 'Copy CSS'. Photoshop will output a nice chunk of code and copy it straight to

**LS LAYERSTYLES v 0.1**  
JUST LIKE YOUR FAVORITE GRAPHICS EDITOR  
BUT IN YOUR BROWSER. AND IT CREATES CSS.



your clipboard. When you paste it into your editor with a little bit of HTML, you'll have a button like the one you designed in app.

Unfortunately, this is a far from perfect solution; the home brewed tool just isn't up to scratch and neglects to use RGBA values for low opacity – and sometimes ignores effects altogether. It also provides no formatting options before copying, so everything has to be fixed later in the editor. Nevertheless, even with these bugs, it does provide you with a great base to start working from, without having to manually input all of the basics yourself.

## Third-party CSS plugins

Photoshop's own CSS export function works well – but it isn't the dream solution we've all been waiting for. With a few kinks left to iron out it's up to the third-party plugins to offer a neat and efficient way to get our styles from canvas to browser



### CSS3Ps

css3ps.com

CSS3Ps is a totally free Photoshop plugin that's been around since long before the built-in PS to CSS3 functionality. With the extension installed, the functionality all sits inside a neat little window. All you have to do is select a layer group and then click the CSS3Ps logo to start the process.

Due to the nature of the software being free, you're forced to wait 20 seconds and look at an ad, but that's a small price to pay for such great functionality. CSS3Ps takes you to a page with your code, ready to copy and paste. Something to note is that this plugin ignores positioning, so you'll need to fix that later.



### CSS HAT

csshat.com

Unlike CSS3Ps, CSS Hat will set you back \$30. Still, for the additional features and lack of ads, the price is worth it. CSS Hat has the ability to export in multiple formats, including LESS, SASS and SCSS. You can also toggle a variety of other features, like comment explanations, browser prefixes, whether the code gets wrapped in a rule named after the layer and layer dimensions. Exporting with CSS Hat isn't quite as simple as CSS3Ps, as it doesn't support layer groups. This means you'll have to export each layer separately. Other than that, the process is simple and intuitive and the versatility of this plugin is a huge advantage.

# Working with type

**T**ypography has always been something of a problem for Photoshop. Font rendering has never been the software's strong suit and this can become a problem when you're designing for the web.

There's more and more emphasis, these days, on typography for the web. With print designers moving into the digital world en masse, a new importance has been placed on type and fonts in web design. Photoshop has always struggled with rendering fonts and its Type tool is clunky and leaves much to be desired.

The biggest problem is that, with new web-font-only subscriptions, you can't see what the fonts will look like when you're mocking up designs in Photoshop. There's nothing worse than getting a design to the web and realising your chosen font clashes horribly with the design. Web Font Plug-in from Extensis goes a long way in solving this issue, by allowing designers to use Google Fonts in their PSDs.

“There's more emphasis on typography for the web than ever, these days”

## Creating and exporting assets

**L**et's not forget that Photoshop will always be essential for some tasks, like creating icons, banners and images. But when the code can't cut it, what are the best ways for you to get your assets online?

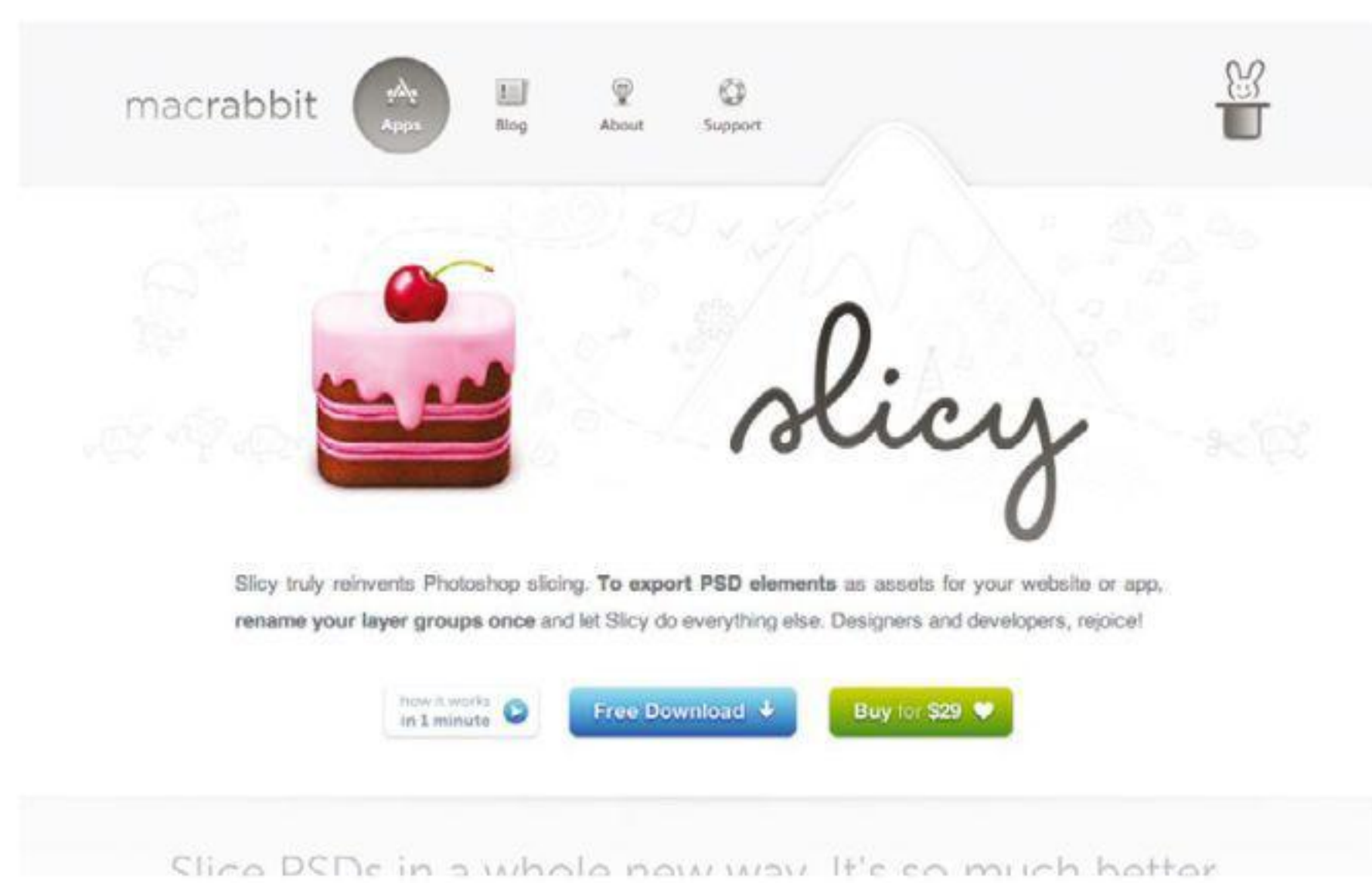
Even with all these tools and tips for effectively combining Photoshop and code, there will always be jobs that CSS and HTML can't handle. If you need to create any kind of bitmap image or element, Photoshop will always be the fallback. You can continue creating designs in Photoshop as usual but remember that, although you'll be exporting assets in bitmap format, you should utilise the vector tools as much as possible so that revising designs isn't a hassle.

Slicing up designs with Adobe's 'Save for Web' option has always been long-winded. These days there are plenty of options for getting your raster assets into the browser, quickly and efficiently. Slicy from Macrabbitt ([macrabbitt.com/slicy](http://macrabbitt.com/slicy)) is an app that exports layer groups as independent files, giving you the freedom to move, hide and overlap elements. It also offers retina scaling on



With Typekit's desktop functionality, you can use the exact same fonts in your mockups as you'll be using in your final page designs online

If you're a CC user you will also have access to Typekit, Adobe's own take on the web font library. With Typekit you can download a set number of fonts through CC to be used with your apps. This means you can access your Typekit fonts with ease, since they sit in Photoshop's font window – so you are able to test out firm favourites such as Proxima Nova and Bree in your static designs.

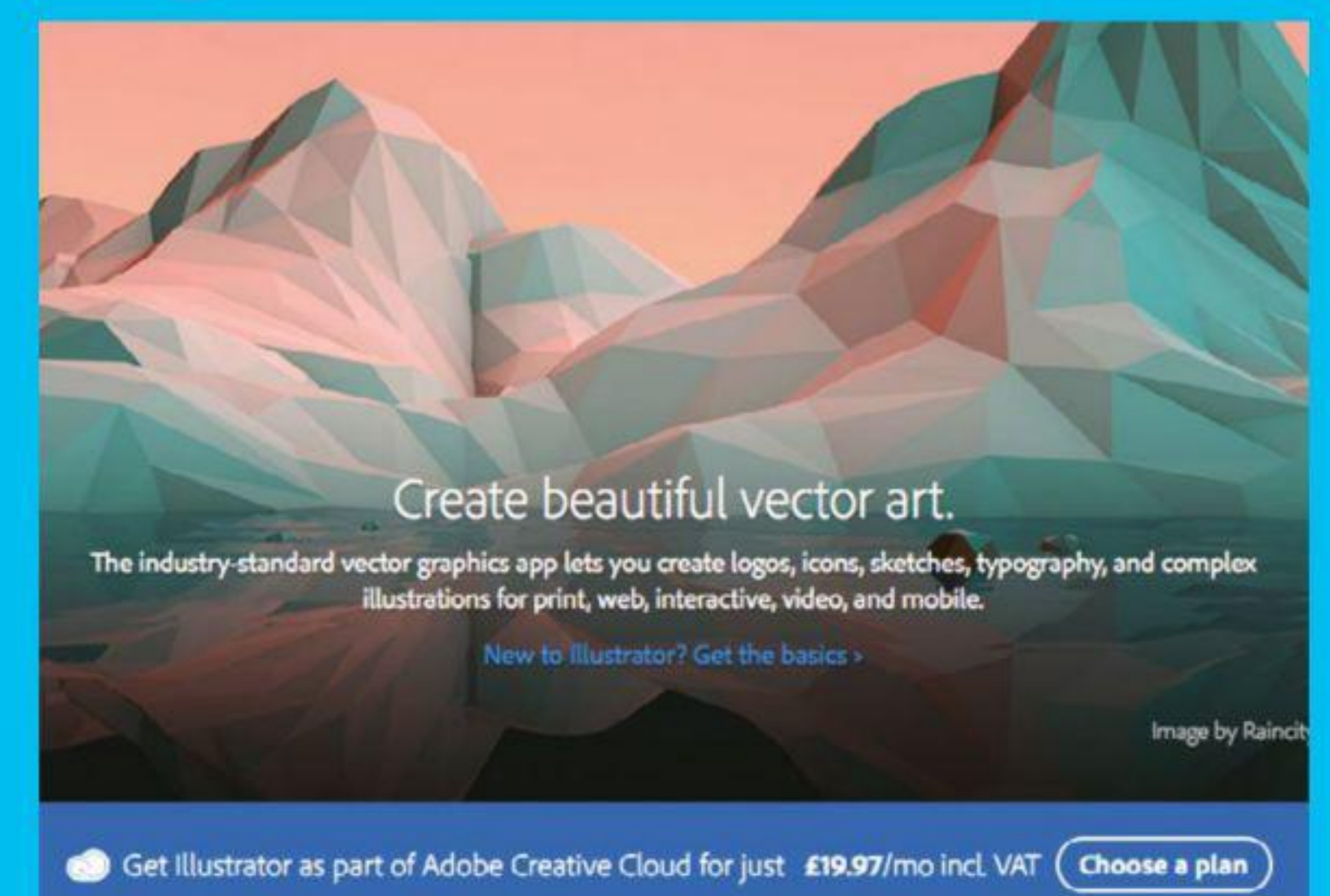


Slicy is a powerful tool for exporting elements, with built-in retina-scaling features – best of all, it's free

vector designs. Cut&Slice me is a free plugin that will export your assets from Photoshop and make them ready for use on all kinds of devices.

It also never hurts to have some extra tips on hand for best practice. Make sure you have a look at [bjango.com/articles/actions](http://bjango.com/articles/actions) – this list of Photoshop actions, put together by the good people at bjango, will save you countless hours when creating and exporting images and artwork from Photoshop.

## Alternative options



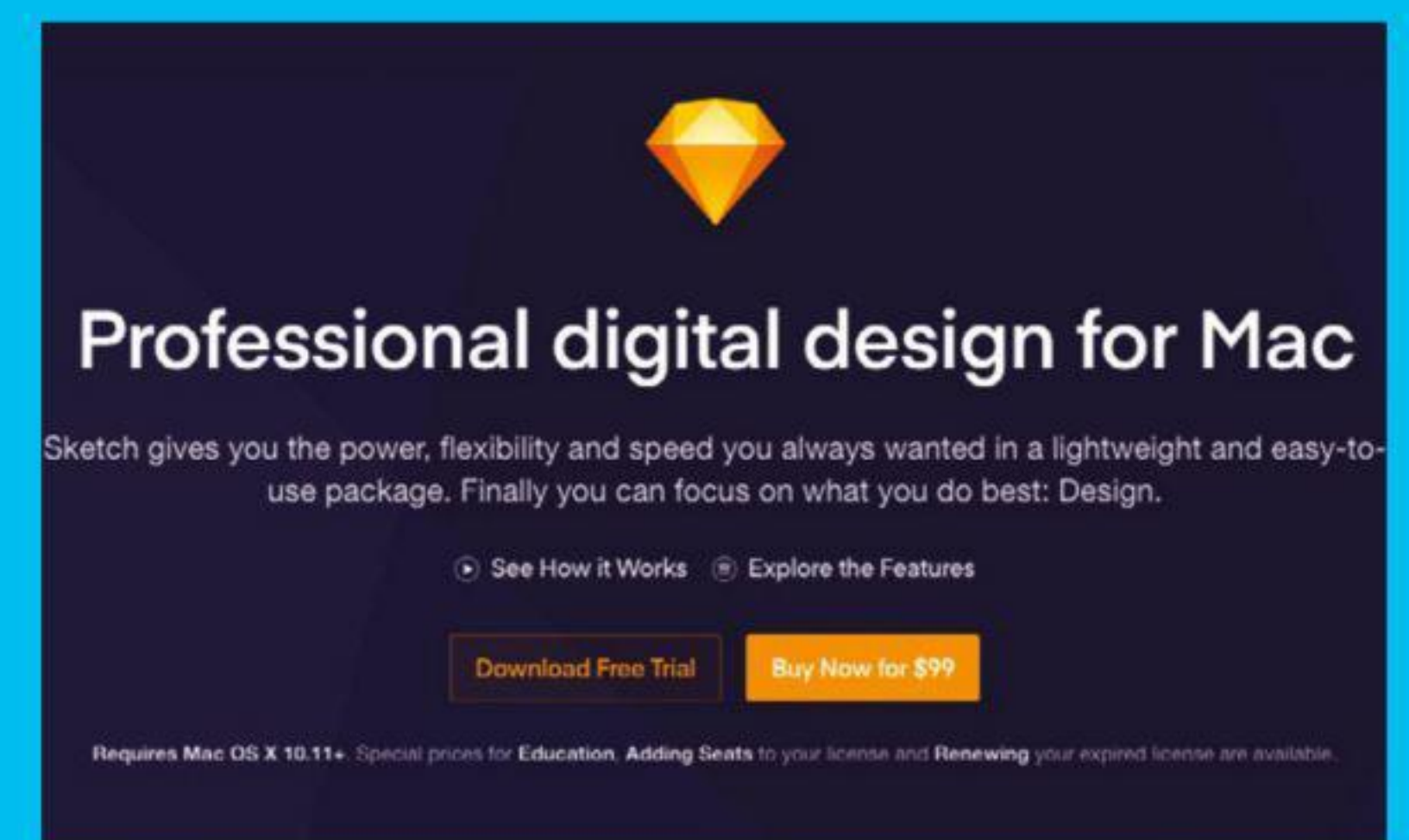
### ADOBE ILLUSTRATOR

[adobe.com/uk/products/illustrator](http://adobe.com/uk/products/illustrator)

Recently, Adobe's Illustrator has become more powerful and now features many of the tools and effects we're used to seeing in Photoshop. With layer effects and some powerful type and drawing tools there isn't much Illustrator can't do. It can also be more useful than Photoshop when it comes to sketching out early designs.

**PRO:** More fluid workflow and working completely in vectors mean that the process can be quicker and easier.

**CON:** There's no endless list of third-party plugins to make your life a little easier like there is with Photoshop.



### SKETCH

[bohemiancoding.com/sketch](http://bohemiancoding.com/sketch)

Sketch is a beautiful, lightweight and very powerful design app. The Mac-only software began as a drawing package but was quickly adopted by web and UI designers due to its flexibility and feature list. It allows for PNG and CSS asset exports and on-the-fly previews for all iOS devices.

**PRO:** Predetermined UI element styles make creating buttons and sliders easy.

**CON:** It can be hard to get used to Sketch's tools and interface after years of Adobe.

## Create great backgrounds for your website

Create a rich, original image that tiles perfectly in Photoshop

**B**ackground images are an essential part of designing a website, so being able to create a tiled image – one that repeats without seams – is especially important. After all you don't know how long your pages will be.

We can find inspiration all around us for repeat patterns, whether it's a bee's honeycomb, parquet flooring or some vintage wallpaper. While it's true to say that styles and fashions come and go, often at an alarming rate, there are those that are always fashionable – timeless designs that work whatever

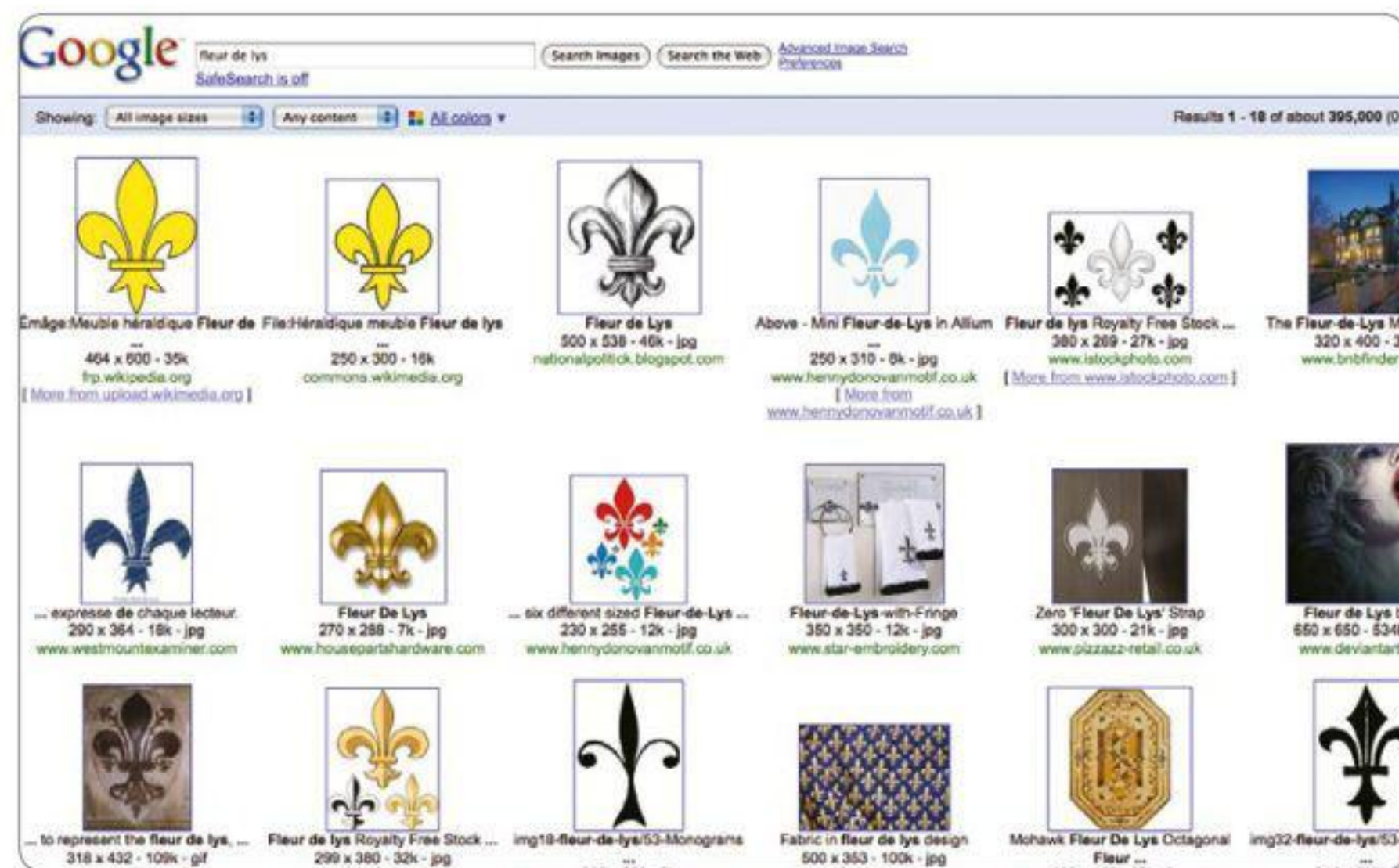
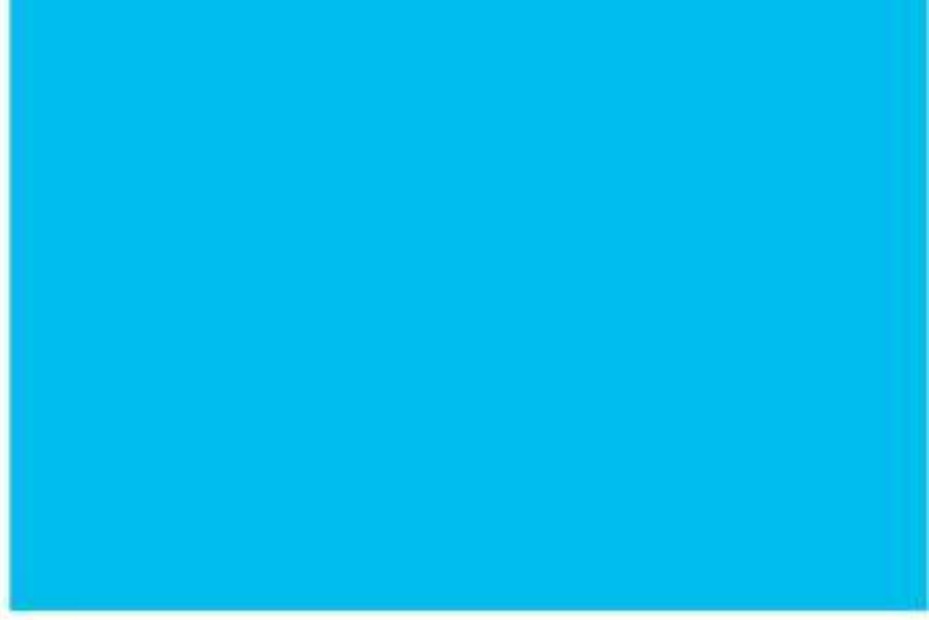
the era. 'Vintage' suggests age, refinement, sophistication and experience.

In this tutorial we're going to create a classic fleur-de-lys in Photoshop. We'll start from a sketch and work this up into a fantastic vintage wallpaper tile, which will repeat perfectly for use on a website.

We'll weather and age our design to help create a time-worn look and save it in a format that will work on the web. If you don't fancy using a sketched fleur-de-lys, we explore ways to use Photoshop custom shapes to create simple and easy-to-use patterns that will suit your website.

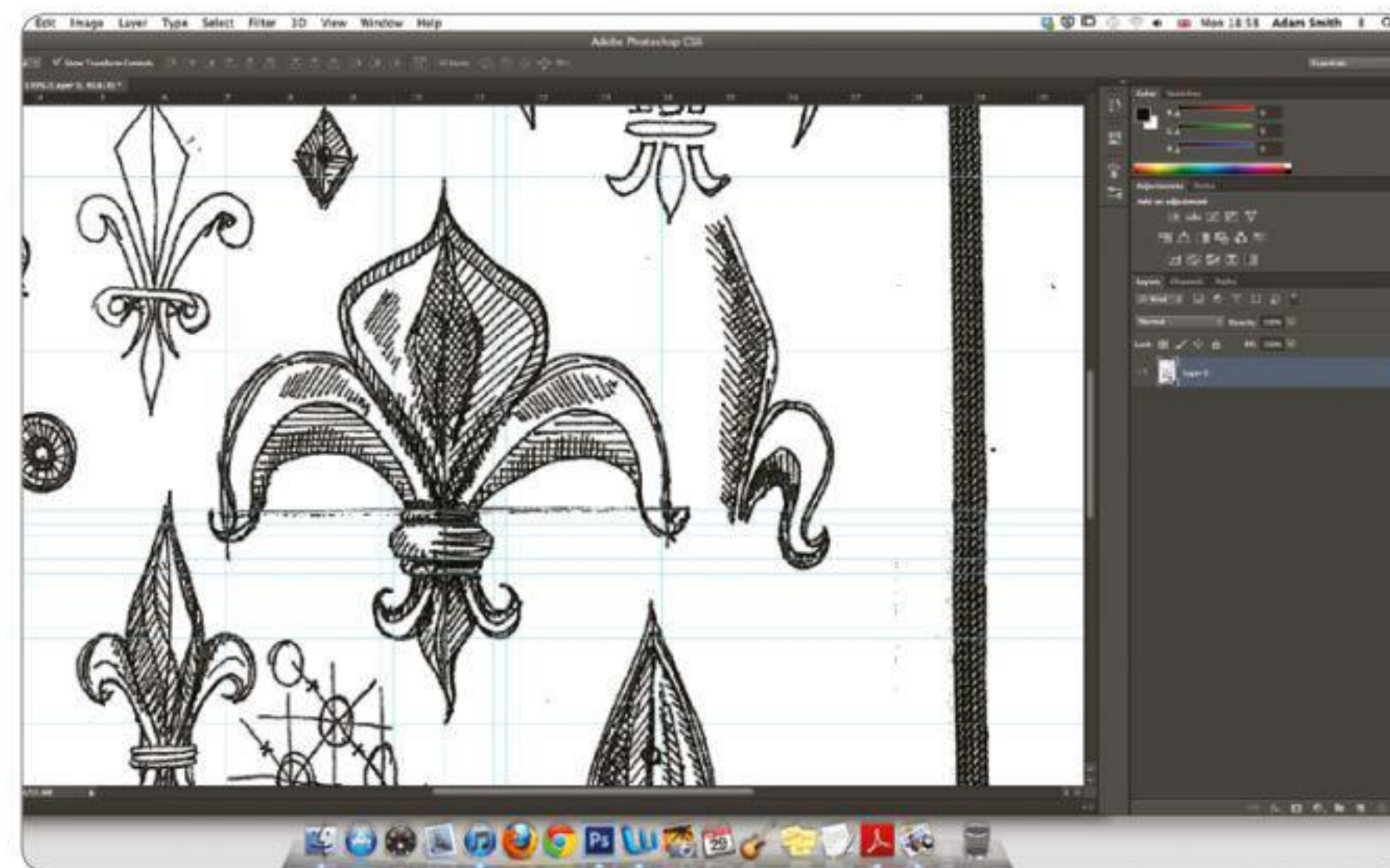
“We find pattern inspiration all around us – from honeycombs to parquet flooring”





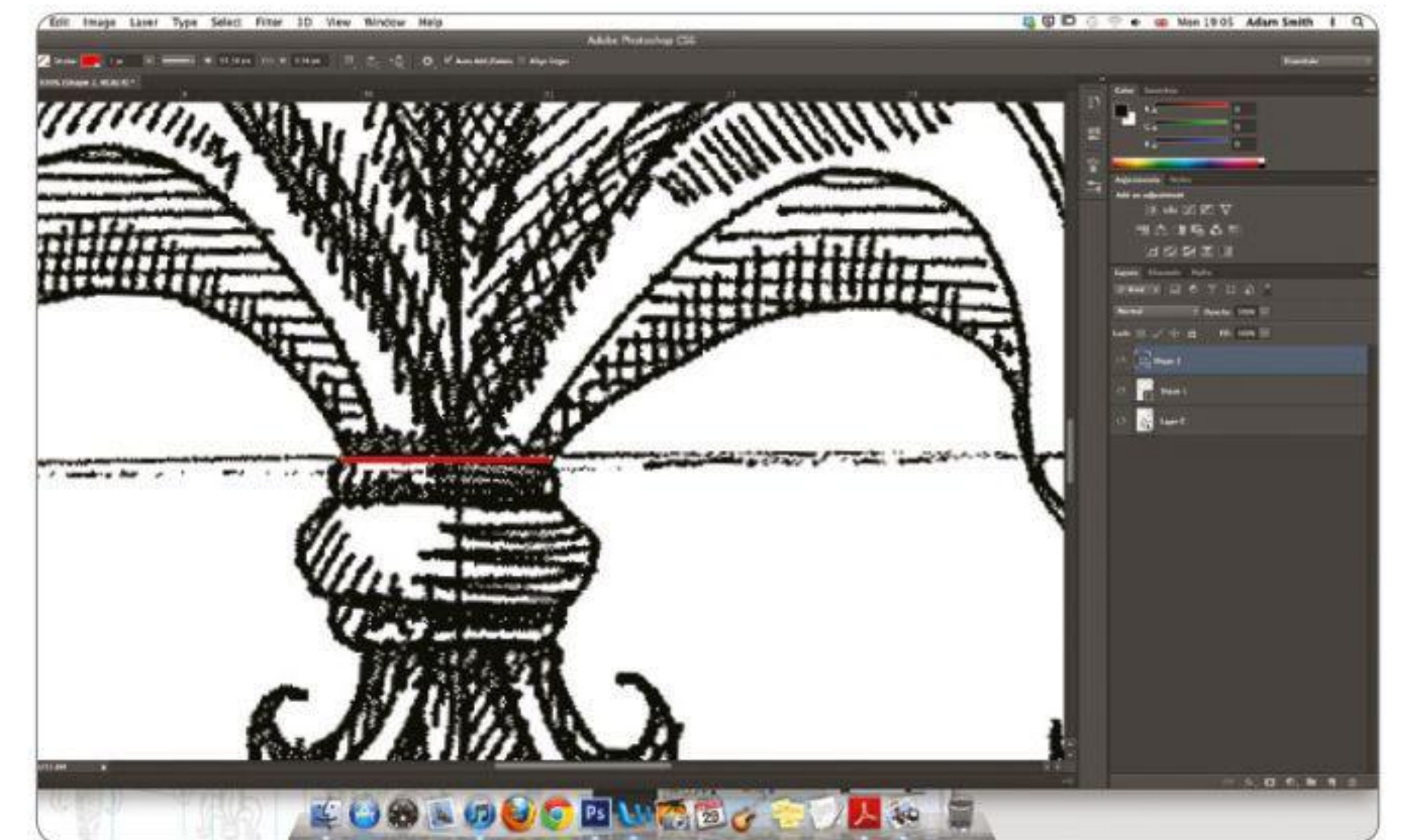
### 01 Do your research

It really is worthwhile doing your research and getting some real-world reference material. You can go to the library and get a book of interior design, visit your local wallpaper shop, or take the easy option and use a search engine to find images of the motif you have in mind.



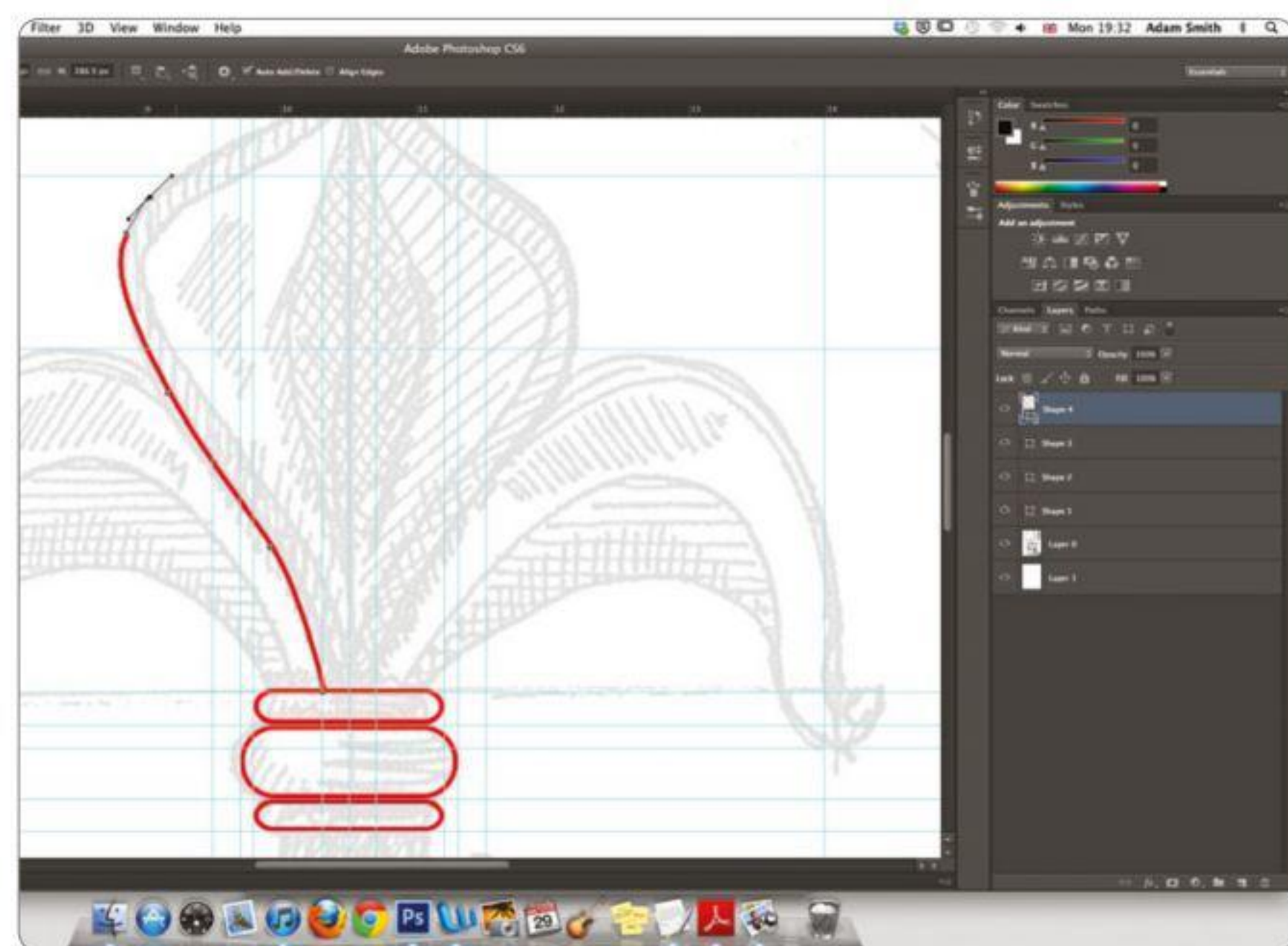
### 02 Sketch and scan

Sketch out your design elements on a sheet of paper. Scan it to your computer, opening your image file in Photoshop. If you'd like to incorporate elements from two sketches into one final design, that's also fine: identify which part you want to start drawing first and zoom in close.



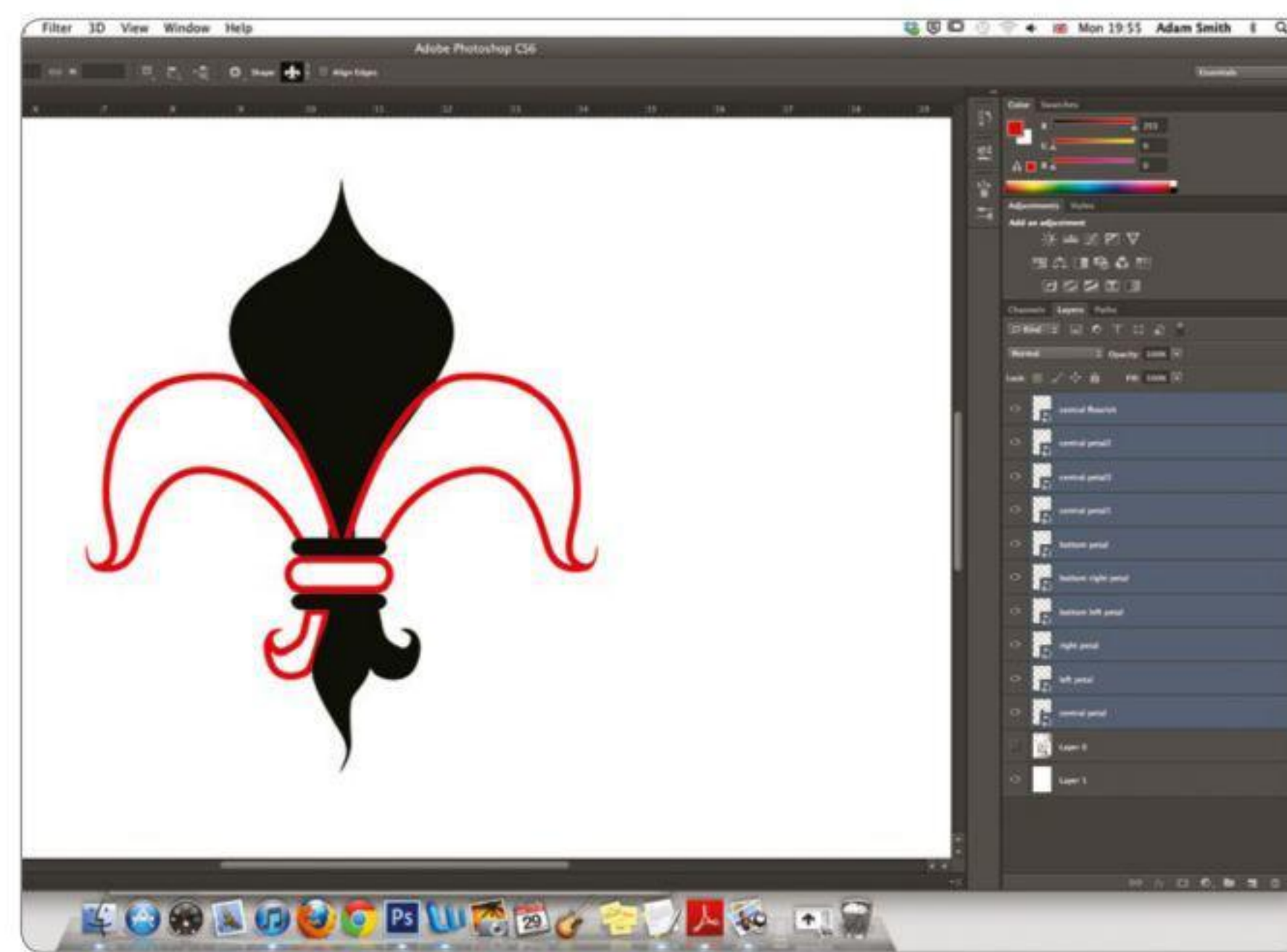
### 03 CS6 Pen Shape tool

We'll use the Pen tool set to Shapes to create an outline in CS6. The new Stroke Shape Tool Options are an ideal replacement for paths. Set stroke width to 1px then click to create and click again further along the same edge to create another. A straight line is drawn between points.



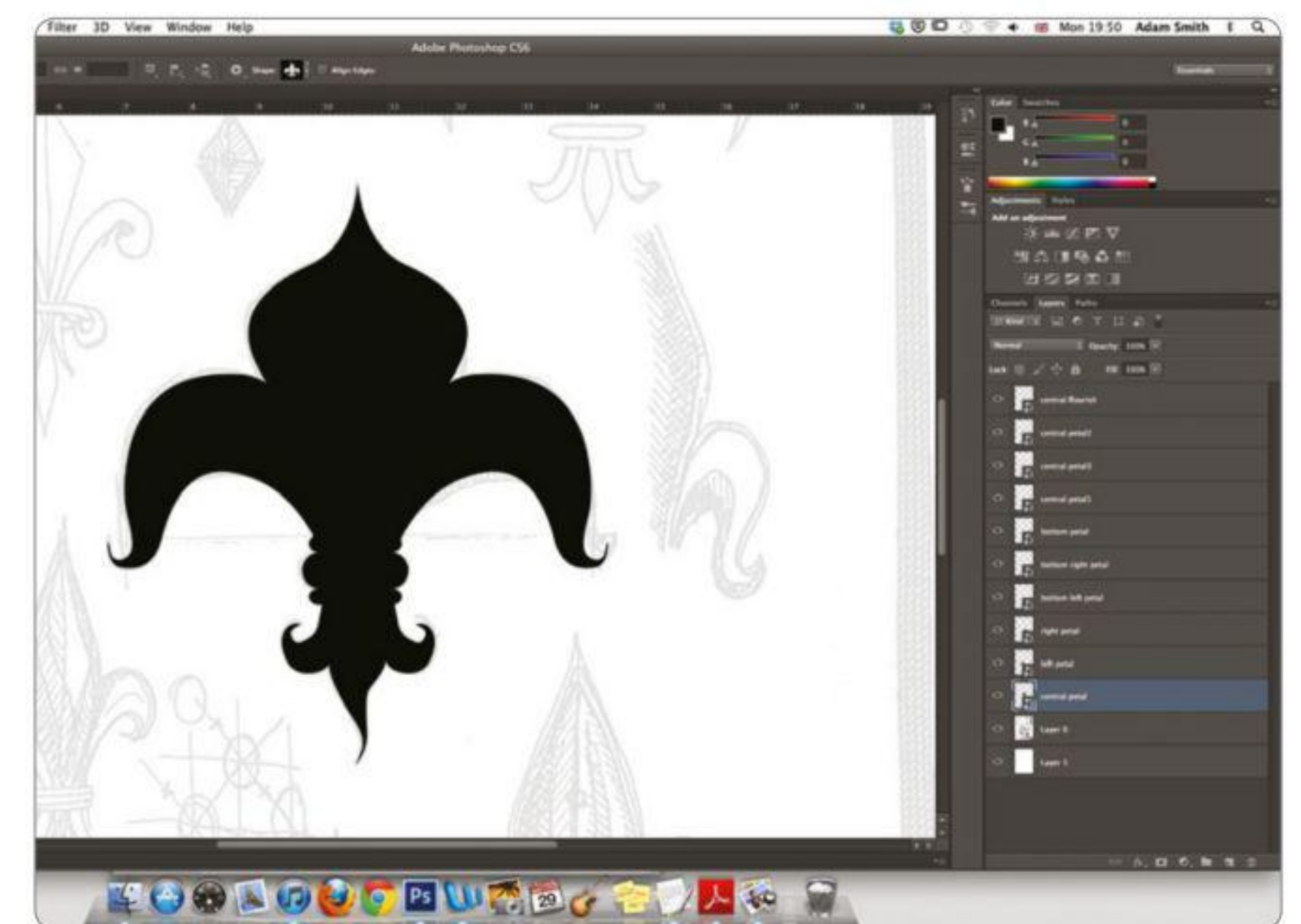
### 04 Create curves lines

To create a curved line, hold the mouse button after clicking, then drag to either side. Work your way around the motif, adding points, until you can click on the original point. Now we want to move on and fill our selection.



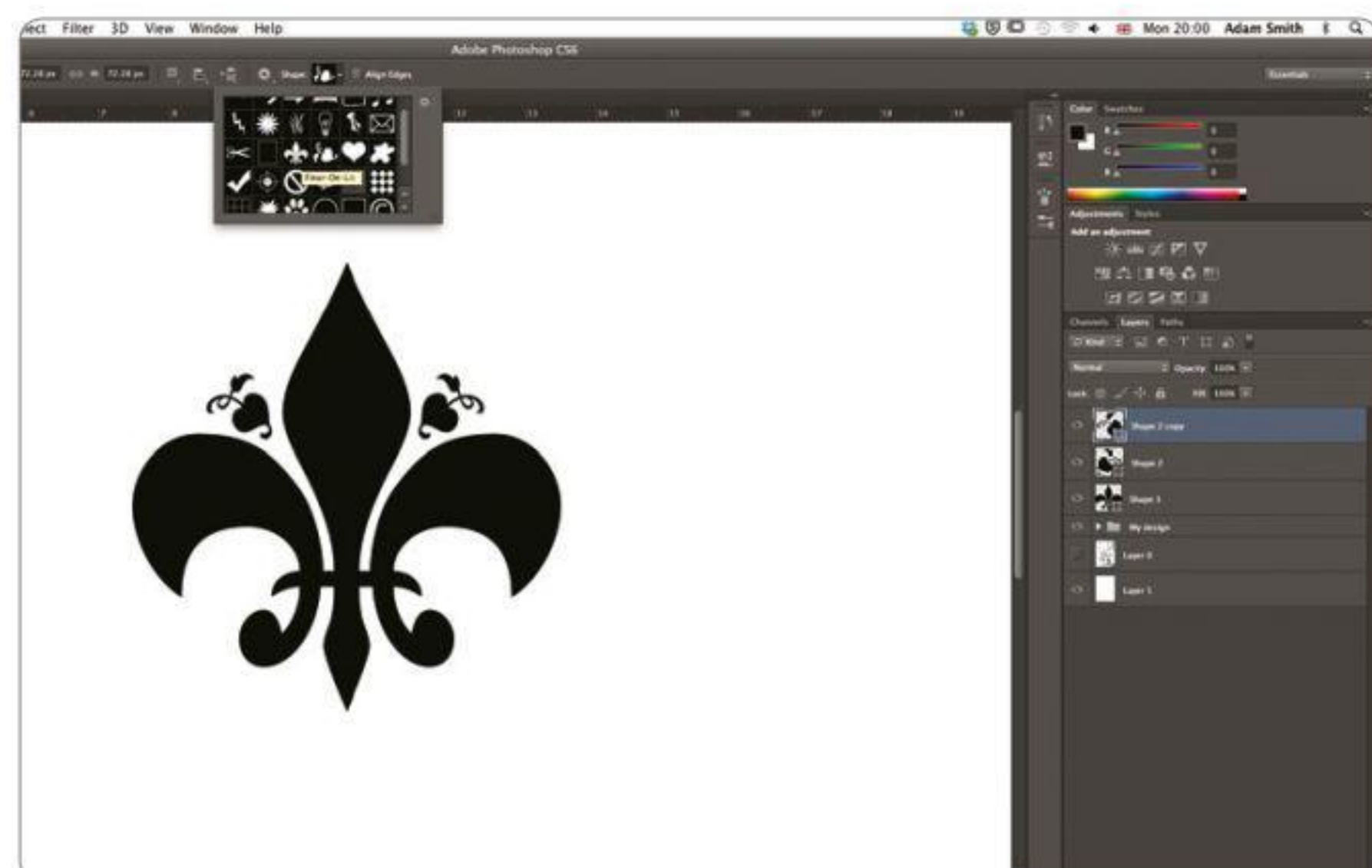
### 05 Finish paths

We made a total of ten paths, setting Stroke to no colour, Fill to black – one for each of the top and bottom petals, three for the central bands, and one for the central flourish. Now we have to start filling in our Path Shapes.



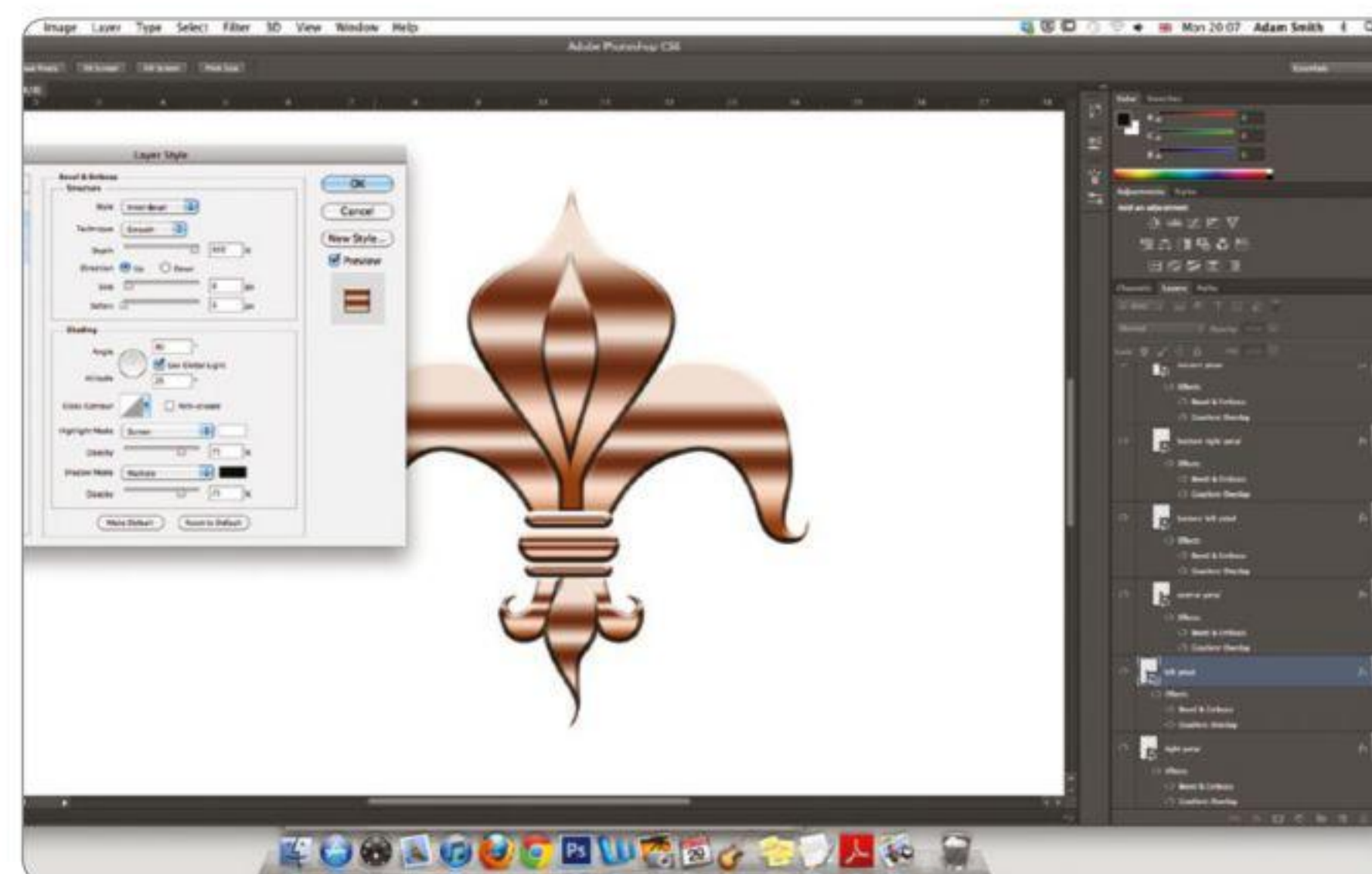
### 06 Fill each path

Filling your Paths is super-easy with the new Shape Tool Options. All you need to do is activate your Path Shape layer and set Stroke to No Colour. Activate the Fill options and set colour to black, making your Path Shape solid.



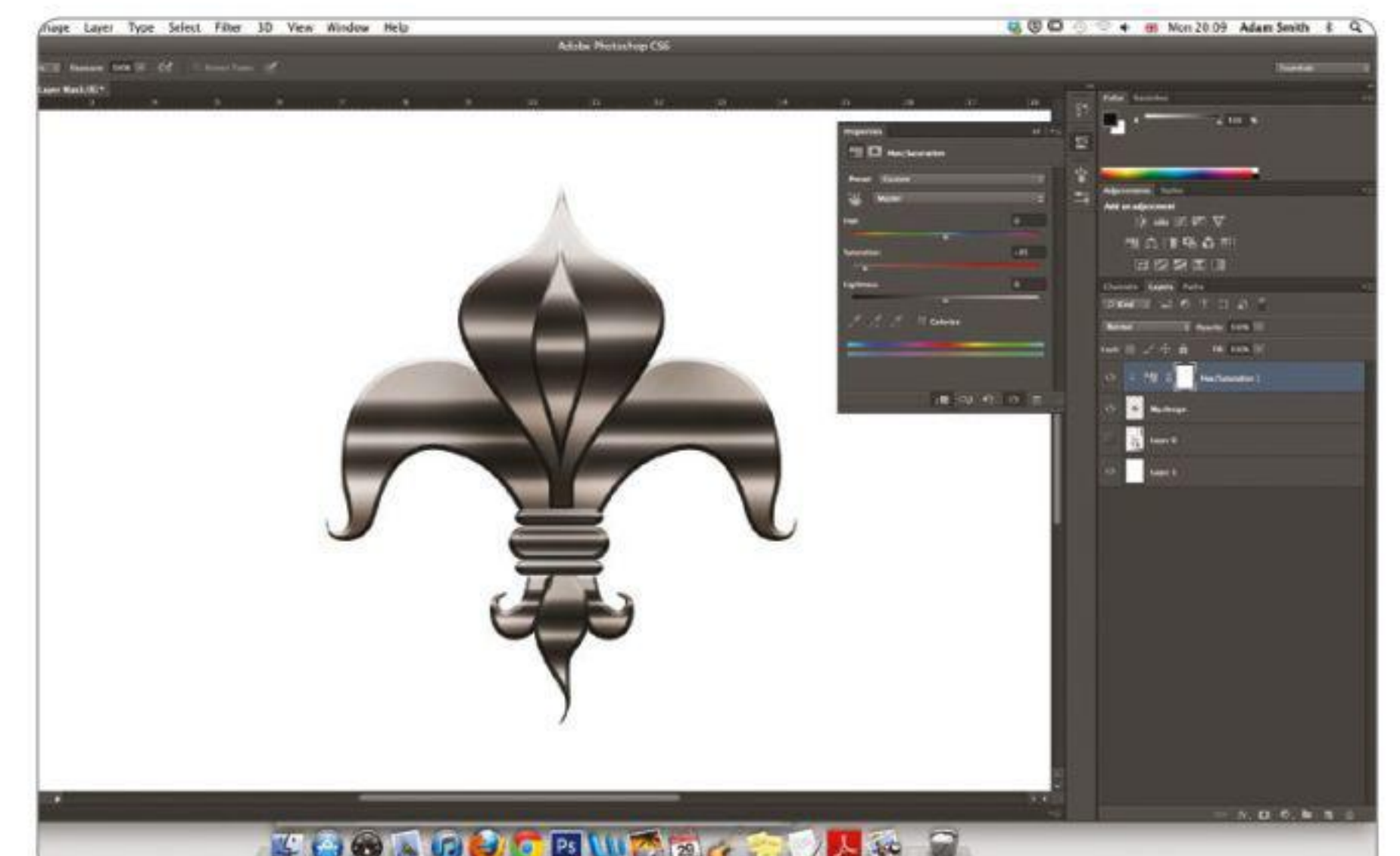
### 07 Use Custom shapes

As always, Photoshop provides you with even fast ways to create shapes. Press U and select Custom Shapes from the Tool Bar menu. You'll find a Fleur-de-lys shape preset in the default options. You can combine this with other preset shape options to create your own design.



### 08 Add layer styles

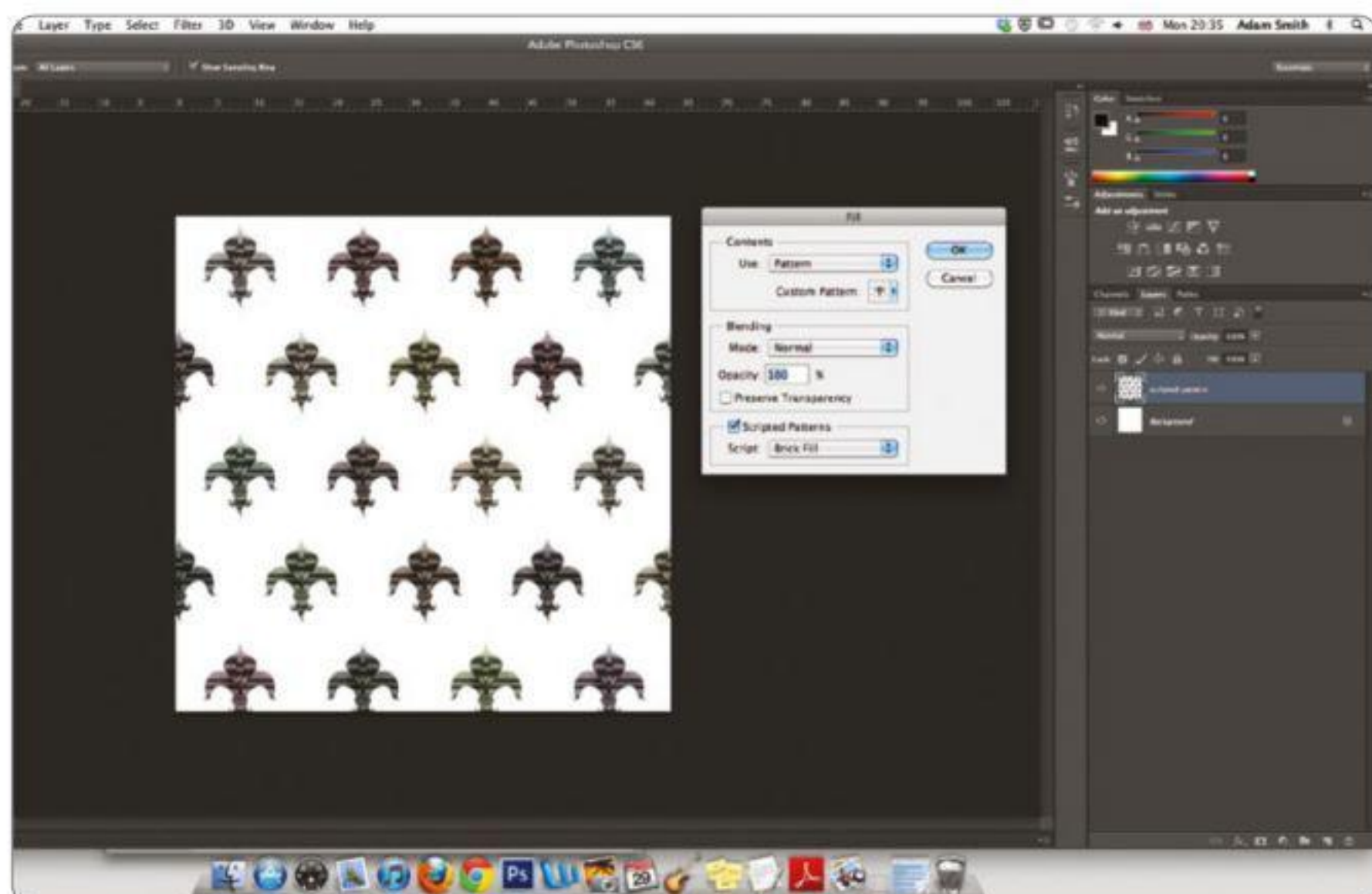
Choose a layer and select Layer>Layer Style>Gradient Overlay. Choose Copper. Tick the boxes for Bevel & Emboss and Texture, then play with the settings. Right-click on the layer in the Layers panel and choose Copy Layer Style. Right-click and paste the layer style onto each layer.



### 09 Merge and collaborate

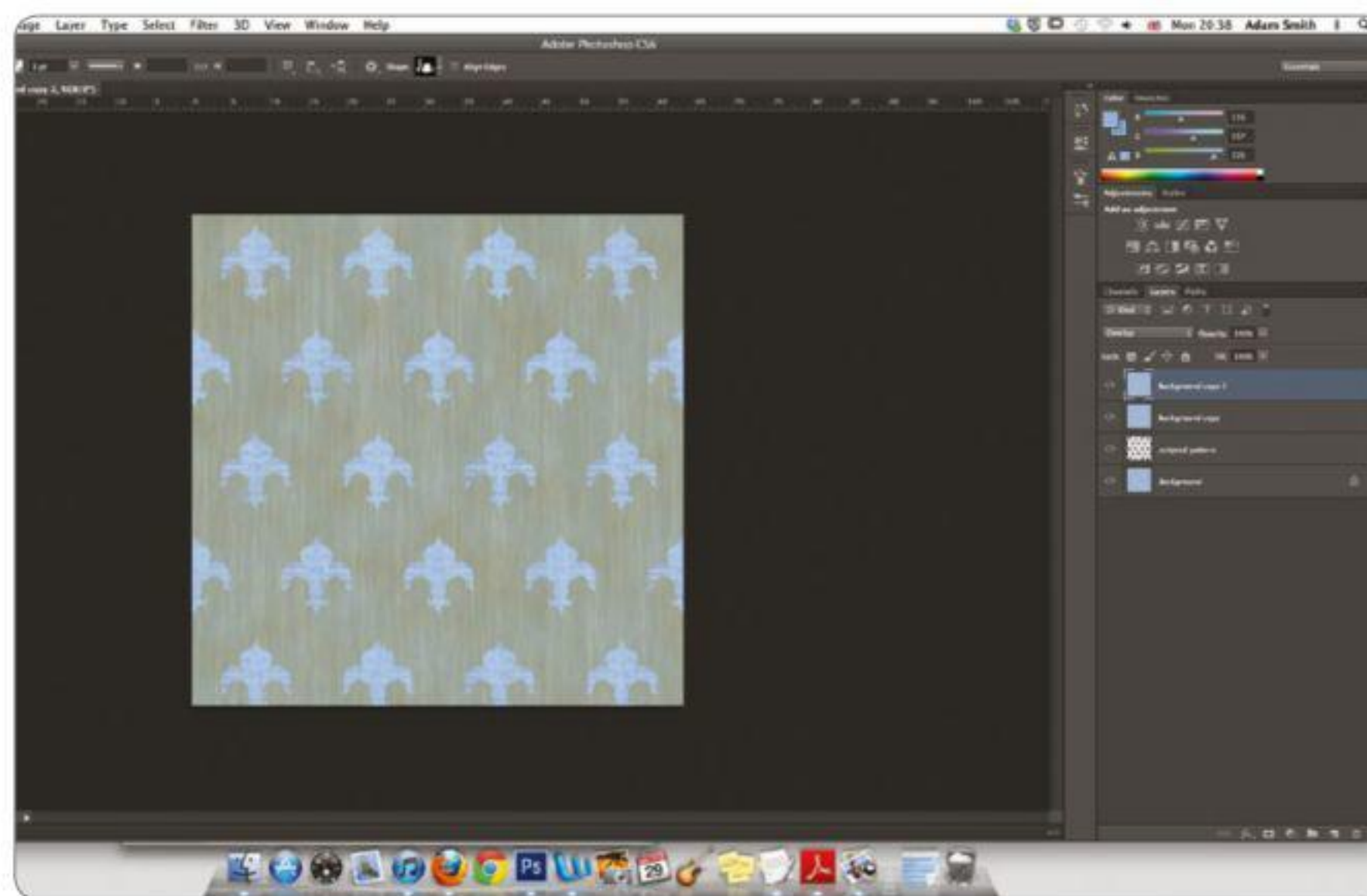
Turn off any background layers, then select Merge Visible from the Layer panel pop-out menu. Using the Burn tool, burn shadows across the motif for a lightly distressed look. Add a Hue/Saturation adjustment layer and reduce the copper to silver by de-saturating the image.

# Photoshop & Graphics



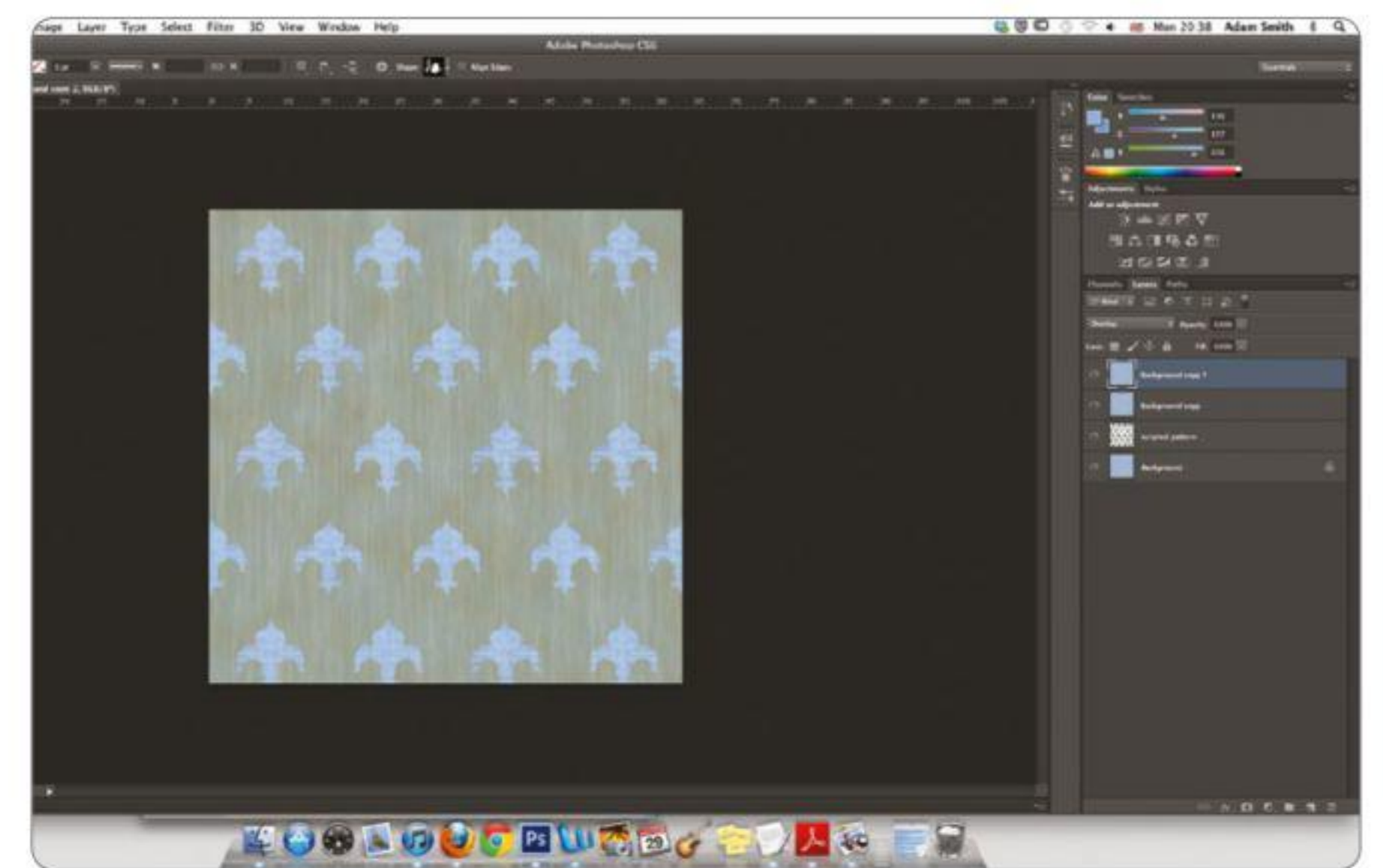
## 10 Lay out the pattern

Reduce the size of your design accordingly, then make a selection of it and choose Image>Define Pattern. Now File>New and set a canvas size that's 1800px square. Press Shift+F5 and set Use to Patterns, setting custom pattern with your shape. Set Script to Brick Fill and click OK.



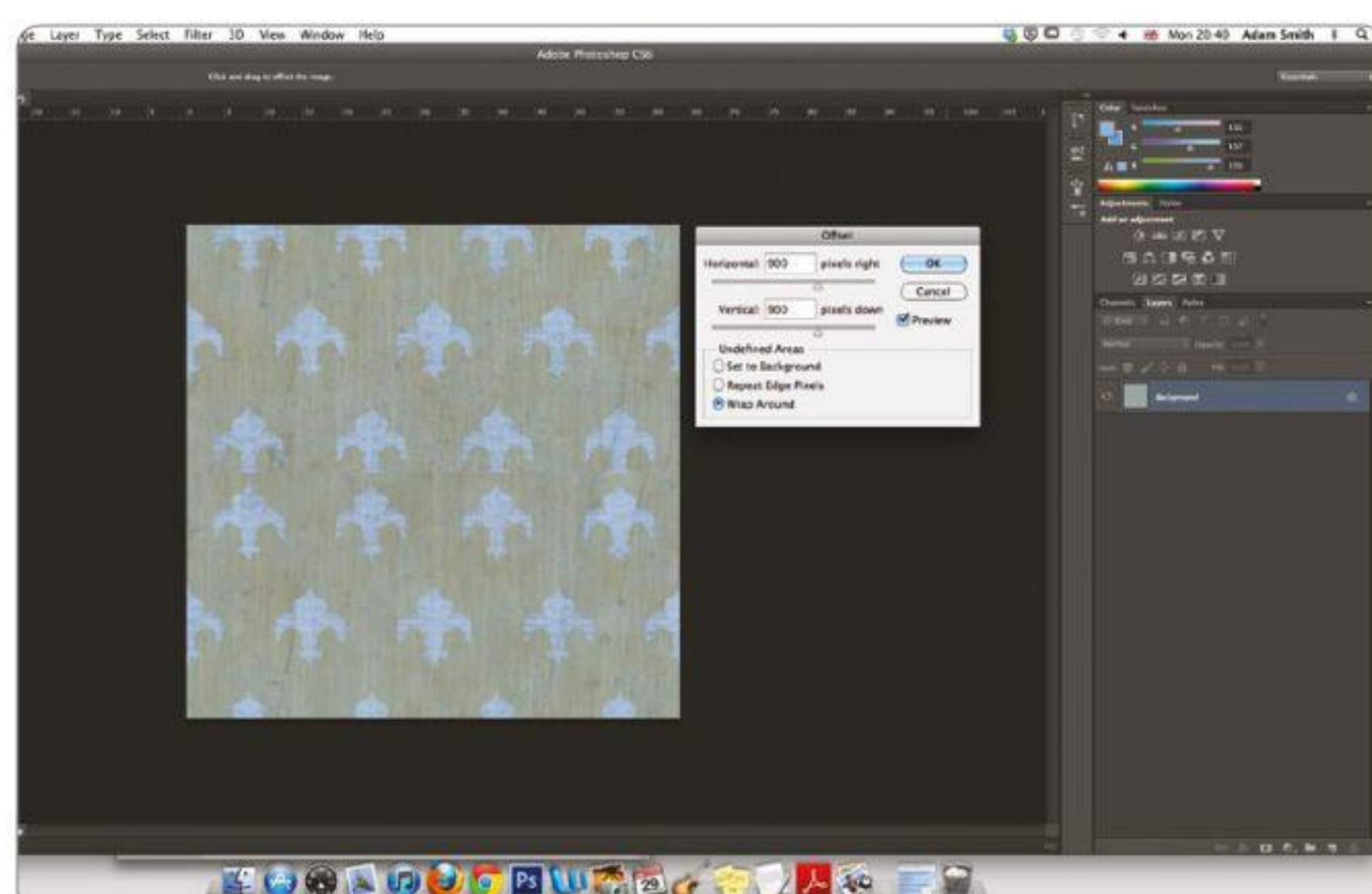
## 11 Add texture

Desaturate your pattern. Set a blue foreground, darker blue background. Activate the background layer. Select Filter>Render>Clouds. Duplicate and place at the top of the layer. Set blending mode to Exclusion. Put a copy at the top; Filter>Render>Fibers, blending mode Overlay.



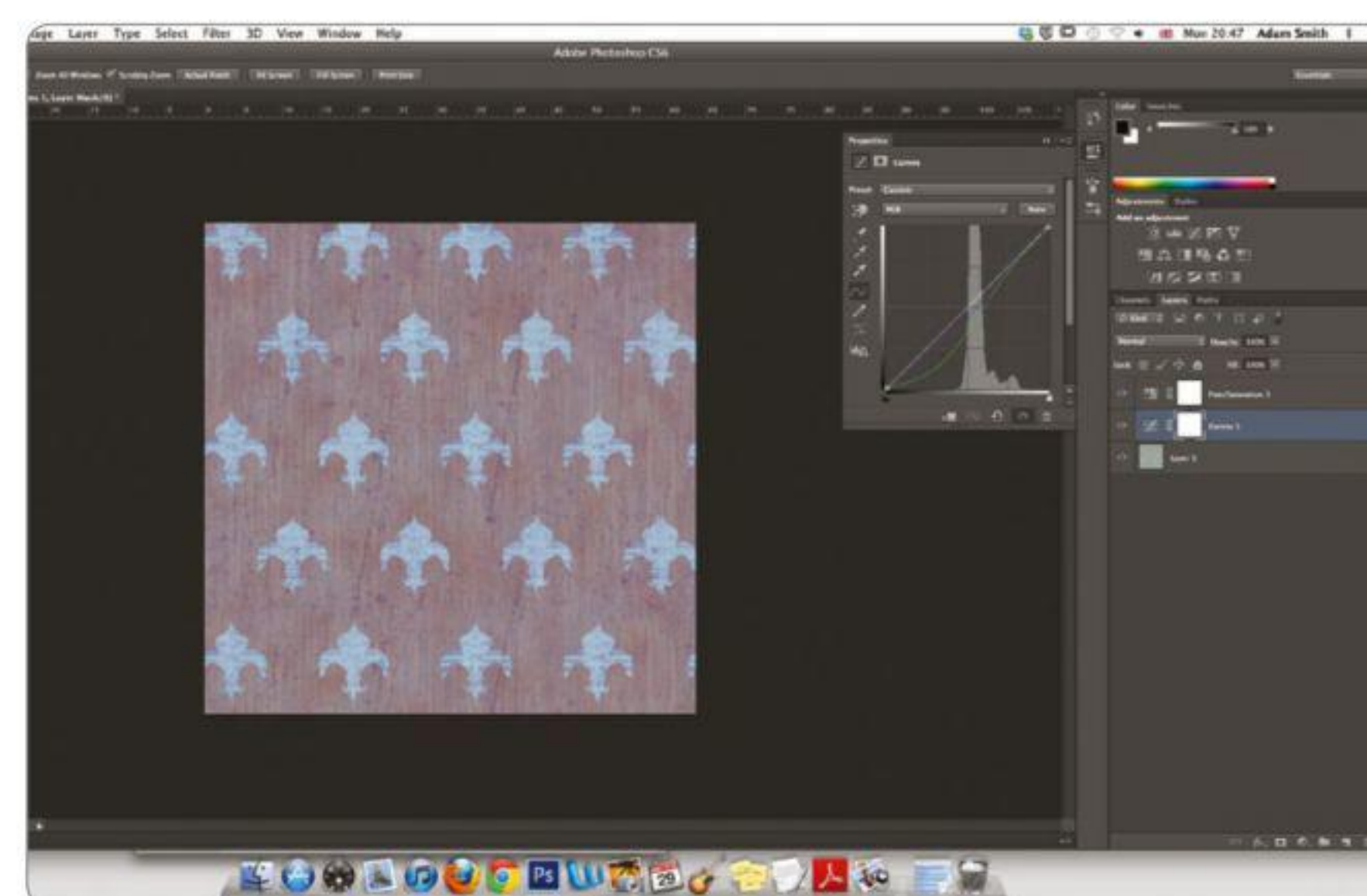
## 12 Add extra distress

Download a free concrete texture from [www.bittbox.com/freebies/free-texture-tuesday-concrete/](http://www.bittbox.com/freebies/free-texture-tuesday-concrete/) and add it to your image. Set it to blend using Darker Color and reduce the opacity to 20% so that there's some general additional distress to your image.



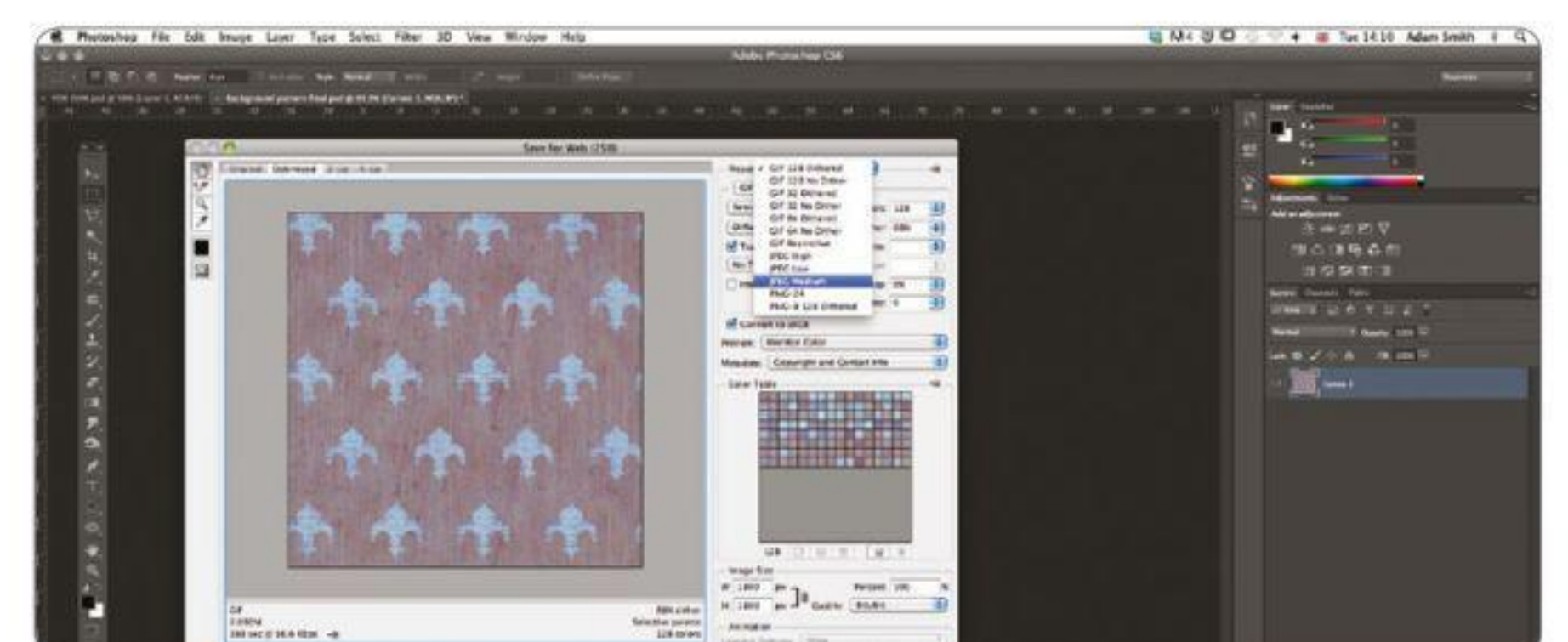
## 13 Create an offset

Merge all visible layers into a single one, then choose Filter>Other>Offset. Enter values of 900px for both Horizontal and Vertical; this is half the canvas size. You'll probably see a slight seam across the middle of your image. Use the Clone Stamp tool to blur this seam.



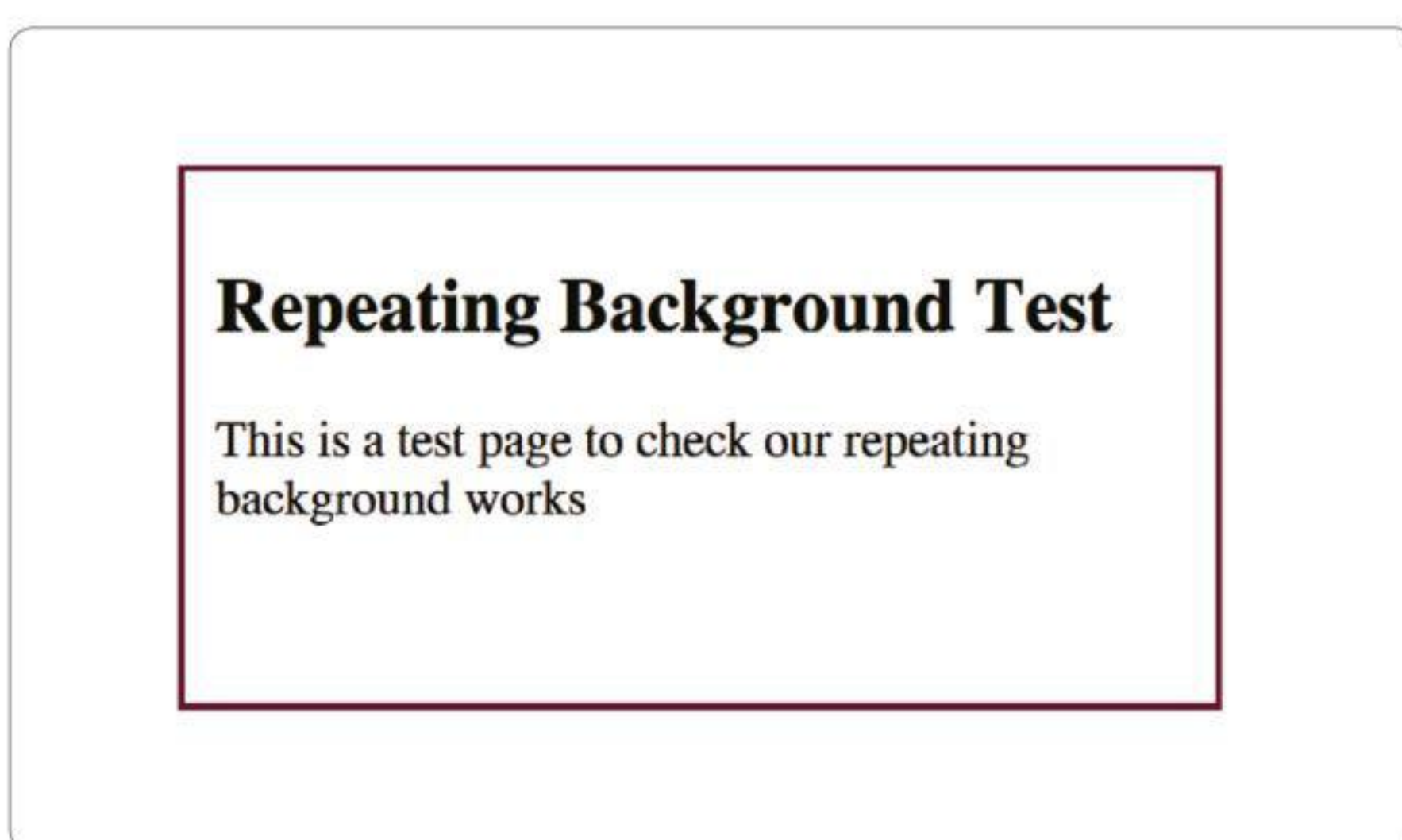
## 14 Offset, tweak and save

Your image will now tile perfectly. Add a Curves Adjustment layer and Hue/Saturation Adjustment layer to increase contrast and recolour the artwork if desired, to suit your website. Save your document as a PSD file to ensure you retain the original source material for later reuse!



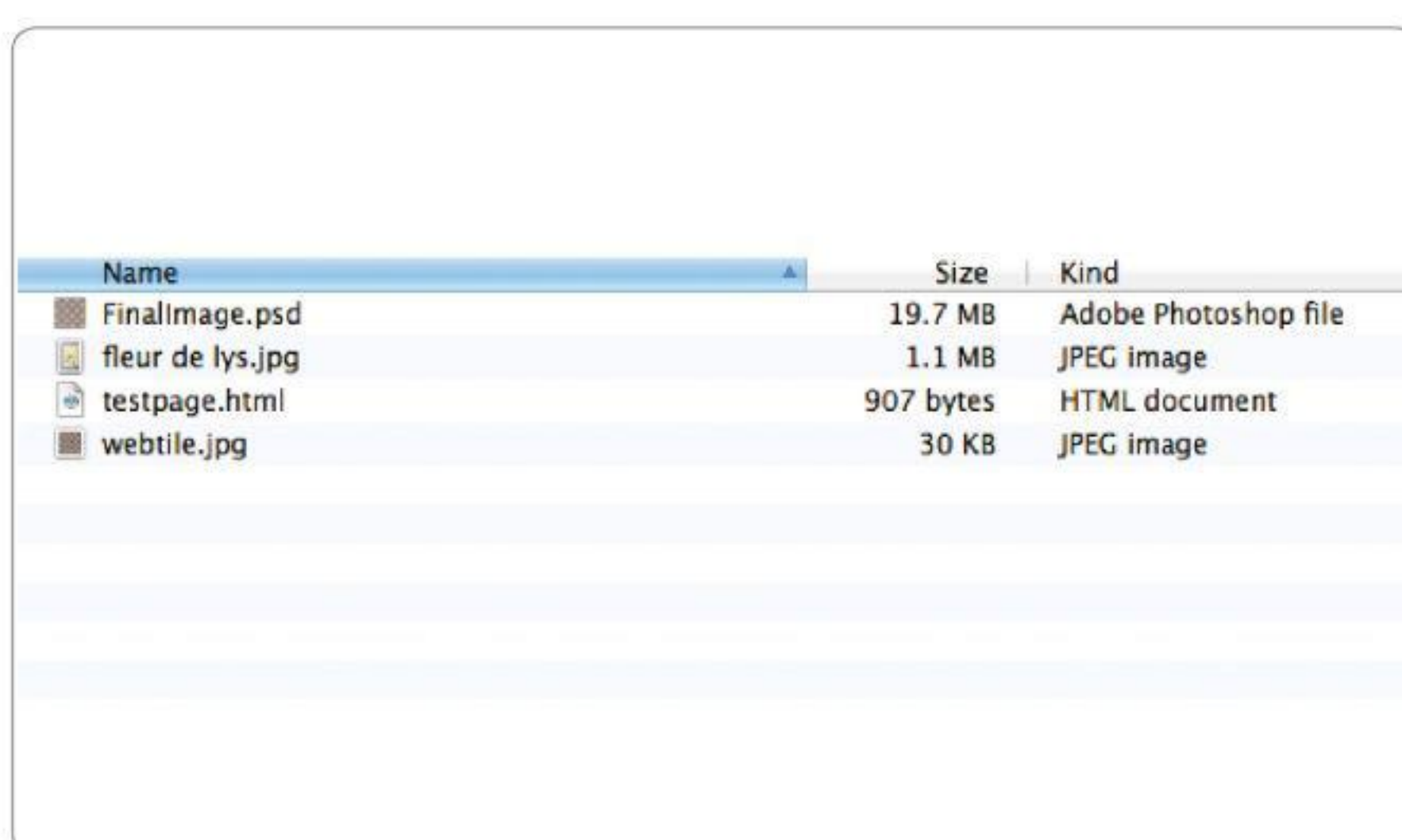
## 15 Save for the web

We'll use Photoshop's 'Save for Web and Devices' function to output a web-ready version of our artwork. Choose File>Save for Web & Devices and select Medium JPG – it'll work well for the subtlety of texture we've created. Save the image with a name with no spaces, eg 'background.jpg'.



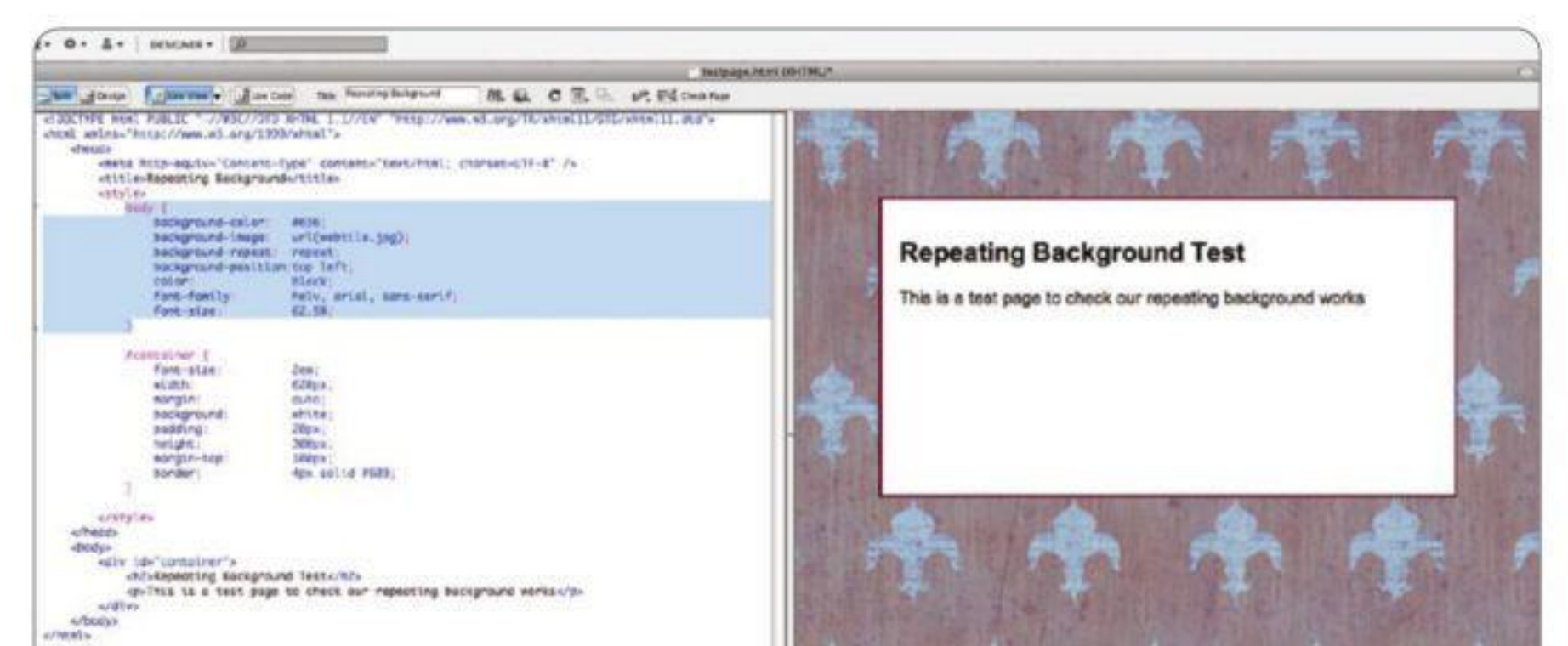
## 16 Use your image

Once you've successfully saved your image, it's time to use it on your website. To do this you'll need to have a webpage lined up and ready to go, with a CSS stylesheet and an element you're going to apply your repeating background to. If you haven't already got these in place, come back to this section later on!



## 17 Import your image

Adding a background image to your website using CSS is very simple. First you define the element you'd like to create the CSS rule for – this is achieved by naming the element either through its tag name, class or ID. Next, add a rule for background-image and specify the image you'd like to use as a background.



## 18 Other properties

Your image will need to be in the same folder as your style sheet. You can set the position of your repeating image using the background-position property, how it repeats using background-repeat, and a fallback colour to be used using background-color.

```
001 body {
002 background-color: #ccc;
003 background-image: url(background.jpg);
004 background-repeat: repeat;
005 background-position: top left;
006 }
```



# Repeating background images

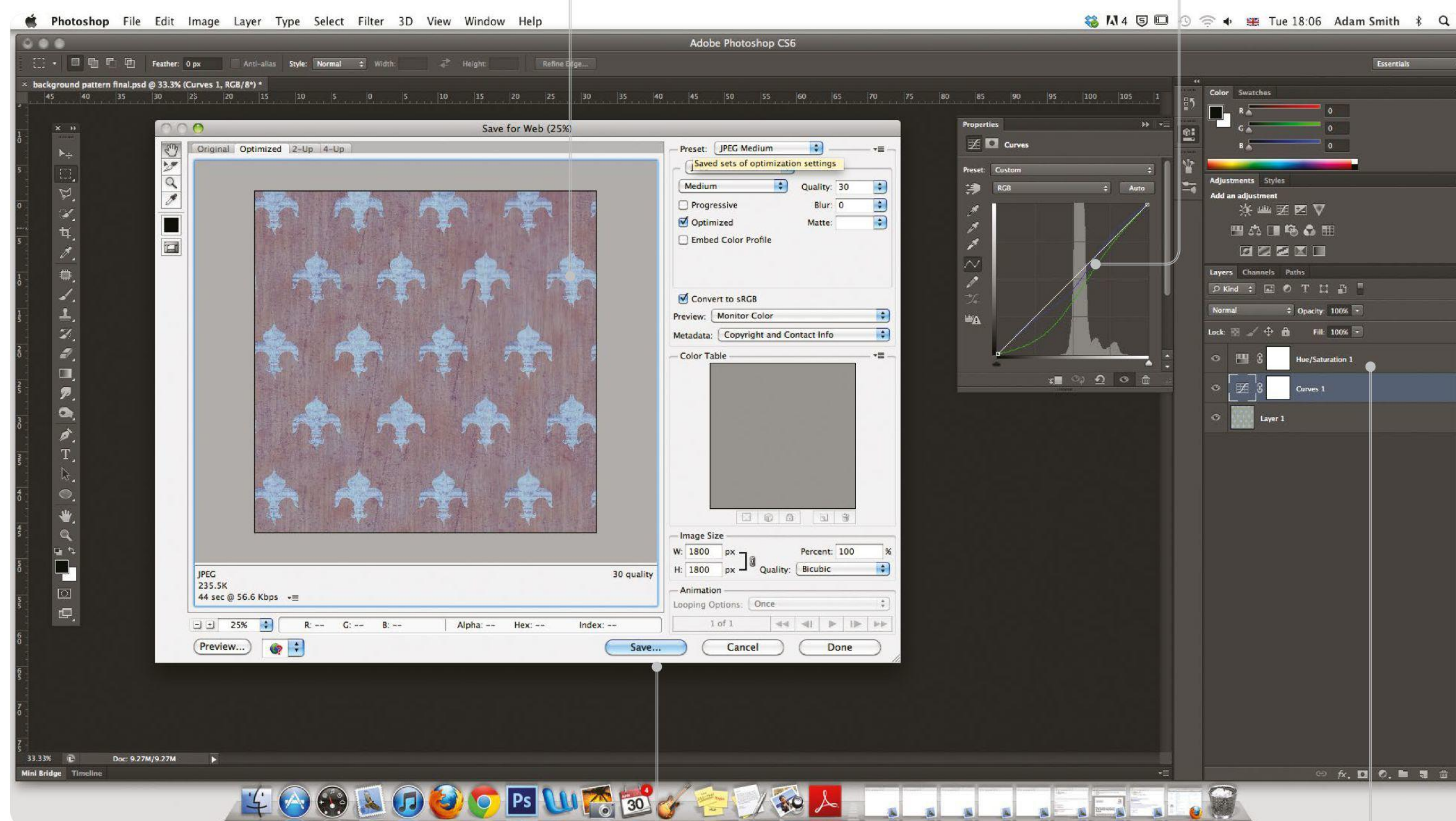
See how we constructed our repeating background image

## Add grunge

We've used a concrete texture to add extra grunge and character to our background tile. This is the antithesis of the modern, clean web look, but it's often good to go your own way and avoid following fashions on the web – especially if you want your site to stand out!

## Curver for content

We've used a curve adjustment to increase the contrast of our design. Our curve has an S shape which darkens the dark pixels and lightens the light pixels to create more dynamics in our image



## Save as a JPEG

Because our image has lots of colours and fine textures, a JPEG file is the best format to use for this particular background tile. We've created quite a large tile, but you could have used just two motifs arranged diagonally to get a similar effect

## Adjust hue and saturation

The colours have been adjusted before we saved our image using a Hue/Saturation adjustment layer. This allows us to control the overall colour balance without having to manually alter each layer individually, and allows for experimentation!

# Repeating backgrounds The background tile is a great web design tool

Because you never quite know in advance how long a typical webpage may be, it's often very useful to be able to create a background that is capable of scaling to fill the space, no matter how big or small that space is. This is why repeating background tiles are such a mainstay of web design – they can be quite small but cover a large area of screen without the need to create a different version of your background for each page. The offset filter in Photoshop makes it easy to check that your image tiles perfectly, and correct any issues if it doesn't. When trying to decide on a background

to incorporate into your website design, it's worth having a look at what other websites are doing. A combination of a partially transparent image (saved as a PNG file for variable transparency) and a background colour set to use a CSS3 gradient can give the impression of an image that's much bigger than it really is. CSS3 also allows you to apply more than one background image per element, opening up a whole series of possibilities that didn't even exist until quite recently. Don't be afraid to experiment till you find something that works best for you.

# WHAT IS AVAXHOME?

# AVAXHOME-

the biggest Internet portal,  
providing you various content:  
brand new books, trending movies,  
fresh magazines, hot games,  
recent software, latest music releases.

Unlimited satisfaction one low price

Cheap constant access to piping hot media

Protect your downloadings from Big brother

Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages

Brand new content

One site



# AVXLIVE . ICU

AvaxHome - Your End Place

We have everything for all of your needs. Just open <https://avxlive.icu>

## Design effective header and footer graphics in Photoshop

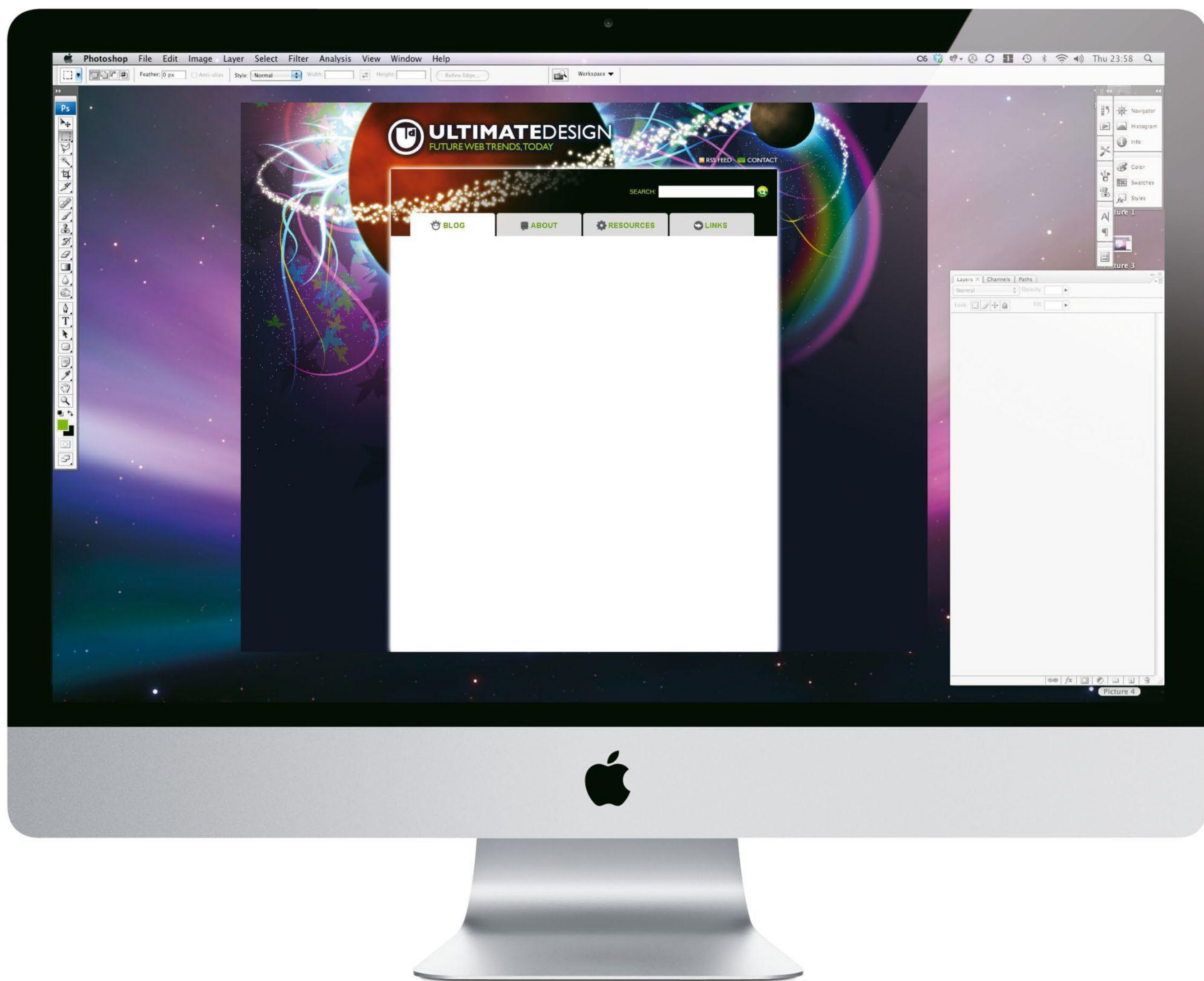
Make your website memorable with a custom header and footer

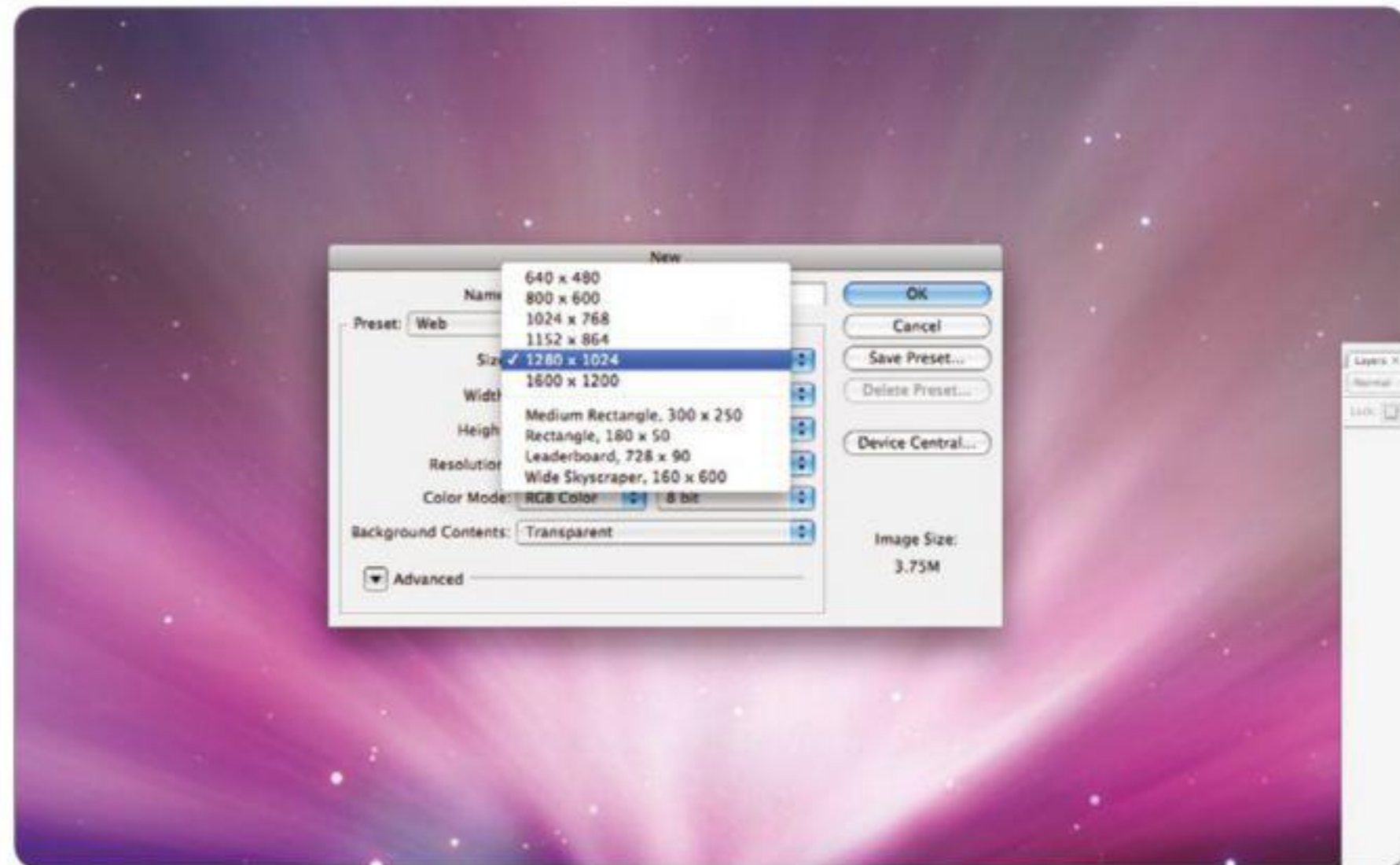
**H**ave you ever browsed the web and come across a website that has a really beautiful header? Do you wish you had something equally stunning sitting at the top of your website? Having a unique, memorable identity on the web can be the difference between a user remembering your site and the same user instantly forgetting it. The most important rule on the web is to ensure your site has great content that compels return visits, but, given the choice, most people would also like their site to look nice.

Of course this can present a challenge, especially if you feel you're lacking inspiration, artistic ability, or both. Fortunately, you don't really need either! Some basic Photoshop techniques can be used to take a very simple concept and make it into something really special. The same techniques we

use in this tutorial will work with many different types of subject matter, so follow the steps below and then apply the principles to your own project. Once you've created your header, you can do the same for the footer of your design too, creating an integrated, consistent design.

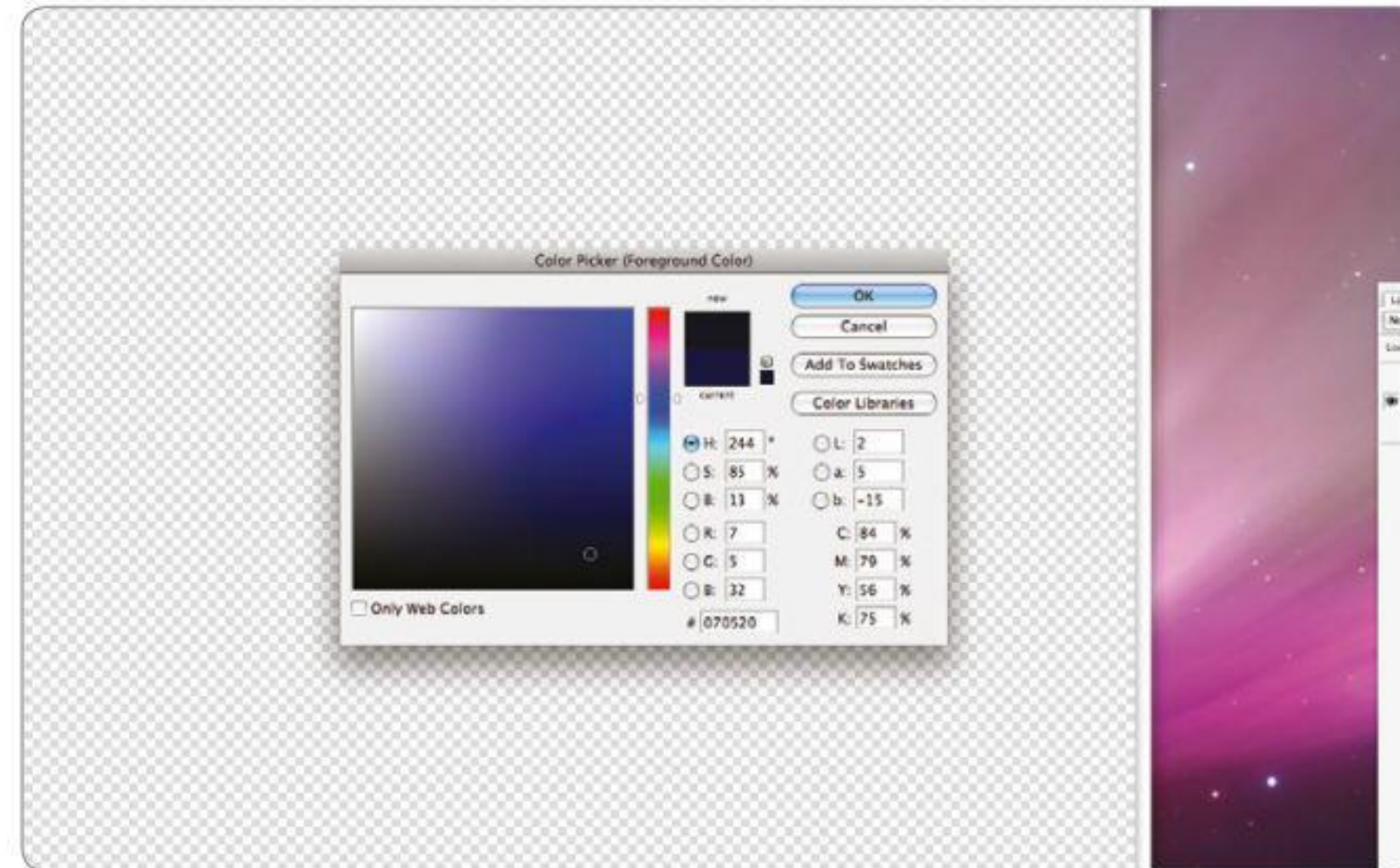
“Some basic Photoshop techniques can be used to make something really special”





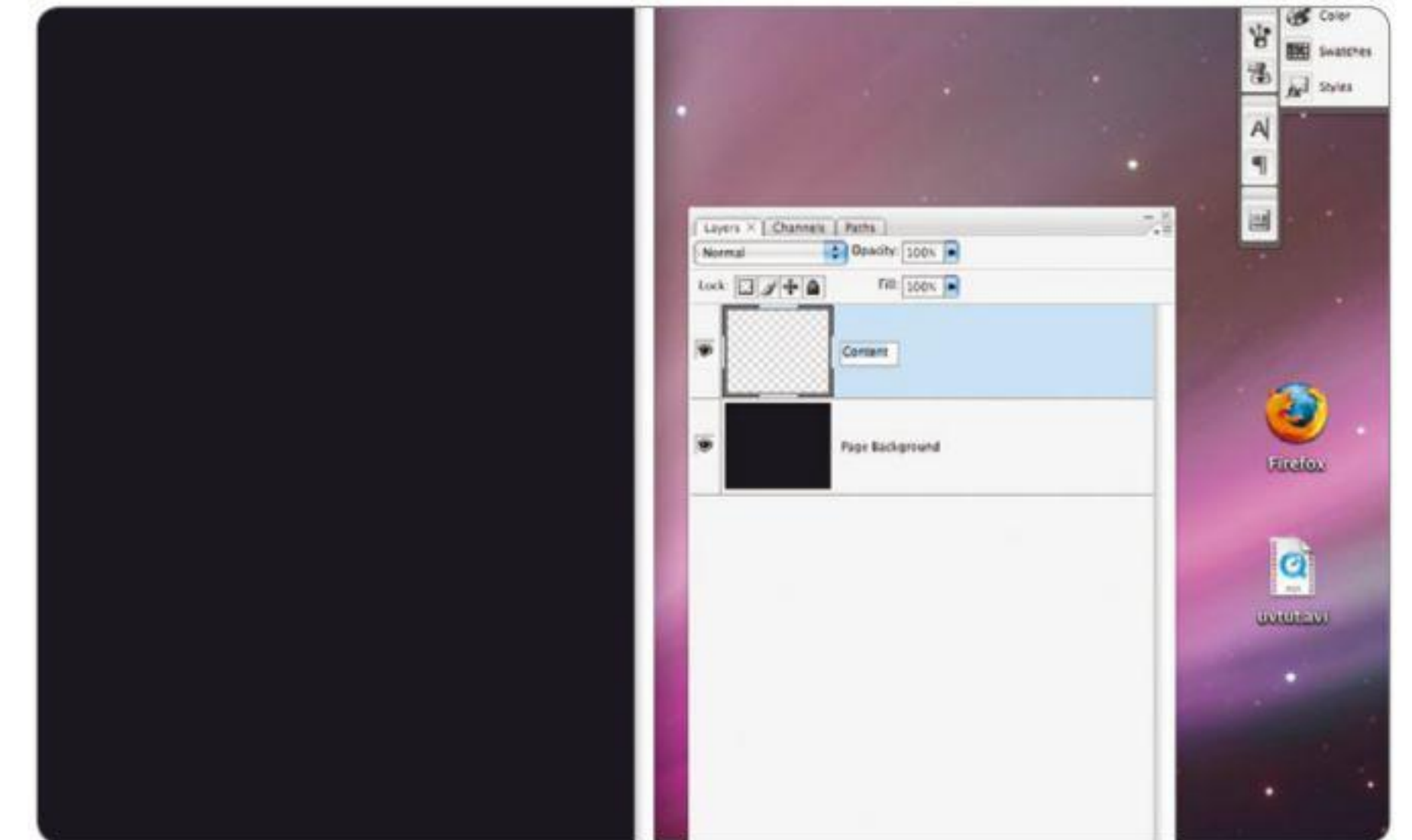
## 01 Create a document

Create a new Photoshop document. If you have a recent version, choose one of the web presets; if not, choose a document size of 1280x1024px at 72dpi and a transparent background. If you create a document with a background layer, double-click on this to convert it to a normal layer.



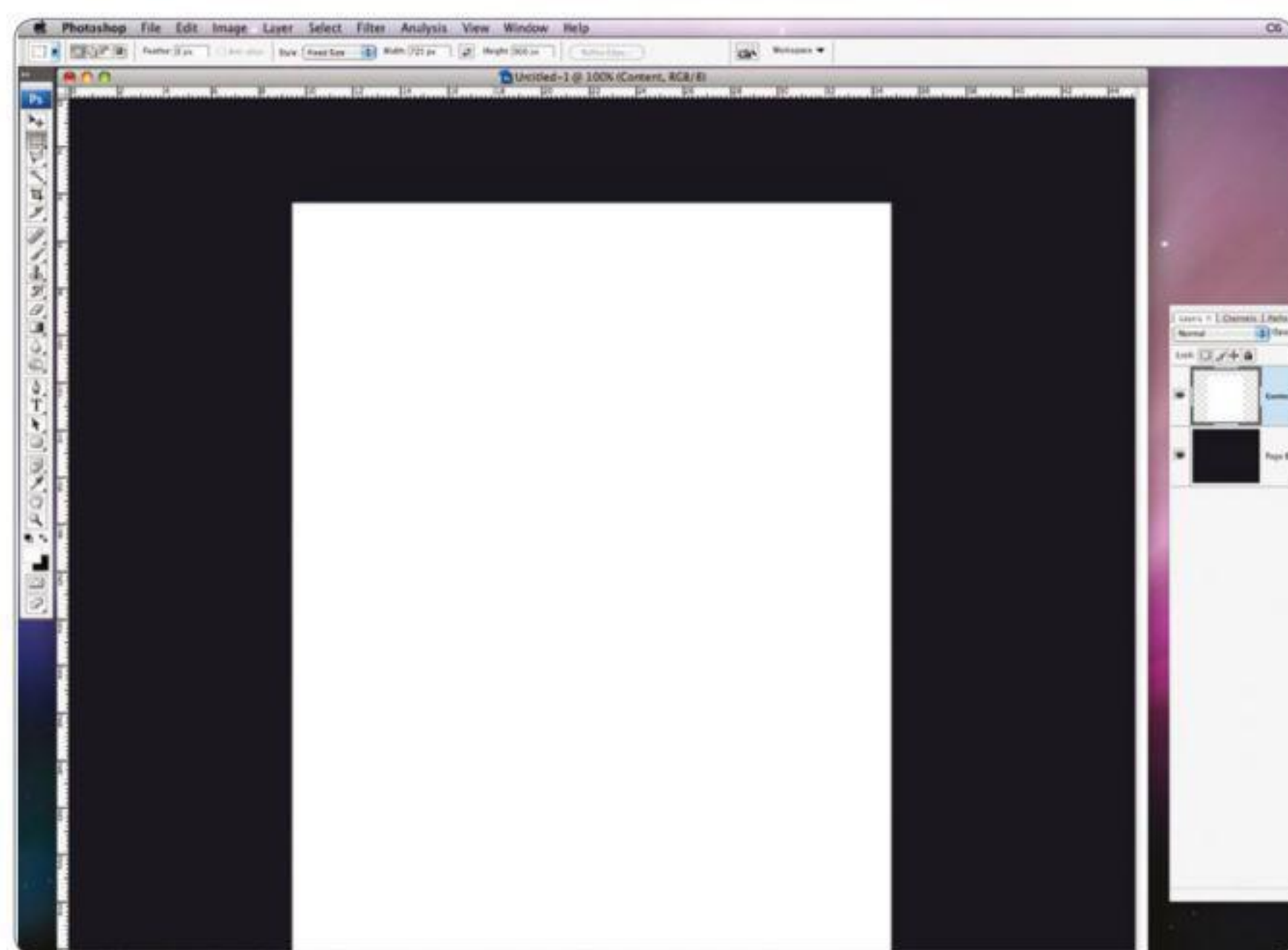
## 02 Create the base colour

We need to create a base colour to work over. In this tutorial we're creating a graphic that includes planets and stars, so it makes sense to choose a dark background base colour. Double-click on the foreground colour well on the toolbar and select a dark blue. We've used #070520.



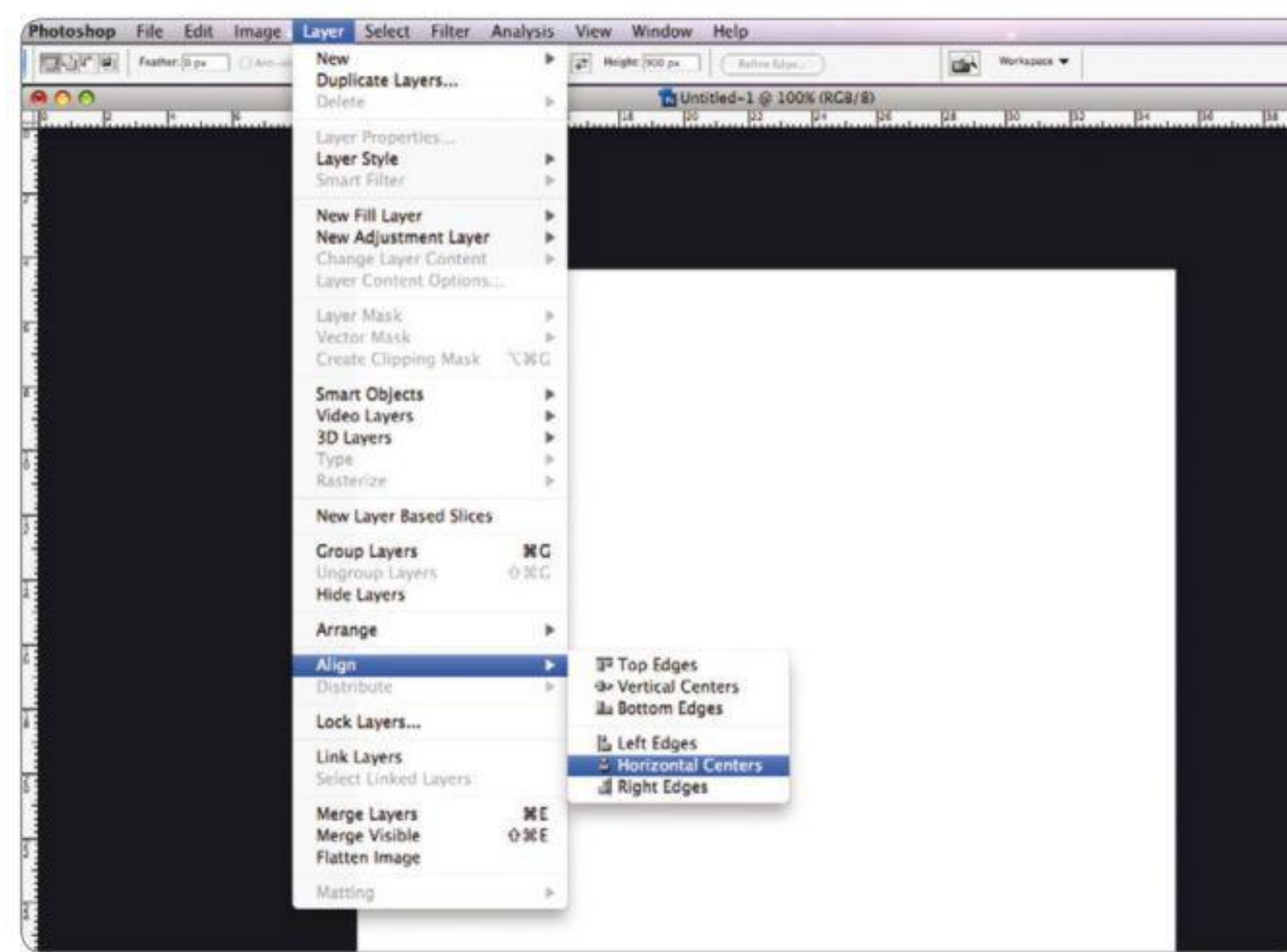
## 03 Organise your layers

Fill the layer with the colour you've just selected by using the Paintbucket tool (or use Alt+Delete on a PC, Option+Backspace on a Mac). Let's name our layers appropriately. Click twice on the name of the layer you've just filled, then type 'Page Background' over the existing name.



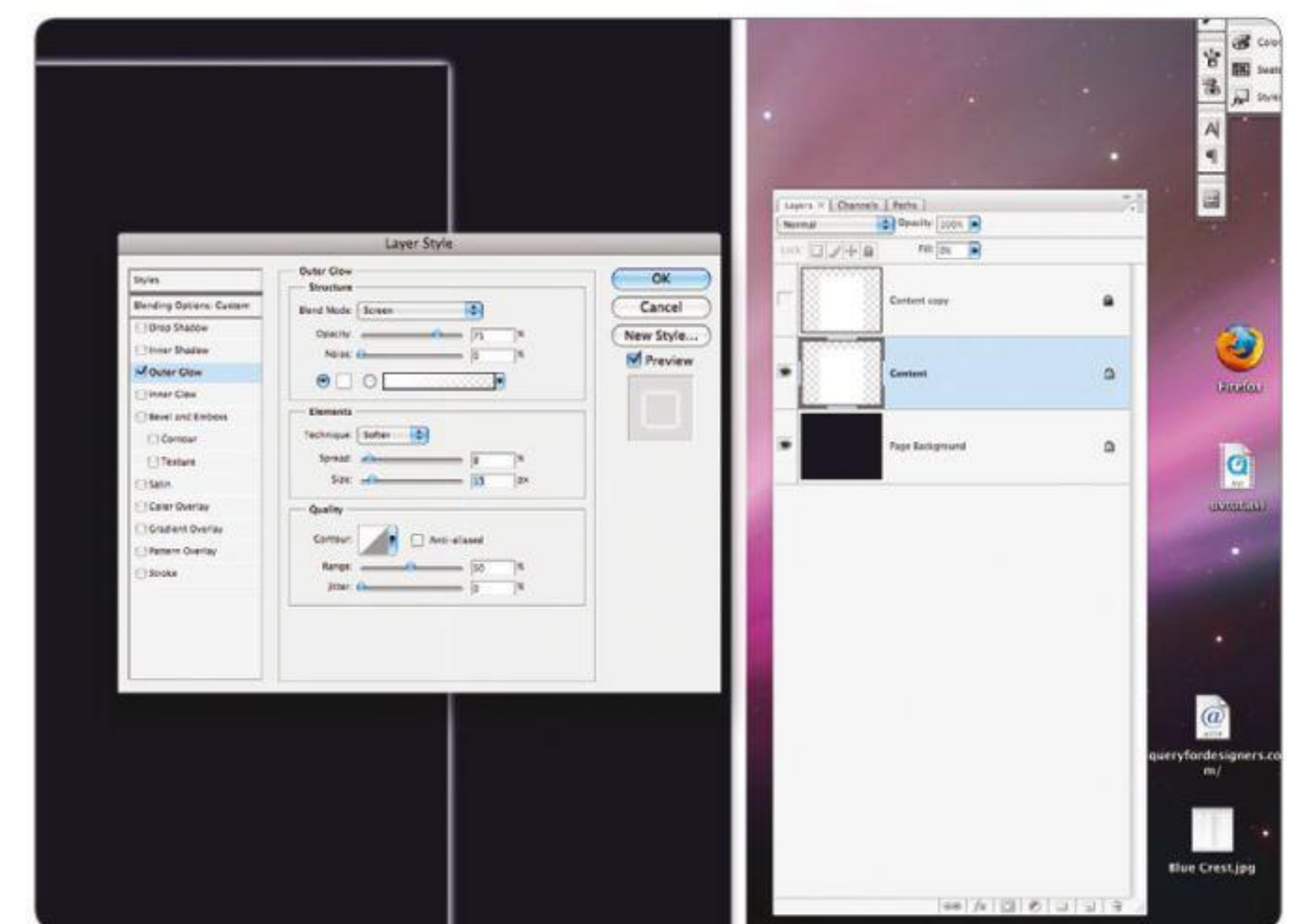
## 04 Add the content area

Select the Rectangular Marquee tool and change the style to 'fixed size'. Enter a width of 720px and a height of 900px. Click once near the bottom of the document to create a selection. On a new layer, fill this selection with white.



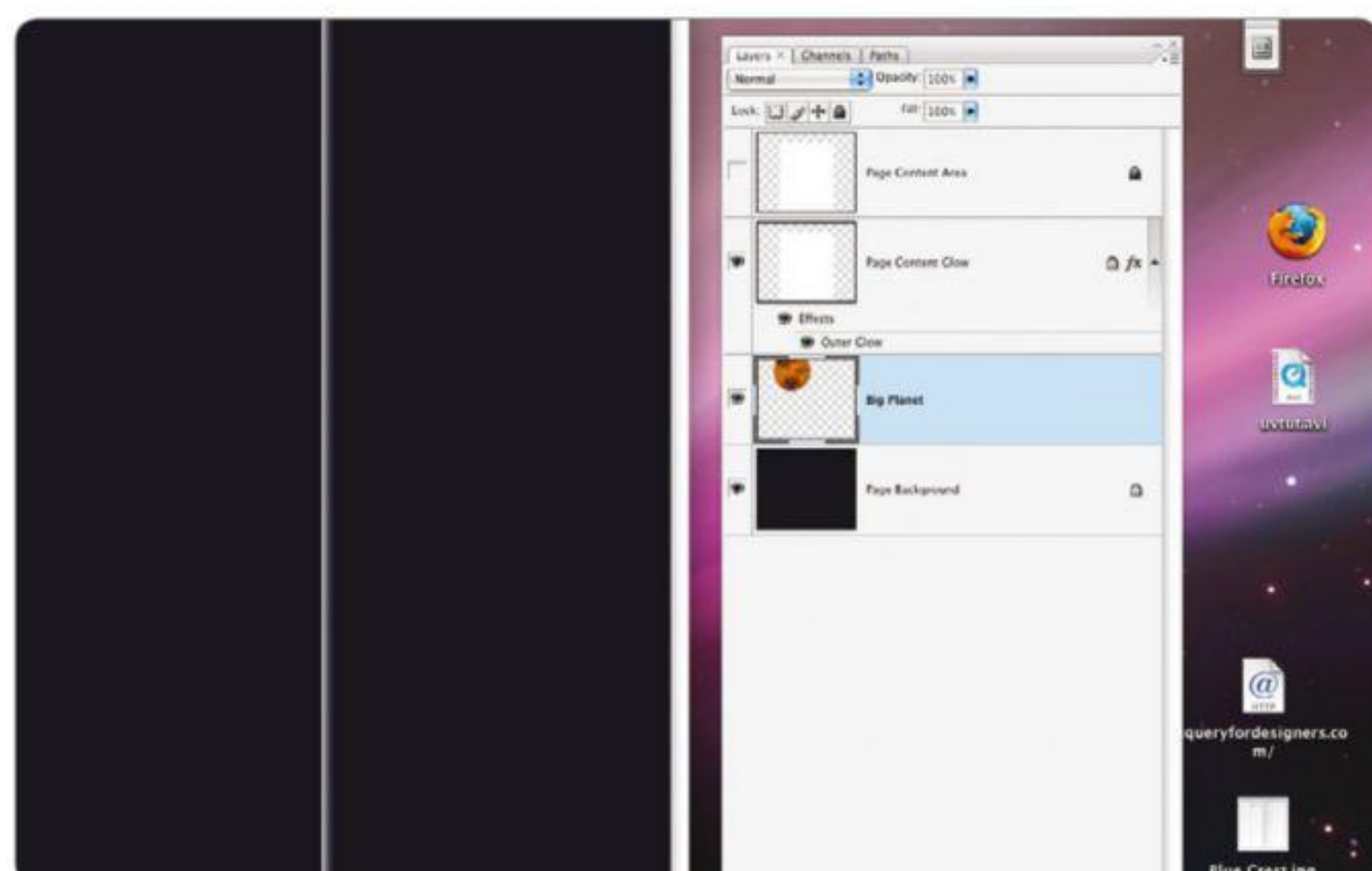
## 05 Align your content

We want our content area to be centred. Select both layers by clicking on one, then Shift-clicking on the other, then use Layer>Align>Horizontal Centers. This will position your 720px content area perfectly in the centre of the design.



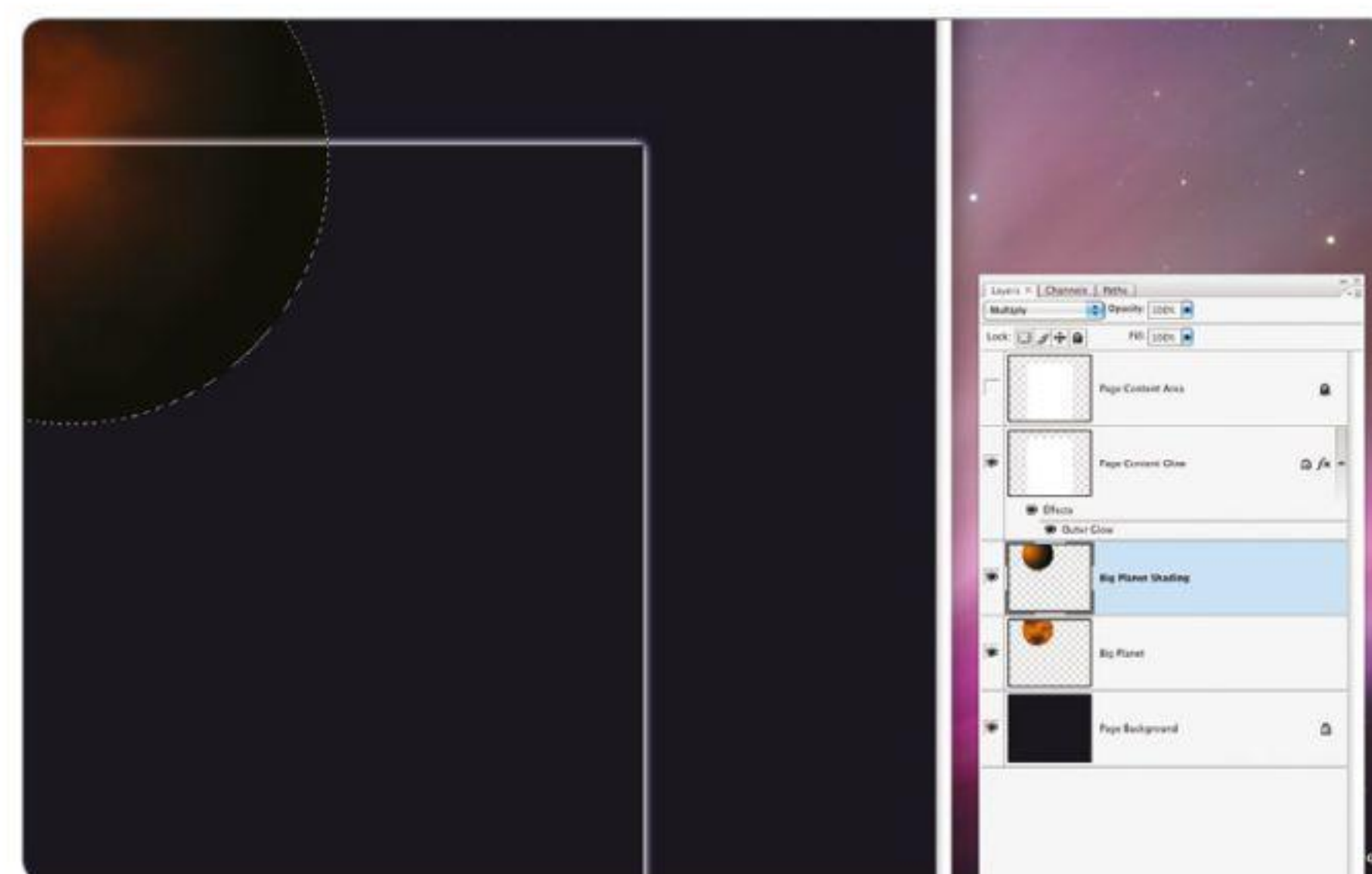
## 06 Create a glow

Duplicate the content layer and select Layer>Layer Style>Outer Glow. Set the colour to white, spread 8% and size 13px. Click OK, make the other content layer invisible and set Fill to 0% for this layer. This should leave only the glow visible.



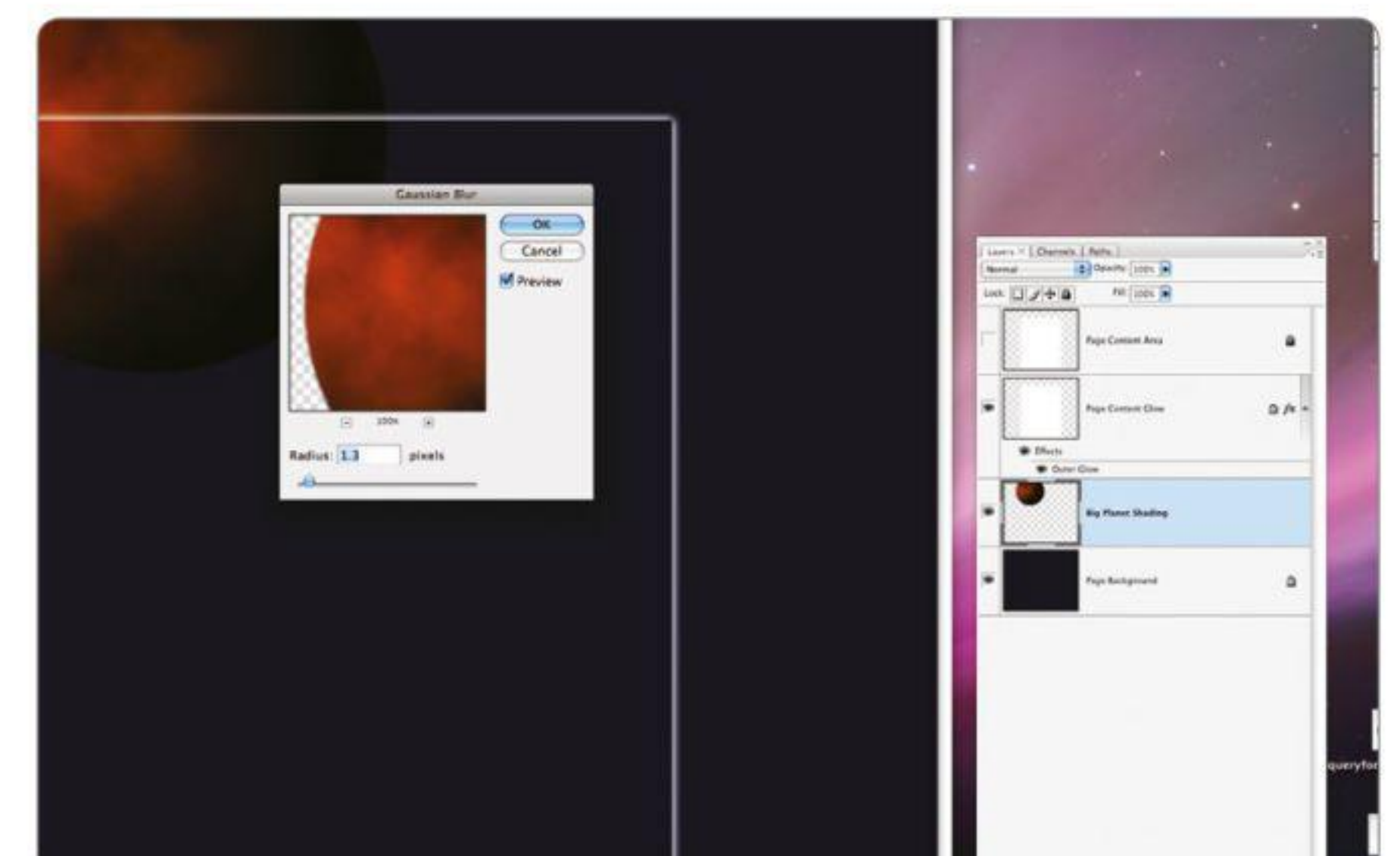
## 07 Create a planet

Create a new layer, 'Big Planet'. Select an orange for the foreground colour, dark red for the background. Using the Circular Marquee tool with Shift held down, draw a big circle then Filter>Render>Clouds. (Hold Alt/Option when selecting this to get a higher-contrast result).



## 08 Add shading

The planet needs shading. With the selection still active (if you lost your selection just Ctrl/Cmd-click on the planet layer), create a new layer and use the Gradient tool to fill the selection with a radial gradient from orange to black. Set the layer to use Multiply as the blending mode.



## 09 Merge and blur

Select the planet layer and the shading layer, then, using the fly-out menu at the top right corner of the Layers panel, select 'Merge layers' to convert these two layers into one. Add a small blur: Filter>Blur>Gaussian Blur. Enter a value of 1.3px and click OK.

# Photoshop & Graphics

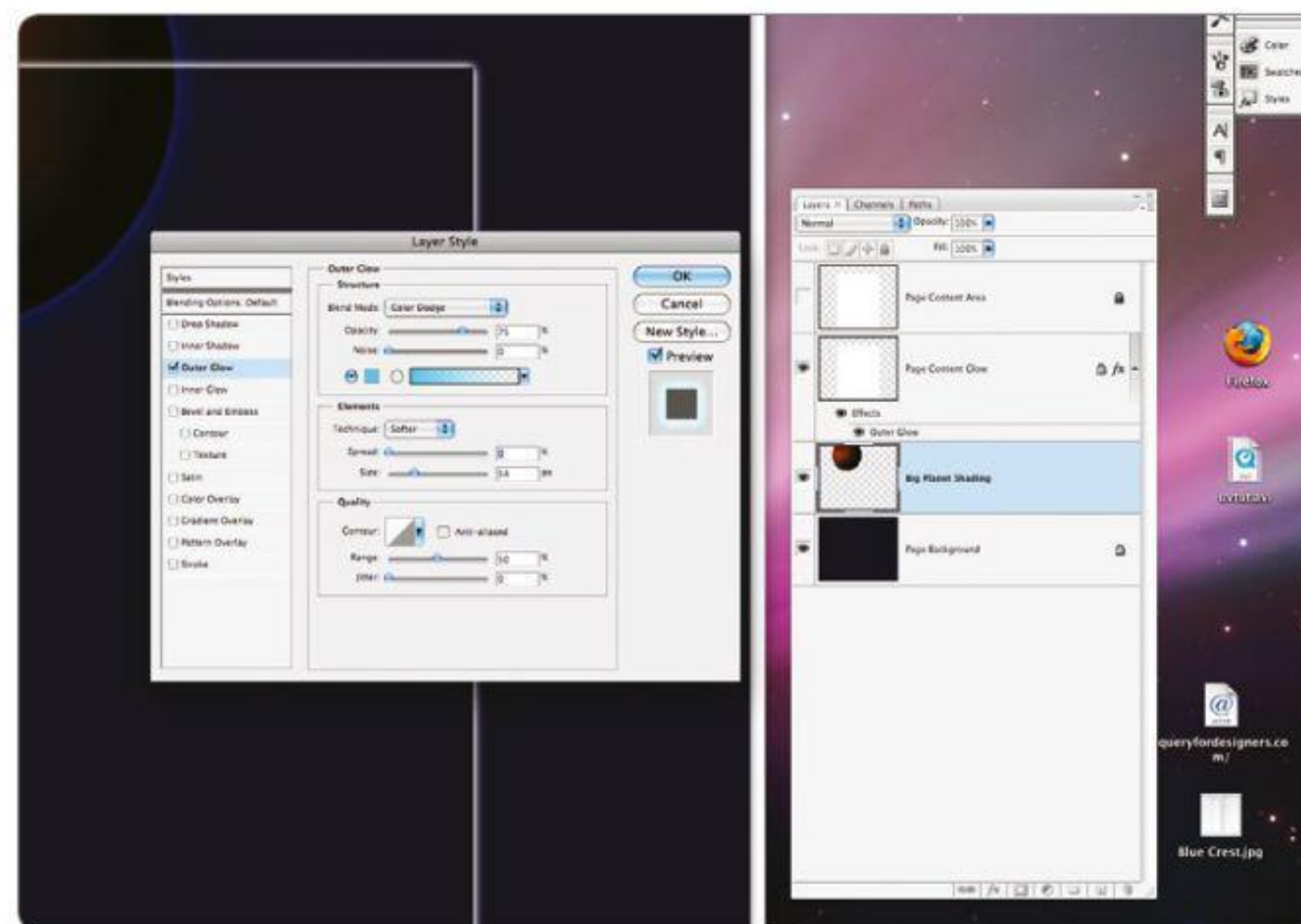
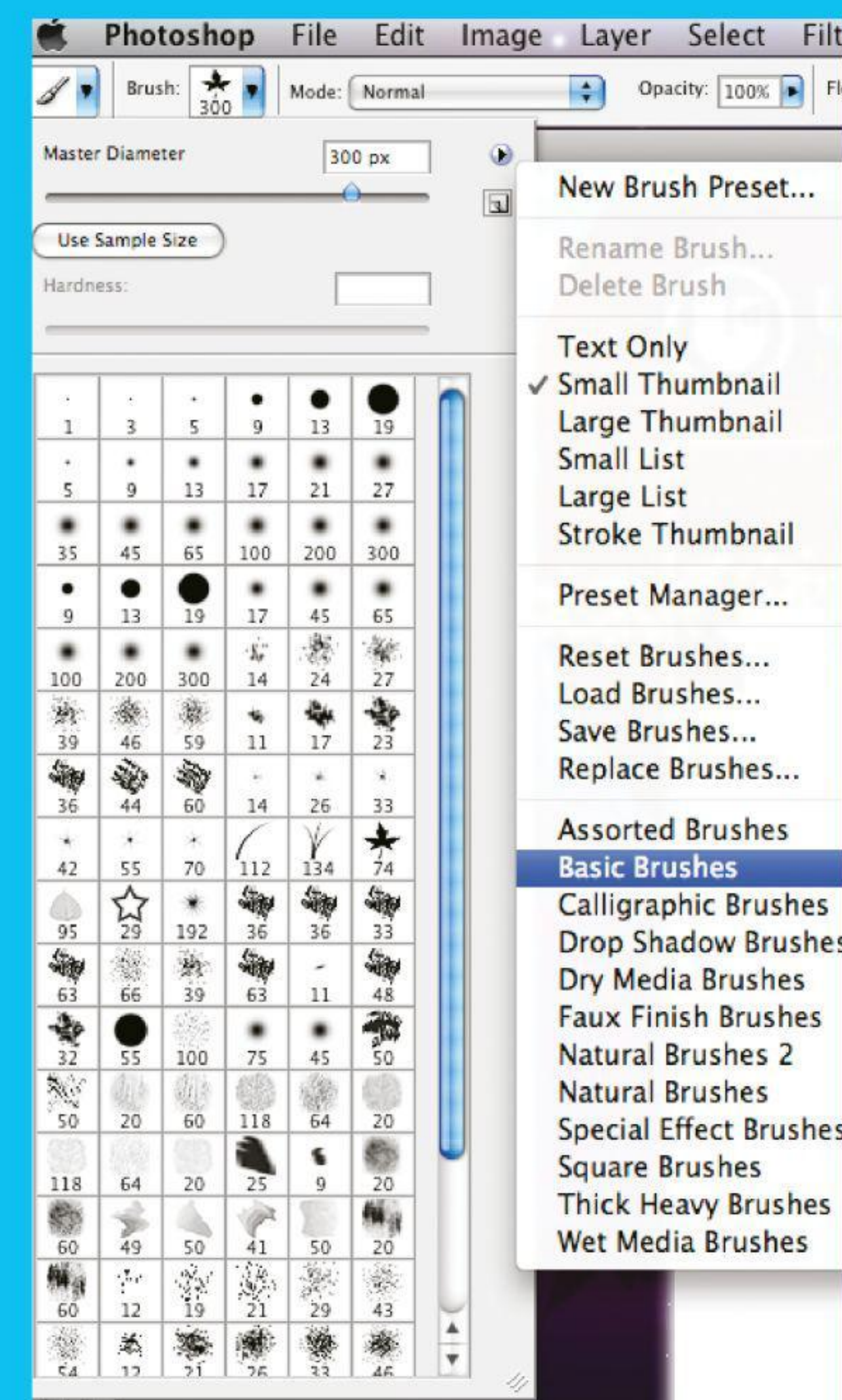
## Using Photoshop's brush engine

Using brushes in Photoshop, you can achieve a wide variety of effects

Photoshop comes with a variety of brushes built in. Selecting the Brush tool opens up a range of options in the toolbar, allowing you to choose style, size and hardness. You might be forgiven for thinking that this is the beginning and end of brushes in Photoshop, but there's so much more.

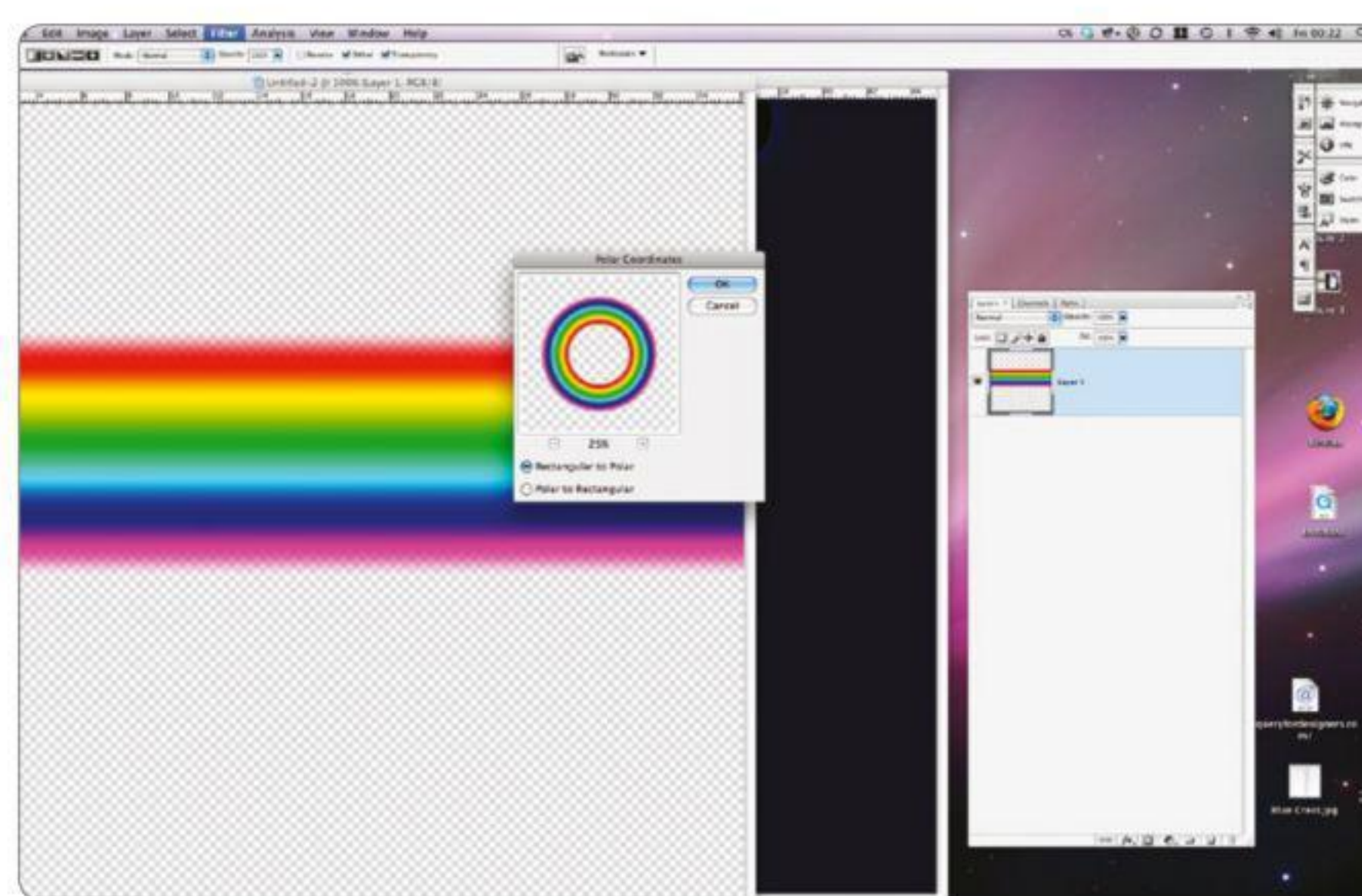
For starters, the set of brushes that appears by default is only one of many sets Adobe thoughtfully provides. To load other brush sets, click on the flyout menu when selecting a brush style. You'll see a whole bunch of brush sets just waiting for you to activate. Choose one you like the sound of and Photoshop will ask you if you'd like to append or replace the current brush set. Appending simply adds the new brushes you're loading to the existing set. If you'd rather keep it clean, replace the set and you'll just have the set you last loaded.

In addition, you can download and load in whole new brush sets from the web. A quick internet search for 'free Photoshop brushes' yields thousands of results. Every kind of brush you can imagine can be found, ranging from simple shapes to entire illustrations in a brush. To install, simply download the brush set of your choice, then click Load Brushes from the Brush flyout menu.



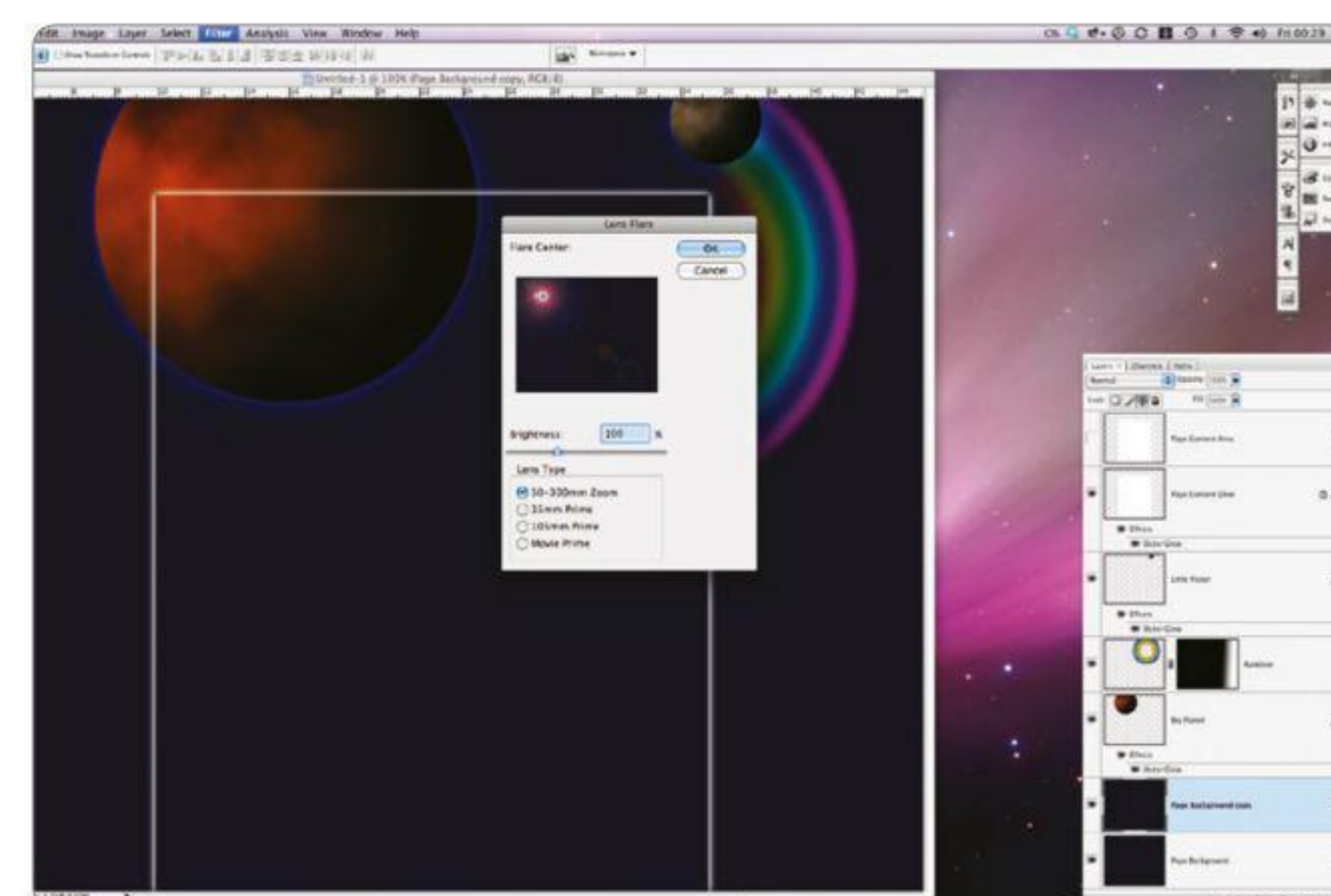
## 10 Give it a glow

It would be nice to have a light-distorting atmosphere on the planet, so let's add another outer glow to simulate this. Select Layer>Duplicate Layer. Select Edit>Transform>Scale and reduce the size. Finally, choose Image>Adjustments>Hue/Saturation and tick Colorize. Play with the settings to find a nice result that suits.



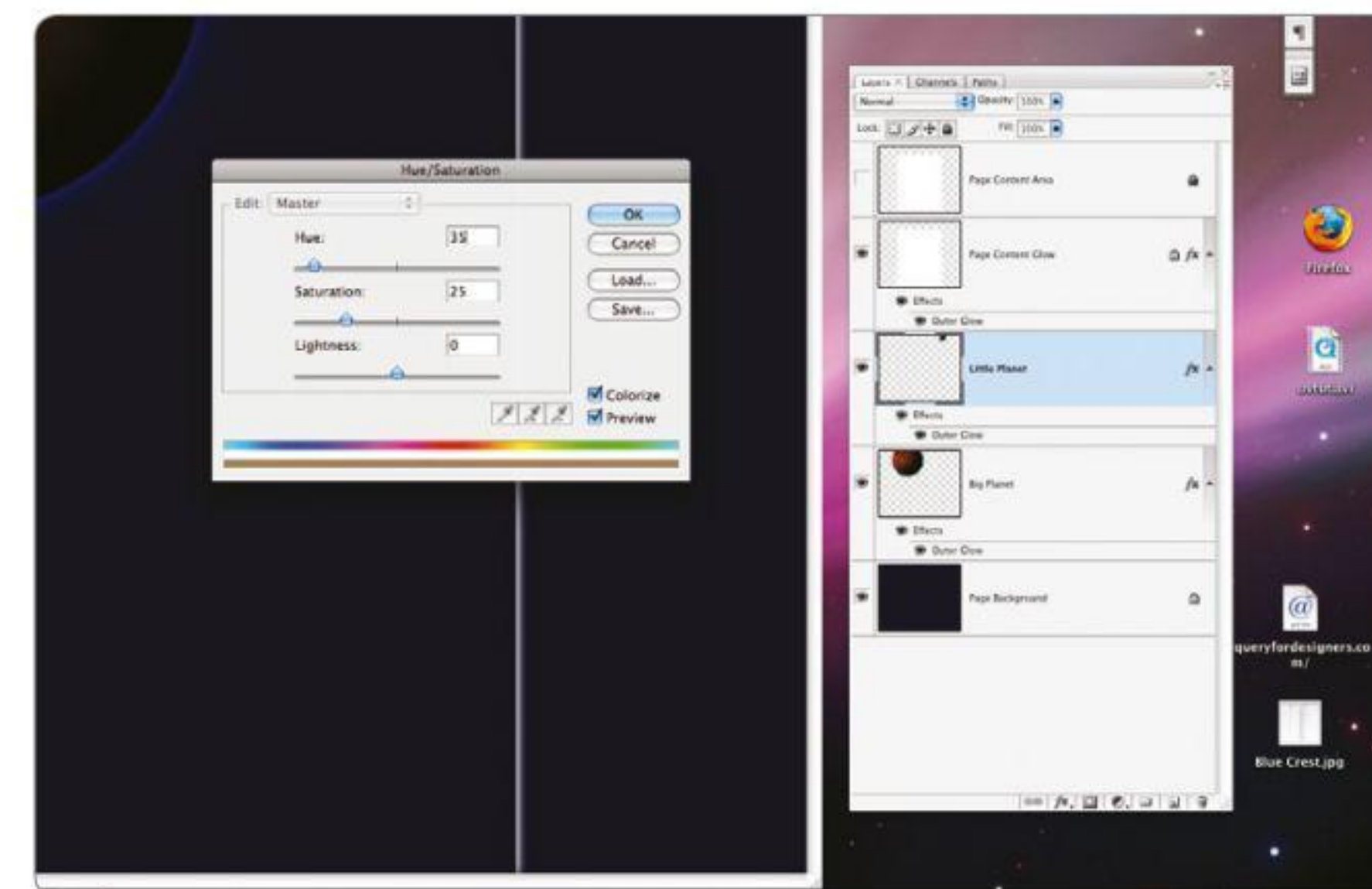
## 12 Create a rainbow

Create a new document at 1024x1024px, 72dpi and transparent. Select the Gradient tool and, from the tool presets, choose Transparent Rainbow. Draw a linear gradient top to bottom, covering the middle third of the canvas. Select Filter>Distort>Polar Coordinates. Ensure 'Rectangular to polar' is selected and click OK.



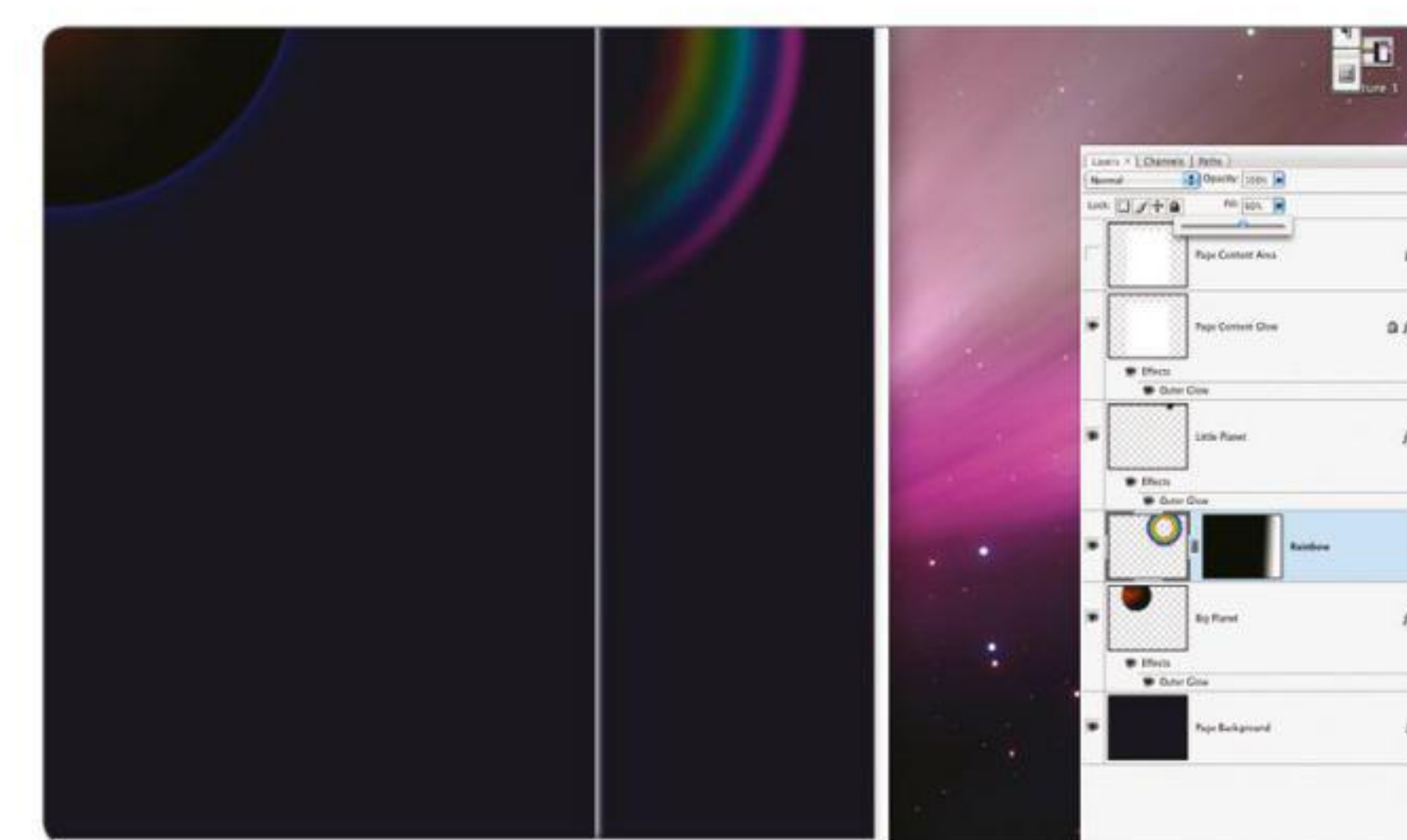
## 14 Add a lens flare

We'll simulate a bright sun appearing behind the planet. Duplicate the Page Background layer. With the duplicate selected, Filter>Render>Lens Flare. Click on top left of filter preview window to set flare position, then click OK. You can use the Eraser tool to remove unwanted bits of flare.



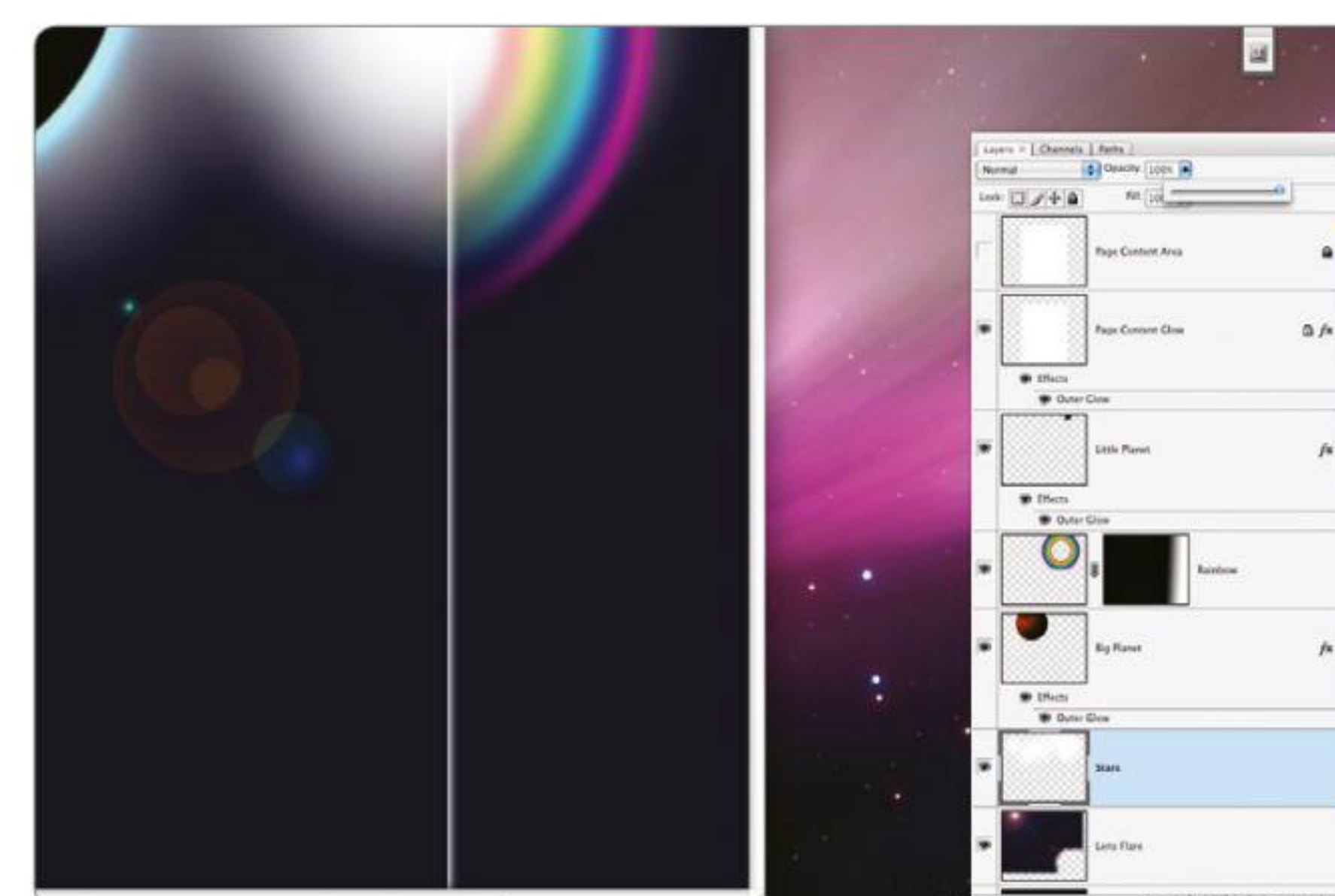
## 11 Copy and recolour

Let's quickly create a second, smaller planet. Make sure you have the planet layer selected, then select Layer>Duplicate Layer. Select Edit>Transform>Scale and reduce the size. Finally, choose Image>Adjustments>Hue/Saturation and tick Colorize. Play with the settings to find a nice result that suits.



## 13 Bring the rainbow into your scene

In the rainbow file, select Edit>Copy Merged (shortcut: Shift+Ctrl/Cmd+C), then return to the main document. Select Edit>Paste (shortcut: Ctrl/Cmd+V). Add a layer mask to the rainbow layer, and draw a black to white gradient onto the mask to hide the left-hand side of the rainbow. Position the layer to the right of the canvas.



## 15 Add stars to the space

Add stars to a new layer. Select a foreground colour of white. Using the Gradient tool set to use a radial foreground-to-transparent gradient, draw small overlapping gradients covering the top third of the canvas. You can always add more later, so don't overdo your gradients.

# Creating our custom header design

After creating basic planets, we use various effects and techniques for the design

## Planets

The planets were created using nothing more sophisticated than the Cloud filter and a circular selection. Shading helps to create a sense of mass, and an outer glow layer style ensures that the planet fits into the scene nicely

## Fancy tentacles of colour

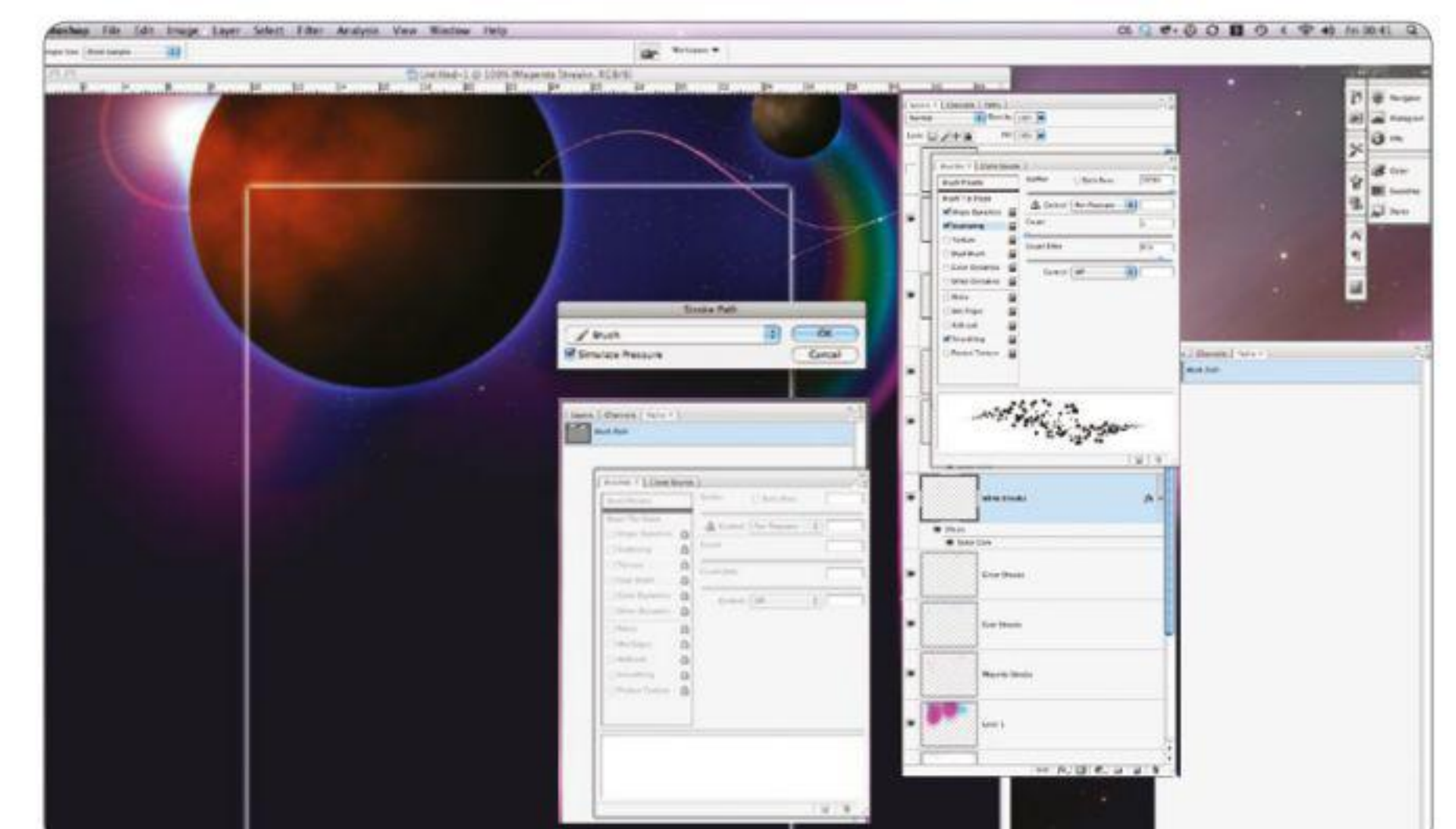
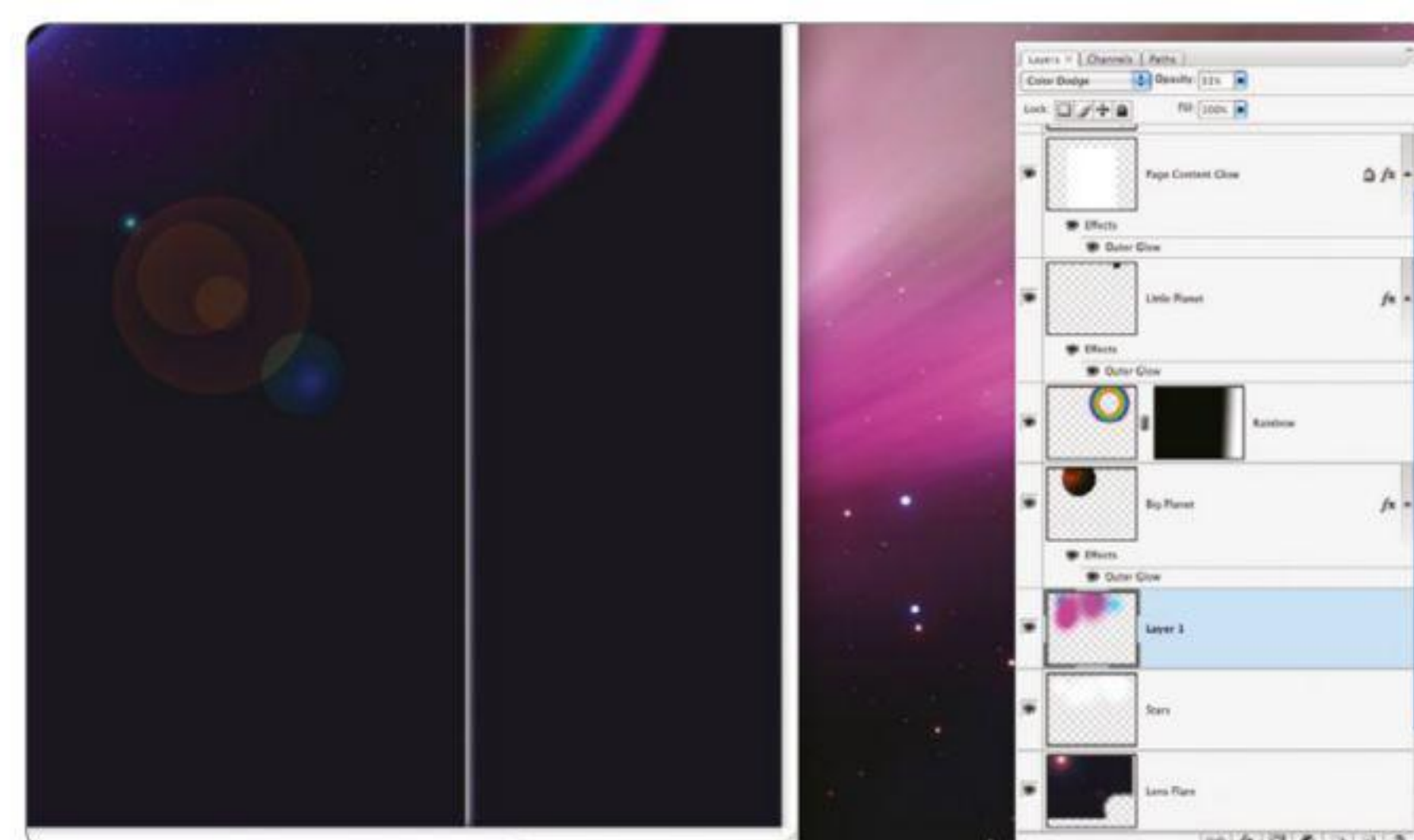
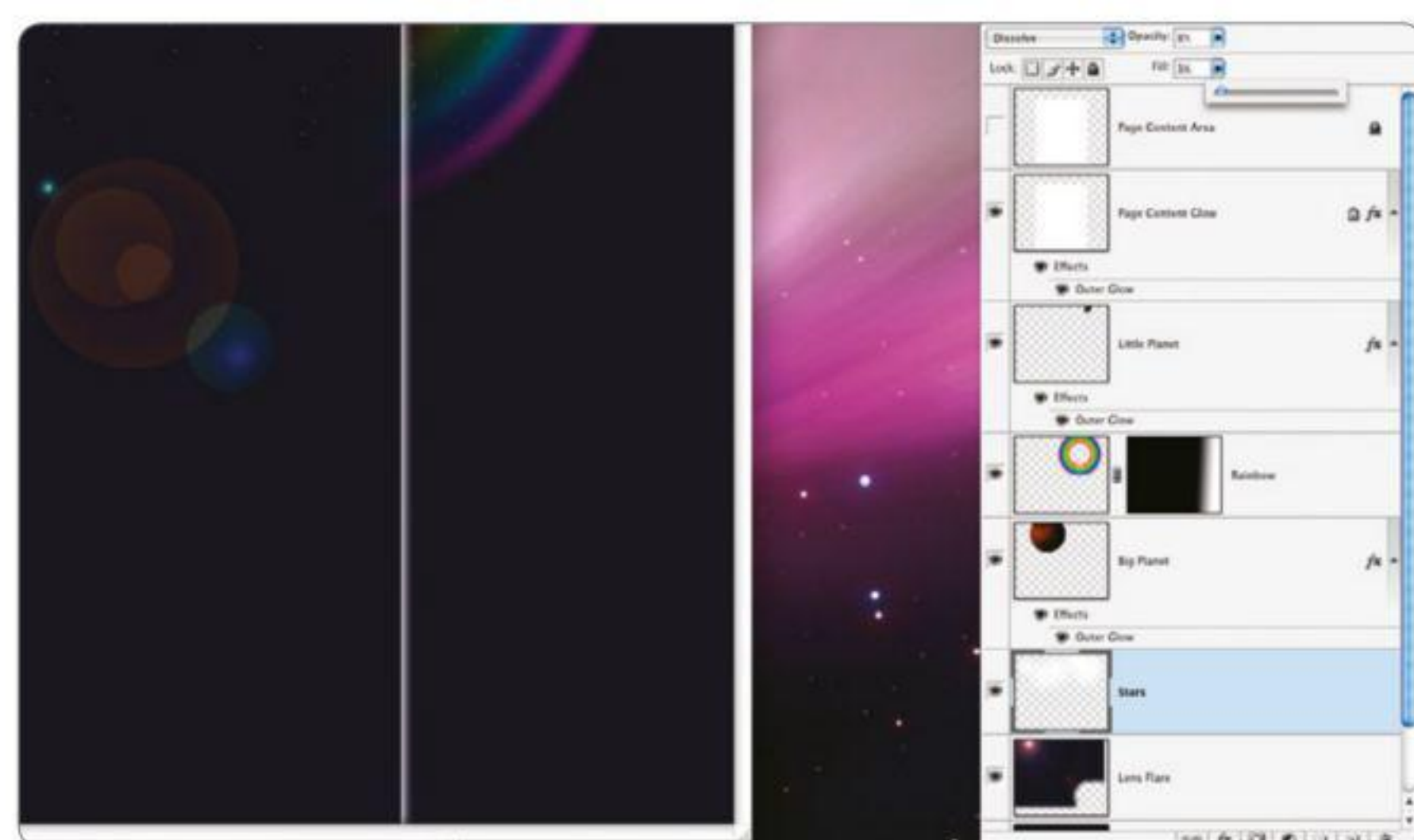
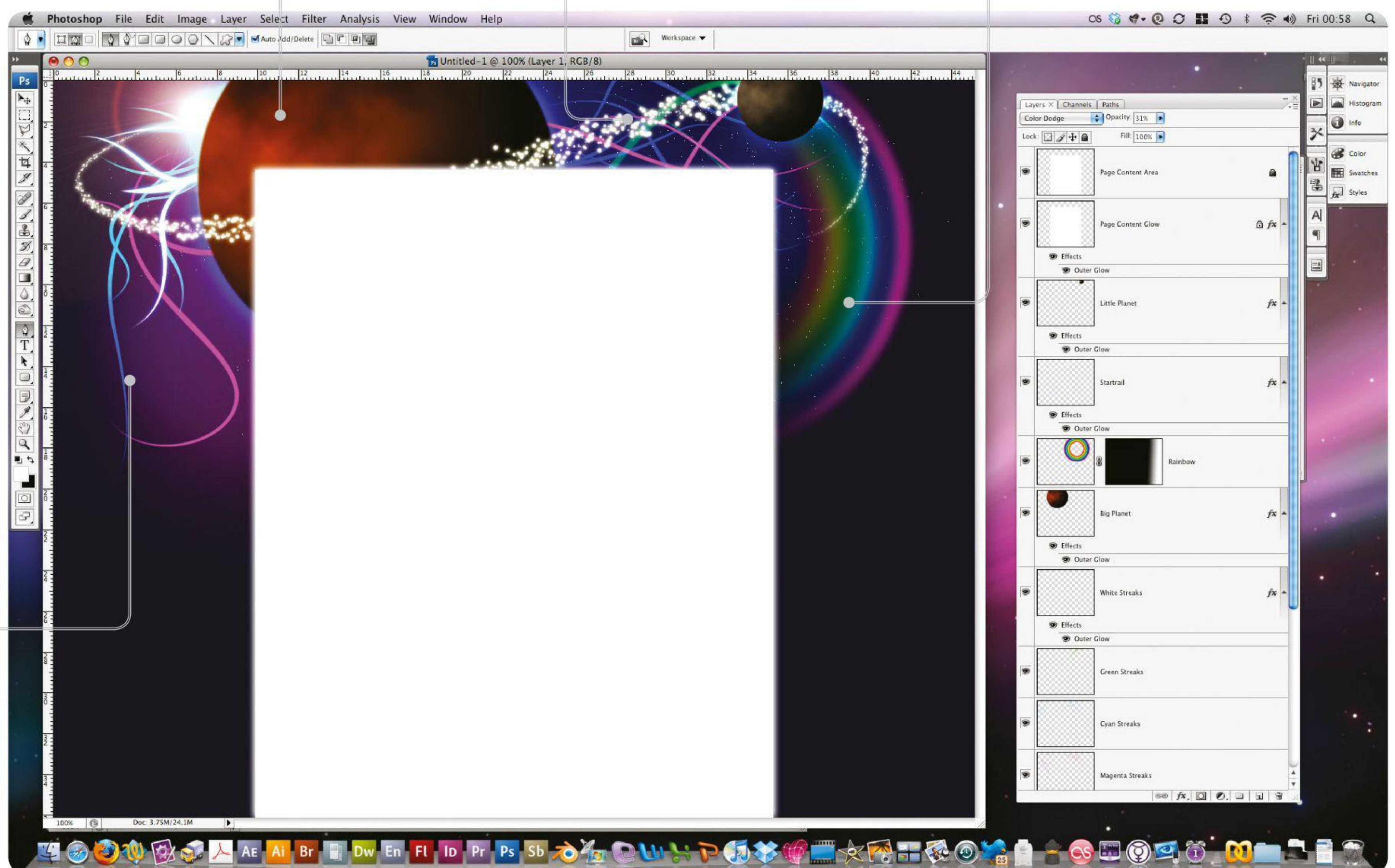
The tentacles of colour have been created using a stroked path, with simulated pressure. Each colour is chosen from the rainbow to complement and set off against the other elements nicely

## Shooting stars

The shooting stars effect is achieved using a stroked path with simulated pressure. The brush is set to use a scatter effect so that the individual elements look like a meteor or comet trail. We've added an outer glow layer style to complete the look

## Rainbow a go-go

The rainbow effect is created using a simple gradient and the polar co-ordinated filter inside Photoshop. This, when combined with the stars, planets and tentacles, helps to create a coherent whole design



## 16 Set the stars free

With your gradients in place, it doesn't quite resemble a star field. To get the star effect, change the layer's blending mode to 'Dissolve'. This gives an instant star effect, but there are way too many stars. Reduce the number by adjusting both the layer's opacity and fill values to something around 5% for each.

## 17 Create an aurora

Create a new layer and set the blending mode to Colour Dodge. Using the Gradient tool, again set to foreground-to-transparent, draw magenta and cyan gradients around the top third of the canvas to create a nice aurora effect. You can adjust the opacity of the layer to control the amount of aurora visible.

## 18 Add streaks of light

Create a new layer; foreground colour magenta. In Brush tool, select a small round brush. Select Pen tool. Create a curved path by clicking and dragging in three positions. Select Paths panel, right-click on work path and select Stroke Path. Ensure Simulate Pressure is checked. Repeat with different brushes to complete the effect.

## Create a bright, neon text effect

Employ the power of Photoshop to build your own font from scratch, light it up, give it a glow and animate it for a neon effect





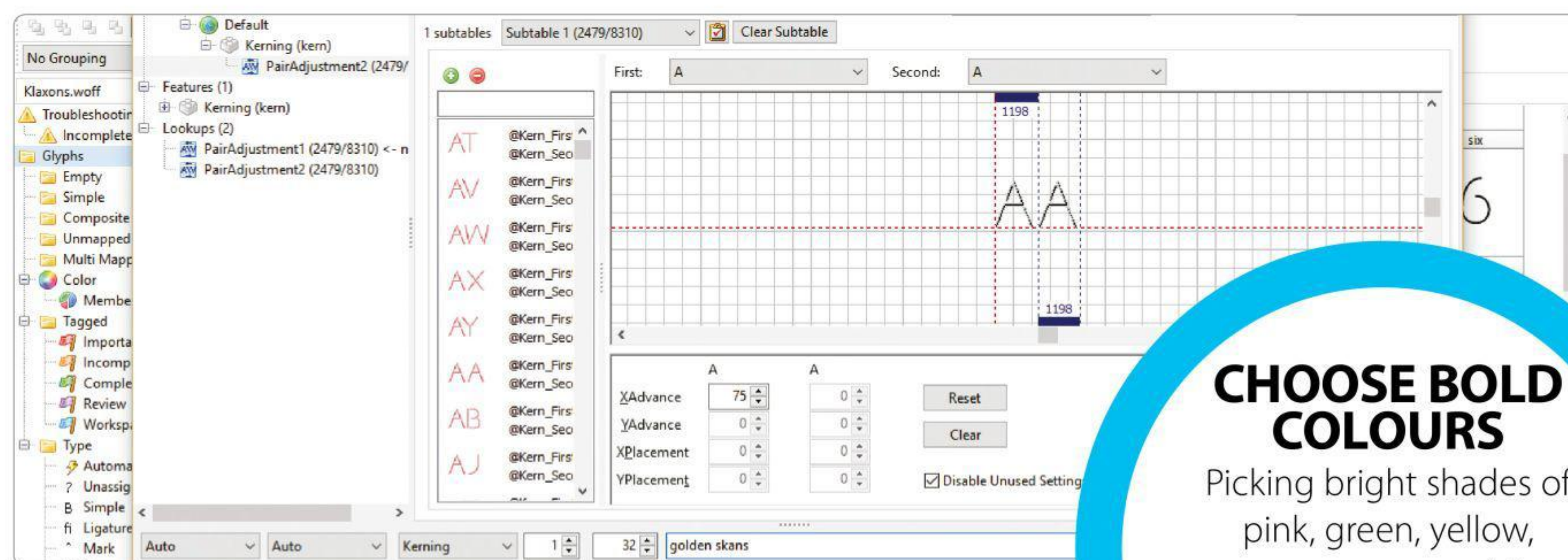
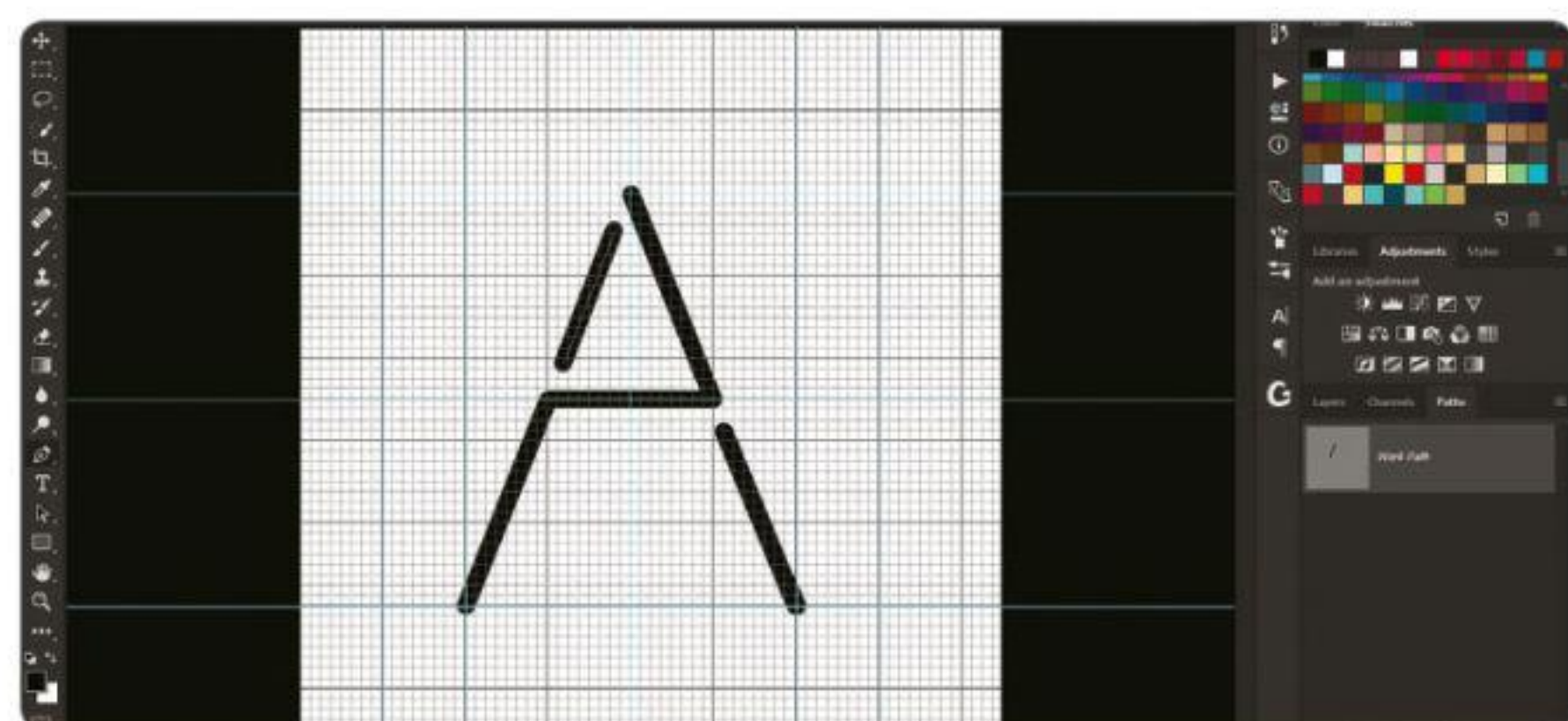
**O**ften, it's the simplest effects that look the most striking, and neon text is one such project that's a lot easier to make look realistic than you think. While this entire tutorial only uses one stock image, your brain tricks itself into seeing this as a real, functioning neon sign: and that's the power of Photoshop's layer styles.

But more than that, the fact that this entire project is built from scratch – from the font to the colours of the glow, to the eventual animation – simply means that there's a lot of scope for creativity. You can choose exactly what you want every part of this effect to look like. This tutorial is applicable if you're just wanting to make the font, or you're looking to animate the logo of your website in a neon style: just pick and choose the parts you want!

Neon is really popular right now online, simply because colours are becoming bigger, bolder and much more vibrant. Showing off saturated tones against a dark, muted background is a great way to present a landing page, a logo or a header, and it's easy to animate your work and save it as a gif with a low file size. Neon type is extremely simple to create on paper, but if you can do it well, you can create a brilliantly striking effect.

## 01 Start creating the font

Create a new document 550x550px in Photoshop, and bring up the grid by hitting **Cmd/Ctrl+'**. Create a new layer and with the Pen tool, sketch out your first letter. Leave gaps in the character, as this is going to be a neon-style typeface, and once you're happy, hit **Stroke** within the **Paths** tab to draw in the letter.



## CHOOSE BOLD COLOURS

Picking bright shades of pink, green, yellow, green or even white make great neon type effects – try to avoid duller greys if you can.

## 02 Work through the alphabet

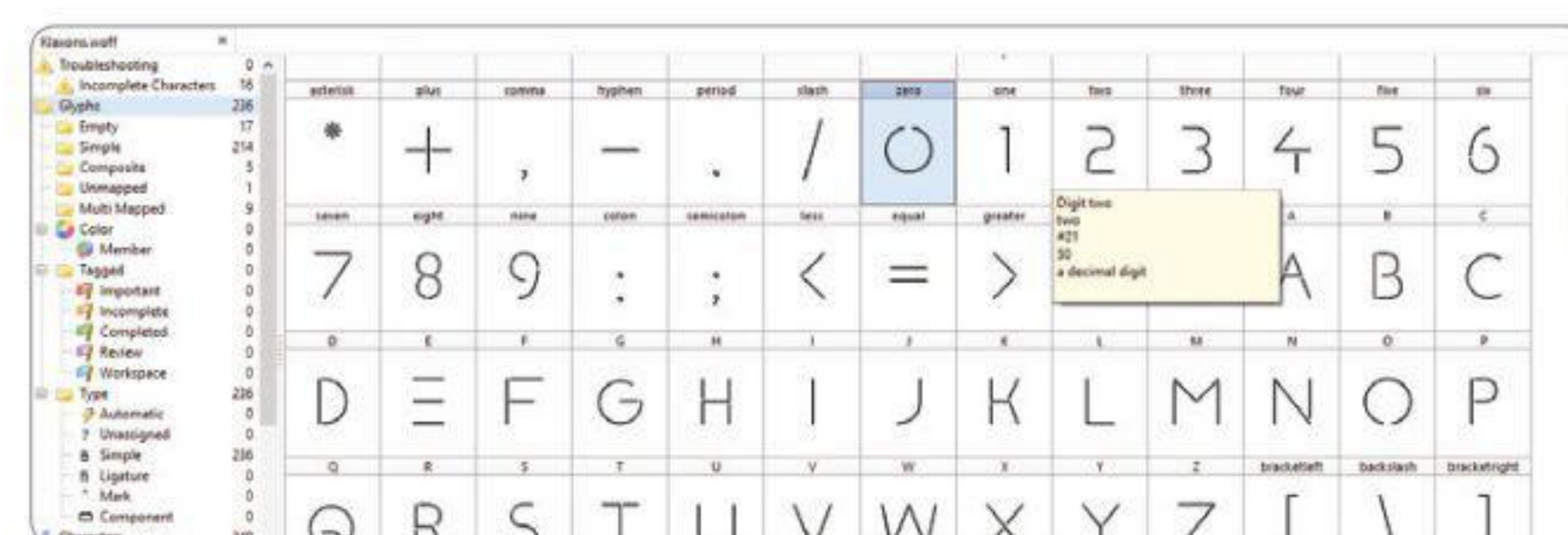
Create as many characters as you can with the Pen on new layers each time. If you want to, add in some special characters, such as currency, punctuation and accented letters. Follow the same basic style that you started with, so that your font is cohesive and follows a pattern.

## 03 Paste into FontCreator

If you have High-Logic FontCreator, this is the part where you can turn your characters into a font; if you don't, a free trial is available, and anyway, it's not essential to create a font from your work. By pasting each character into FontCreator though, we can create a useable typeface for Photoshop.

## 04 Fill FontCreator

Work your way through FontCreator, by double-clicking each character and pasting in your Pen-drawn work. Make sure that each letter is on the same base line and that the font feels natural and that each letter feels a part of the same font.

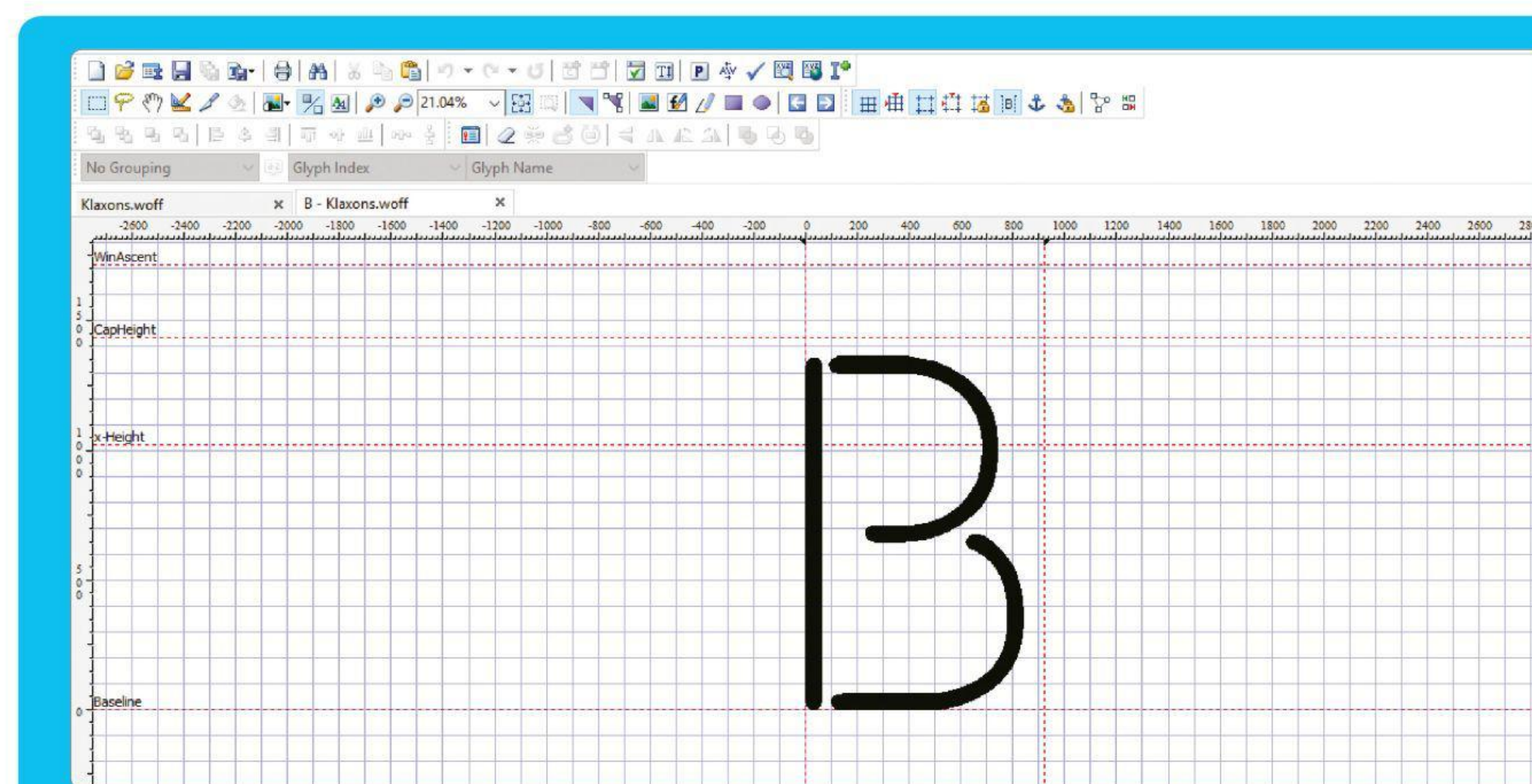
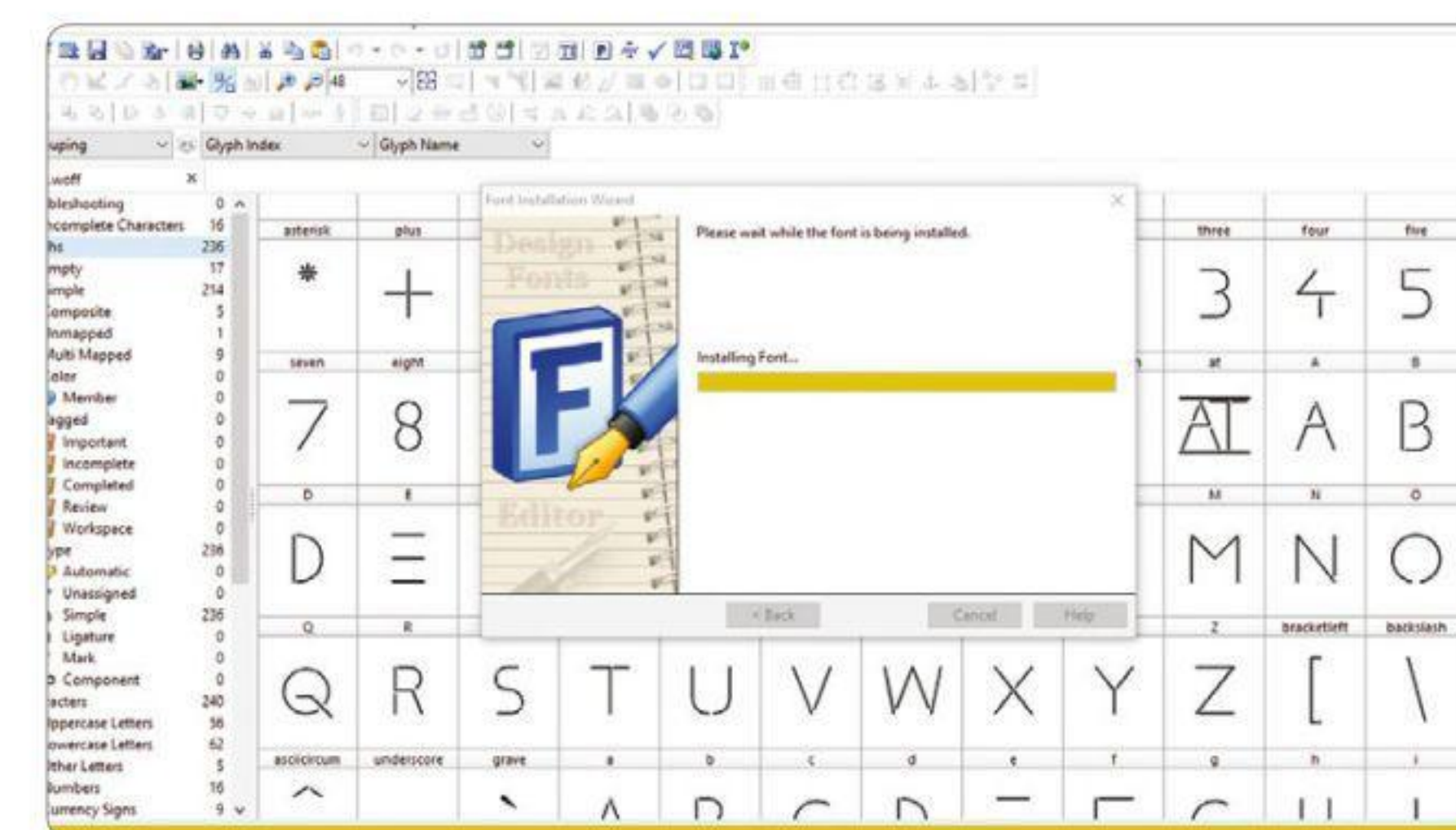


## 05 Auto-kerning

Kerning is the space between each of the letters, and the Auto-kerning option within FontCreator is what naturally spaces out your letters so that the font looks neat. Try this option and make sure each letter looks good together.

## 06 Export

Export your font and install it into your computer once it's complete. This will automatically add it to Photoshop CC. And if you'd rather not create the font yourself, we've provided ours, named Klaxons, available on the FileSilo.



### Top

Duplicate any elements of your font that can be repeated, such as the curves on Rs and Ps

### Left

Don't resize letters, as they all need to follow the uniform sizing of the font you're creating

# Photoshop & Graphics

## 07 Pick your colours

Create a new document back in Photoshop for your neon banner. On a new layer, create a colour palette by using a big brush. We went with #501d26, #af273d, #f74663, #ffdae1, #35e985 and #b2dcc4. These colours are available on the FileSilo as a swatches file.

### CHANGING BACKGROUNDS

Using a brick background simply gives the impression that your neon type is displayed on a wall, but you can use other backgrounds for your image, such as plain ones or metal ones.



## 08 Create the background

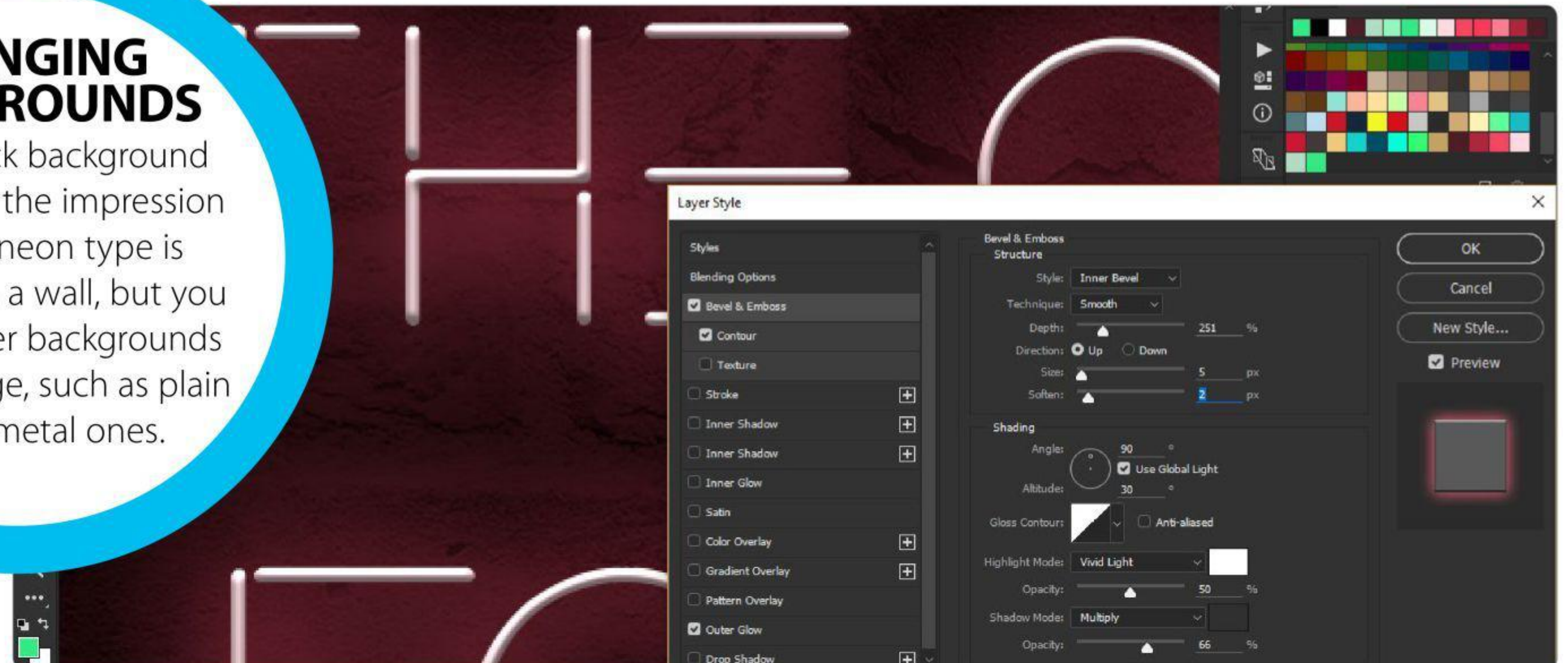
Drag in the supplied brick background into Photoshop. Create a new layer, fill it the deep red colour, and duplicate. Set one layer to Multiply, one to Colour. Create a Brightness/Contrast layer and set to -75 in Brightness. Duplicate this and mask the centre for a vignette.

## 09 Input the text

Grab the Type tool and select your font; if you didn't create the font earlier, that's fine too, just place in each letter individually. Spell out your text, before Ctrl/right-clicking the layer and selecting Rasterize Type.

## 10 Outer Glow

Ctrl/right-click the layer, and go to Blending Options. Click on Outer Glow. There, input an opacity of 50%, a spread of 5% and a size of 63px. Now, you can see your neon text beginning to look a lot more realistic. Choose a bright colour.

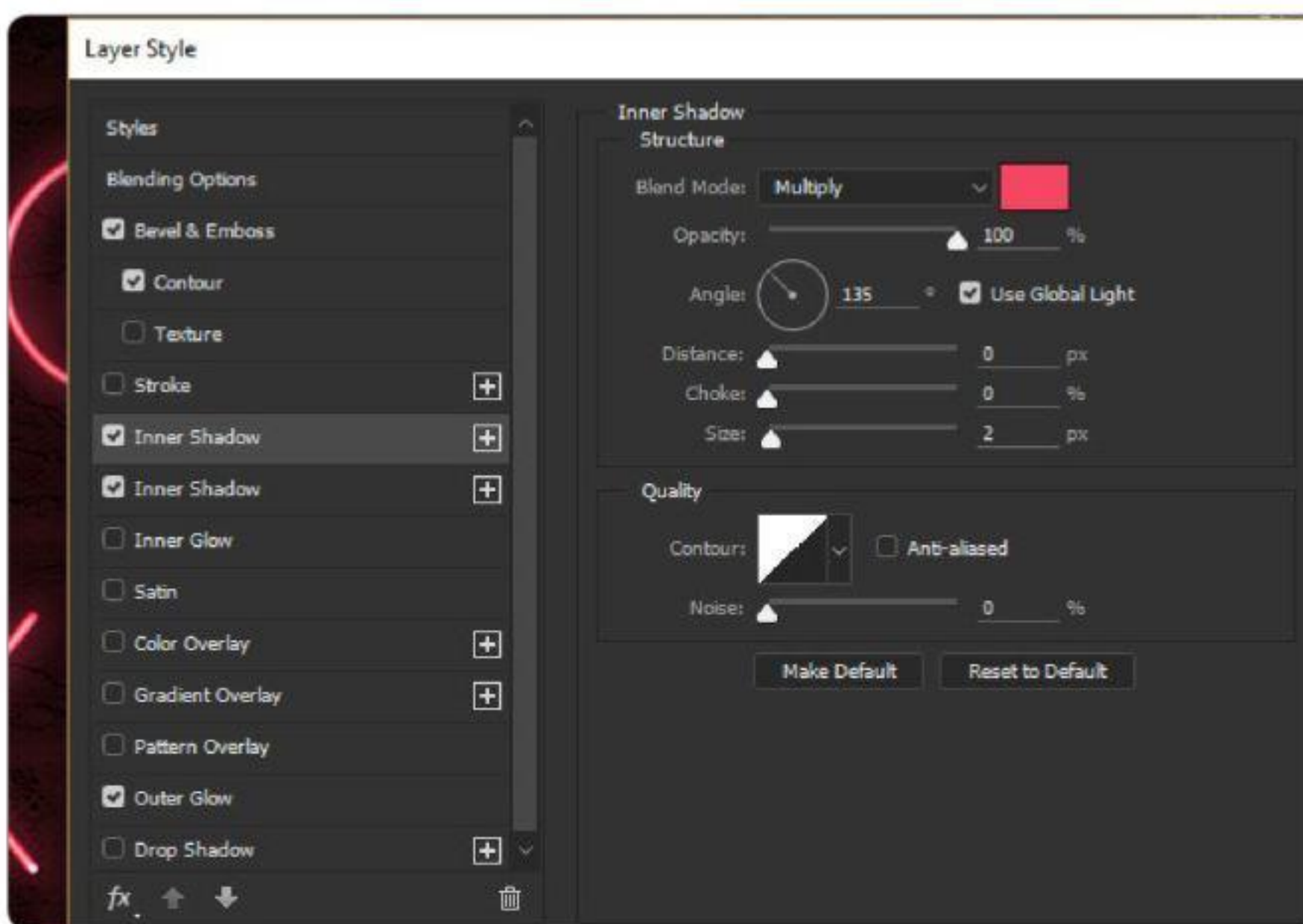


## 11 Add a bevel

Click on Bevel and Emboss, still in the Layer Styles option. Choose Depth: 250%, size: 5px, Soften: 2px. Use the Highlight and Shadow modes to add a little more depth to the text, and play with these options until you find the right mix.

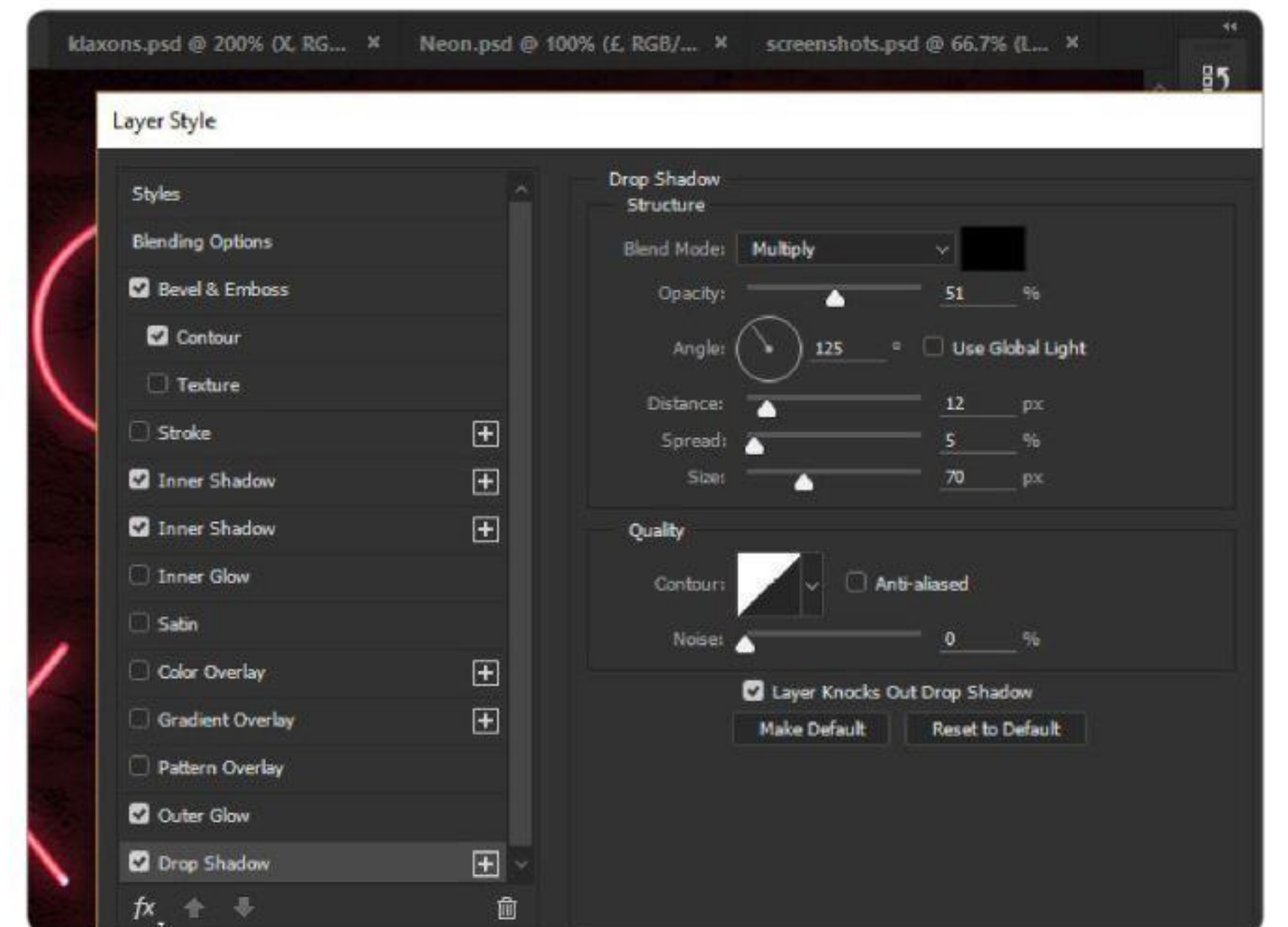
## 12. Inner Shadow

For the Inner Shadow, choose the same bright colour you picked for the Outer Glow. All you'll need to edit here is the size, depending on how big the text is. Alter this and leave all other values at 0.



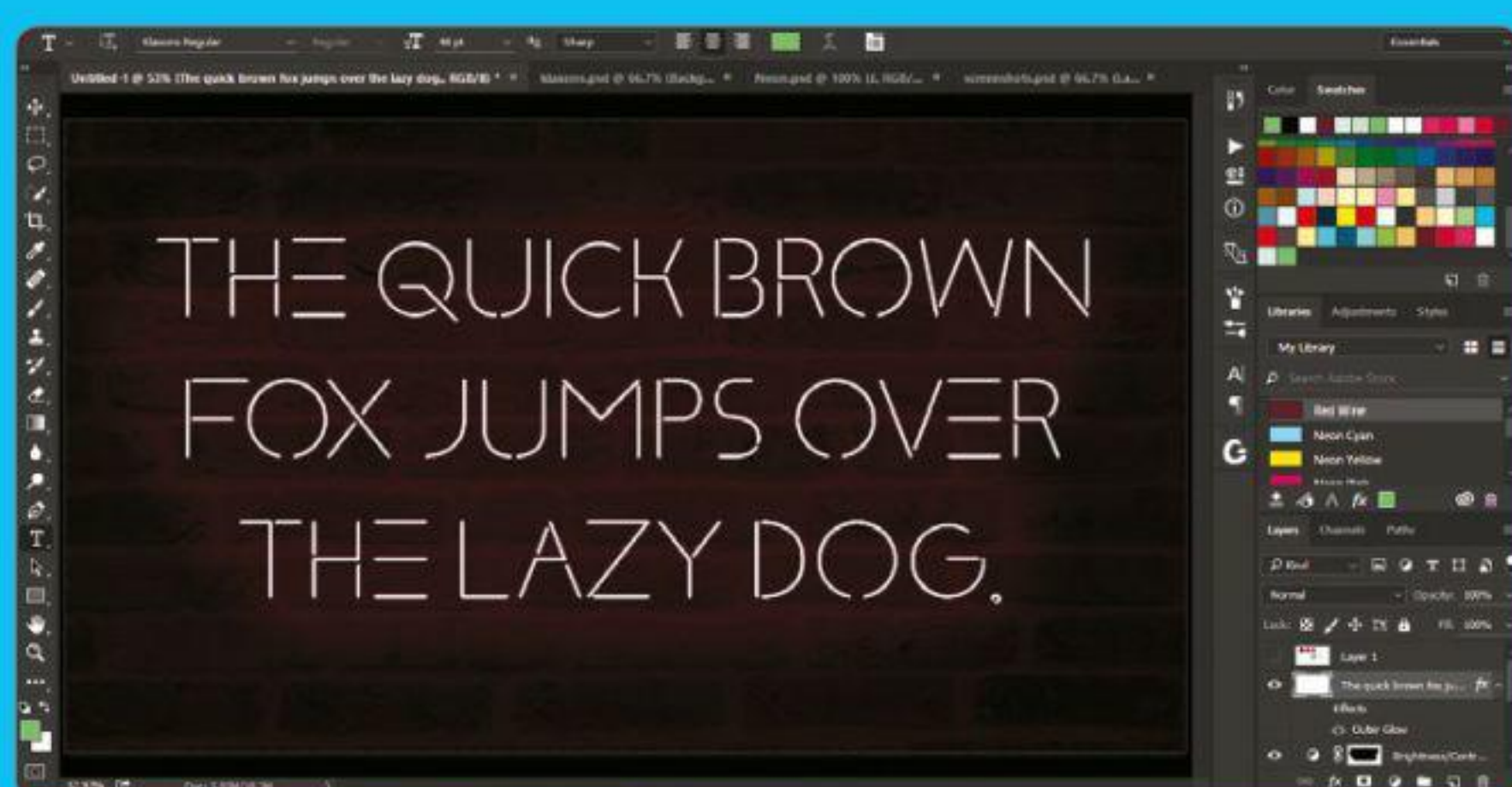
## 13 Drop shadow

As the neon text is going to be sitting off the wall slightly, we're going to need a subtle drop shadow, but not too much as we don't want to compromise the Outer Glow. Use a low opacity, and give this one some more Distance and Size.



## 14. Draw some characters

Grab the Pen tool and sketch out a fox and a dog on a new layer, leaving the same gaps as you did when you created the text. Stroke these in the pale green colour that you added to your swatches.



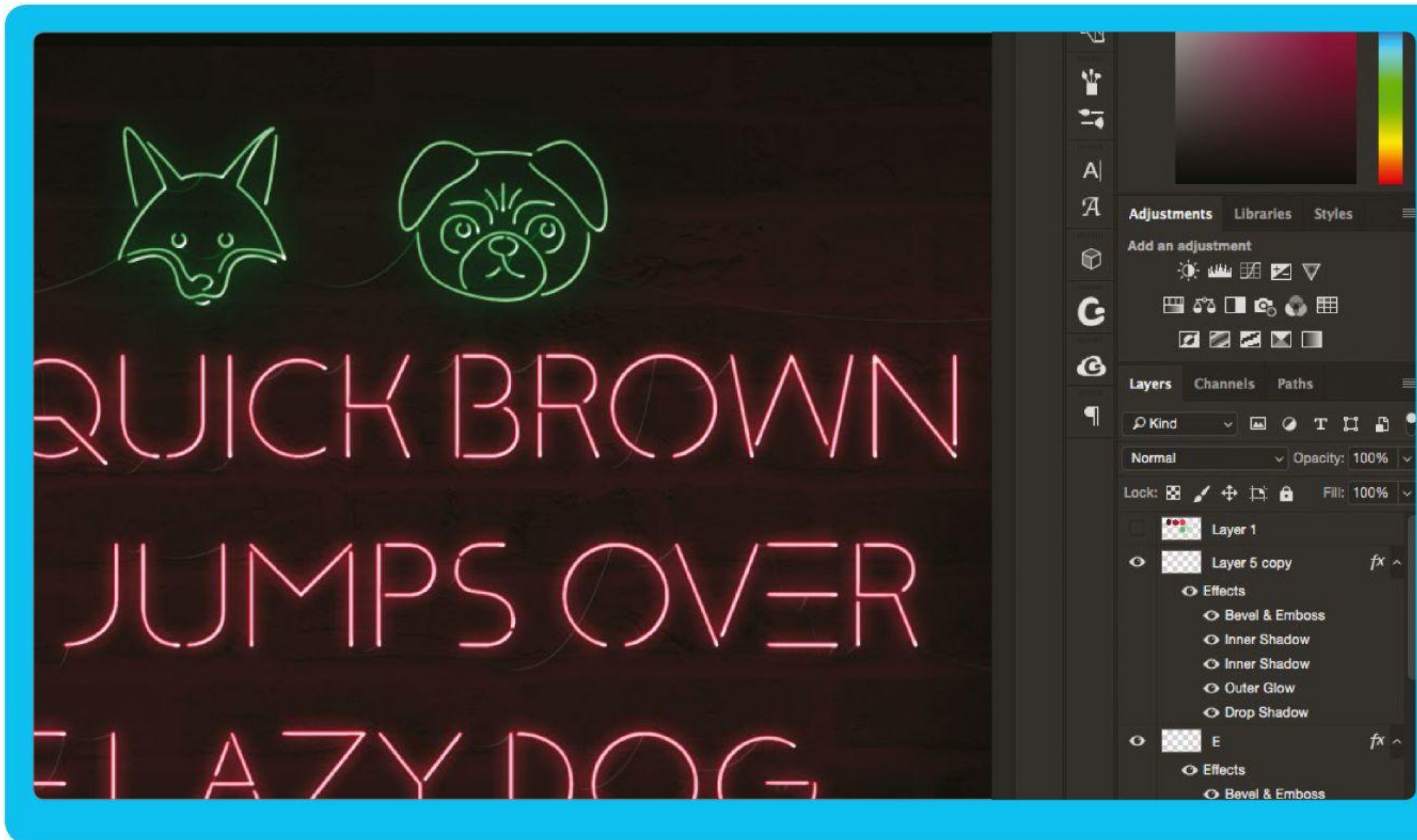
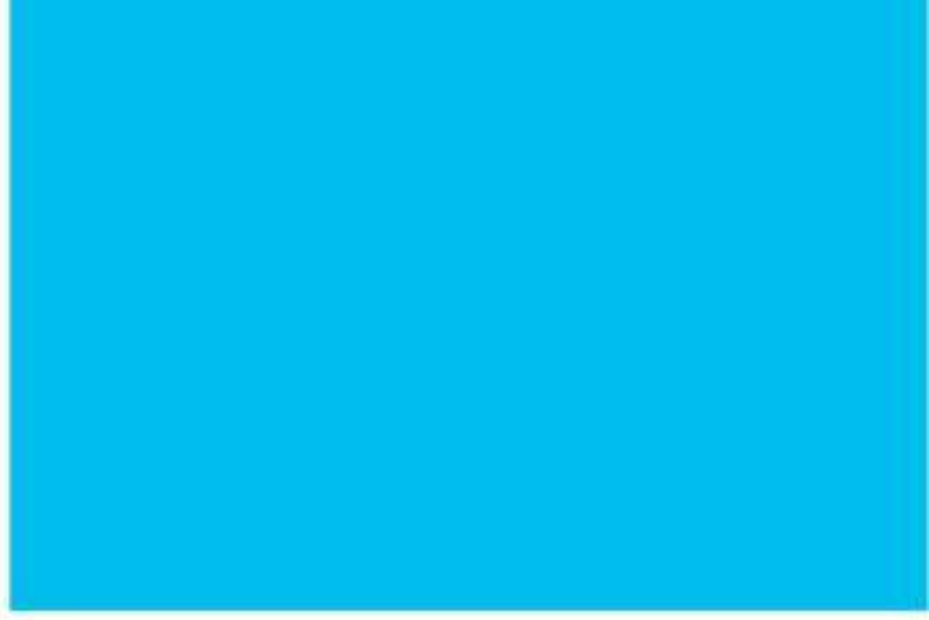
### Top

Enter the title of your heading if you wish, or if you're just looking to type any phrase, choose words that show off the best letters you've created

### Right

Find reference images of animals if need be, or draw them freehand if you're confident in using the Pen tool





## Applying neon

This tutorial is one that works really well for 'hero' pages on websites as well online headers and banners, especially if you animate them. Creating a gif from a neon project such as this doesn't produce a large file size either, as you're literally only animating a few frames.

If you wish to create a neon header with a transparent background, that's easy to do too. Simply hide the background layers that you create towards the beginning of the tutorial, and leave only the text layers and the strings that you create to connect the neon letters.

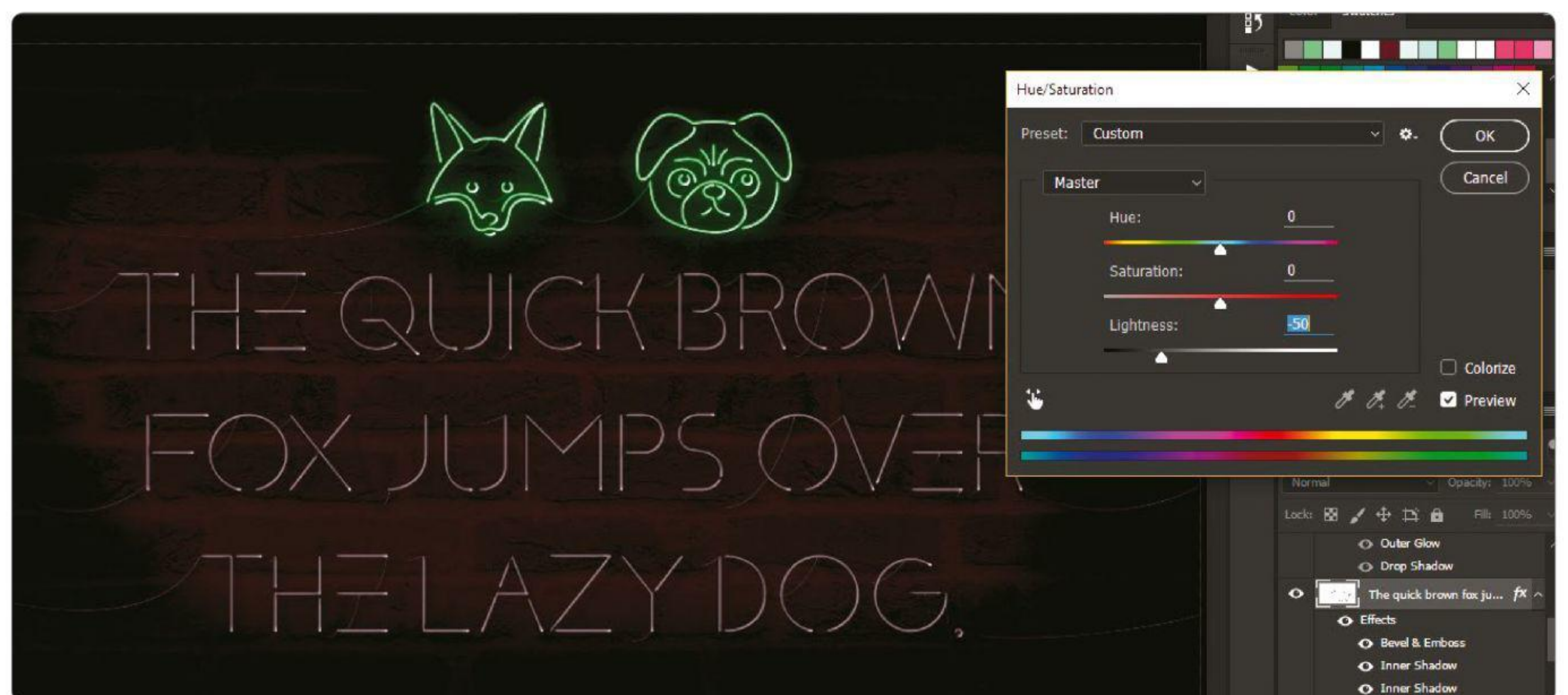
Leaving a transparent background makes it more difficult to animate in Photoshop, but means you can show the background of your site.

### 15 Make it glow

Go to the text layer, Ctrl/right-click and choose Copy Layer Styles. Click on the animal layer, Ctrl/right-click and choose Paste Layer Styles. Double-click on the FX icon and turn the pink colours to green for a little contrast to the text.

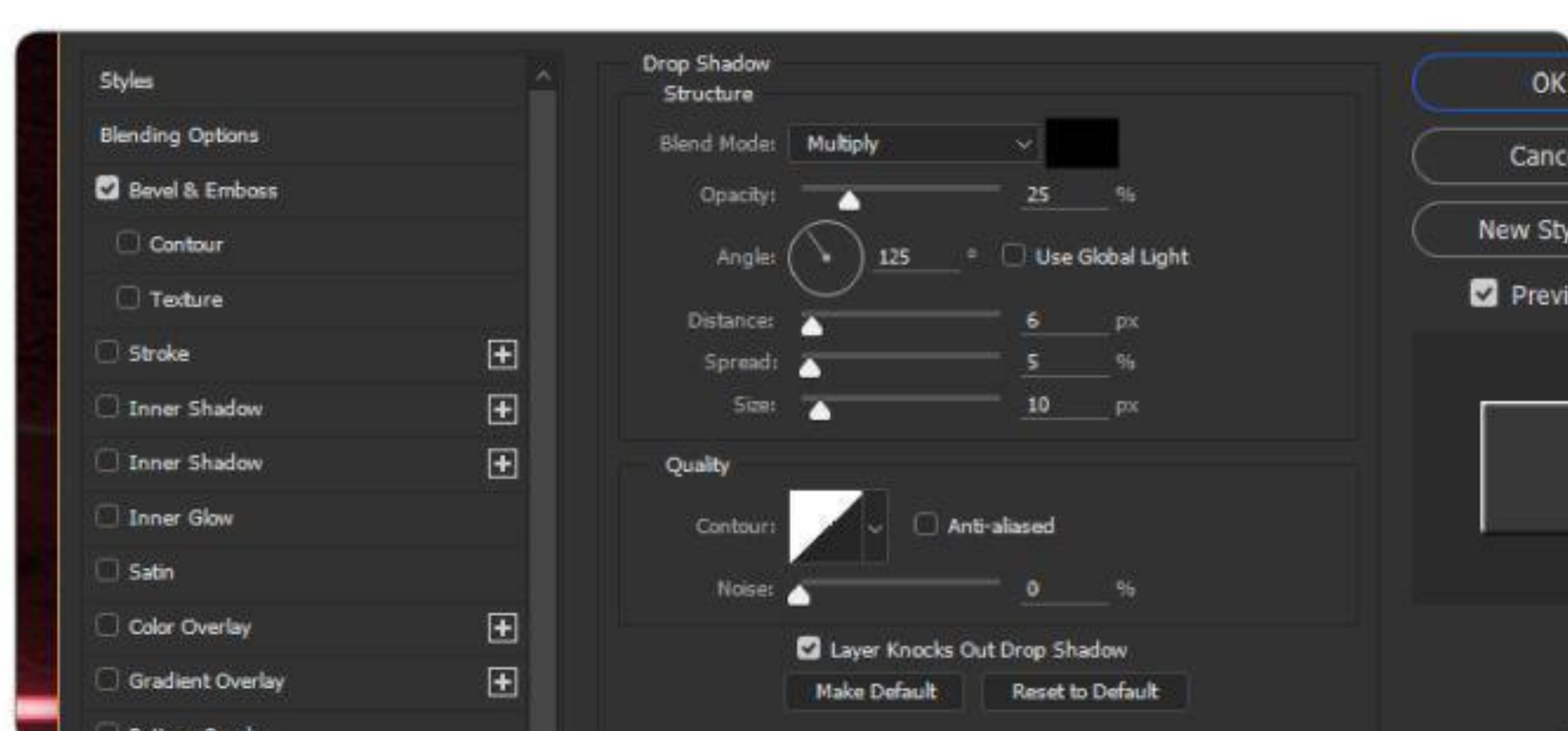
### 16 Draw some strings

Grab the pen tool and create a string through the neon text and the animals that you've created. Make sure that it follows through all of the characters, and then stroke with #808080, with a 2px brush selected with 1% spacing.



### 17 Give it shape

Go to the Blending Options for the string you've just made. Head to Bevel to give it a subtle shape, and give it a subtle drop shadow, too. The variables here depend on the size and shape of the string you've created, so just experiment to see what works.



### 18 Create an 'off' version

Let's create a layer of text that isn't glowing, so we can animate a flicker on some of the letters. Duplicate the text layer, then hide the Outer Glow style. Set the Inner Shadow to #808080, then alter the Lightness of this layer to -50, using Hue/Saturation (Cmd/Ctrl+U).

### 19. Select some letters to flicker

On the glowing text layer, grab the Marquee tool and select a few letters you want to switch off briefly in the animation. Make duplications of this layer, with these letters masked out until you have sufficient layers to create an animation.

### 20 Set the animation

Go to the top-right of Photoshop and select Motion as a Workspace option. The animation timeline will appear at the bottom; here, you can define which layers are shown or hidden at for however long you want them to be.

### 21 Create the frames

Create new frames along the bottom with various letters either glowing or not glowing, depending on whether the layer is visible or not. Set the time of each layer's animation using the little arrow on each frame, too. Save as a gif using Save For Web.



# Customise your site

- 132** The perception of colour  
Understand how colours impact your site
- 138** Make a CSS expanding navigation menu  
Build a dynamic navigation menu
- 142** Get background colour to match content  
Create dynamic colour schemes
- 146** Develop a three-step animated web form  
Engage users with animated form
- 150** Create email newsletters and let people subscribe  
A more efficient way to reach your fans
- 152** Create contemporary text  
Master visually appealing titles

## WHAT YOU'LL LEARN

Although by now you'll have learned lots of code and designed lots of graphics, there are still plenty of things you can do to make your site special. In this section you'll learn how to create your first script, add social-network interaction, maps and videos to your pages, as well as how to create newsletter forms to capture contact details data to target interested parties with emails.

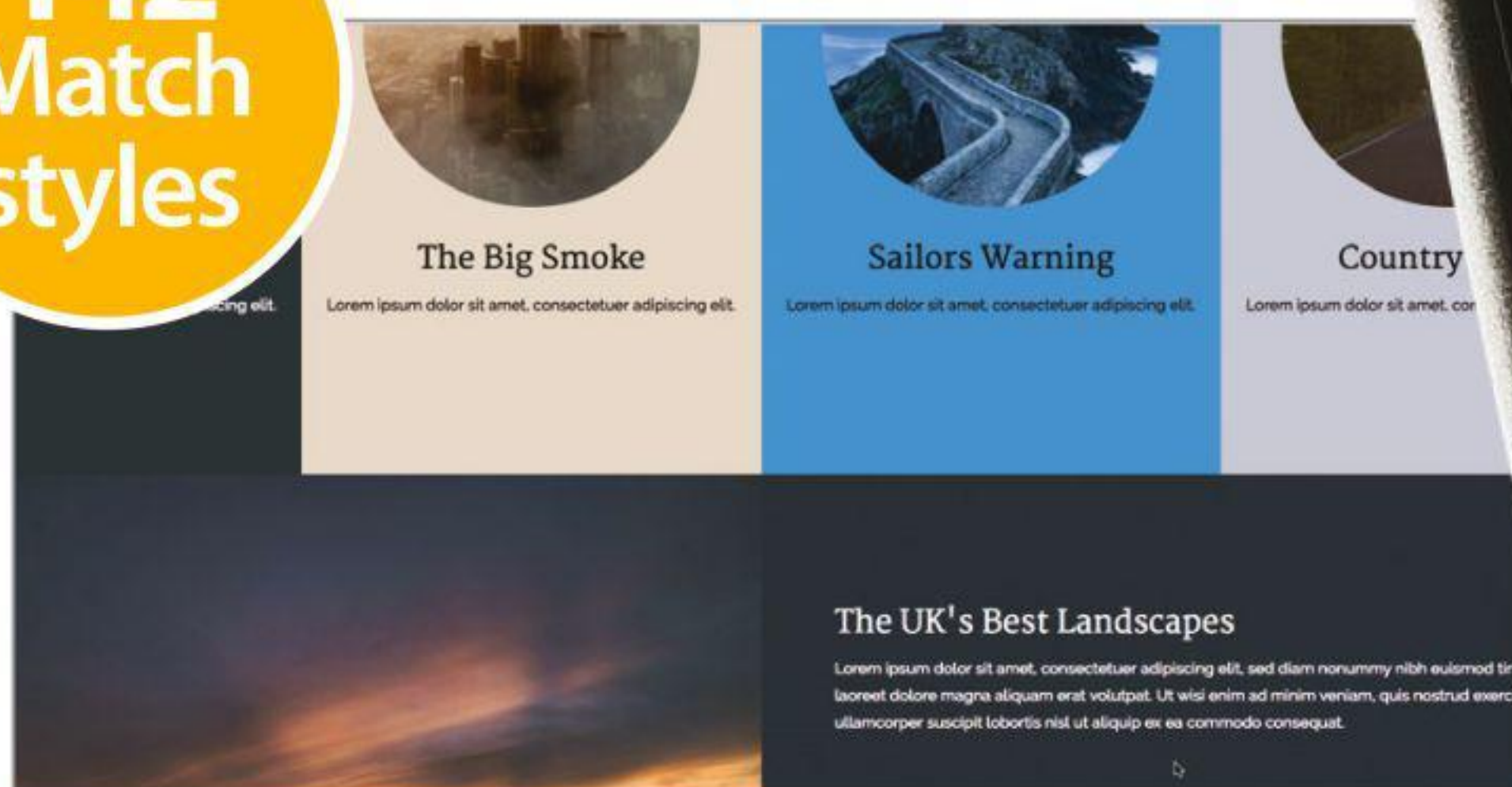
152  
CSS  
titles

W



"Developing your site for your audience is key"

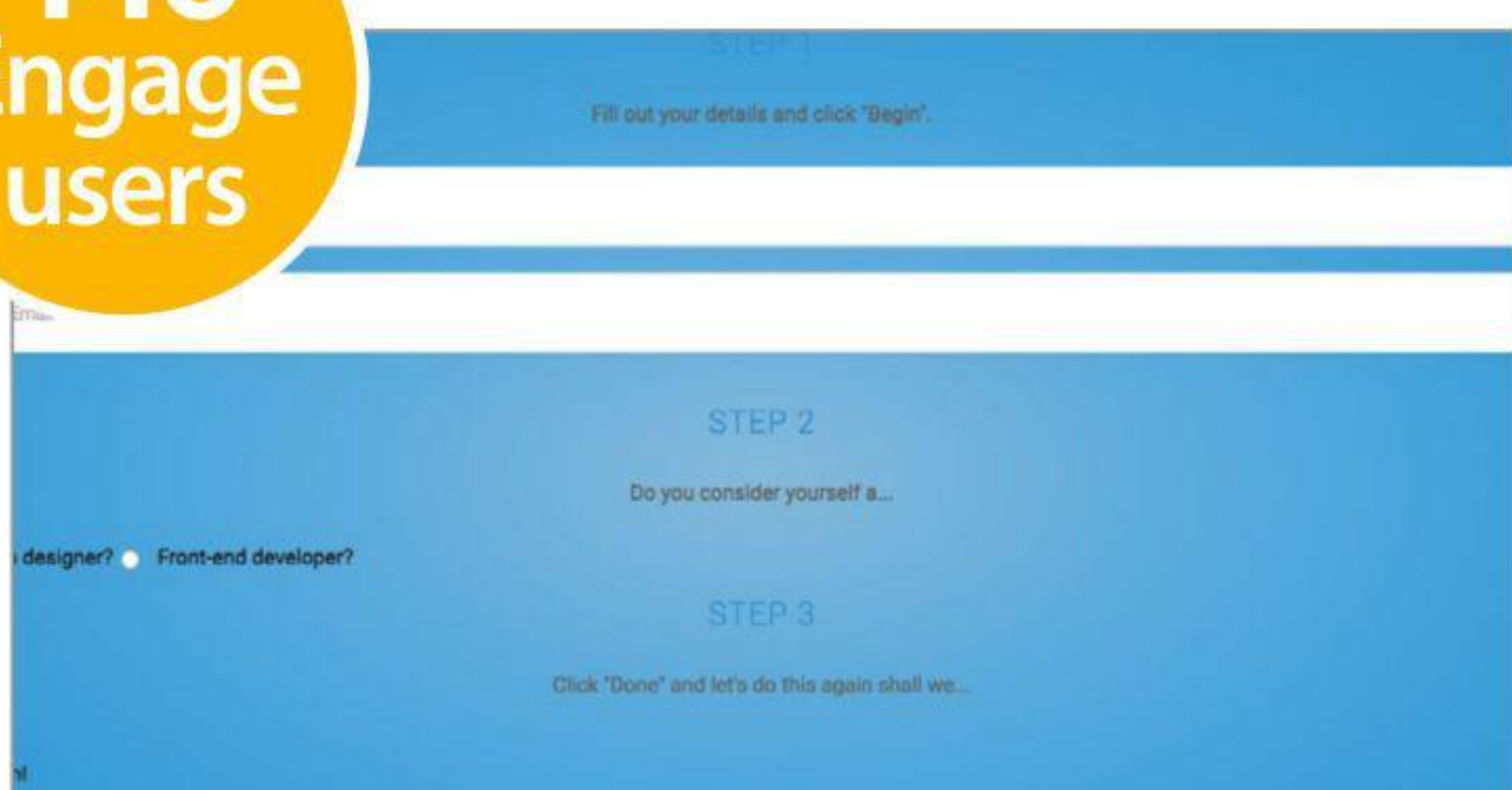
142  
Match  
styles



132  
Perfect  
palette

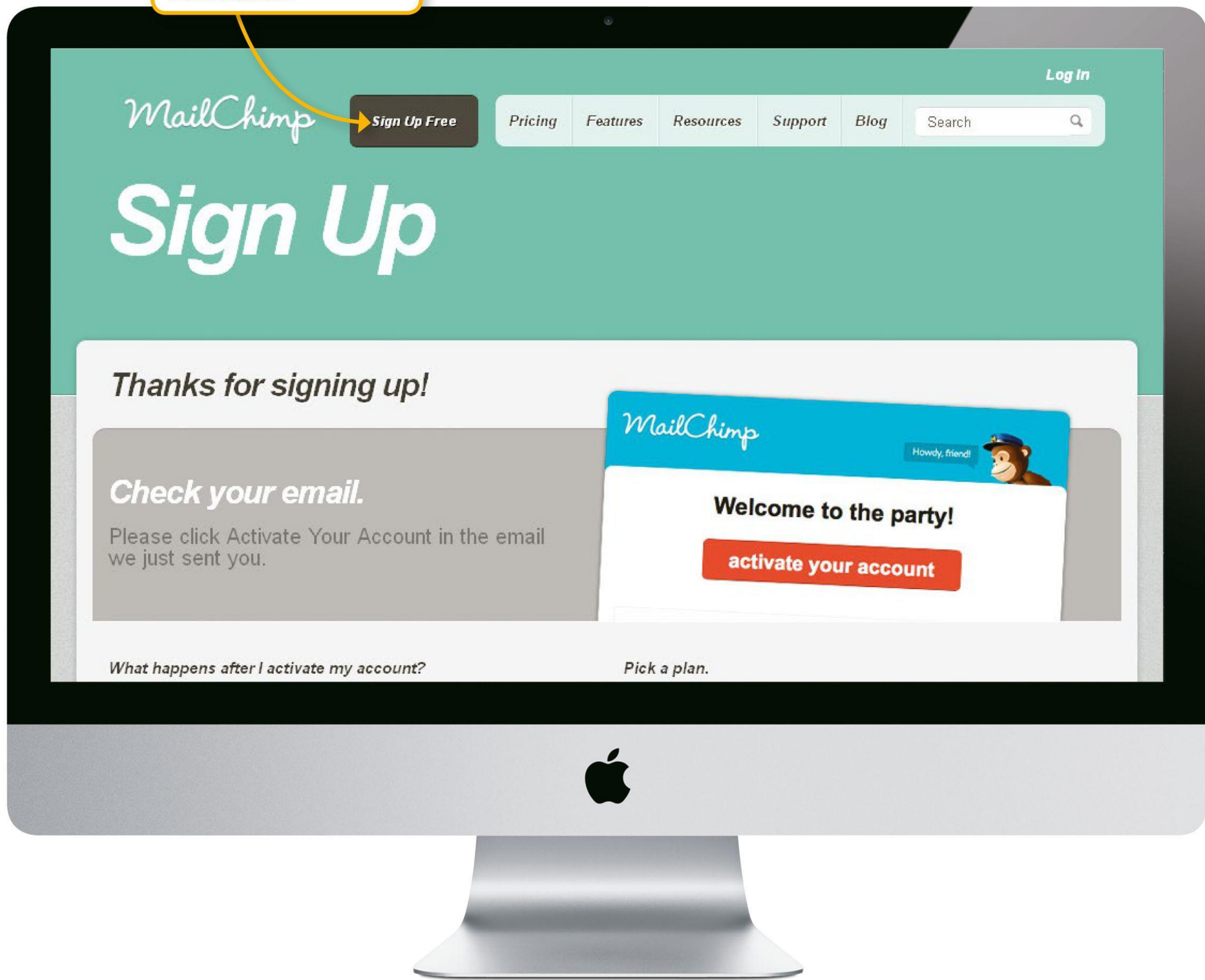


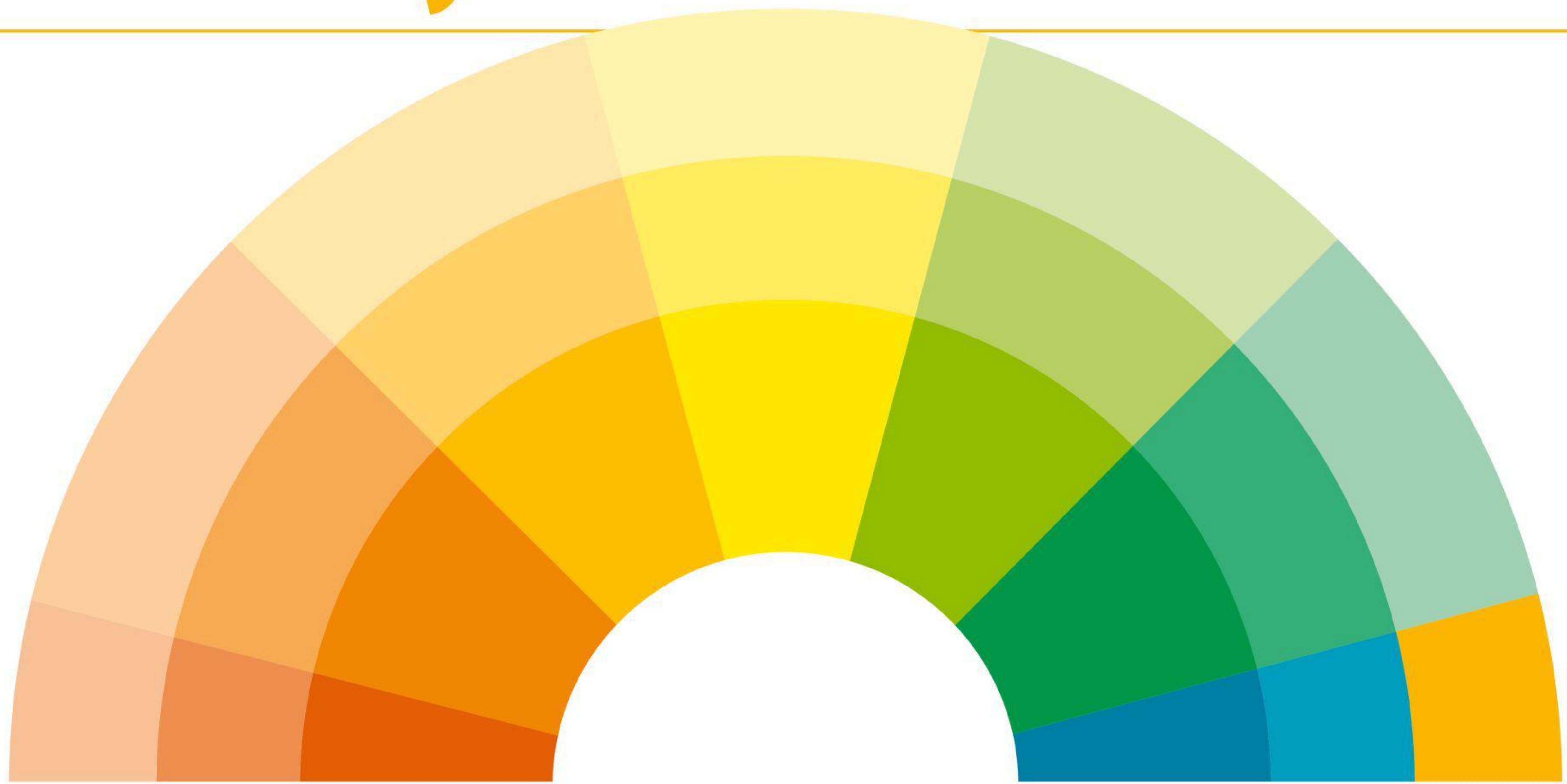
146  
Engage  
users





**EMAIL NEWSLETTERS**  
 Get in touch with your visitors with a newsletter





# THE PERCEPTION OF COLOUR

HOW DO TINT, TONE AND SHADE INFLUENCE THE USER EXPERIENCE? FIND OUT HOW TO USE THE BEST COLOUR PALETTE IN YOUR SITE DESIGNS TO ENGAGE YOUR AUDIENCE



# Why colour matters

If asked "Why does colour matter?" the most obvious answer would be "Because if the world was black and white, it would be a boring place."

Colour matters for many reasons. Familiarity, is one. We know bananas are yellow, the sky is blue and the grass is green, and if that changed it would throw us. In nature, such changes aren't likely, but what if overnight someone decided that hot taps should be pink and cold taps should

be purple? Or that green no longer meant 'go' at traffic lights?

We know blue is cold and red is hot. No other message is needed; colour gives us all the information we need, which is true of most places in the world. So, in many cases, colour transcends language as a tool for communication. And beyond its functional uses, colour affects moods: different hues evoke different emotions. This has been shown by research conducted by governments, brands and designers that reveals the effects different colours have on people.

Most simply, colour brings meaning to life. When something has colour, it acquires its own unique style. Just by being a certain colour, an object forms an idea in people's minds.

Colour defines the personality of a design. It's more powerful than shapes, symbols and words. It's totally subjective, so know your audience. Be single-minded, own a simple colour palette and be remembered.

MARK SEPHTON,  
CREATIVE DIRECTOR  
WWW.MARKSEPHTON.CO.UK

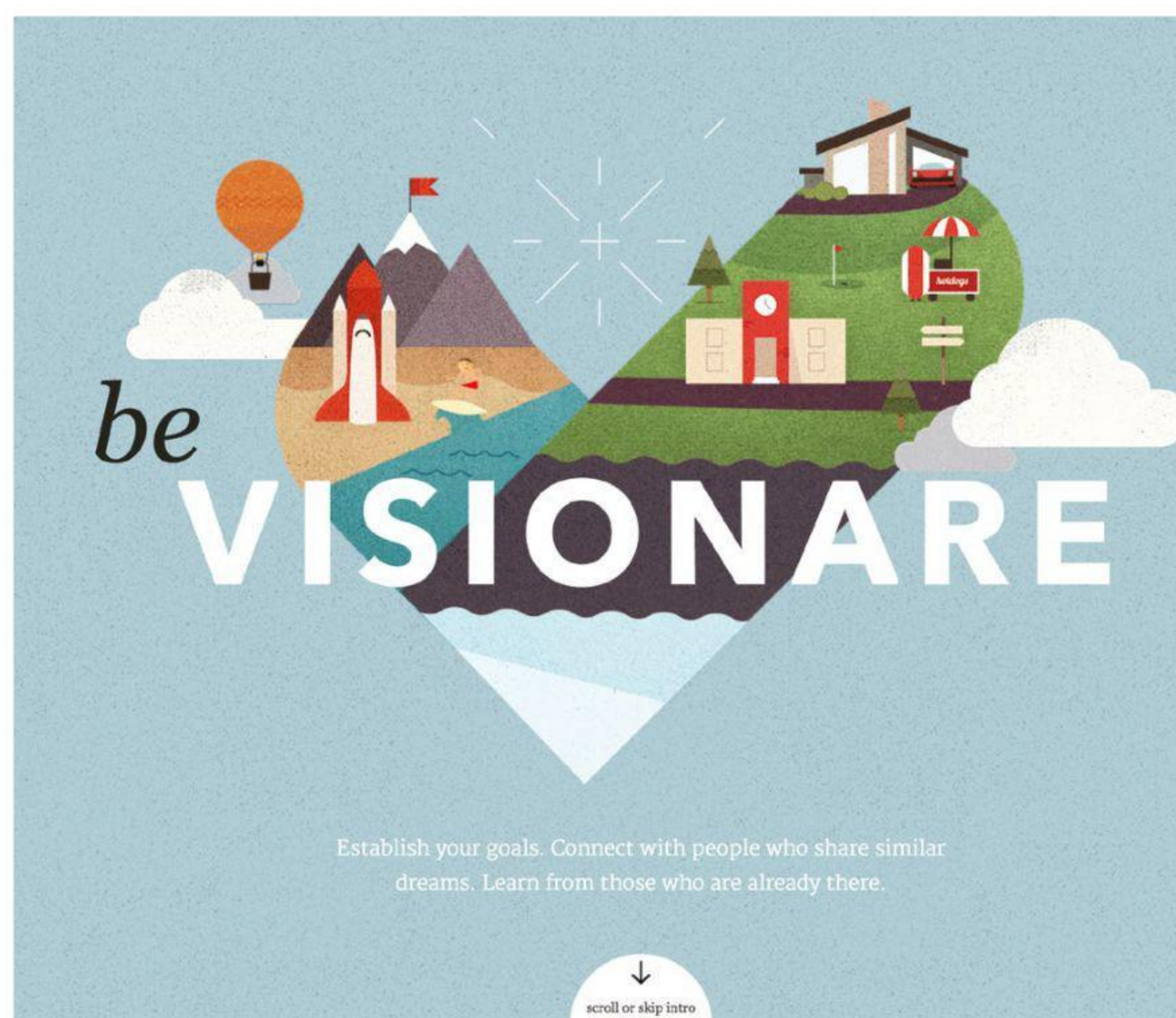


# How colour works on the web

In the golden age of the web that we're experiencing now, we're spoiled for choice when it comes to colour. There are more options available to us than we can physically determine (16,777,216 to be precise) and it's all too easy to forget that, once upon a time, a mere 216 colours had to suffice. This is owing to the fact that computers themselves only supported 256 colours, and in order to create a standardised method for displaying colour, this handful of just 216 were selected. But despite today's increase to over 16 million, the principle for creating and displaying colours on the web remains the same as it has always been – through a mix of just three basic colours: red, green and blue. Each has 256 shades that can be combined together to form virtually any colour you could possibly imagine or visibly recognise.

Web colours are described through the humble Hexadecimal value - effectively a three part algorithm made from varying intensities of Red (R), Green (G) and Blue (B) values, starting with the absence of all colour, black (or 00), to the presence of all colour, white (or FF).

Before you get carried away and start dipping your paintbrush into those 16 million colours, be mindful of the fact that all screens can, and will, display differently. This is particularly relevant as we enter the omnichannel age of web access via tablets, phones and TVs. Never is the reality of this disparity felt more keenly than when you design a beautiful web concept on a 24-inch cinema display, only for the appearance to be wildly different when displayed on a client's four-year-old Toughbook! Put simply, the more far out the colour you use, the higher the chance of it displaying poorly. Neons, for example, may not 'pop' as much, or delicate shades of cream or grey may not show at all. So always test on several types of screen before signing anything off.



## How to use colour

Bevisionare.com is an example of where colour in digital art does the talking, while the navigational elements are kept in simple monochrome. The natural hues create an earthy warmth when combined with the softly rounded shapes. The style of the illustrations do not immediately grab your attention but do give a real sense of humour.



## How not to use colour

Just because 16 million colours exist, it doesn't mean you should use all of them! While designed purposely to attract attention as a joke, lingscars.com is still a perfect example of how not to use colour. Check out the horrendous neon glows, the very distracting bold paisley background and the jarring reds and oranges in the middle of the page.

# Customise your site

## What colours mean

What associations are connected to different colours? They can go from personal preference to becoming a symbolic representation that gets embedded as a cultural norm...

Colour psychology has long been the source of much debate, but attempting to label colours with specific meanings or emotions is rather like trying to classify what effects different flavours have on us. It's personal opinion, and each individual's understandings and perceptions of

colour will vary vastly, depending on personal experience. So while you can't guarantee it will have the desired effect on a viewer's reception, clever colour choice can – according to research – boost your chances of evoking particular associations in the viewer's mind.

### GREEN

*ENVIRONMENTAL, FRESH, HONEST*

It's been found that people relate better to colours that resemble those that they experience naturally. Green represents the earth, nature, growth and honesty. In China, green is the symbol of health and prosperity. It's also widely recognised as the colour for envy.

*% of males that state green as their favourite colour: 14%*  
*% of females that state green as their favourite colour: 14%*



### BLACK

*SOPHISTICATED, POWERFUL, DEATHLY*

In western culture, black has traditionally been associated with despair, decay, death and mourning, but it also has strong links with power and authority. Black is also used to convey messages of sophistication, luxury and even elegance.

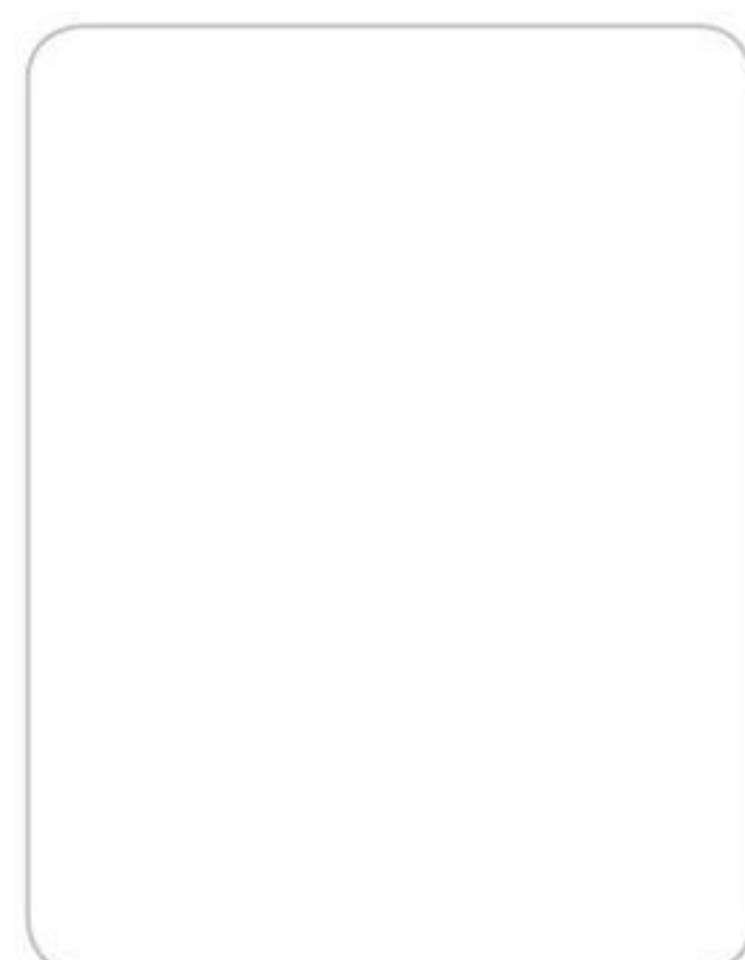
*% of males that state black as their favourite colour: 9%*  
*% of females that state black as their favourite colour: 6%*

### YELLOW

*BOLD, DISCOUNT, OPTIMISTIC*

Interestingly, while we generally tend to associate yellow with bright, bold and fun, some studies have found most people associate yellow (along with orange) with cheap and inexpensive attributes. They also ranked it as one of their least favourite colours.

*% of males that state yellow as their favourite colour: 1%*  
*% of females that state yellow as their favourite colour: 3%*



### WHITE

*INNOCENT, PURE, CLEAN*

Technically not a colour, white is in fact the presence of all colour. We associate it with clean slates, freshness, new beginnings, positive energy and life. It can turn confusion into clarity, but too much white can also bring a sense of empty isolation and coldness.

*% of males that state white as their favourite colour: 2%*  
*% of females that state white as their favourite colour: 1%*

### RED

*PASSION, WARMTH, AGGRESSION*

Red shares a similarity with black but has conflicting connotations. We consider red to be the colour of the heart, relating to love, emotion and safety, but on the flip side, red also symbolises warnings such as 'danger' and 'stop' and the display of rage.

*% of males that state red as their favourite colour: 7%*  
*% of females that state red as their favourite colour: 9%*



### BLUE

*COOL, CALM, RELIABLE*

Through its association with uniform and royalty, blue also delivers a sense of trust and authority. Many of the largest corporations (IBM, Barclays, Facebook) use blue for this reason. But using blue filters in film can create a cold and isolated feeling.

*% of males that state blue as their favourite colour: 57%*  
*% of females that state blue as their favourite colour: 35%*

*Source: Joe Hallock (2003), Colour Assignment.*

## Cultural differences

HSBC ran a TV advert a couple years back that explained that red signifies good luck and weddings in China, whereas white represents death and mourning. This contrasts with our own country, where white is often the bridal theme colour and death is represented at the other end of the spectrum by black.

Cultural variations of colour connotations don't stop there. Yellow in the UK draws up images of supermarket price reductions. However, in Thailand yellow is the colour of

the royals, or more specifically: the king. In Belgium, baby girls wear blue and baby boys wear pink, which is unlike what we are used to here. If we think of fertility, freshness and springtime in the Western hemisphere, we think of the colour green. The opposite is true in South America though, where the dense green rainforests make the locals think of death. Green is forbidden altogether in parts of Indonesia; a ban rooted in local culture and a myth about the wrath of a sea goddess.





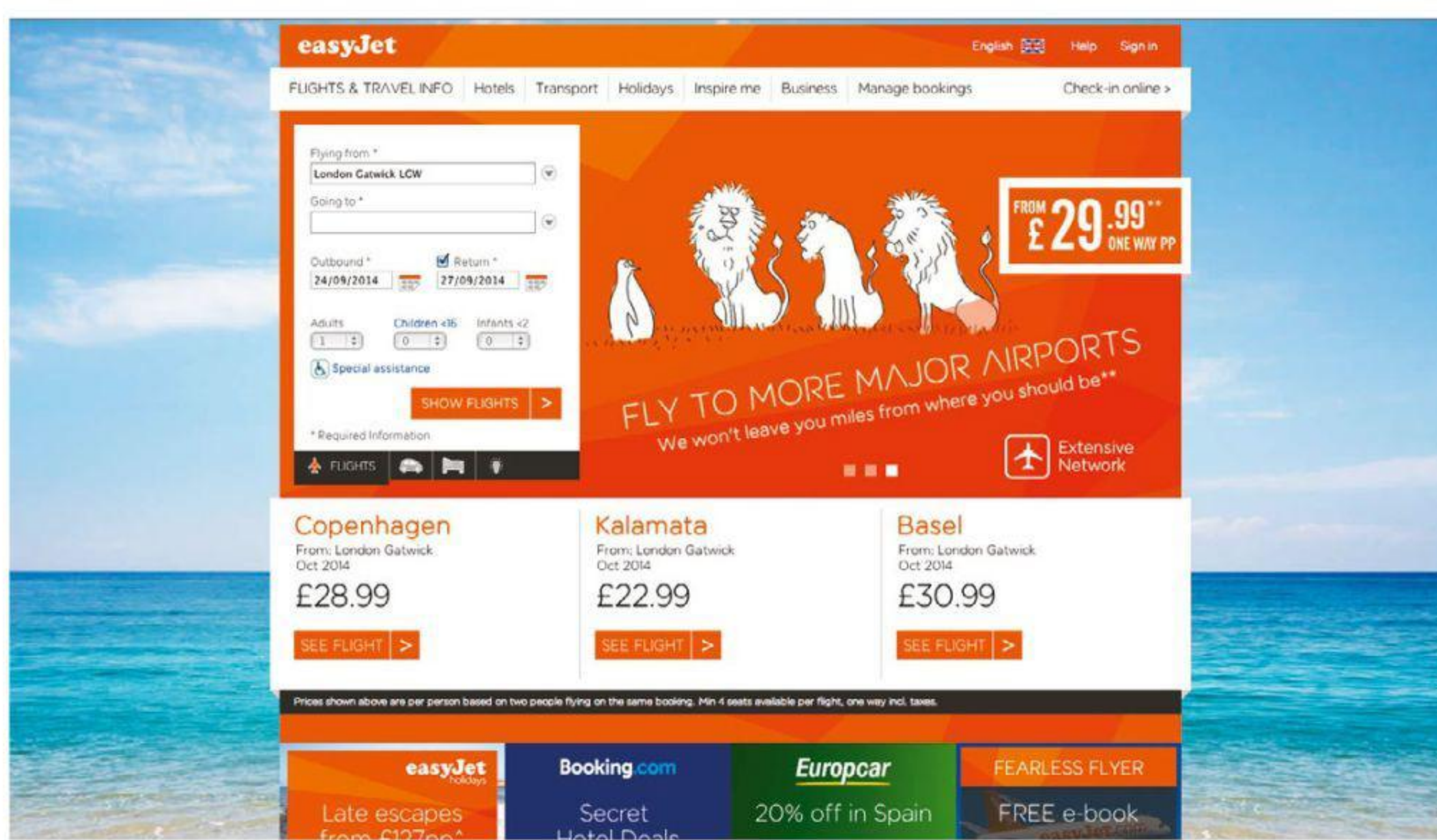
# Building a brand

Most people judge based on colour, which makes colour selection vital in building a successful brand identity

**Who owns red?** Who owns orange? Who owns purple? Reaching a stage where your brand is recognised through colour alone is a testament to how effective a marketing tool it is.

But there's more to colour selection than something that looks nice on packaging, TV adverts and magazines. Finding the right colour is not an easy task and is something of an art form for many brands – not to mention a major commitment.

Let's look at easyJet, which is a great example thanks to its easily recognisable branding. They arrived and turned the air travel industry upside down with their no-frills cheaper way to fly. It was a simplistic, bold move, and they needed a bold colour to convey their message of value and efficiency – who else could step up to handle a task other than bright orange? Before long, orange became more representative of easyJet than any other brand using orange – including Orange themselves.



The easyJet brand uses a powerful orange



Orange is now intrinsically linked to the brand

## Why is Facebook blue?

Twitter, Tumblr, LinkedIn, Skype and WordPress all have varying shades of blue as their primary colour. But did they jump on Facebook's bandwagon or is there something more?

In a study conducted in the 1940s by Faber Birren and again in 2003 by Joe Hallock, which explored the perception of colour, some interesting correlations arose surrounding why certain colours in branding evoke particular feelings and associations better than others. The results begin to explain why brands select the colours they do.

The most surprising result was that both men and women voted blue as their favourite colour. It wasn't by some small margin either, as 35 per cent of all females surveyed would choose blue over any other colour, followed by purple at 23 per cent. However 57 per cent of men cited blue as their favourite colour with the next choice being green at 14 per cent.

Looking at how this breaks down into age, blue appeared top of all ages surveyed, with people in their twenties, thirties, forties and fifties all choosing hues with shorter wave lengths (blue, green, purple) compared to younger audiences (those 19 and under) who had a



preference for brighter, longer-wave colours (red, orange, yellow).

If we look at Facebook's demographic, which has roughly a 60 to 40 ratio leaning to a female audience, and an average age of 40, finding a colour popular among the typical user would

seem a logical choice. So with a bit of research it would have almost been a no-brainer for the company to choose a colour that attracted and appealed to as many people as possible.

But what is it about blue that people love? Again, the results of the survey speak for themselves. Answers to the questions "what colour do you associate with high quality, trust, security, reliability/dependency and courage/bravery?" were all met with blue on top. When you think about it, what brand wouldn't want this type of association? So it would seem that while not terribly original, blue statistically has a solid purpose for its ubiquity among some of the world's most successful brands.

While not original, blue statistically serves a solid purpose thanks to its ubiquity

# Customise your site

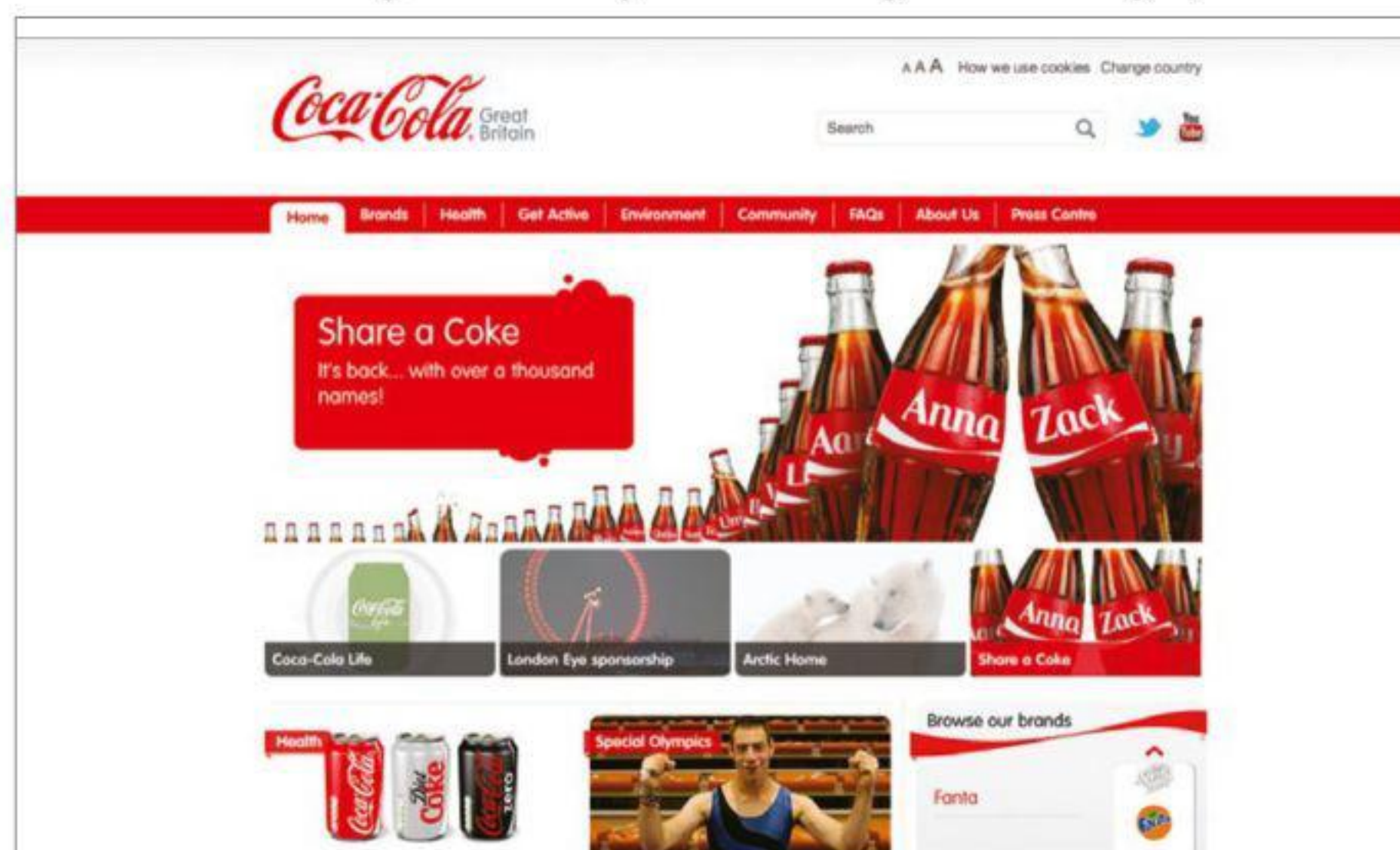
## Pick the perfect palette

If you're in the fortunate position where no brand guidelines are determining the colours for your next piece of work, here's a selection of palettes to get the grey matter whirring

### RED OR DEAD

Red is one of the hardest colours to work with, but can also be one of the most memorable when done correctly. Coca-Cola are a testament to that. Think carefully before selecting red for your designs though, and consider specifically what type of red.

Try it out on several types of screen. It's not the easiest colour to work with in print, nor read from, but if done well it can create a look of high energy and excitement.



### NINETIES NEONS

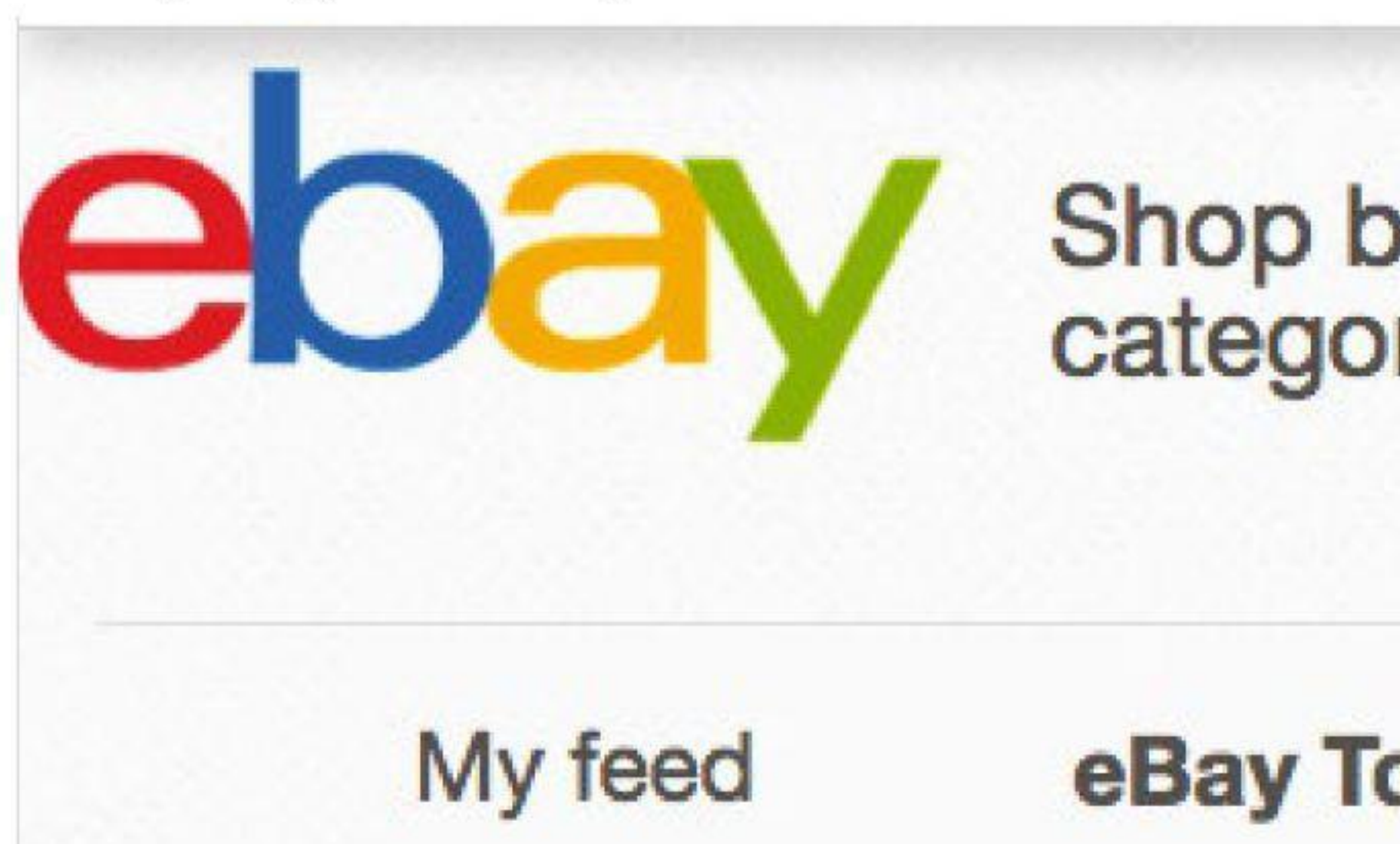
Hot right now with the resurgence of Nineties fashion, neon colours are steadily finding their way back into designers' palettes. Use of clashing electric blues and sunglass-inducing-pinks are the order of the day. It's a style that screams young, fun, vibrancy and life, but despite the playful nature, these colours still require careful selection to ensure your design doesn't end up looking like a gunge tank from Pat Sharp's *Fun House*.



### PRIMARY'S COOL...

When handled with care and consideration, the vibrancy of the primary colours – red, blue and yellow – can create an impactful and powerful look. Think Google and ebay for great examples of where this has worked well.

The bright, contrasting colours mean everything else has to be kept simple, so go minimal. Clean lines and bold, sans serif, geometric typefaces create a stylish feel and sense of humour.



### THE BLUES

As we have discovered, blue is widely considered the most popular colour in the world according to research. You may therefore be torn between siding with its popularity or dismissing it as overused – but you can still make it unique. Start by exploring the varying shades for a sense of calm and depth and don't always opt for the corporate hues; try turquoise, sky blue and navy for a modern take.



### BLACK AND WHITE

The classic. Love it or hate it, you know where you are with it. Though be warned, once you get heavily into using monochrome it's hard to pair it with other colours without spoiling the minimalist feel. Generally, when using black and white you should ensure that you introduce colour through imagery. Use large, bold photos so the design of the website becomes a mere hanger for the content. And when you do select the right colour, the page will really 'pop'.

☼☼ Clean lines and bold, sans serif, geometric typefaces create a stylish feel ☼☼

# Tools you can trust

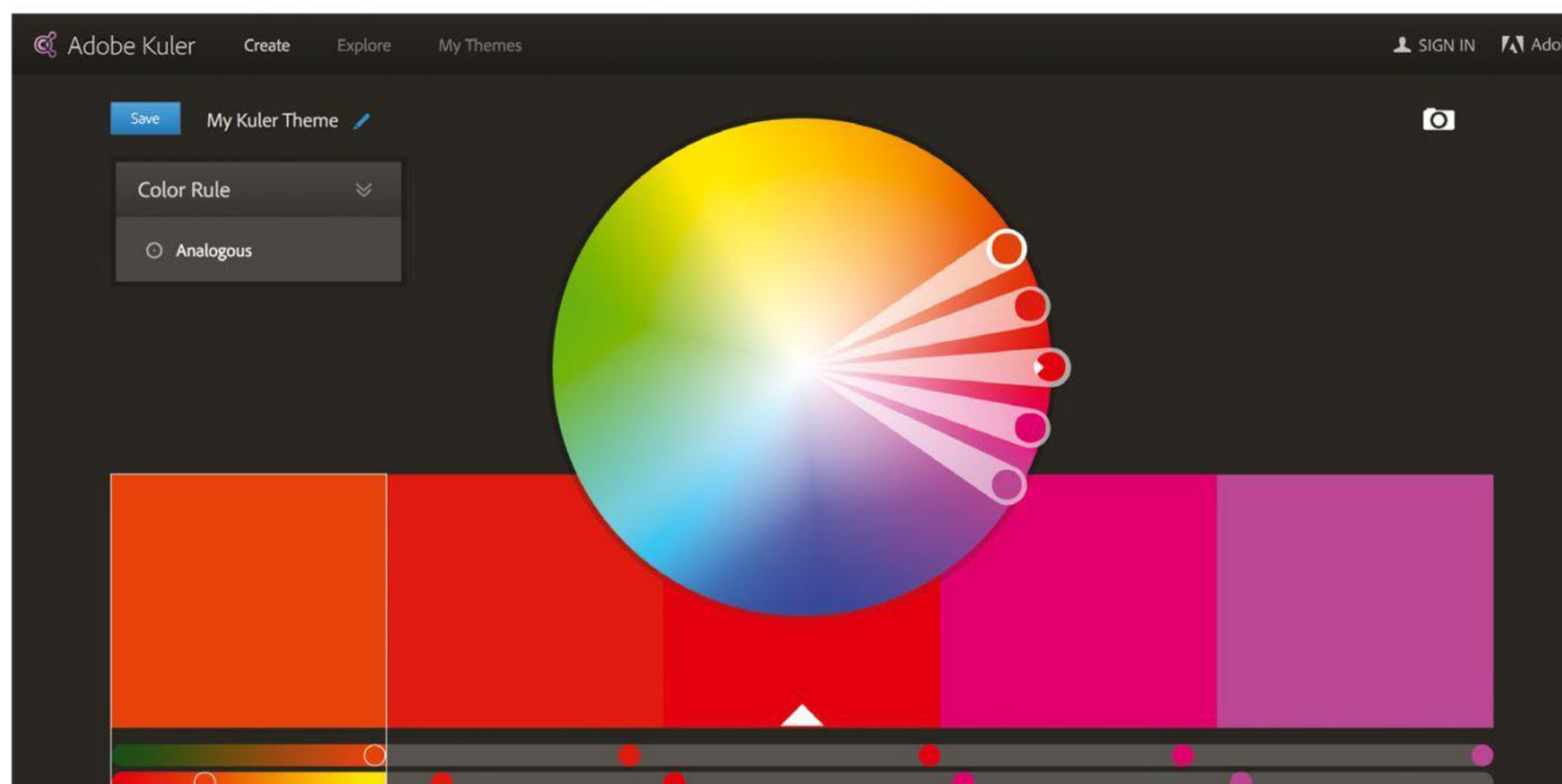
Never feel a new colour palette has to just magically appear in your mind - get out there to gain inspiration for new ideas

## ADOBE KULER

Over the years, the designer's sidekick, Kuler (pronounced 'colour'), has gone from behemoth flash website to nimble HTML5 application, plugging directly into various Adobe desktop apps. A crowd-sourced platform for thousands of colour palettes searchable by phrase, it also provides a wide variety of options (or "Color Rule") for creating your own unique palette. There may only be five colours to choose from

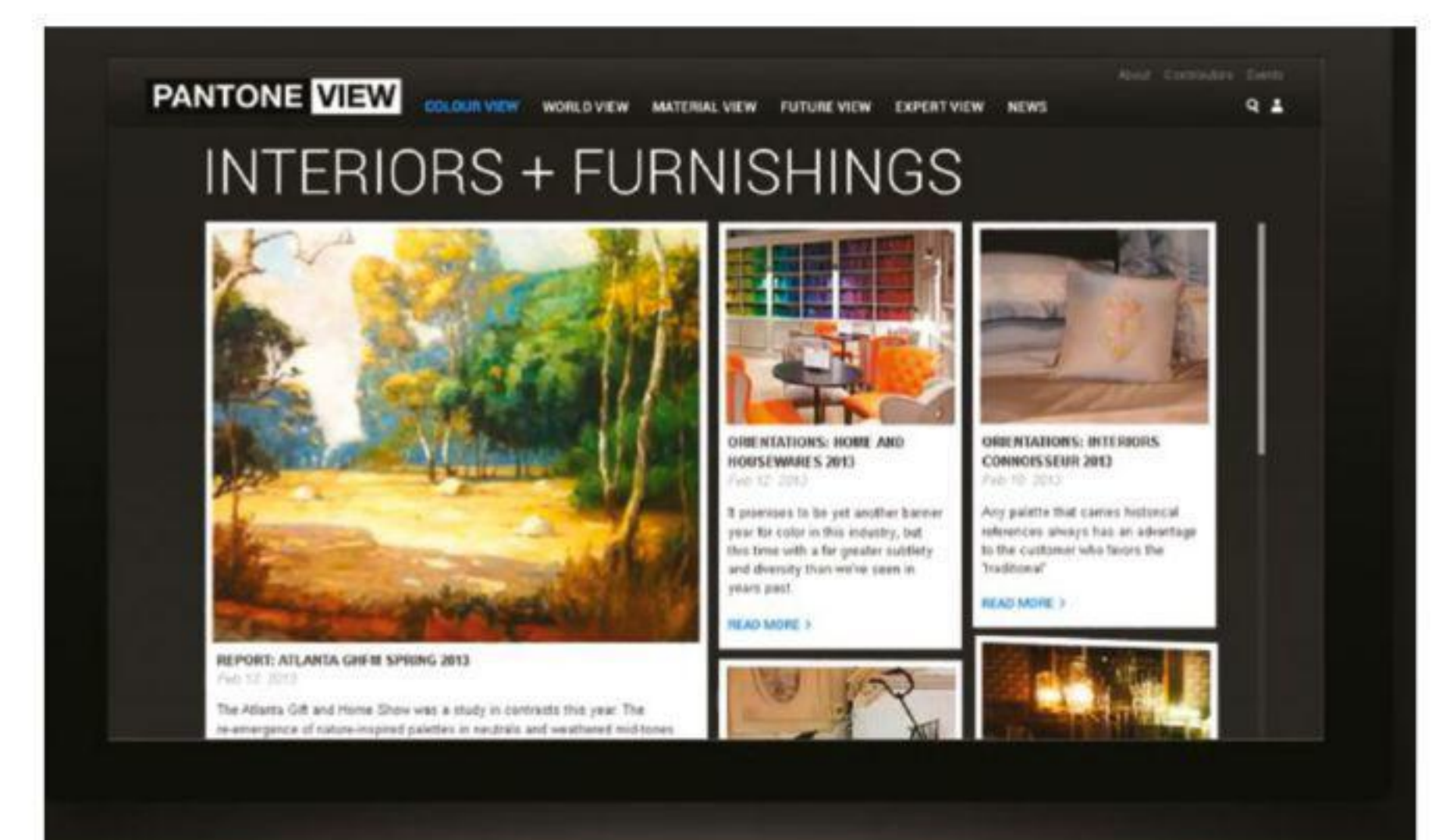
at any one time, but you can explore the most popular palettes and find inspiration.

The beauty of using the Kuler app is the variety and intensity of colour that it can provide. If you are on the lookout for a palette that will provide a winning collection of colours, this is undoubtedly a tool you need in your creative arsenal. What's more, it gets guaranteed results, with the added bonus of being really simple to use.



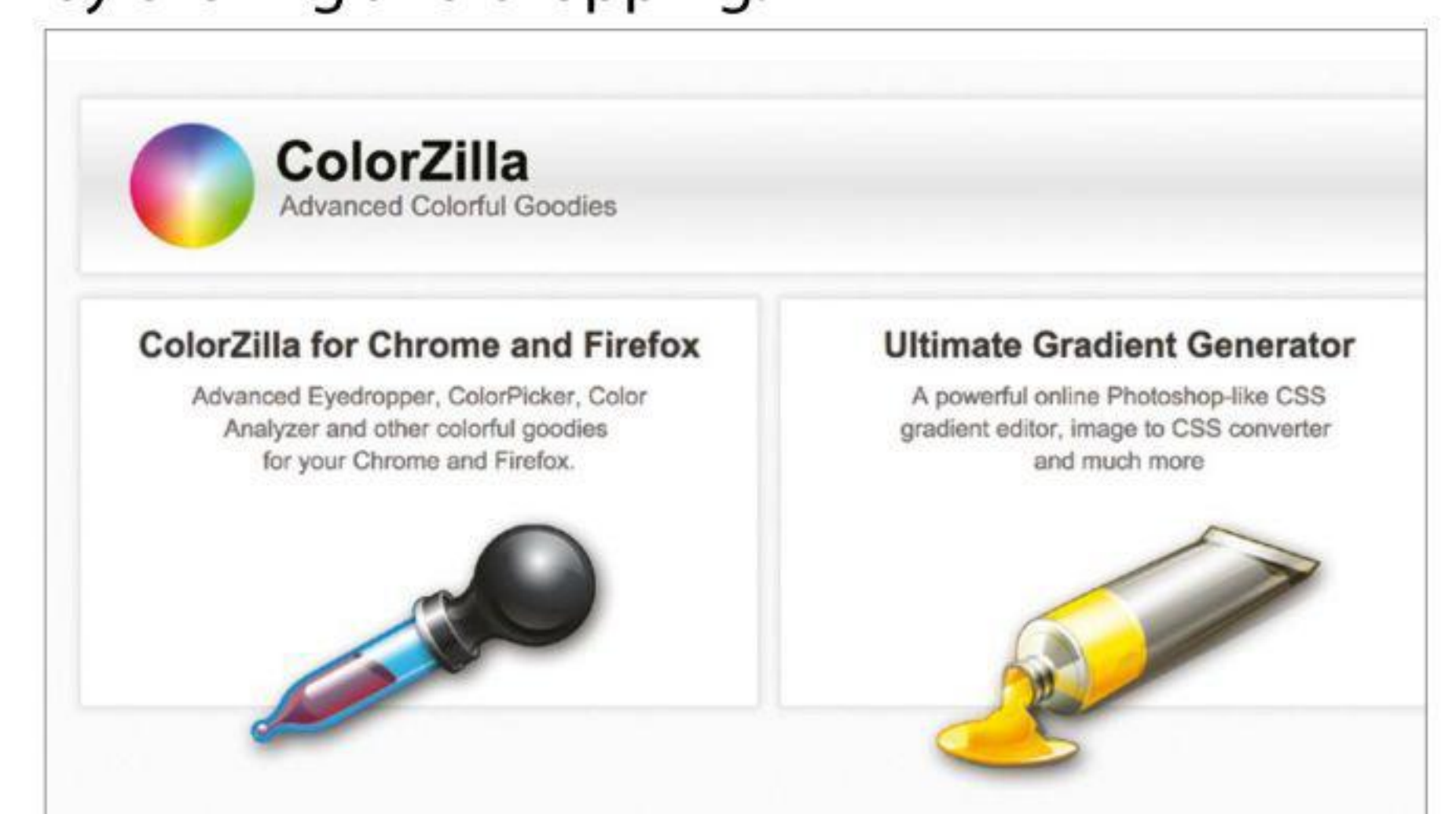
## PANTONE'S TREND FORECASTING

Pantone, the long-time kings of colour, bring you their colour-based predictions for the year ahead. Broken down into categories for use, gender, country and more, they make it easy to determine the right colour for your audience and you can even trace the sources of influence.



## COLOURZILLA COLOUR PICKER

ColourZilla is invaluable for not only poaching colour ideas, but also for checking designs against build. This browser plugin allows you to simply pick any colour rendered in the page just by clicking and dropping.



# Colour trends to follow

Just because they're in, doesn't mean they're right. Or does it?

Just as trends in design come and go, colours do the same, albeit less frequently. You'll always have the classics: black and white, blue and grey, green and yellow and so on. Depending on the application, good design shouldn't really follow a trend but be based on suitability for purpose. Let's suggest fluorescent pink is the colour of the

moment. It's in all magazines, adverts, even cars are being sprayed in it. Now if you were asked to design a flyer for a club night, you'd be wise considering this as an option. Propose that same fluorescent pink to a client who runs an exclusive private wealth fund, however, and suddenly you'll end up looking considerably less smart.

## Recent colour trends



Pantone's colour for 2018 was Ultra Violet

Making predictions on what is going to be the next big colour is a precarious business. But, it is the business that Pantone are in. Every year they predict the next big colour. In one sense they are not predicting but suggesting a colour that designers should be using. For example, the Pantone Colour of the Year for 2018 was Ultra Violet. This is a shade of purple that has yet to permeate the world of web design. But, remember colour can be subjective too.

# What next?

It's impossible to predict exactly where colour trends will go next. It's like stocks and shares: the market could go one way or another. The most important thing to remember is, as a designer, to remain open to possibilities. Don't constrict yourself to any specific style purely because you like it. Always think beyond the current fad, research who you're communicating with and consider the purpose.



The PANTONEVIEW Colour Planner



## Make a CSS expanding navigation menu

Create a space saving menu for all screens with the help of CSS and Font Awesome

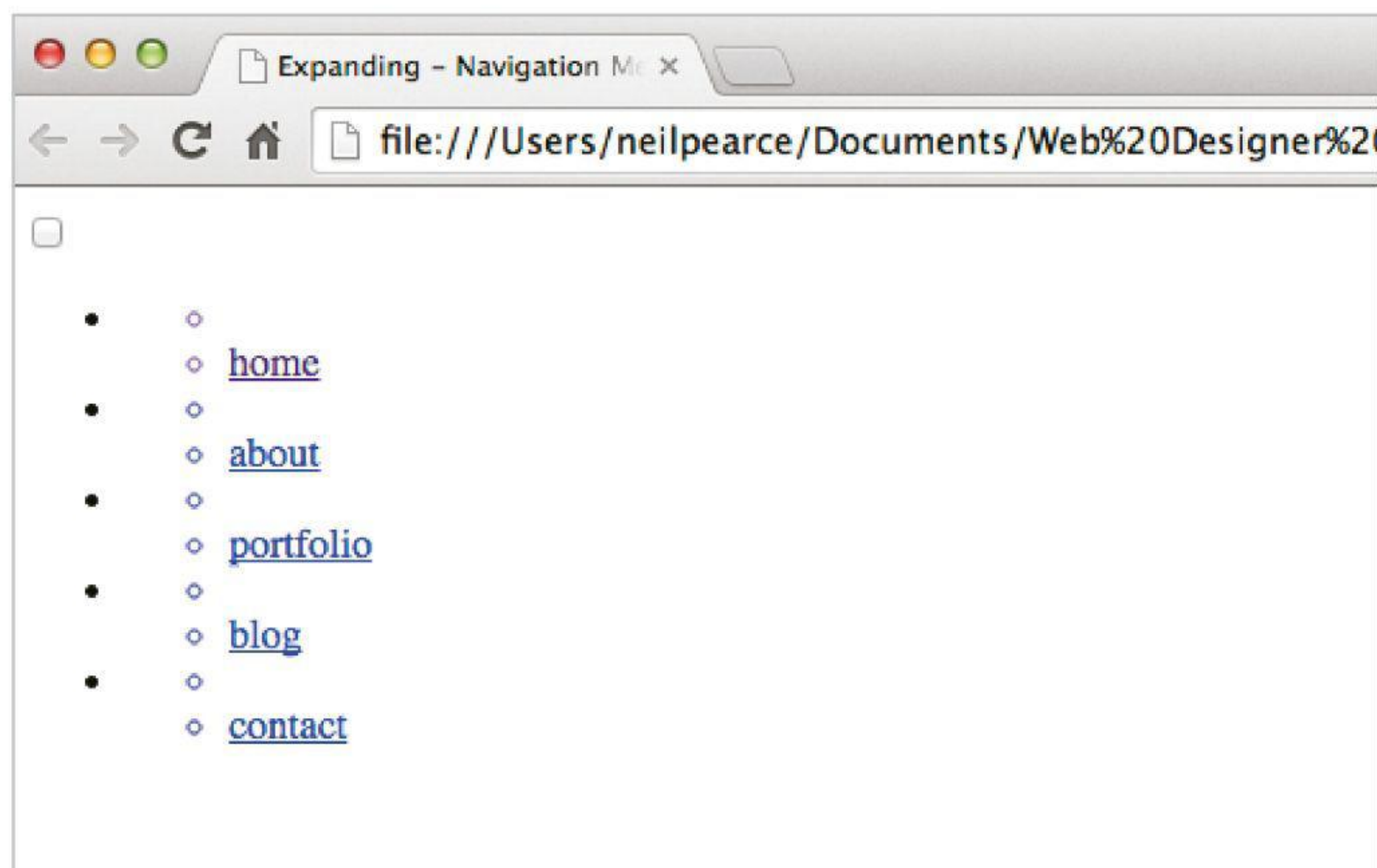
**N**avigation menus are vital to the success of any website. The navigation menu on a website is like a road sign on a street or a level directory in a shopping centre. You can't decide on your destination without knowing all of the options available to you, and reaching that destination would be impossible without first knowing where you are. Just like in real life, navigation in web design is very important and plays a major role in a website's usability, as well as in the user experience.

Nowadays you can see plenty of different types of navigation menus with interesting, creative and unusual designs. In this tutorial, we will look at how we can develop a simple and clean navigation menu. The menu will expand horizontally and, when closed, will be tucked neatly away, with just the popular Navicon icon showing. This icon (which is three horizontal or vertical

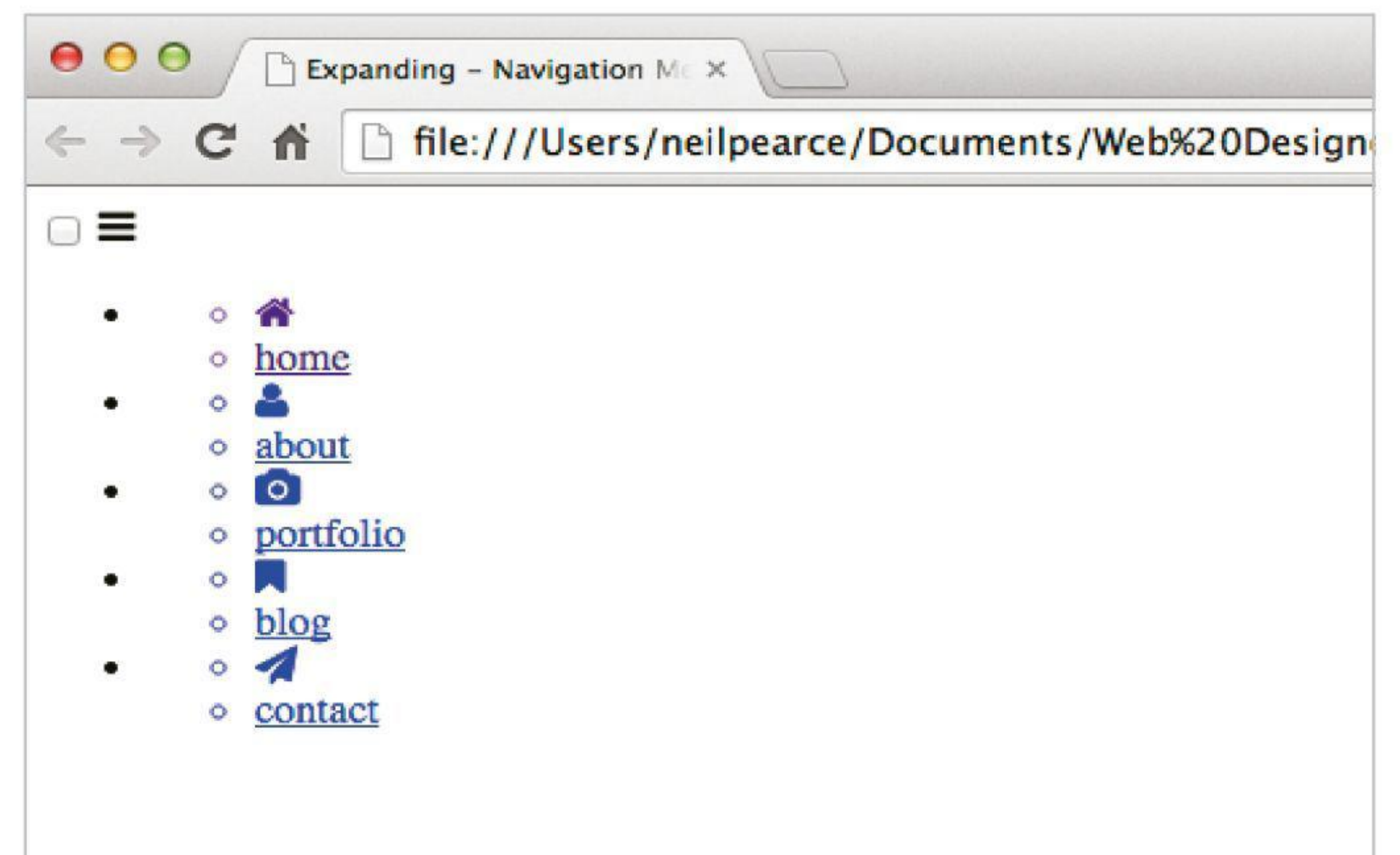
bars) is quickly becoming known as something that 'should' be clicked on.

To help us develop this menu, we're also going to be using Font Awesome, which is an iconic font, and CSS toolkit, and we will be adding some vector icons to each menu button. So let's get started on our expanding navigation menu by following these easy steps!

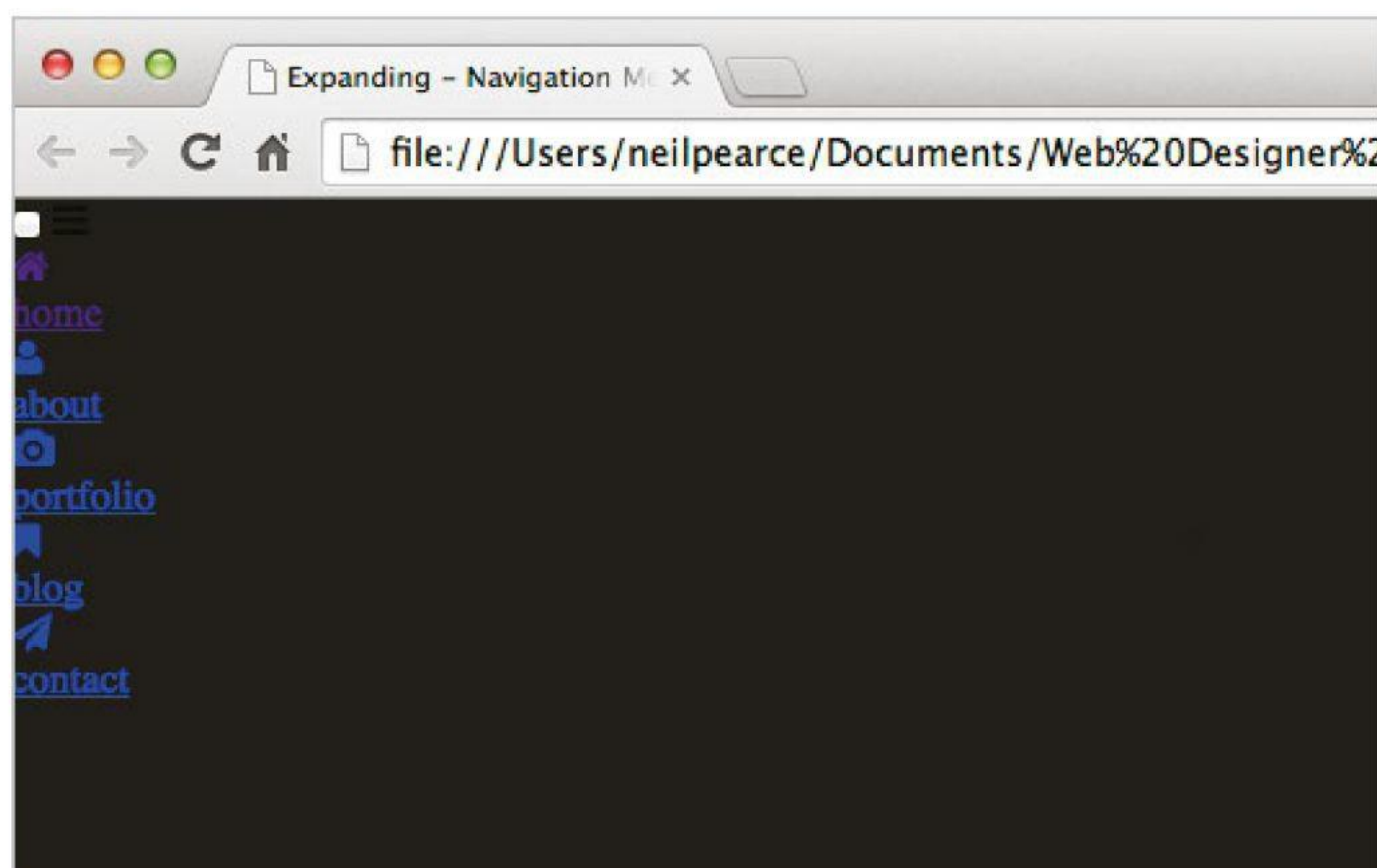
“Navigation plays a major role in a website's usability as well as user experience”



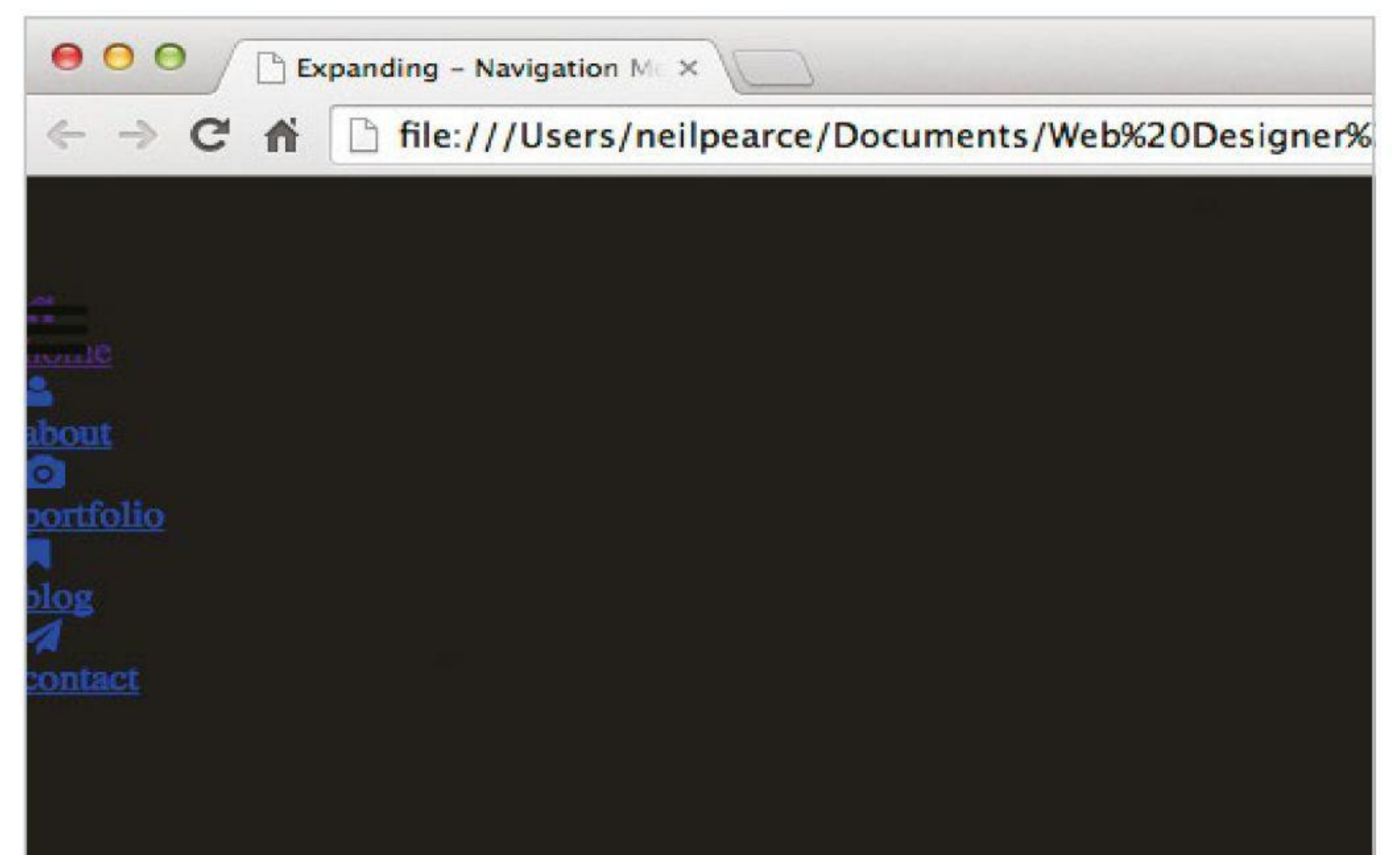
With all the HTML completed, all we can see is a typical, boring and unordered list



With the Font Awesome CSS imported, we can see what the icons look like with the text



We've now added the CSS reset and set the background colour to make sure the text stands out



Everything is now hidden, but it saves space and is revealed when we click the Navicon

## 01 Use Font Awesome

Throughout this tutorial we'll be using Font Awesome's scalable vector icons, which can instantly be customised using CSS. There are two ways to use Font Awesome: you can use their content delivery network CDN (as shown), or download the whole file from the home page: [www.fontawesome.github.io/Font-Awesome](http://www.fontawesome.github.io/Font-Awesome), which is what we're going to do so that we can take a peek inside the CSS file.

```
001 <link href="//maxcdn.bootstrapcdn.com/font-awesome/4.2.0/css/font-awesome.min.css" rel="stylesheet">
```

## 02 Create the menu

Our first bit of HTML will be a div with five different class names that we'll use to position and style our menu. Then add in an input field and label element which we'll use to animate the menu. The first icon font we'll use is the popular Navicon which has a class name of 'fa-bars' as seen below.

```
001 <div class="menu top left horizontal blue">
002 <input id="slide" name="slide"
type="checkbox">
003 <label for="slide" class="icon open">
004 <i class="fa fa-bars"></i>
005 </label>
006 </div>
```

## 03 Menu buttons

Inside the div that we created in the last step, let's start adding in our menu buttons. We're going to use the HTML5 <nav> element, and then give it a class name of 'navigation'. Then, within that element, we need to add an unordered list. We leave the unordered list empty for now, as we will fill that in throughout the next few steps.

```
001 <nav class="navigation">
002
003
004 </nav>
005
```

## 04 The home button

The next step is to move on to the all-important home button. Within our unordered list, we're now going to add in our buttons using a combination of list items and additional unordered lists. Adding a class called 'active' for our first list will allow us to use that as a trigger for when we add the CSS for our animation. Then our class name is called 'fa-home', and this class pulls in our icon fonts from the Font Awesome CSS file.

```
001 <li class="active">
002
003
```

```
004 <i class="fa fa-home"></i>
005 home
006
007
008
```

## 05 The about button

Now, underneath the closing list item of our home button, we're going to add in another set of lists and wrap this within an anchor tag. This time we're going to target a font icon that's called 'fa-user', which is a font icon that will be perfect for our 'about' button.

```
001
002
003
004 <i class="fa fa-user"></i>
005 about
006
007
008
```

## 06 Finish off the buttons

To finish off our navigation we're going to add in another three buttons. We are going to pull in a camera icon font for our portfolio button, a bookmark icon for our blog button and finally a paper plane icon for our contact button. These seem like good icons to use, but feel free to experiment with other available icons.

```
001
002
003
004 <i class="fa fa-camera"></i>
005 portfolio
006
007
008
009
010
011
012 <i class="fa fa-bookmark"></i>
013 blog
014
015
016
017
```

## CSS combinator ~

In a couple of steps throughout this tutorial we have used a very handy little selector called the CSS general sibling selector. The combinator used to notify it is the tilde character '~', which separates two simple selectors. The general sibling selector works by selecting all of the elements that are siblings of a specified element.

```
018
019
020 <i class="fa fa-send"></i>
021 contact
022
023
024
025
026 </nav>
027 </div>
028
```

## 07 Import Font Awesome

Create a new CSS file and open it up within your favourite text editor. If you haven't already done so, create a new folder called CSS and put both your new CSS file and the font-awesome.css file in it. Now we simply import our font-awesome.css file using the @import url rule.

```
001 @import url(font-awesome.css);
002
```

## 08 CSS reset

Adding in a reset to our CSS file is standard practice these days, but we're going to target every element by using the asterisk symbol and removing all margins, padding and any borders. It's not always a good idea to reset every single element, but this will do nicely this time for the purposes of this tutorial.

```
001 * {
002 margin: 0;
003 padding: 0;
004 border: 0;
005 }
006
```

## 09 Body styles

Another part of our CSS reset is to specify both the 'html' and 'body' elements as 100% height. This will allow our page to stretch to fit the whole browser window. Lastly, because our menu will be blue, we're going to make the page background dark, which will make our menu pop off the page a bit better than if we were to use white as our background colour.

```
001 html,
002 body {
003 height: 100%;
004 }
005 body {
006 background: #1b1b1b;
007 }
```

## 10 Menu position

Making sure the menu is in a fixed position will prevent vertical scrollbars from popping up. Then we're going to use the z index to make sure

# Customise your site

this falls above everything else. To give us some breathing space, we will move the menu down by 50 pixels.

```
001 .menu {
002 position: fixed;
003 z-index: 9999;
004 margin: 50px 0 0 0px;
005 }
```

## 11 Hide the menu

Before we can have any kind of animation occurring on the page, we will first need to create some space. This can be done by hiding all of our menu buttons. So, by targeting the nav element, we can set its opacity to zero. Then, you will need to make sure the input check box, which will be our Navicon, is clicked. The next step is to set its opacity to '1' and you will see the menu will appear underneath right away.

```
001 .menu nav {
002 -webkit-opacity: 0;
003 -moz-opacity: 0;
004 opacity: 0;
005 }
006 .menu input#slide:checked ~ nav {
007 -moz-opacity: 1;
008 -webkit-opacity: 1;
009 opacity: 1;
010 }
```

## 12 Label styles

Now we're going to give our Navicon (the horizontal lines) some default styles. Giving this a position of 'fixed' will pull the icons up into alignment with the Navicon. Then we make sure that this will act like a button by adding in 'cursor: pointer' and we're going to remove the little checkbox by specifying 'display: none' for the input field.

```
001 .menu label {
002 position: fixed;
003 font-size: 30px;
004 cursor: pointer;
005 z-index: 9999;
006 }
007 .menu input#slide {
008 display: none;
009 }
010 }
```

## 13 Navicon rotation

When the Navicon is clicked on, we want it to rotate 90 degrees by using the transform property. This will make the menu more appealing as it spins around once clicked on, and then the menu will slide out from underneath. At the moment though, the rotation is way too quick, so let's sort that out in the next step.

```
001 .menu input#slide:checked ~ label.open i {
002 -webkit-transform: rotate(90deg);
003 -moz-transform: rotate(90deg);
004 transform: rotate(90deg);
005 }
```

## 14 Navicon and button transitions

With the Navicon rotating as quickly as it does, it isn't all that easy on the eye, so it will need to be altered. What we really want to do is add a little easing to it so that it will have a much nicer, smoother rotation when it's clicked on. The same goes with the menu buttons. Having them suddenly drop down in a blink of an eye isn't all that comfortable to look at, so we add some easing to those too.

```
001 .menu label i,
002 .menu nav,
003 .menu nav ul li a span {
004 -webkit-transition: all 0.2s ease-in-out;
005 -moz-transition: all 0.2s ease-in-out;
006 transition: all 0.2s ease-in-out;
007 }
008 }
```

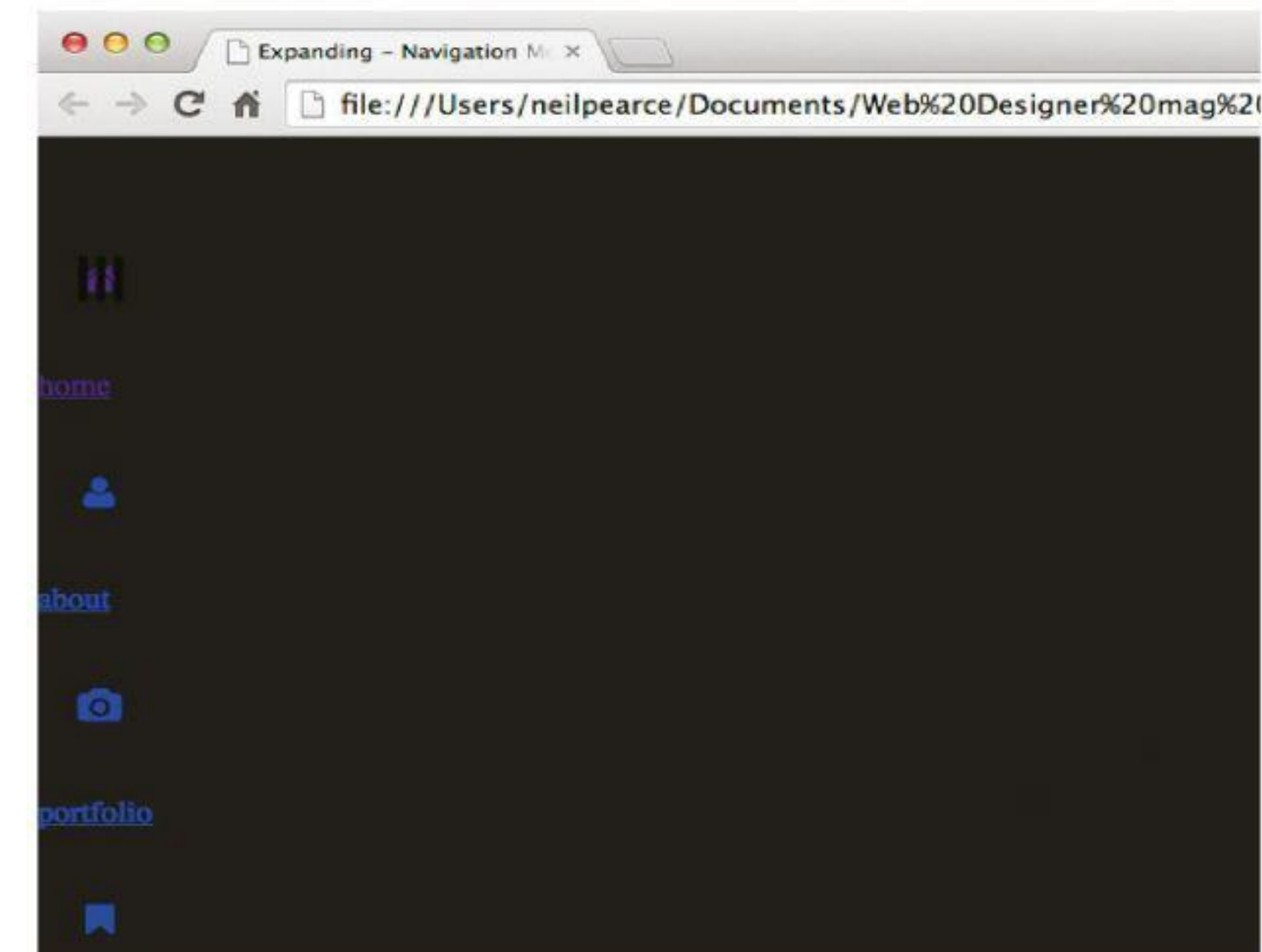
## 15 Space out the buttons

We've got the menu buttons and Navicon looking a lot better now, so let's add some spacing to our buttons. Then, once we have the spacing sorted, we can remove the bullet points. Make sure the overflow is hidden and then increase the size of our font icons to 20 pixels. Having the ability to change the size of our icons is what makes Font Awesome, awesome!

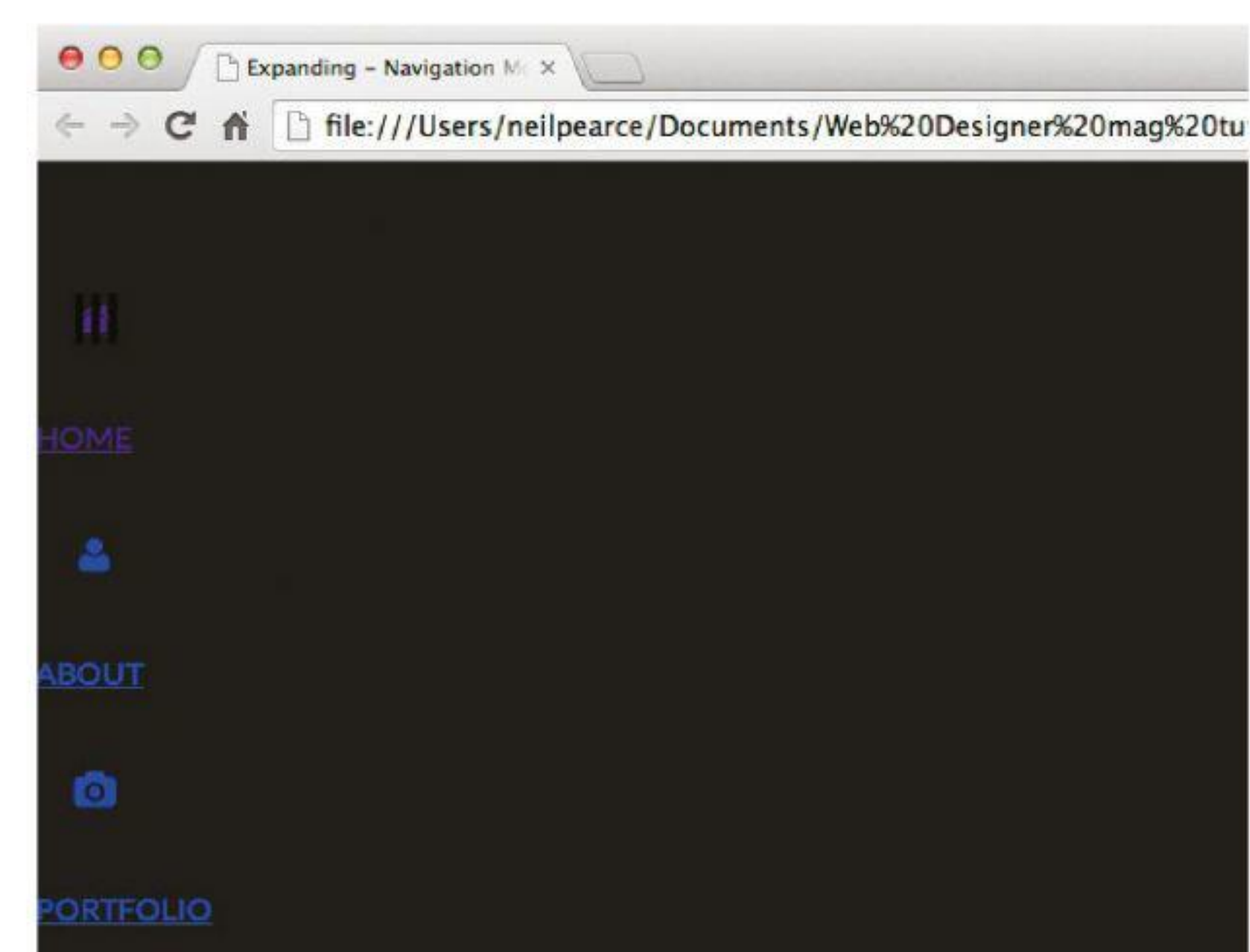
```
001 .menu label,
002 .menu nav ul li a i,
003 .menu nav ul li a span {
004 line-height: 60px;
005 text-align: center;
006 width: 60px;
007 height: 60px;
008 }
009 .menu nav ul {
010 list-style: none;
011 overflow: hidden;
012 }
013 .menu nav ul li a i {
014 font-size: 20px;
015 }
016 }
```

## 16 Button text

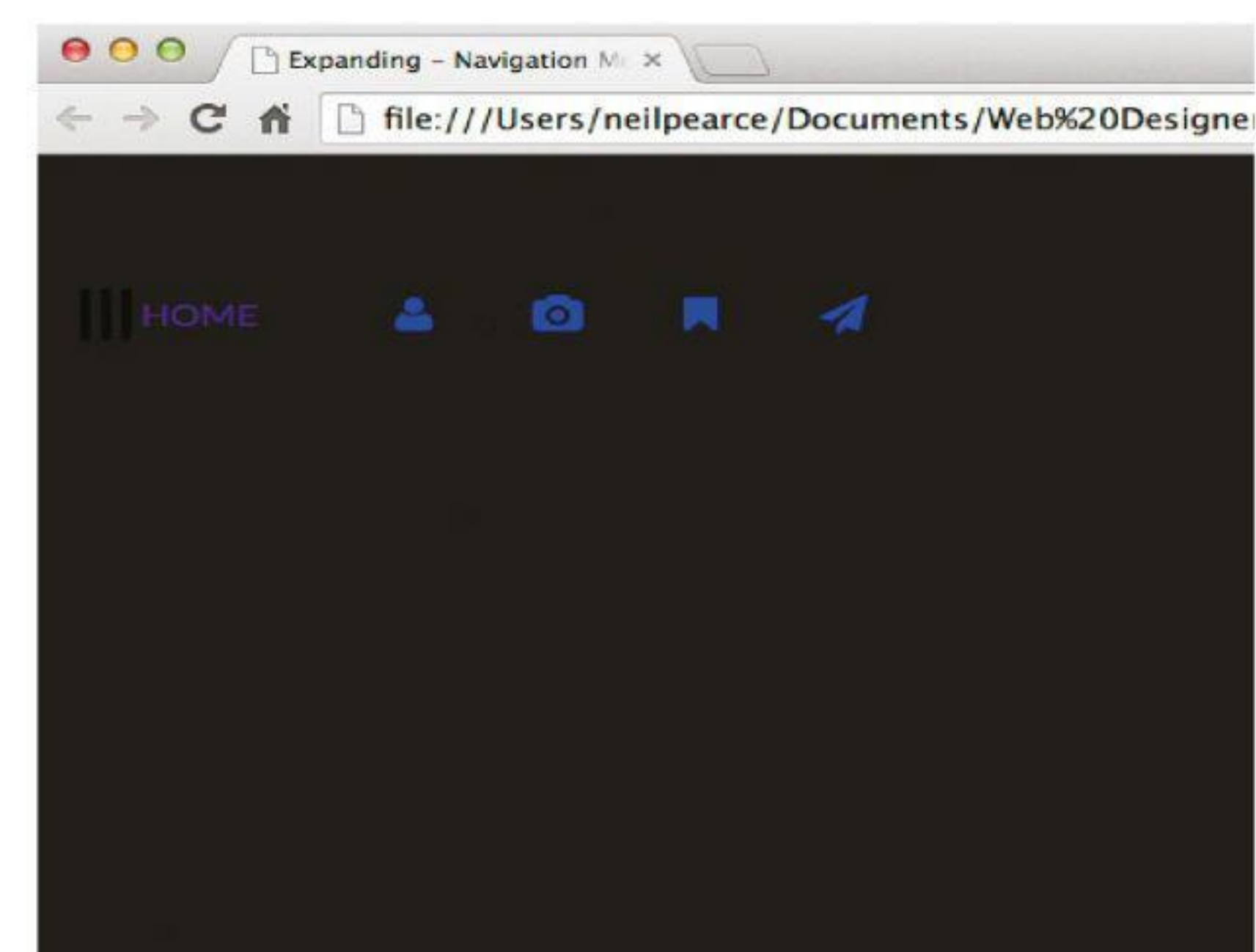
The next step is to set the styling for our button text. For this tutorial, we're going to use a Google Font called Lato, but you can experiment with any font you want to get the desired aesthetic. Next we will set the size to 16px and make sure



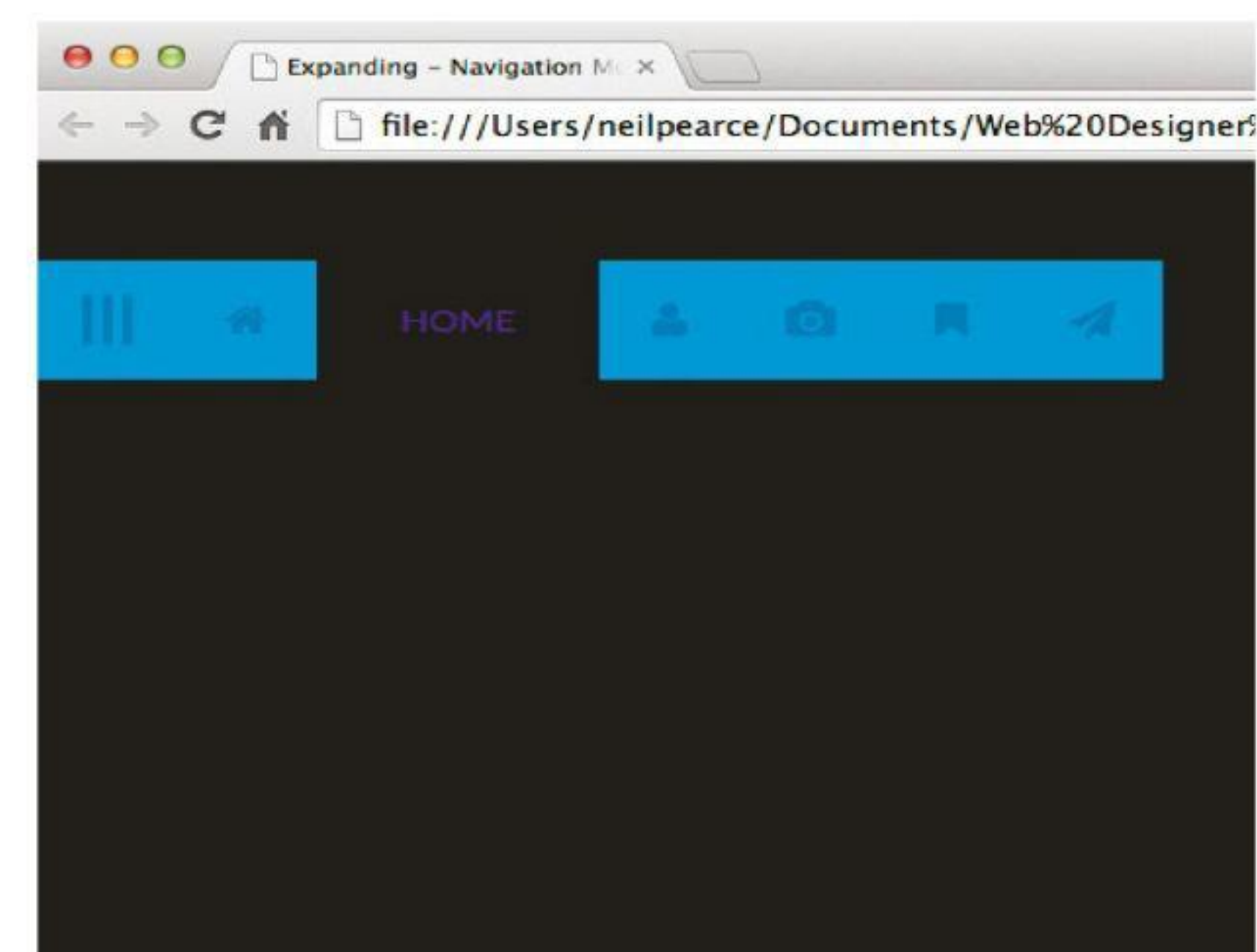
We've now spaced out our buttons using margins and have increased the size of our icons



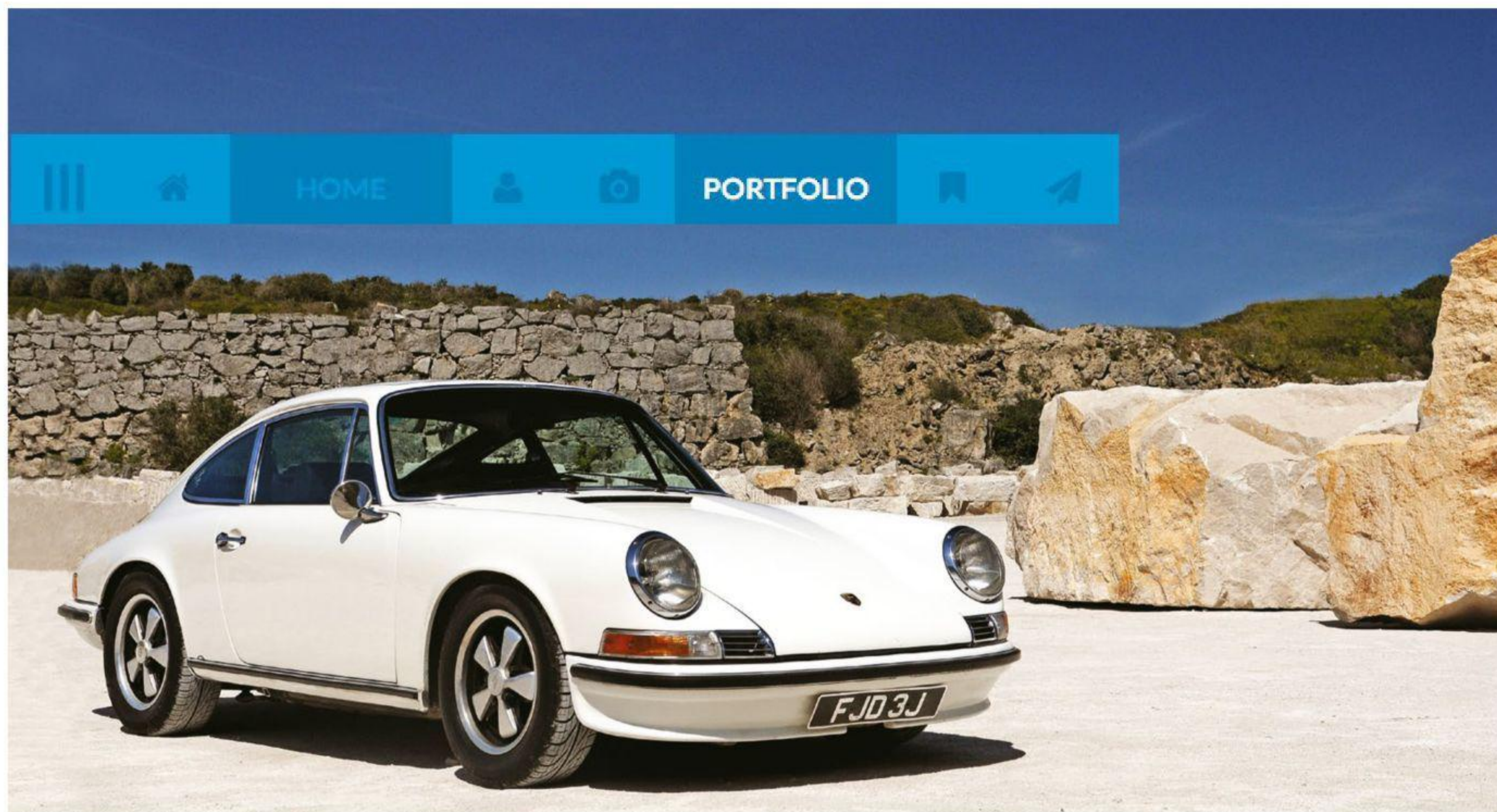
Here we used the Google Font Lato and then set the size to 16px to boost the style and impact of this design feature



Now we add some CSS to make the menu go horizontal at the top of the page, which is where visitors expect the navigation menu to be



We've now added the background colour to our menu and all that's left is the menu buttons background



The last step is to add a hover state to our button text, and our expanding horizontal menu is now complete

it's all in upper-case. Then we're going to set the width to zero.

```
001 .menu nav ul li a span {
002 font-family: 'Lato', sans-serif;
003 font-size: 16px;
004 text-transform: uppercase;
005 width: 0;
006 }
007 0
```

## 17 Animate the buttons

Now this is where things get a little more interesting. We are going to animate the buttons by using padding – this is so that when the buttons are hovered over, they will move to the right by 10px. Then we need to make sure that the active state is set and they are given a width of 100px.

```
001 .menu nav ul li a: hover span {
002 width: 100px;
003 padding: 0 10px;
004 }
005 .menu nav ul li.active a span {
006 width: 100px;
007 padding: 0 10px;
008 }
```

## 18 Horizontal menu

Our main aim in this tutorial is to create a horizontal menu, so by targeting the horizontal class we will be able to float the list items to the left, which will fulfil that aim and make the whole menu horizontal. Then, by adding a negative 50 pixels to our menu, we can tighten things up a little bit.

```
001 .menu.horizontal nav ul li,
002 .menu.horizontal nav ul li a span {
```

```
003 float: left;
004 }
005 .menu.left.horizontal nav {
006 margin-left: -50px;
007 }
```

## 19 Home button

At the moment the icon for our home button is hidden underneath the Navicon. So by adding some margins we can push all of our buttons over to the right slightly so the home icon will appear. Another feature you will notice is that when you click on both the Navicon and the home icon, the menu will close.

```
001 .menu.left.horizontal input#slide:checked ~
nav {
002 margin-left: 60px;
003 }
004 .menu.right.horizontal nav {
005 margin-right: -50px;
006 }
007 .menu.right.horizontal input#slide:checked ~
nav {
008 margin-right: 60px;
009 }
```

## 20 Menu colour

In the last few steps of this tutorial we are going to add some colour to both our menu and the buttons. The first thing to do then is to add a nice light blue to our menu background. Then we will give our icons a different shade of blue, which will be slightly darker than our main menu background.

```
001 .menu.blue label,
002 .menu.blue nav ul li a ul li i {
003 background-color: #3498db; bg
004 color: #2980b9; icons
005 }
```

## 21 Button colour

In this last step, all we need to do is add some colour to our menu buttons. What we're going to do is reverse the colours so that the background colour to our buttons is the same colour as our icons and the text will be the same colour as the menu background. Lastly, let's add in a hover state for our button text with white as the colour for that.

```
001 .menu.blue nav ul li a span {
002 background-color: #2980b9;
003 color: #3498db;
004 }
005 .menu.blue nav ul li a span: hover { color:
white;}
```

## 22 Final thoughts

You'll more than likely see plenty of navigation menus like this, especially now that responsive webpages are now part of our design workflow. Using vector icons such as Font Awesome will really help make your navigation menus more easy and fun to develop.



### The @keyframes at-rule

Throughout this tutorial we've made good use of Font Awesome, a scalable vector icon font and CSS kit. So what are the benefits of using an icon font instead of images and sprites? The first and best benefit is that it is just a font. This means that you get all of the benefits of styling that you would get with regular text. So, for example, you can easily change the colour and size of an icon with a little bit of CSS. It will also render as sharp as your device will allow it to, so there's no need to worry about creating Retina-ready graphics.

The other benefit of using Icon Fonts is the performance. Since all of the icons are included in one font file, it means that it is only one HTTP request to load. This can really give you quite a bit of page-load performance if you are using a number of different icons.

The best way of adding Font Awesome to your website is to use the CDN and add that to the head of your HTML file.

```
001 <link href="//maxcdn.bootstrapcdn.
com/font-awesome/4.2.0/css/font-awesome. min.
css" rel="stylesheet">
```

The other way is to download the CSS file and link that in as you would with a normal CSS file – which is what we did for this tutorial.

# Customise your site

SOURCE FILES AVAILABLE



## Get background colour to match content

With the adaptive-backgrounds.js library it is possible to create dynamic colour schemes based on a dominant image colour



**M**aking sure that content on your webpage is fresh, is incredibly important. News, magazine sites and blogs are often popular because of their ever-changing and updated content. The designs of these sites often show the change using carefully selected images; aggregating a new picture and headline to the home page shows that the content on the site is up to date and different to the user since they last paid the webpage a visit.

Using the adaptive-backgrounds.js library, designers can now actively take the dominant colour of the image and use that to make the background of the section change and reflect the mood of the image. This is a powerful way to make sections of a site appear dynamic and to really emphasise content changes.

In the tutorial, a number of techniques will be explored, from simply changing the background of the parent div that the image is in, to targeting

specific other parents and even grabbing the colour from an image added through CSS as the background of a div. These techniques can be used together, or separately, and can be used multiple times on a page to affect the design. Another feature of this is that the text can be changed to be light when there is a dark background and vice versa. As such it can be a great way to change text over a background image to be easily visible.



## 01 Starting the project

From the start folder, open the 'index.html' file in the code editor of your choice. In the body section start by adding the panel as shown below. Once this code is in, copy and paste it so there are four panels. Just change the image on display to 'panel2.jpg', 'panel3.jpg', etc.

```
001 <div class="panel">
002 <div class="p_inside">
003
006 <div>
007 <h2>Boat Skills</h2>
008 <p>Your text.</p>
009 </div>
010 </div>
```

## 02 Styling the page

Switch over to the 'design.css' file in the CSS folder. This file already has some CSS resets to ensure browsers treat content similarly. Add the code here to style the body with the appropriate font and line spacing required for this project.

```
001 body {
002 margin: 0;
003 padding: 0;
004 line-height: 1.8em;
005 font-family: 'Raleway', sans-serif;
006 }
```

## 03 Panel fitting

The CSS class for the panel ensures that each panel takes up a quarter of the screen, while floating next to each other, side by side. The next class adds the appropriate padding to the inside of each of the panels.

```
001 .panel {
002 float: left;
003 width: 25%;
004 text-align: center;
005 }
006 .p_inside {
007 padding: 100px 20px 140px 20px;
008 }
```

## 04 Scaling the image

The image for the panel is styled up here so that it is only ever 80% width of the panel. This is set to display centred on each panel. Because the images are square, adding a 50% border radius, turns the square into a circle.

```
001 .panel-img {
002 max-width: 80%;
003 display: block;
004 margin: 0 auto;
005 height: auto;
006 border-radius: 50%;
007 }
```

## 05 Text styles

The heading and paragraph text for each of the

panels is styled up in these CSS rules. This is mainly the font size and the typeface. Save the CSS now and then return back over to the 'index.html' page as the javascript will then need to be added to the webpage.

```
001 h2{
002 font-family: 'Merriweather', serif;
003 font-size: 2em;
004 padding: 40px 0 20px 0;
005 }
006 p{
007 padding: 0 0 20px 0;
008 }
```

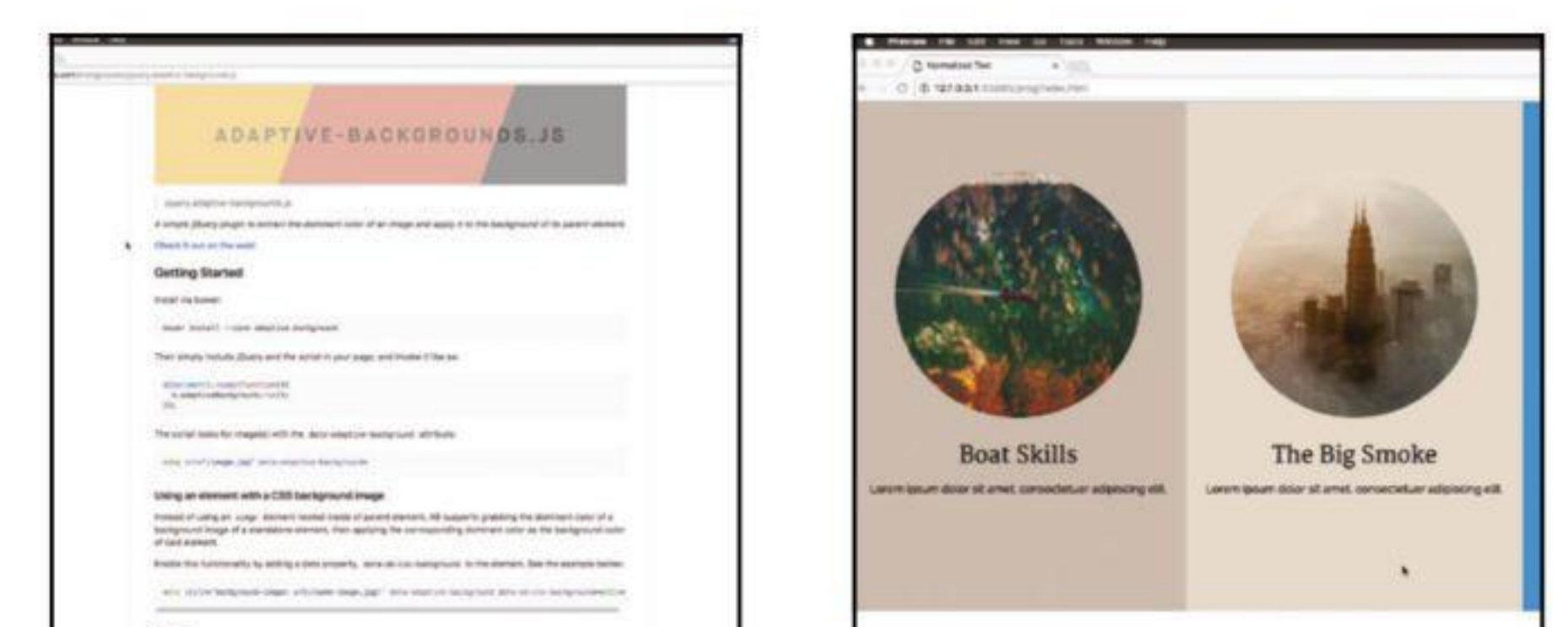
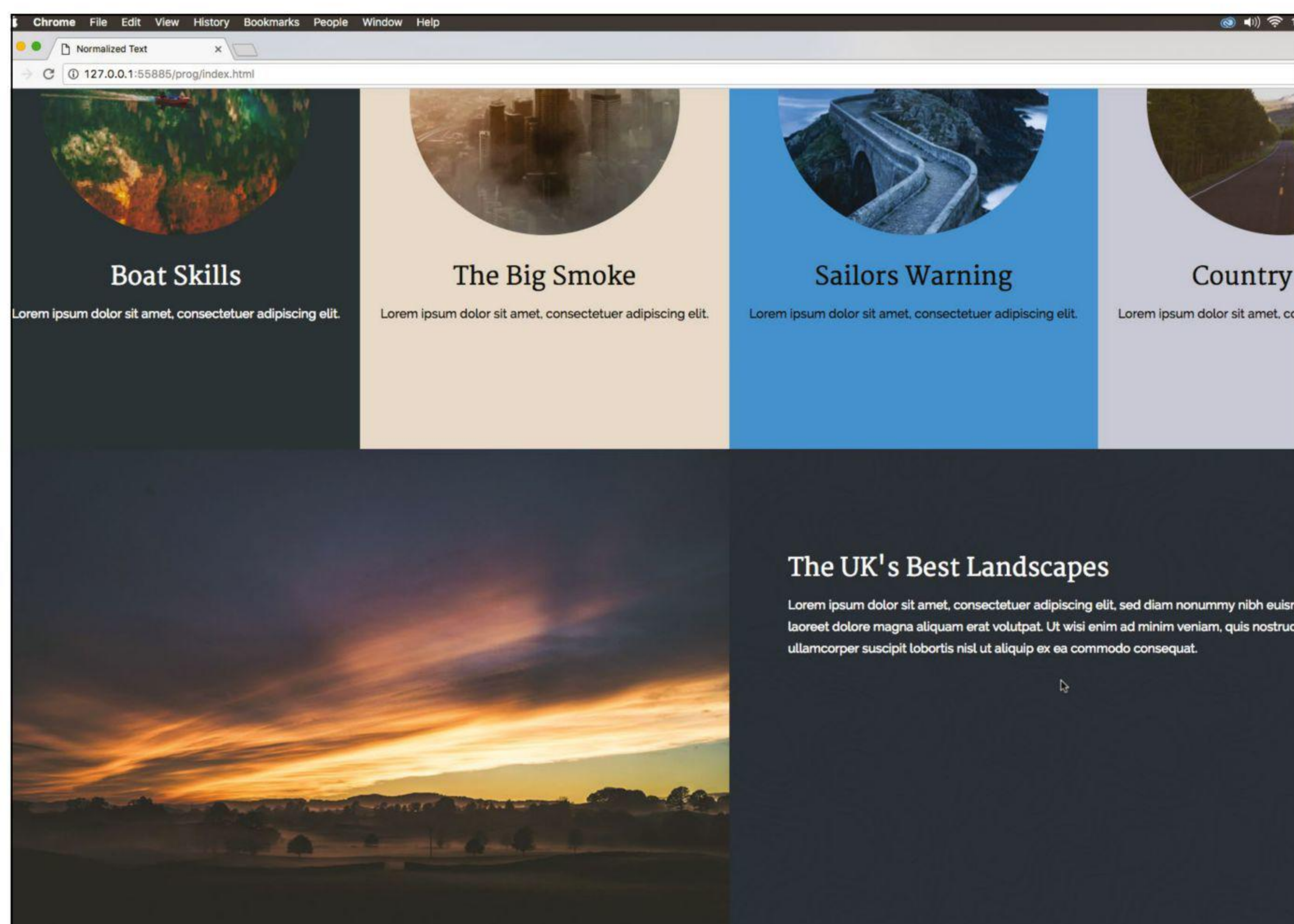
## 06 Powering the backgrounds

In the head section of the 'index.html' page add the code shown here. This will check all images with the 'data-adaptive-background' attribute. It will give the parent attribute the background colour and change the text colour so that it stands out from the colour. Save this and check it in your browser.

```
001 <script type="text/javascript">
002 $(document).ready(function() {
```

### DATA ATTRIBUTES

Data attributes are specially designed to be picked up by Javascript and can apply special rules to the tag. These are used extensively with the Adaptive Backgrounds library.



### Top left

The tutorial uses the adaptive-backgrounds.js library to find the dominant colour in the image and change the background to match

### Top right

Here four panels have been set up with the same CSS classes; each is given a different background colour from the colour scheme in the image

### Left

The background in this image has been changed, but there is also a subtle transparent PNG texture used in the background for this section

# Customise your site

## WHERE'S THE HERO

The term 'hero' section comes from film making, when a 'hero' shot would establish an important character in the film. The hero becomes an important design element on the page.

```
003 $.adaptiveBackground.run({
004 normalizeTextColor: true
005 });
006 });
007 </script>
```

## 07 Clearing the content

In order to get the next section of content onto the screen we need to clear the previous content. Here the code gets an empty div tag added just to serve that purpose. Add it at the end of the body content. Save this and move over the 'design.css' file.

```
001 <div class="cleared"></div>
```

## 08 Setting up the rule

Now in the 'design.css' add the content that will clear the floating content that is above it in the code. Save this and return back to the main 'index.html' file. The next section that will be added will then change the background colour and add a transparent texture image over the top of it.

```
001 .cleared{
002 clear: both;
003 }
```

## 09 Main content section

The HTML code that is added here will be placed before the closing body tag. The content will have two sections that will take 50% of the screens side-by-side. The image targets a specific ID of 'main' to add the adaptive background colour to it. The inner section will have a semi-transparent background image of its own in it.

```
001 <div id="main">
002 <div id="inner">
003
006 <div id="mainText">
007 <h2>The UK's Best Landscapes</h2>
008 <p>Your text here</p>
009 </div>
010 </div>
011
012
```

## 10 Main content design

Here the ID of 'mainPic' is set for the image in that section. Here it sits on the left of the display with a 50% width. The text is set slightly smaller because of the padding on the left and right side of it and this all adds up to 100%. As both are floated, the content will sit nicely side-by-side on the page.

```
001 #mainPic{
002 max-width: 50%;
003 float: left;
004 height: auto;
005 }
006 #mainText{
007 max-width: 42%;
008 float: left;
009 padding: 100px 4% 0 4%;
010 }
```

## 11 Adding the transparent image

The 'inner' section will get the image set in the background. The image is a transparent PNG so it will allow the background colour of the adaptive background through so that the colour will still affect the design. Save the page and view the results in the browser.

```
001 #inner{
002 width: 100%;
003 background: url(../images/cart.png) repeat
004 !important;
005 }
```

## 12 Adding a header image

Now in the 'index.html' page a header and branding will be added to the top of the web page design. Add these HTML tags to the very top of the body content. Save the index page and switch over to the 'design.css' file to style up the content and fill in the design.

```
001 <div id="header" >
002
003 </div>
```

## 13 Designing the site branding

The CSS styling here will style both the header and footer sections with a very light grey background colour. These are the only sections that don't have adaptive backgrounds in the entire design. The image is centred in the header section. Save this and view it in the browser.

```
001 #header, #footer{
002 background: #eee;
003 }
004 #header img{
```

```
005 display: block;
006 margin: 0 auto;
007 }
```

## 14 Designing the hero

The hero section of any web site usually contains the main shot and some interesting text about it. Here the image is going to be placed as a background image in CSS, but it can still be used to get the adaptive colour from it. This will then target the 'heroSection' so that this will be given the right background colour.

```
001 <div id="heroSection">
002 <div id="hero" data-adaptive-background
003 data-ab-css-background data-ab-
004 parent="#heroSection">
005 <h2>Special Feature

006 Exploring Vistas</h2></div>
```

## 15 Finishing off the hero

This part of the hero will be text only, and it will sit below the main image of the hero section. The background of this text will be taken from the background image of the section placed above it. The image above it will also have a heading displayed over the top of it, to give it a nice magazine feel.

```
001 <div id="heroText">
002 <div class="layout">
003 Your text here
004 </div>
005 </div>
006 </div>
```

## 16 Styling the hero

Move into the 'design.css' file and add the code here which will set the hero section to be 800 pixels high. The background image is fixed into position, and the image is set to cover the entire width of the design using the 'cover' setting for the background size.

```
001 #hero{
002 height: 800px;
003 background: url(/images/hero.jpg) no-repeat
004 center center fixed;
005 background-size: cover;
006 }
```

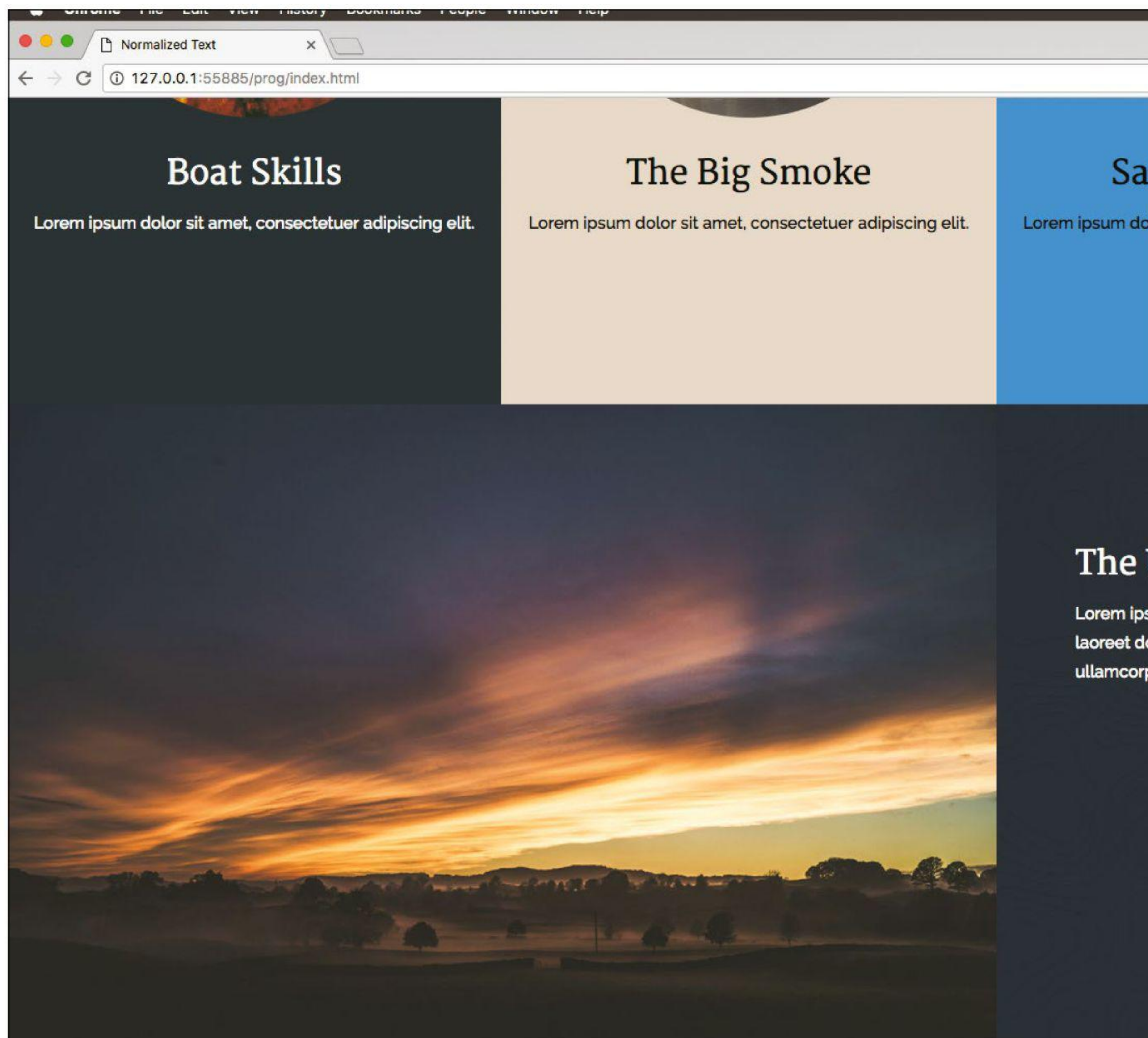
## 17 Heading it up

The heading is set so that it displays as a block on the page. This means that it can be given a width and centred on the screen while pushing it down to sit at the bottom of the hero image. The font size is then increased and the letter spacing reduced so that the letters are kerned better at the larger sizing.

## Going deeper into the adaptive plugin

The `adaptive-backgrounds.js` library allows for a more comprehensive look at the colours in an image so that the designer can use the colour scheme for further development options. An event can be triggered when the colour has been extracted from the image and from here it is possible to get access to both the dominant colour and the colour palette of that image. In the example code shown here from the GitHub page, a typical event is shown. Inside of this the 'payload.color' is the dominant colour extracted from the image. Using the methods with the library it is only possible to target a parent of the image. Once you have the colour and store it in a variable it would be possible for you to target any element within your design. Similarly the entire palette can be accessed as an array.

```
001 $('img.my-image').on('ab-color-found',
function(ev,payload){
002 console.log(payload.color); // The dominant
color in the image.
003 console.log(payload.palette); // The color
palette found in the image.
004 console.log(ev); // The jQuery.Event object
005 });
```



```
001 #hero h2{
002 display: block;
003 width: 1200px;
004 margin: 0 auto;
005 font-size: 7em;
006 text-align: center;
007 position: relative;
008 padding: 500px 0 0 0;
009 color: #fff;
010 letter-spacing: -0.07em;
011 }
```

### 18 Alternate heading span

Some of the text in the main heading is inside a span tag, just to section it off. This is styled here to be smaller and so other elements such as the letter spacing also have to be adjusted to be set for the size of the typeface. The line height is also made smaller as the typeface is smaller and this will then fit better between the two lines of the heading on the page.

```
001 #hero h2 span{
002 color: #ccc;
003 font-size: 0.5em;
004 line-height: 2.5em;
```

```
005 letter-spacing: -0.03em;
006 }
```

### 19 Text section

Now the hero section has text below the image. The text is set to be 1200 pixels wide and centred on the page. The text inside there is given a four-column layout so that this looks like a magazine layout. Save this and view the design in the browser to see the hero section.

```
001 #heroText{
002 max-width: 1200px;
003 margin: 0 auto;
004 padding: 100px 0 160px 0;
005 }
006 .layout {
007 column-count: 4;
008 }
```

### 20 Adding a footer

Back in the 'index.html' page the finishing touches are just to add a footer to the bottom of the page, so that it looks right on the screen. Before the closing body tag, just add the

following div tag for the footer and then save the relevant page.

```
001 <div id="footer">
002 <p>© 2016 Web Designer Magazine</p>
003 </div>
```

### 21 Finishing design

In the 'design.css' file add the footer code to the page and then save the CSS. The page is finished, so open the design in your browser to see all of the adaptive backgrounds that are working and you'll see the design fill in with the dominant colour of the image, great for sites with constantly changing content.

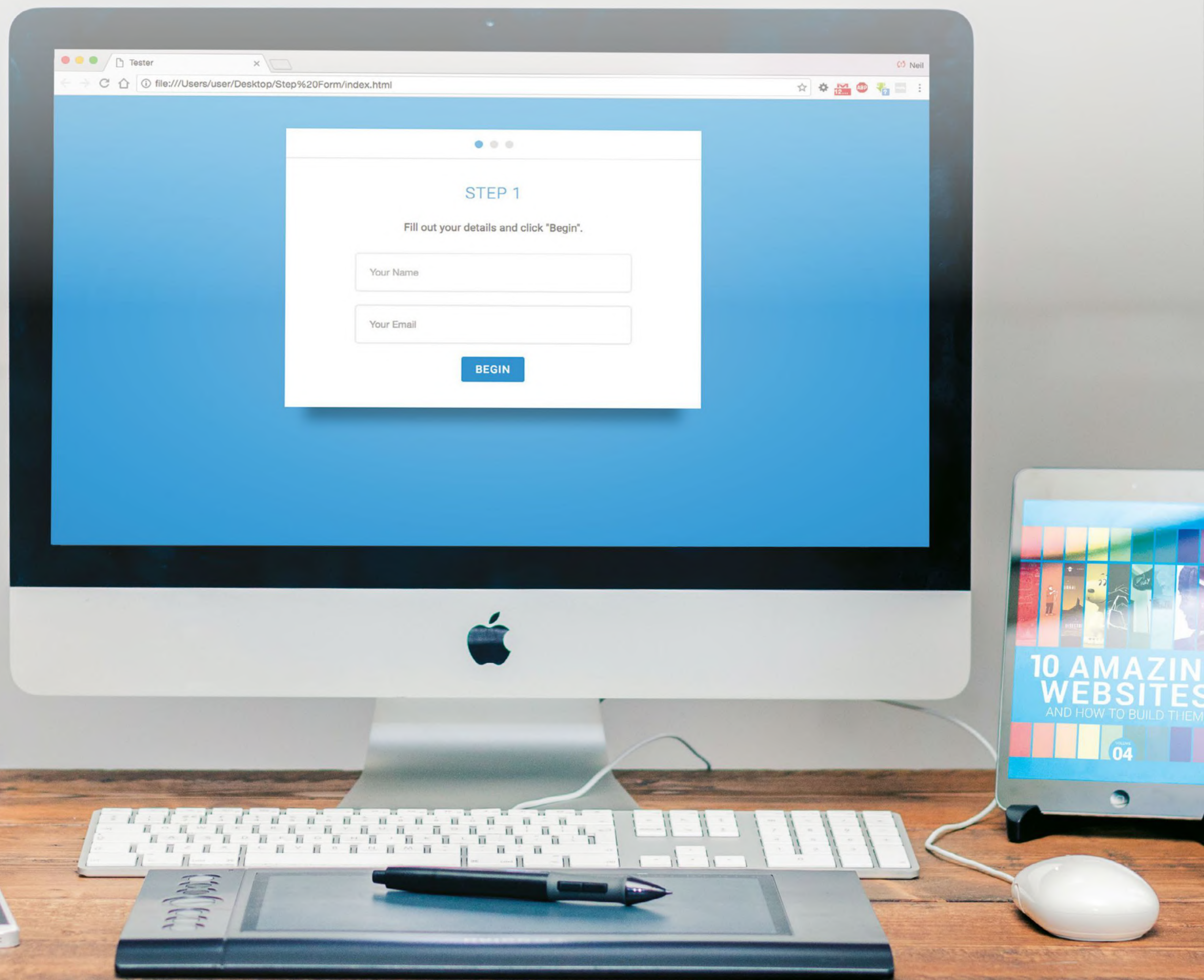
```
001 #footer{
002 height: 120px;
003 padding: 50px 0 0 0;
004 }
005 #footer p{
006 color: #666;
007 text-align: center;
008 }
```

# Customise your site

SOURCE FILES AVAILABLE 

## Develop a three-step animated web form

Engage and guide the user with a three-step animated form created using CSS3 and jQuery



**W**eb forms can often be overlooked when it comes to designing and developing our webpages. If we think about the user experience and how this affects user interaction, then making more fun and interesting forms is certainly something we can all start thinking about. Of course the first thing we do is make sure our forms work and we then make sure they are styled, however more often than not that is where it ends. If it works and it's styled accordingly, then we're happy. But where's the fun in that, right?! What if we added some animation to our forms and really enhance the UX, as well as the UI. Well in this tutorial, we will do just that. We're going to use CSS3 animations coupled with a bit of jQuery. The finished form will be a three-step process and can be any type of form you want.

Perhaps this could be a survey or a quiz that could easily be added to any page on your website. The beauty of this effect is that you can get as creative as you wish by using different types of animations. As always, we encourage you to experiment with the code once you've completed this tutorial. So open up your editor and let's get started!

## 01 Get started with the HTML

As already mentioned in the introduction, this tutorial will be a three-step process, so naturally we need to begin with step one. We will start by opening up a wrapper div and call it 'form-wrap'. The empty <span> tags will be used to show what active step were on, and then we will add in some content to tell the user what to do.

```
001 <div class="form-wrap">
002 <div class="form-header"><span class="is-
active"><
/span></div>
```

```
003 <div class="form-bodies">
004 <div class="form-body form-body-step-1
is-showing">
005 <div class="title">Step 1</div>
006 <div class="description">Fill out your details
and click "Begin".</div>
```

## 02 Add the form

Following on from the last step, we will add in a basic web form. The form will just include two input fields with placeholder text, but you're welcome to add as many input fields as you wish. Then we will add in a button so the user can be taken to the next step.

```
001 <form>
002 <input type="text" placeholder="Your
Name"/>
003 <input type="email" placeholder="Your
Email"/> yourself a...</div>
004 <div class="text-center">
005 <div class="button">Begin</div>
006 </div>
007 </form>
```

## 03 Create a head for step two

In the next step of our form we will ask the user a question with at least two answers to choose from. Similar to the first step we will add in the form-body class name and then add in a new class called form-body-step-2. Then give it a title of 'Step 2' and then finish up with the question.

```
001 <div class="form-body form-body-step-2">
002 <div class="title">Step 2</div>
003 <div class="description">Do you consider
yourself a...</div>
```

## 04 Give answers for step two

For the answers we will need to add in another form. The form will contain radio buttons so the user can easily pick which one they want. We can add in the class name of text-center, which we then target using our CSS to centre the button.

```
001 <form>
002 <label>
003 <input type="radio" name="radio"/>Web
designer?
004 </label>
005 <label>
006 <input type="radio" name="radio"/>Front-end
developer?
007 </label>
008 <div class="text-center">
009 <div class="button">Next</div>
010 </div>
011 </form>
012 </div>
```

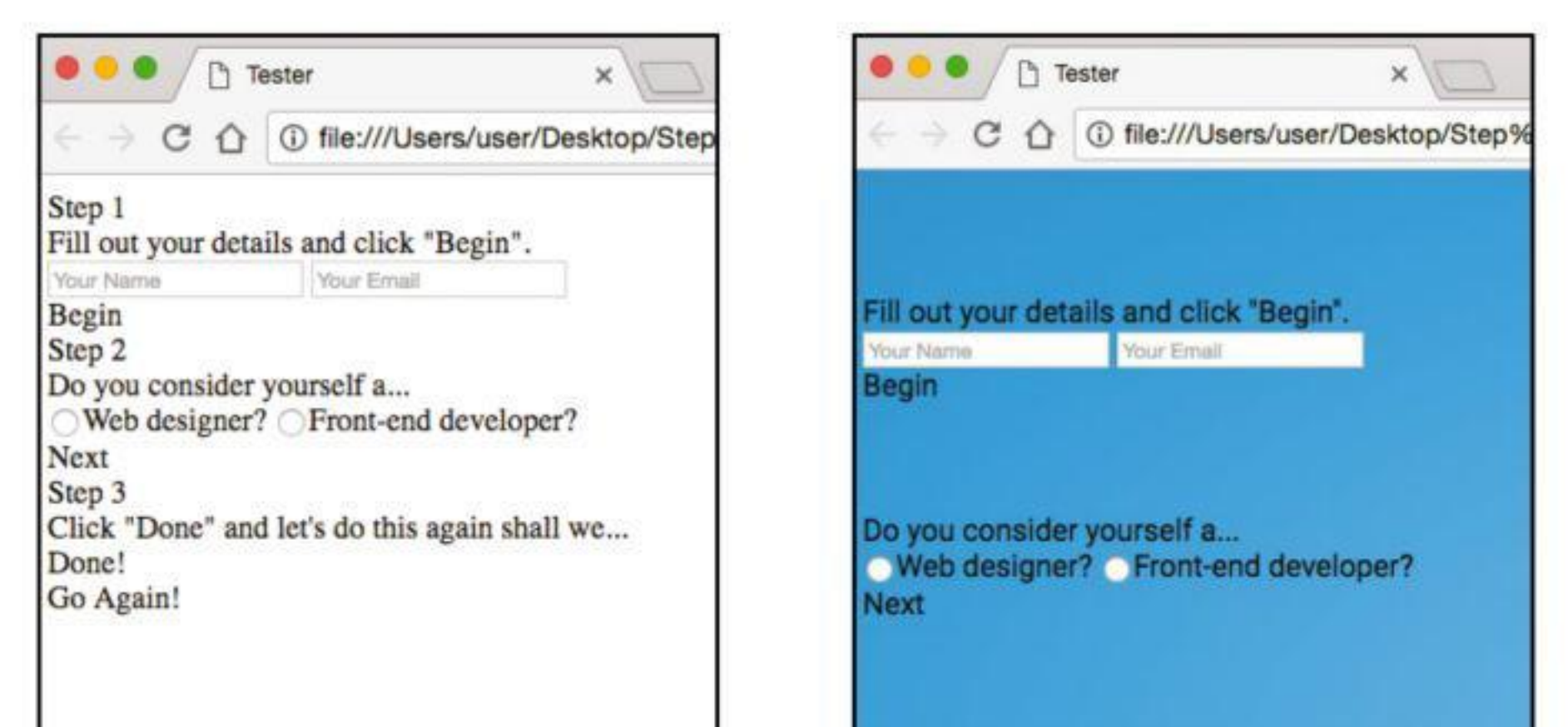
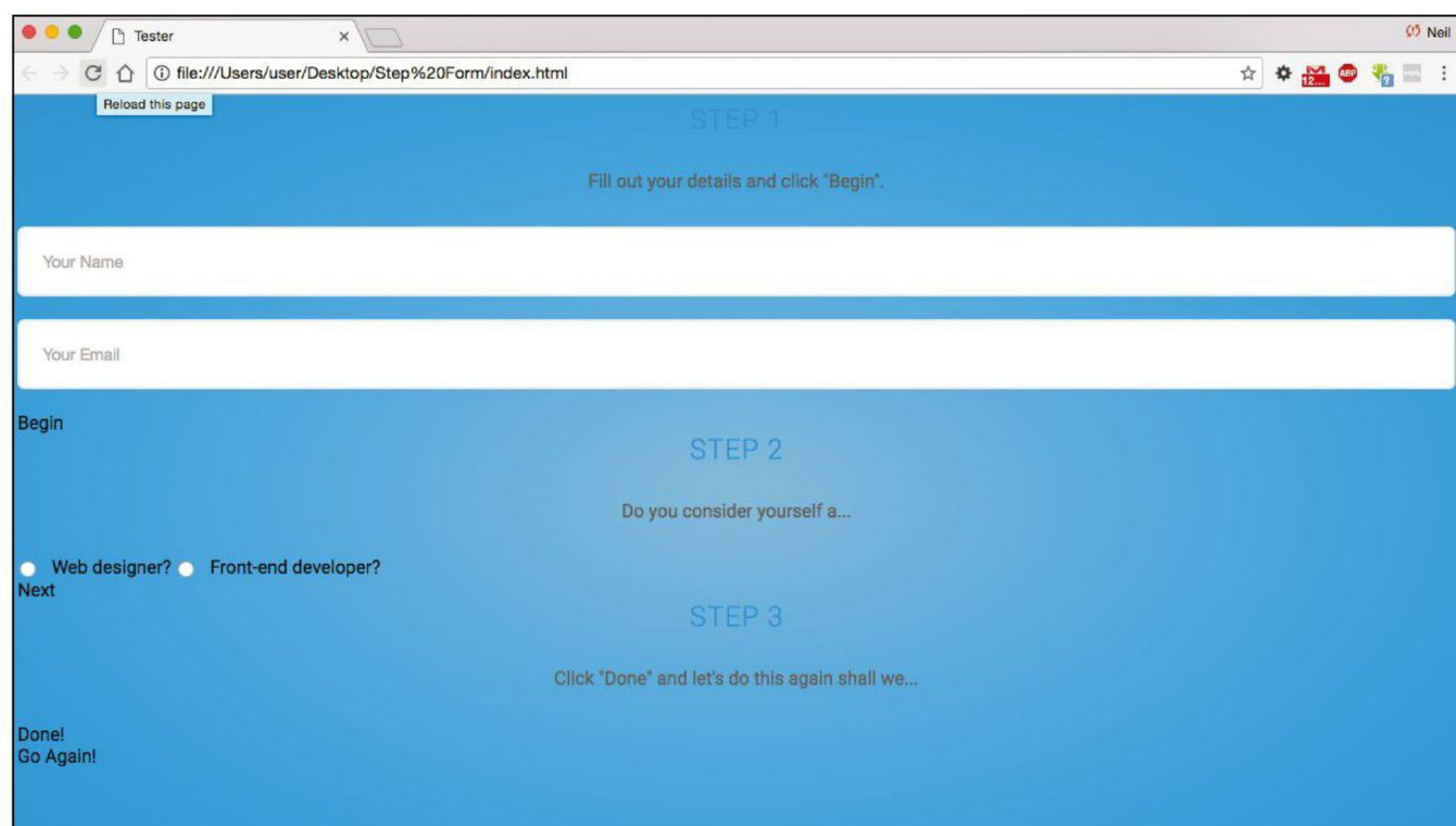
## 05 Work on step three

In this last step of the form, the user will be told the form is now done and they can run through the form again. We will add in a new button called rerun-button and allows the user to go back to the beginning. Lastly, we need to add in the links to the jQuery library first and then our custom script file.

```
001 <div class="form-body form-body-step-3">
```

### WHEN USING JQUERY

jQuery isn't just used to create animations, it has many other uses. It can be used to remove and add class names dynamically, as we do in this tutorial. For more on jQuery animations visit <https://api.jquery.com/category/effects>



### Top left

We have all the HTML in place now, and we can begin adding some styles to our form

### Top right

Using a radial gradient, we have added a nice background to the form as well as the form titles

### Left

Each description for each step has now been styled and positioned as well as the input fields

# Customise your site

```
002 <div class="title">Step 3</div>
003 <div class="description">Click "Done" and let's
do this again shall we...</div>
004 <div class="text-center">
005 <div class="button">Done!</div>
006 </div>
007 </div>
008 </div>
009 .</div>
010 <div class="text-center">
011 <div class="rerun-button">Go Again!</div>
012 </div>
013 <script src="https://code.jquery.com/
jquery-2.2.4.min.js"></script>
014 <script src="js/myscripts.js"></script>
```

## 06 Work on the CSS

Firstly we'll add in a nice blue radial gradient to the whole page and then we have set the font family to Roboto. Next will be the page titles. We want these titles to be nice and prominent on the page so users know what step they're on.

### PERSPECTIVE PROPERTY

The perspective property gives an element 3D space. It affects the distance between the Z plane and the user. If you want to create a subtle effect use a greater value. A smaller value will bring the effect closer to the object.

## 07 Add description and styles

In each step of the form there will be a snippet of text that either asks the user a question or lets them know what to do next. So we will style this text using the class name 'description'. Then we will also give the input fields that sit underneath some styling.

## 08 Finish the input fields

To finish styling the input fields we will add in a blue border on the focus state of the fields. This is to help the user know what field they have clicked on. Then we will push the titles of the radio buttons over to the right slightly by adding a 15px right margin to each one.

```
001 input[type="text"]:focus,
002 input[type="email"]:focus {
003 border-color: #0e98df;
004 }
005 input[type="radio"] {
006 margin-right: 15px;
007 }
```

## 09 Label step two

In the second step of our form, we wrapped the two questions within labels. With that done we can now give them some styles. Most of the CSS is self-explanatory, however we want to pay particular attention to giving the labels a light

grey border above and below, with a decent amount of padding.

```
001 label {
002 margin-bottom: 20px;
003 display: block;
004 font-size: 18px;
005 color: #666;
006 border-top: 1px solid #ddd;
007 border-bottom: 1px solid #ddd;
008 padding: 20px 0;
009 .cursor: pointer;
010 }
011 label:first-child {
012 margin-bottom: 0;
013 border-bottom: none;}
```

## 10 Style the buttons

The next step is to add some styles to the buttons. The buttons will be the 'begin', 'next', 'done' and 'go again' buttons. These will be set to blue with white text and a hover state with a subtle transition.

## 11 Add the rerun button

The rerun button needs a bit more attention than the others. This is because we want this button to be hidden using display: none and then use jQuery to reveal it once all the steps have been completed. And because this button will be on the blue background and not the white form,

## 3D transforms and perspective

To activate 3D space, an element needs perspective. This can be applied in two ways: using the transform property with the perspective as a functional notation.

```
001 transform:
002 perspective(600px);
```

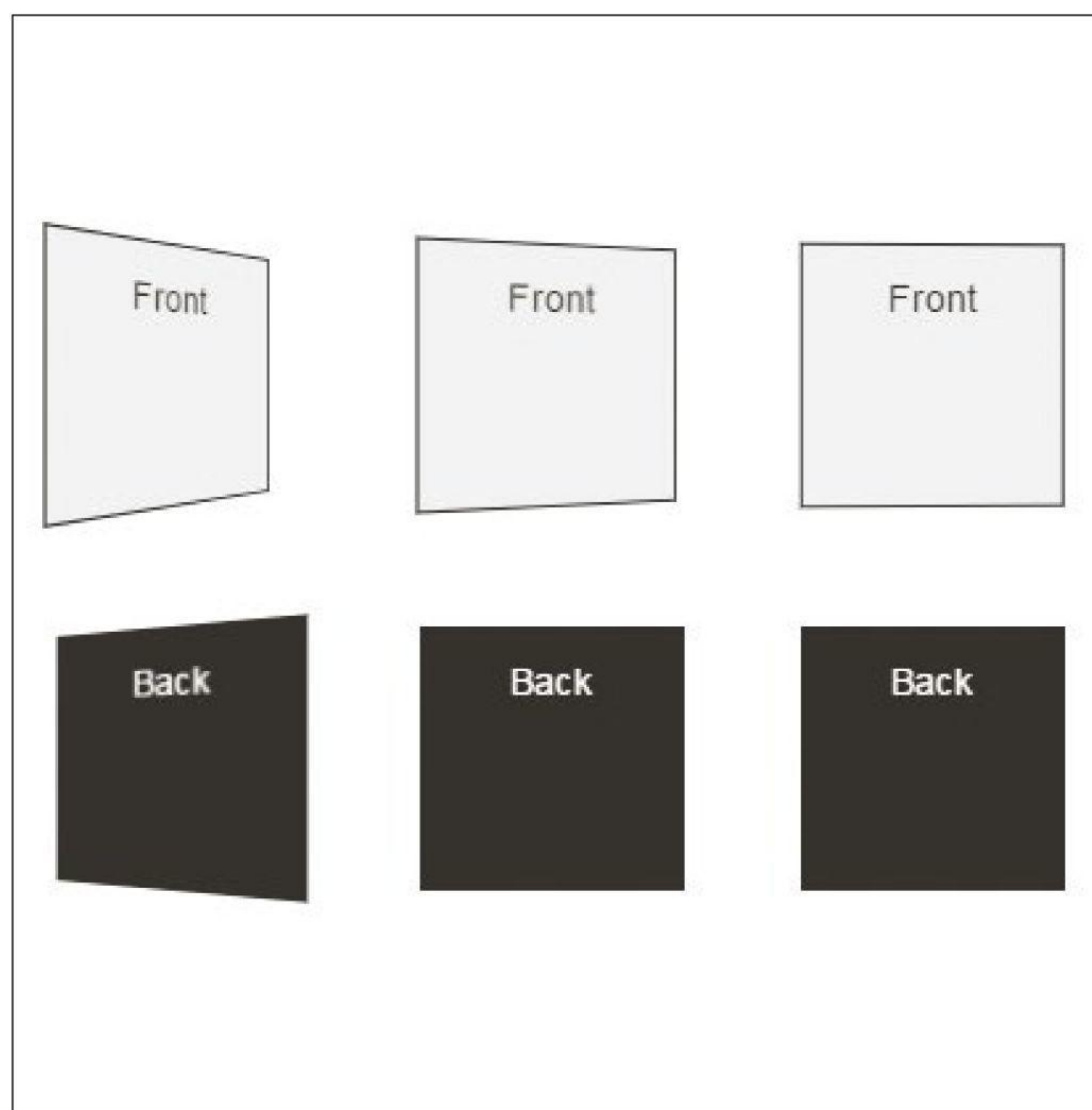
Or by using the perspective property on that element:

```
001 perspective(600px);
```

The perspective property doesn't affect how the element is rendered; it simply enables a 3D space for children elements. This is the main difference between the transform: perspective() function and the perspective property. The first gives element depth while the later creates

a 3D space that is shared by all its transformed children. But when used on multiple elements, the transformed elements don't line up as expected. If you use the same transform across elements with different positions, each element will have its own vanishing point. To fix this, use the perspective property on a parent element, so each child may share the same 3D space.

```
001 #red-box
002 {
003 perspective: 400px;
004 }
005 #red-box figure
006 {
007 background: red;
008 transform: rotateY(45deg);
009 }
```



we will give it a white border and a subtle drop shadow to make it more prominent.

## 12 Target form wrap and header

Now we can begin to start giving our form some shape by targeting the form-wrap and form-header classes. We will give the form a width of 600px, and then centre it. Then we will give the form a transition for when it is finished and begins again, making the form slide out when done and then back in again once the 'go again' button is clicked.

## 13 Style span tags

The span tags we added will appear as page indicators that are similar to breadcrumbs. They will be 12px circles and will be placed at the top of our form pages and the span tag will only turn blue for the page that is active.

```
001 .form-header span {
002 display: block;
003 height: 12px;
004 width: 12px;
005 margin: 5px;
006 border-radius: 50%;
007 background: rgba(0, 0, 0, 0.2);
008 }
009 .form-header span.is-active {
010 background: rgba(0, 0, 0, 0.4);
011 background: #0e98df;}
```

## 14 Use the perspective property

When we start playing with transforms and the 3D space, we need to make sure that the elements affected will have the perspective property assigned to them.

## 15 Position form bodies

Now we need to make sure that our form bodies are positioned relative so they can be animated and then we will give our forms some default styling, such as making the background white and giving them a drop shadow. Then we set the display mode to none so we can bring them back in again when animated.

```
001 .form-bodies {
002 position: relative;
003 perspective: 1000px;
004 }
005 background: white;
006 padding: 40px 100px;
007 box-shadow: 0px 50px 30px -30px rgba(0, 0, 0, 0.3);
008 margin-bottom: 50px;
009 position: absolute;
```

```
010 top: 0;
011 display: none;
012 box-sizing: border-box;
005 width: 100%;
006 transform-origin: top left;
007 }
008 .form-body.is-showing {
009 display: block;}
```

## 16 Animate out and in

In this step we will add in a few class rules that will be triggered using jQuery. This CSS rules will occur when the form buttons are clicked and the class names will be added dynamically using our script. The animate out creates a swing animation and the animate in is after that swing animation occurs and the form animates back in.

## 17 Work with @keyframes

So we have now specified the out and in animation, but we haven't created them yet. We can do this by using the @keyframe rule. So the out @keyframe controls the way the form is animated out on the y axis and the in controls the way the form animates back in on the x axis.

## 18 Use jQuery

Now create a new script.js file and store it in a folder called 'js'. Then open it up and begin adding our jQuery. In this first part we will add a click function to the .button class. This will trigger a few functions depending on what step we're on and also set a few variables.

```
001 $('button').click(function(){
002 var $btn = $(this),
003 $step = $btn.parents('.form-body'),
004 stepIndex = $step.index(),
005 $pag = $('form-header span').eq(stepIndex);
006 if(stepIndex === 0 || stepIndex === 1) {
007 step1($step, $pag); }
008 else { step3($step, $pag); }
009 });
```

## 19 Add a function for step one

So let's say you clicked the next button, which has the .button class. This will trigger the step one function that begins by adding a new class called animate-out. This will then trigger the animate-out CSS rule and our animation will occur.

```
001 function step1($step, $pag){
002 // animate the step out
003 $step.addClass('animate-out');
004
```

## 20 Animate in

After we have animated step one out, we need to animate in the next step in the form, which is of course step two. But we don't want this to happen too quickly as we need some time to do the required animation using CSS. So we used the setTimeout function to delay the animation for 600 and then 1200 milliseconds.

```
001 // animate the step in
002 setTimeout(function(){
003 $step.removeClass('animate-out is-showing')
004 .next().addClass('animate-in');
005 $pag.removeClass('is-active')
006 .next().addClass('is-active');
007 }, 600);
008 // after the animation, adjust the classes
009 setTimeout(function(){
010 $step.next().removeClass('animate-in')
011 .addClass('is-showing');
012 }, 1200);}
013
```

## 21 Animate for step three

The next bit of script will fire off the step three function. Again we're going to add the class animate-up which will trigger that CSS animation, and then using the setTimeout function we can set a delay enough for us to then display the re-run button, which we called 'go again'.

```
001 function step3($step, $pag){
002 // animate the step out
003 $step.parents('.form-wrap').addClass('animate-up');
004 setTimeout(function(){
005 $('rerun-button').css('display', 'inline-block');
006 }, 300);}
007
008
```

## 22 Rerun button

In this last step we want a function that sets everything back to the beginning once the rerun button is clicked on. So we first remove the animate-up class and then add and remove other classes on the form wrapper. Lastly we will hide the rerun button and then we can go again.

```
001 $('rerun-button').click(function(){
002 $('form-wrap').removeClass('animate-up')
003 .find('form-body')
004 .first().addClass('is-showing')
005 .siblings().removeClass('is-showing');
006 $('form-header span').first().addClass('is-active')
007 .siblings().removeClass('is-active');
008 });
```

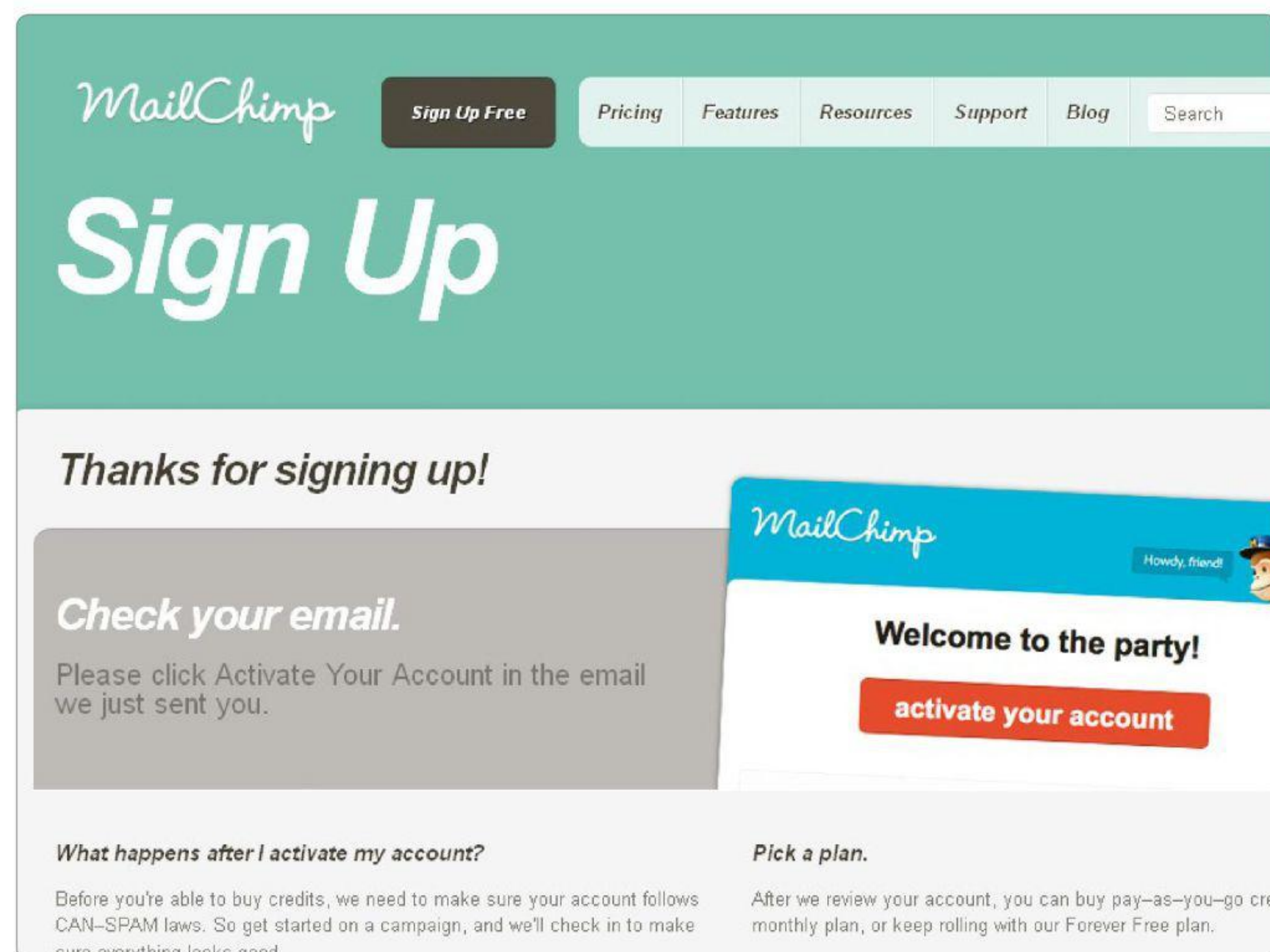
## Create email newsletters and let people subscribe

Creating a newsletter script for your site need not be hard with a little help from MailChimp

In order to promote your website or the subject of your website, you may consider producing an email newsletter. These are sent out to subscribers, keeping them up-to-date with the latest additions to your webpages. The idea is that it keeps driving traffic back to the site among those who have already expressed an interest in it, allowing you to show them that you are still up and running and that there's plenty of content to keep visitors coming back for more.

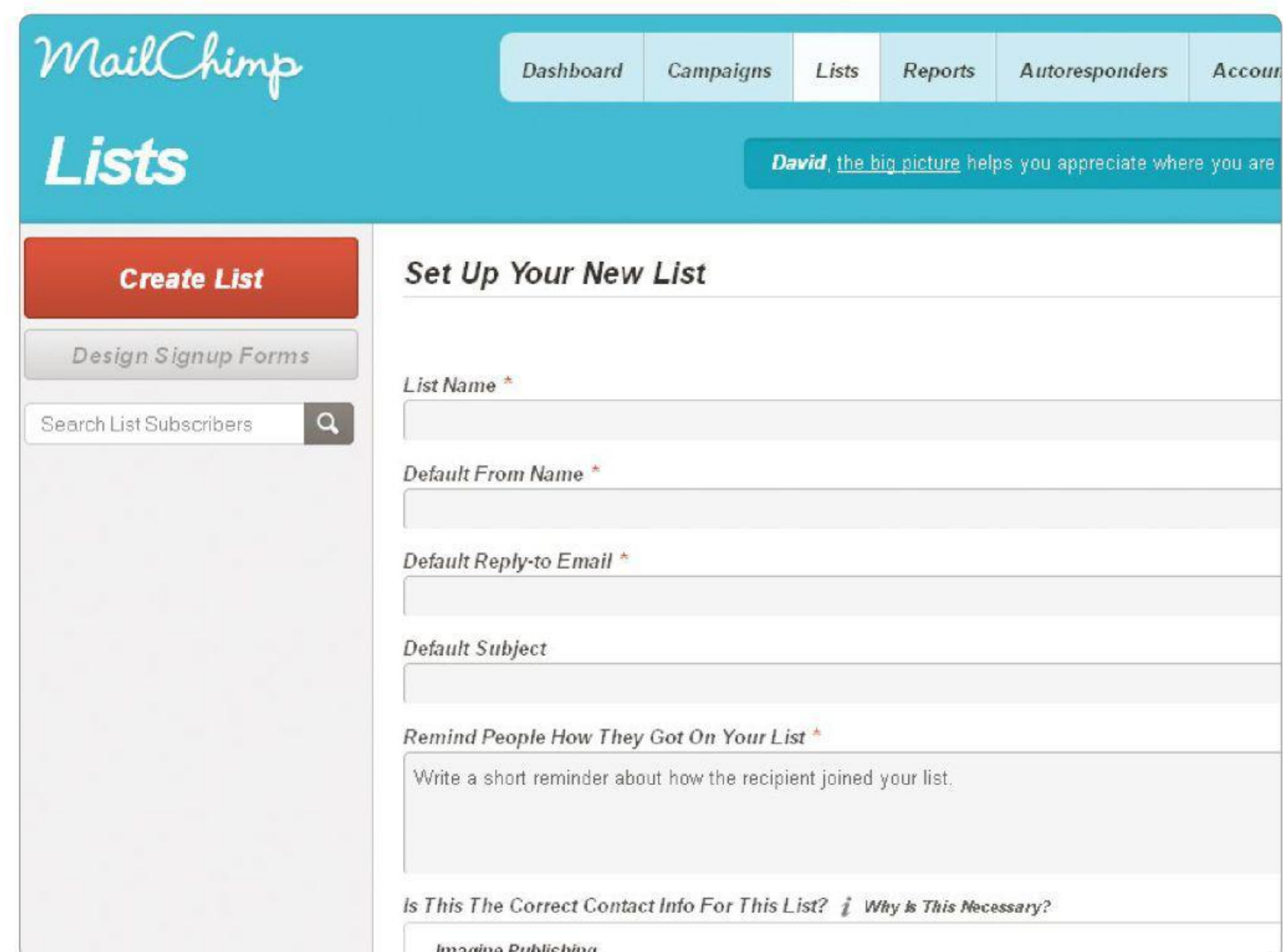
In order to be effective, you will want to add a newsletter script to your webpage. This will produce a form into which people can insert their contact information and sign up for your regular updates. This is a great way to capture marketing data for targeting interested individuals. Once subscribed, they will automatically receive your newsletter every time you produce one. It can also be a good idea to have an Unsubscribe button somewhere on your website, maybe in the About Us section, as subscribers are more likely to try it out if they know they can leave.

The easiest way to set up a newsletter script is via MailChimp. Although the service can charge, if you have fewer than 2,000 subscribers and don't send more than 12,000 emails each month, there is no charge at all. You don't need to input any payment details either to sign up, which is a plus. MailChimp is easy to use and it is all done online with menus and wizards, ensuring you will be up and running in next to no time.



### 01 Sign up to MailChimp

Go to [www.mailchimp.com](http://www.mailchimp.com) and click the Sign Up Free button. Fill in your email, username and password where prompted and you'll then be sent an email with a link. Click this to activate your account. Complete the sign up with your name, address and website details.



### 02 Create a list

The first thing you need to do to get your newsletter up and running is to create a list into which the subscriber details will be inserted. Give it a name, say who you want the emails to come from, give a reply address and a default email subject.



# The design interface

How to design and build your form

## Signup Form

Click the Signup Form drop-down menu and you will see many other different types of forms that you can use for your sign up process. These include Unsubscribe options and confirmation replies

## Email address

The only required box – denoted by an \* – is the email field. This is because you need to know where the email with your newsletter is going to be sent

## CAMPAIGN BUILDER

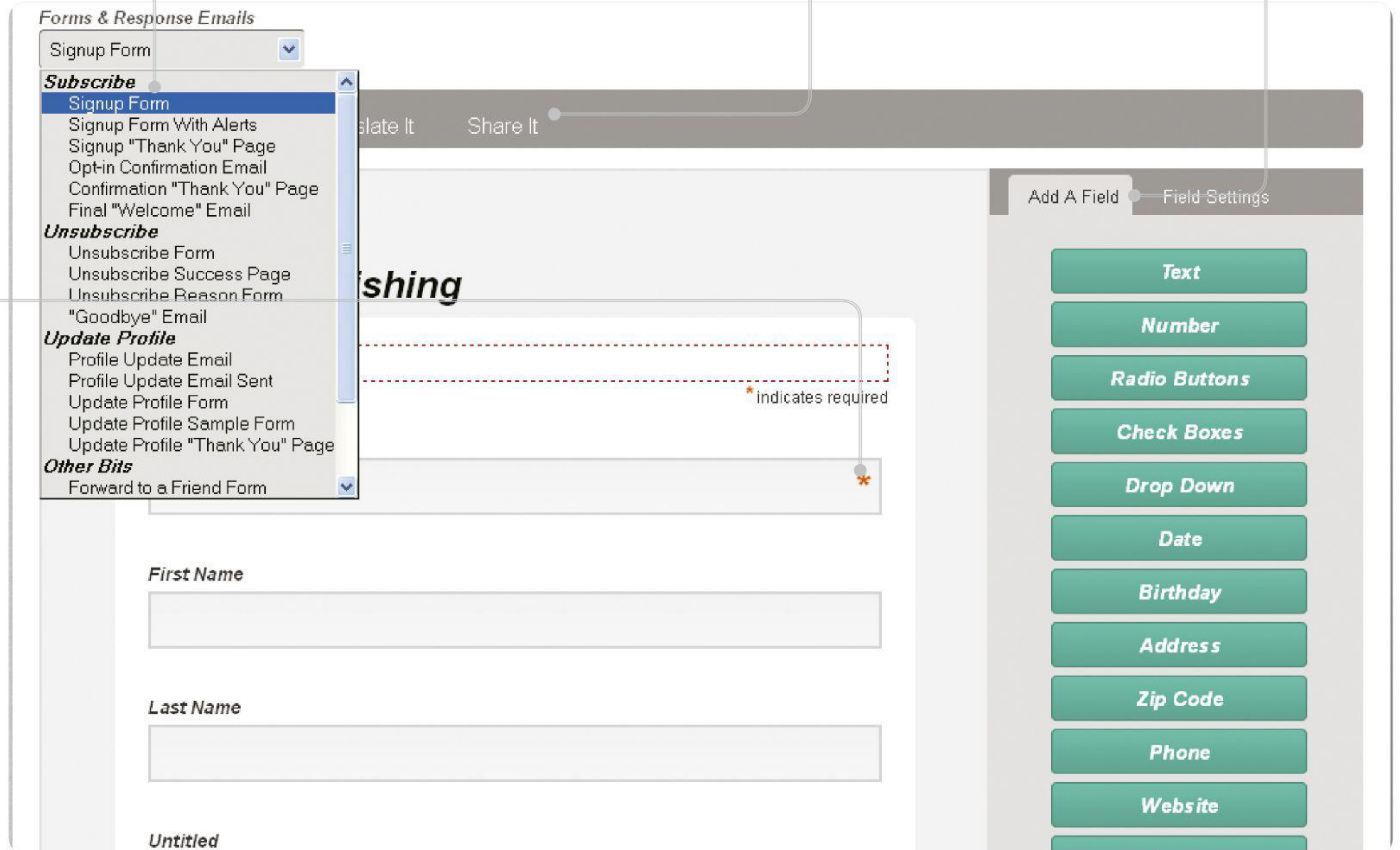
MailChimp has a Campaign Builder option that enables you to create newsletters that can then be sent out to the list of your choice. As people subscribe to your newsletter, they will be added to the list and become a recipient of it. All you have to do is keep creating your newsletters. These templates can be set up at <https://us5.admin.mailchimp.com/templates>.

## Share it

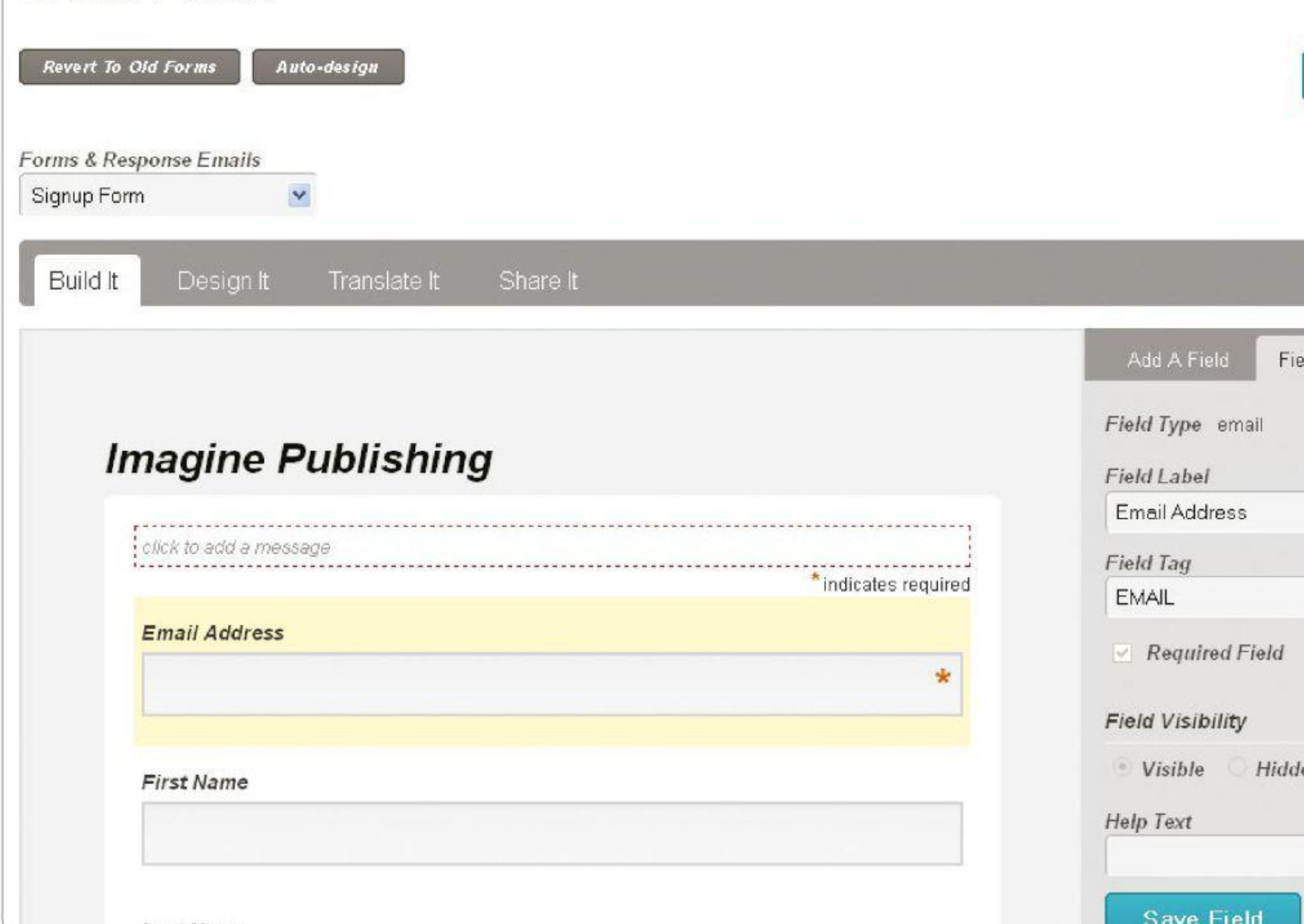
Clicking on here will give you the form that you can then embed into your website. When people fill in the form, it will subscribe them to your email newsletter

## Add a Field

The items to the right show the various fields that you can use for your form. You can ask people to give you their address, phone number, URL and birthday, for instance



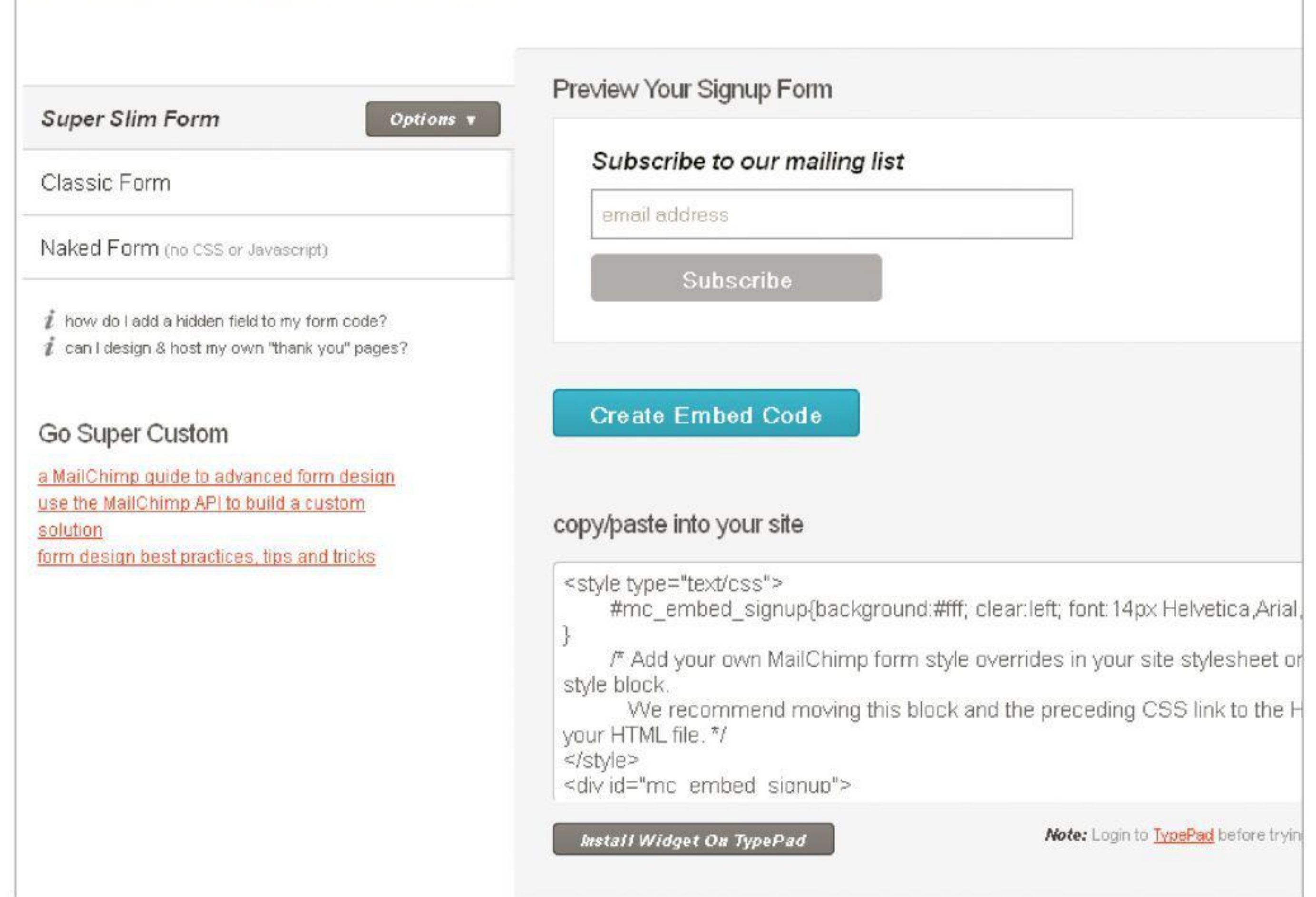
## Create Forms



## 03 Design a sign up form

The next stage is to click on the Design Signup Forms button. Click on a field in the left-hand box to alter the settings to your liking. Under the Add a Field tab, you can include new fields from date to birthday. Build your form the way you want it.

## Create Form Embed Code



## 04 Get the code

The Design It tab lets you alter the form's look. When happy, click the Share It tab. Click the Create HTML Code for a Small Subscribe Form button. Choose the perfect form type for you and the embed code appears. Copy and paste it into your site.

SOURCE FILES AVAILABLE



## Code contemporary CSS text effects

Create visually appealing and easy-to-implement eye-catching text effects for content titles

**T**he purpose of design is to help convey information, whether it be descriptive or measurable. We often think of design as being about imagery and take the actual content for granted. Despite visual information being the first part of a website likely to be noticed, content is king and it is the textual information that delivers the main purpose for the website's existence. With

this in mind, we as website designers should always consider how the role of typography can be used to convey meanings through the appearance of text-based information.

Before the emergence of CSS3, the only way to integrate fonts with visual effects would have been to use graphic images. This technique unnecessarily increases page-download size, makes the page

less maintainable, difficult for search engines to read and unuseable for people who rely on text-to-speech software for the web.

This tutorial will show you how modern CSS3 can be used to style HTML text with visual typography effects without the need to embed images that become troublesome for content changes, SEO and accessibility.



## 01 Initiation

As usual, we need to initialise the HTML document structure so that it is ready to contain the content and additional information (such as title, descriptions and extra content resources) for loading.

```
001 <!DOCTYPE html>
002 <html>
003 <head>w
004 ** STEP 2 CODE HERE**
005 </head>
006 <body>
007 <article>
008 **STEP 3 CODE HERE**
009 </article>
010 </body>
011 </html>
```

## 02 Load additional resources

We use the head of the HTML to link external resources not part of the standard HTML content. This helps keep the page maintainable and search engine friendly. This code goes into the <head> of the previous HTML initiation. We are linking to an external CSS stylesheet.

```
001 <title>Typography</title>
002 <link rel="stylesheet" type="text/css"
href="styles.css" />
```

## 03 Text items

We'll make use of <h1> title tags to present the different text style examples. In this case, each <h1> tag has a class attribute to specify which font style is to be applied.

```
001 <section>
002 <h1 class="metallic">Hello World</h1>
003 <h1 class="blur">Hello World</h1>
004 <h1 class="glowIntro">Hello World</h1>
005 <h1 class="fire">Hello World</h1>
006 </section>
007 *** STEP 4 CODE HERE ***
```

## 04 More text

Some styles appear better on a lighter background, hence the use of the lightBg class in the <section> tag. Containers like this let us control groups of content that are meant to be placed in light or dark backgrounds.

```
001 <section class="lightBg"><h1>
class="threeDimension">Hello World</h1>
002 <h1 class="pop">Hello World</h1>
003 <h1 class="retro">Hello World</h1>
004 </section>
```

## 05 Initiate styling

Now we will start defining the CSS styles. Create a new file called 'styles.css' – this is where all of the style rules will be placed. We start this file with a rule to define the document body to have standard properties for text colour, background colour and padding.

## 06 Font loading

We also want to make sure that the fonts we want to use are available. This can be done by using @font-face. For simplicity, we are going to use the Google Fonts API service, which will provide the font and also generate the @font-face code. All we

do is use @import and include the CSS generated by Google.

## 07 Default title styling

Content presentation looks most professional when there is consistency. Even though each title in our example page will have a different text effect, there will still be properties that each of the titles will share, such as their default font, size and text alignment.

```
001 h1{
002 font-family: serif;
003 <font-size: 4em;
004 text-align: center;
005 }
```

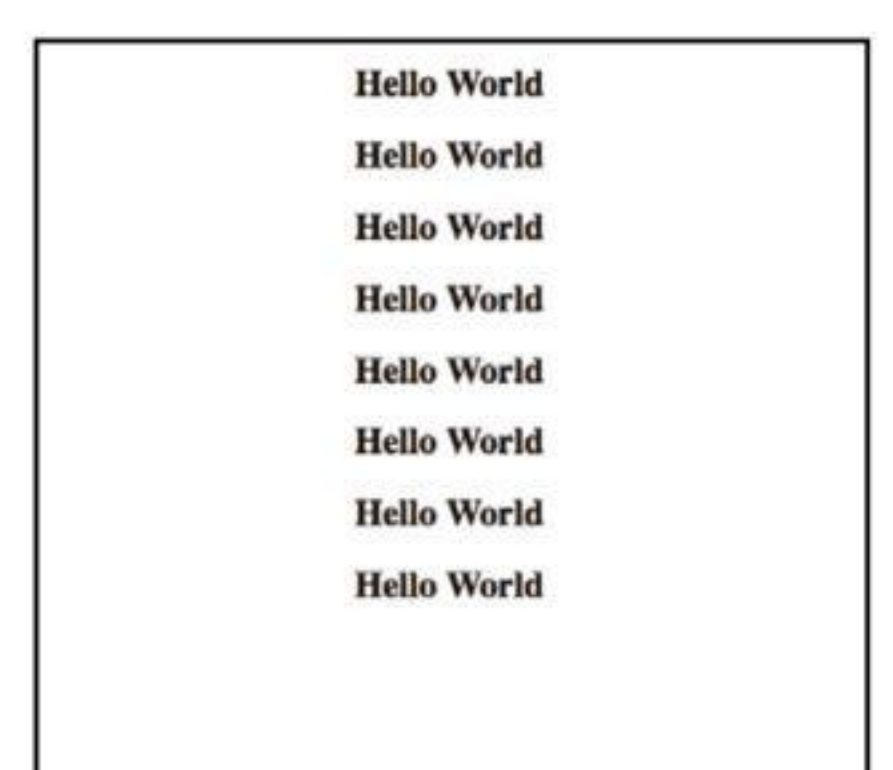
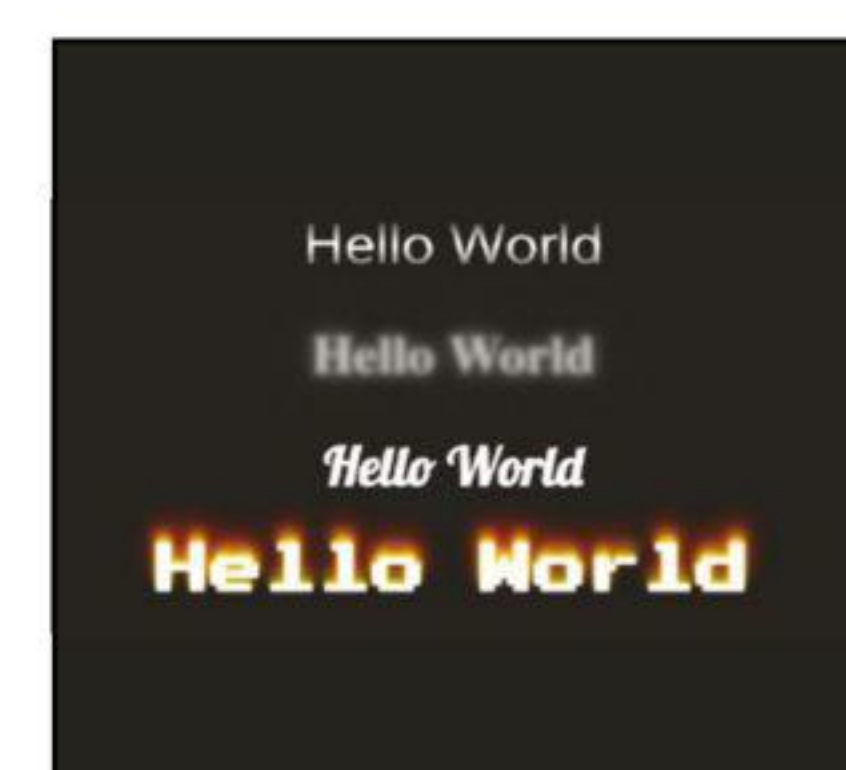
## 08 Content containers

There is a need to define part of the content to have a lighter background in order for the font effects to be fully visible. We have used a class reference of lightBg in the HTML to identify this, hence we define a background colour rule to this class within the CSS.

```
001 .lightBg{
002 background: #777;
003 }
004
```

### TEXT EVENTS

Webpage text effects are not limited to being presented statically upfront, like in print. Effects can appear in response to events such as when the page loads or user interaction is detected.



### Left

Other text effects require a lighter background in order to show them at their best and for readability. Again, containers are useful for managing this

### Top left

Alternatively, some text effects require a dark background. Containers are often useful for controlling these cases

### Top right

All of the HTML titles are in place, but without CSS to provide their styling. This is how search engines and accessibility browsers will see your content

# Customise your site

## 09 Metallic effect

Producing a metallic effect comes from the production of a gradient on the text. Although CSS has the ability to produce gradients, it doesn't apply them to text. We can get around this with WebKit-based browsers and by applying the text fill colour property as transparent, followed by clipping the background gradient to the text.

```
001 .metallic{
002 font-family: Muli;
003 position: relative;
004 margin-top: 0;
005 color: #fff;
006 background: linear-gradient(0deg, #000 0%,
007 #fff 50%, #000 100%);
008 -webkit-text-fill-color: transparent;
009 -webkit-background-clip: text;
009 }
```

## 10 Cloudy effect

We can use a combination of transparent colour and the text shadow property to produce a cloudy or steamy effect. We achieve this by applying multiple white shadows to the text of varying transparency – with main text set to fully transparent for the cloud effect.

```
001 .blur {
002 transition: text-shadow 2s;
003 text-shadow: 0px 0px 10px
004 rgba(255,255,255,0.6), 0px 0px 30px
```

### ACCESSIBLE TEXT

It's important to remember that issues such as dyslexia and visual impairments will lead to some users having difficulties in reading text designs that are too fancy.

```
001 rgba(255,255,255,0.4),
002 0px 0px 50px rgba(255,255,255,0.3),
003 0px 0px 180px rgba(255,255,255,0.3);
004 color: rgba(255,255,255,0);
005 }
```

## 11 Cloudy interaction

Adding the ability to interact with the cloudy effect from step 10 is as simple as adding a hover attribute. Take a look at the previous step's code and you will see that a transition attribute has been set to animation for the text-shadow. We can change this in the hover to give the illusion of the cloud effect disappearing.

```
001 .blur:hover {
002 text-shadow: 0 0 1px rgba(255,255,255,1);
003 }
```

## 12 Initiate glowing text

The glow effect has its properties defined as an animation. This means that the glowIntro class has minimal properties assigned directly to it – this includes the font, the name of the animation, the duration and the number of times to repeat the chosen animation.

```
001 .glowIntro{
002 font-family: lobster;
003 animation-name: glowAnim;
004 animation-duration: 2s;
005 animation-iteration-count: infinite;
006 }
```

## 13 Animate glowing text

The animation defines attribute states for animating between. Keep this simple by defining two states for the glow – from and to. Glow effects are essentially the cloudy effect, but with text colour set to fully visible by default.

```
001 @keyframes glowAnim {
002 from {
003 text-shadow: 0px 0px 10px
004 rgba(255,255,255,0),
005 0px 0px 30px rgba(255,255,255,0.3),
006 0px 0px 50px rgba(255,255,255,0.6),
007 0px 0px 180px rgba(255,255,255,0.9);
008 color: #fff;
009 }
010 to {
011 text-shadow: 0 0 5px rgba(0,5px,5px,1);
012 }
013 }
```


## 14 3D text effect

Like the previous styles, the 3D effect is produced by using shadows with the text. The main difference is how each of the shadows is placed one pixel closer to each other with no blur to give the illusion of a solid part of the text. Only the outer shadows use the blur to provide a real shadow effect. We also use the Lobster font loaded by Google.

```
001 .threeDimension{
002 font-family: lobster;
003 font-size: 50px;
004 text-shadow: 0px 0px 0 rgb(221,221,221)
005 1px 1px 0 rgb(206,206,206),
006 2px 2px 0 rgb(192,192,192),
007 3px 3px 0 rgb(177,177,177),
008 4px 4px 0 rgb(163,163,163),
009 5px 5px 0 rgb(148,148,148),
010 6px 6px 0 rgb(134,134,134),
011 7px 7px 6px rgba(0,0,0,0.8),
012 7px 7px 1px rgba(0,0,0,0.4),
013 0px 0px 6px rgba(0,0,0,.2);
014 }
015 }
```



Hello World



Hello World

### Top left

The metallic effect is made from a gradient that ranges from black to white and then back to black. This provides the effect of light shining on the text

### Top right

The pop effect is made possible primarily from the use of the shadow to give the illusion of depth where the text is meant to be hovering

### Right

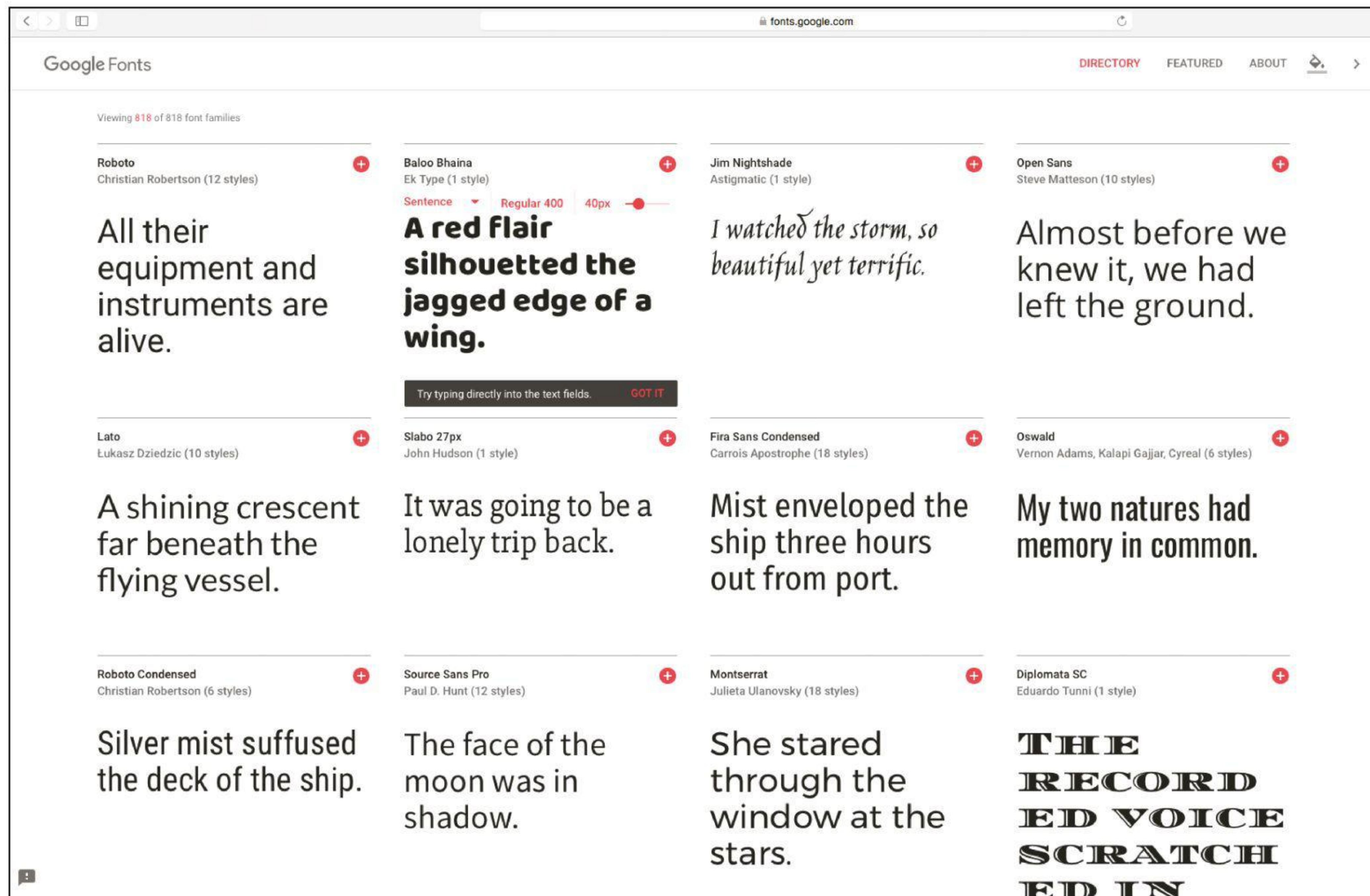
The cloud effect is made by making the main text invisible and only showing shadows of the text – with shadows having their colour set to white



Hello World

# Fonts and styling

Unlike old-style CSS and HTML, we are not limited to fonts available on the user's computer. We are able to load new fonts from our website or from another location on the internet eg Google fonts, using @font-face. It is also possible to load fonts using an HTML tag – this is not a good idea because it means that the control of presentation is separated from your stylesheet, meaning that you have to make future updates in more than one place. Modern CSS styling enables multiple styles to be combined to produce new types of effects. Examples include using the text shadow with colour to create an effect for flames and 3D. For flexibility, effects are defined as class names so that they can be applied to text containers such as <h1> title tags.



## 15 Flame effect

Similar to the glow effect, the flames in this effect are produced by using multiple shadows behind and around the text. The main difference here is their positioning and also how different colours are used in order to make the shadows look just like flames.

```
001 .fire{
002 font-family: 'Press Start 2P';
003 color:#fff;
004 text-shadow: #fff 0 0 4px,
005 }
006 3px 3px 0 rgb(177,177,177),
007 text-shadow: 0 0 5px rgba(0,5px,5px,1);
008 yellow 0 -5px 10px,
009 orange 0 -15px 20px,
010 red 0 -25px 50px;
011 }
```

## 16 Pop-up text

The pop-up text effect relies on providing the illusion of the text appearing to hover above the page. This is achieved through the use of shadow positioning. The first group makes the text look slightly 3D, while the last shadow is used to provide an illusion of depth.

```
001 .pop{
002 text-shadow: 0px 3px 0px #2c2e38,
003 0px 14px 10px rgba(0,0,0,0.2),
004 0px 24px 2px rgba(0,0,0,0.1),
005 0px 34px 30px rgba(0,0,0,0.1);
006 }
007 }
008 }
```

## 17 Retro effect

The primary element to this retro effect is the font, which was loaded through Google in Step 6. The use of shadow and letter spacing enables it to appear less plain.

```
001 .retro{
002 font-family: Raleway;
003 color: #d7ceb2;
004 text-shadow: 3px 3px 0px #2c2e38,
005 5px 5px 0px #5c5f72;
006 letter-spacing: .2em;
007 }
```

## 18 Initiate text extrusion

The text extrusion effect is similar to other 3D effects in that it uses a shadow to provide depth of the text. We start the initiation of this style with the basic attributes required to achieve the effect.

```
001 .extruded{
002 color: #888;
003 font-weight: bold;
004 position: relative;
005 color: #fff;
006 transition: text-shadow 1s, color 1s;
007 }
```

## 19 Text extrusion in 3D

These shadows are designed to appear solid, hence full transparency. The positioning of the main text is adjusted to accommodate for the shadows – made possible from the relative positioning defined in the previous step.

```
001 .extruded{
002 text-shadow: blue 1px 1px,
003 blue 2px 2px,
004 blue 3px 3px,
005 blue 4px 4px, w
006 blue 5px 5px,
007 blue 6px 6px;
008 left: -6px;
009 top: -6px;
010 }
```

## 20 Text extrusion interaction

You can also reduce the depth of the effect when user interaction is detected. We achieve this by overwriting the shadow attribute to show only one shadow.

```
001 .extruded:hover{
002 text-shadow: #fff 1px 1px;
003 color: #aaa;
004 }
```

## 21 Font choice for text extrusion

You then have the option to define the font to be used with the text effect that you have created. This example shows how the font can be changed to the Lobster font loaded from Google earlier in this tutorial.

```
001 .extruded{
002 font-family: lobster;
003 }
```

# Web design glossary

As with most specialisms, there are many specific terms that relate to web design. We look through some of the key terms to clear up any confusion

## Above the fold

Anything that resides in the web browser window when your webpage first loads is referred to as above the fold. Imagine it as a large newspaper – above the fold is the top part with the name of the paper.

## Accessibility

This is the extent to which a website can be used by people with a disability. Ideally, a website will be accessible for people with visual and hearing problems and those who are colour blind or physically disabled.

## Address bar

Also referred to as the URL bar. This is where you type in the web address in a browser.

## AJAX

Standing for asynchronous JavaScript and XML, AJAX is a group of technologies which include HTML, CSS and JavaScript. It allows data from a web server to be loaded after a webpage has loaded, without altering its performance.

## Backlink

A link that refers users from another website to yours. The more the merrier because search engines look for the number of quality links to your site to help raise its rankings.

## Bandwidth

The amount of data requested from your website. Your host web server will have a set limit and you may be charged extra if you go over. Either that or requests are denied.

## Blog

Short for weblog. It's a common form of website in which small items of news or opinion are frequently posted.

## Breadcrumb

Refers to the navigation elements at the top of the webpage. These not only show you the site you are on but where it lies in the site hierarchy so that you can see the process of clicks that got you there. It can enhance navigation because they can quickly get to a higher-level page.

## Captcha

Captchas are places within web forms. They are the sometimes undecipherable words which you have to work out and type in when you want to submit a form within a site. The idea behind making you type these correctly is to reduce the levels of spam that would otherwise be generated from automated computer bots.

## Content management system (CMS)

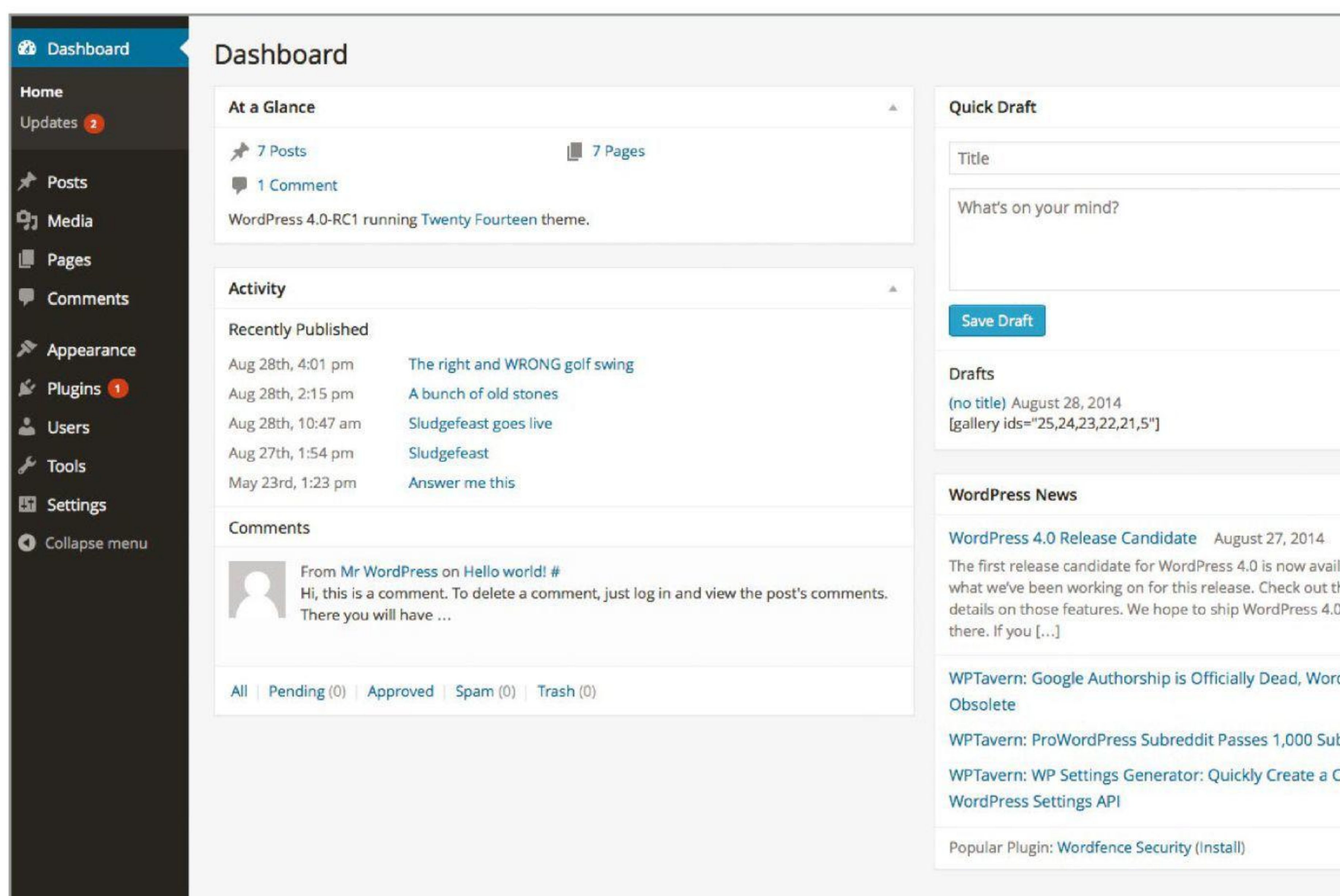
A CMS manages aspects of your site using a backend tool. Popular examples include WordPress. Commonly, you will be able to create posts, add headlines, text and images within a simple form in the admin area for your site that, when published, appear online. The various elements are usually separated so that content is set aside from design.

## Cookie

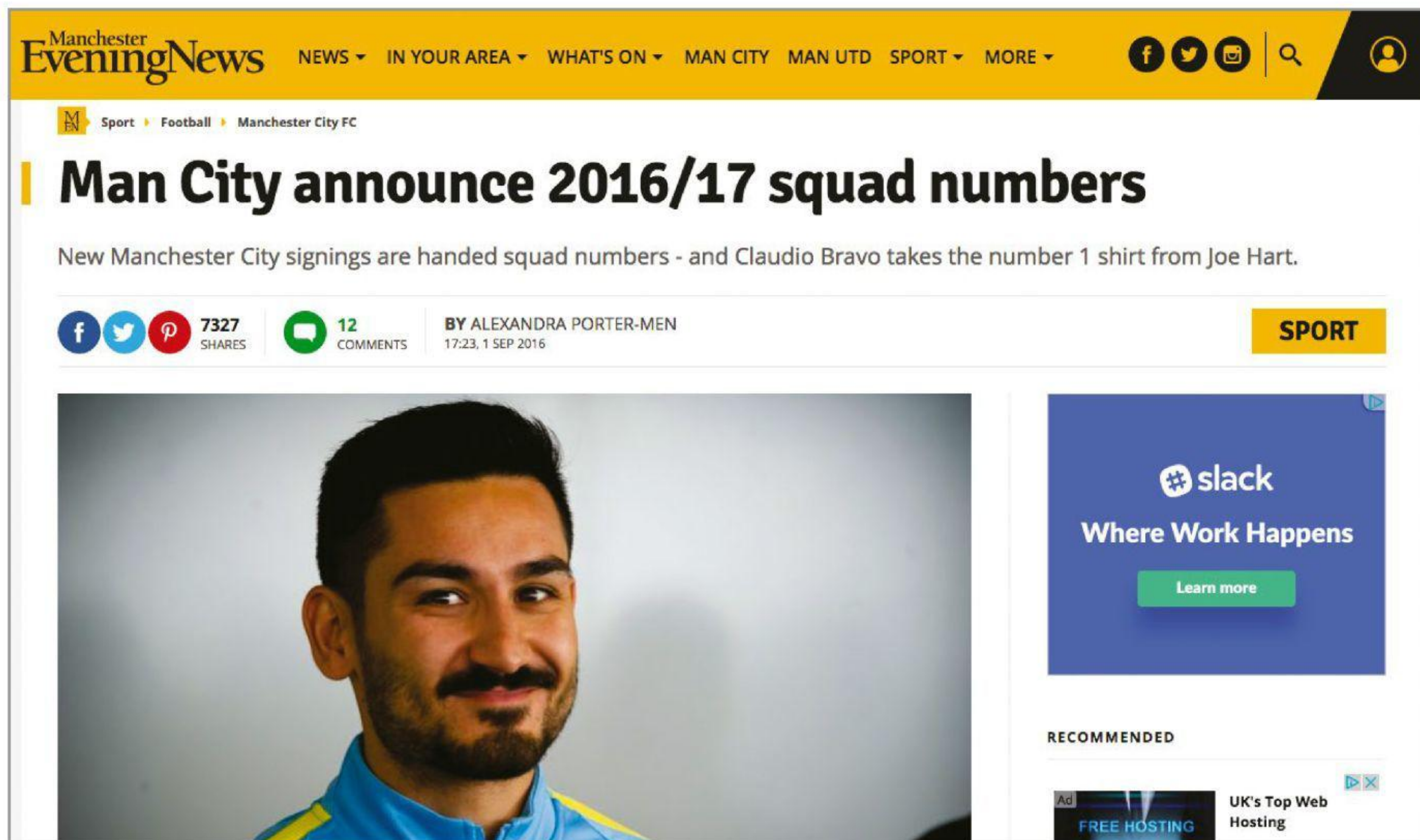
Cookies are useful for remembering what a visitor did when they last landed on a webpage. A cookie can hold all sorts of data including any customised elements, ensuring they do not have to tailor the site for their needs each time.

## CSS

Cascading style sheets have superseded HTML tables, telling a web browser how its pages



Content management systems such as WordPress remove the hassle of coding and ensure updating a site is easy



Here you can see how this site shows a breadcrumb trail, letting you jump to football or sport very quickly

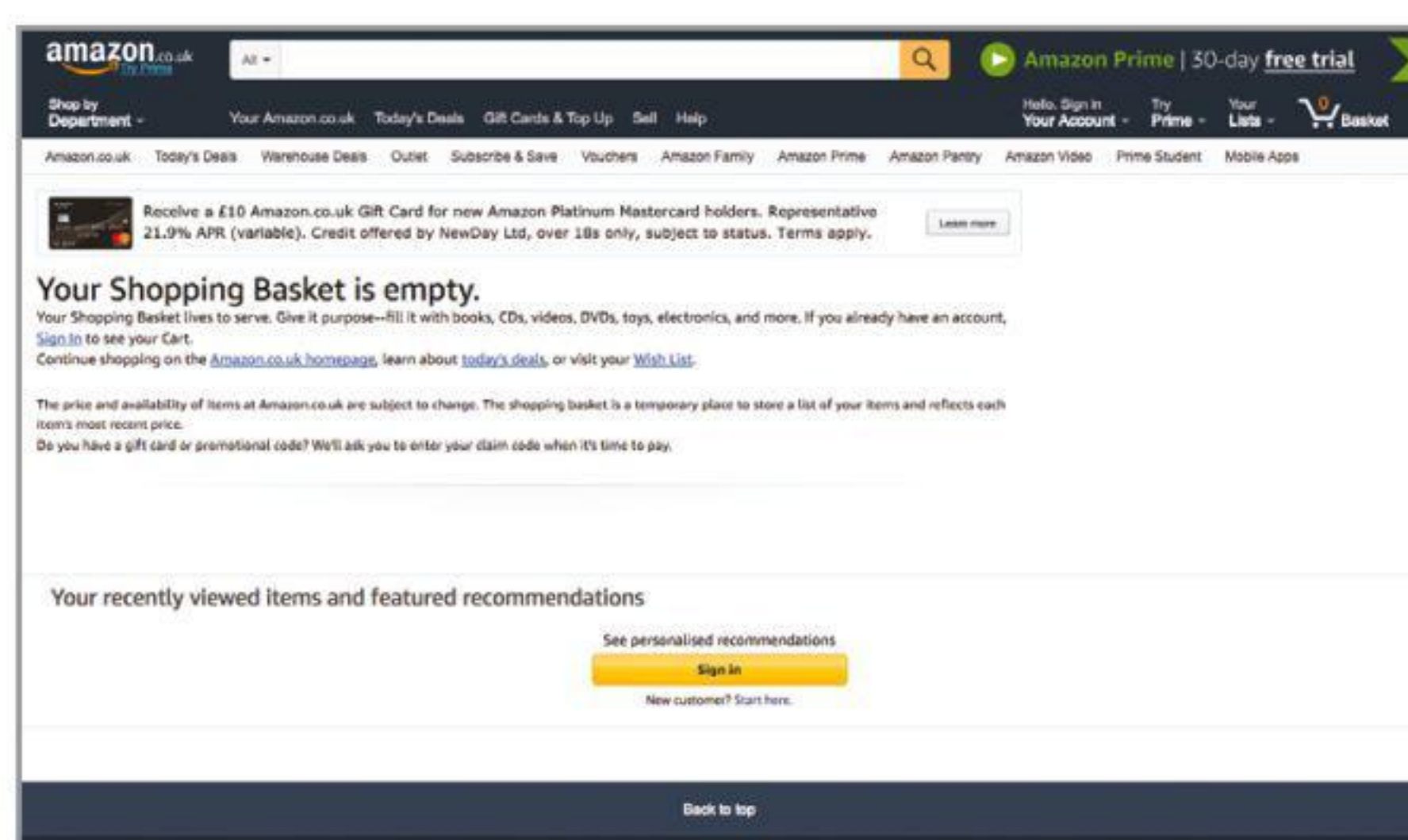
should look. The language specifies the layout and style of a site, giving information about the fonts, colour, typeface, border, alignment, width, height and much more.

## Domain

A website domain refers to the name of the site. For example imagine-publishing is the domain for the publisher of this bookazine. The .co.uk suffix is the domain's extension.

## Dots per inch

DPI refers to the resolution of an image. Typically an image for the web will need to be 72dpi. This is low when compared to print. The images in this bookazine, for example, are 300dpi.



Shopping carts are key features of eCommerce websites and will be identifiable to anyone who has bought items online

## eCommerce

Sites which allow the buying and selling of items online are examples of eCommerce.

## Embed code

Many sites such as YouTube, Facebook, Twitter and so on allow you to feed their content into your own site. This is done via embed code, which

can be copied and pasted into the relevant area of your own page code. The site will then pull in content, be it a video, tweets, images and more.

## Favicon

The 16x16 pixel icon which appears next to the address bar in the browser to identify the site.

## Focal point

The area where the eye is naturally drawn is called the focal point, so you need to make sure that if something is catching the attention more than anything else, that it is the part you wish to draw attention to. A focal point can be anything, but you want it to stand out.

## Font family

Fonts refer to the characters that make up the words on your webpage. A font family is a group of typefaces which look similar, for example Arial and Arial Black, Arial MT Std and so on.

## Font weight

The thickness or thinness of a font.

## Form

Rather than just have a link to an email address (`<a href="mailto:youremail@email.com">email</a>`), you can use a form. They are great for interactivity and for allowing people to fill in details directly on the page. You can code them yourself or use third-party software to generate a form which can then be embedded.

## GIF

An image file which refers to graphic interchange format. GIFs can also be animated. In that case a series of images (or maybe just two) is created and it gives an illusion of movement.

## Hosting

A website has to be stored on a computer. This is referred to as a server. The server has to be connected to the internet. Servers are owned by host companies, hence hosting is the act of providing the service.

## HTML

Hypertext markup language enables you to create webpages. It is an adaptable language that is used to provide website content and can incorporate elements of design. HTML5 is the latest iteration and it adds new syntactical features including `<video>` and `<audio>`.

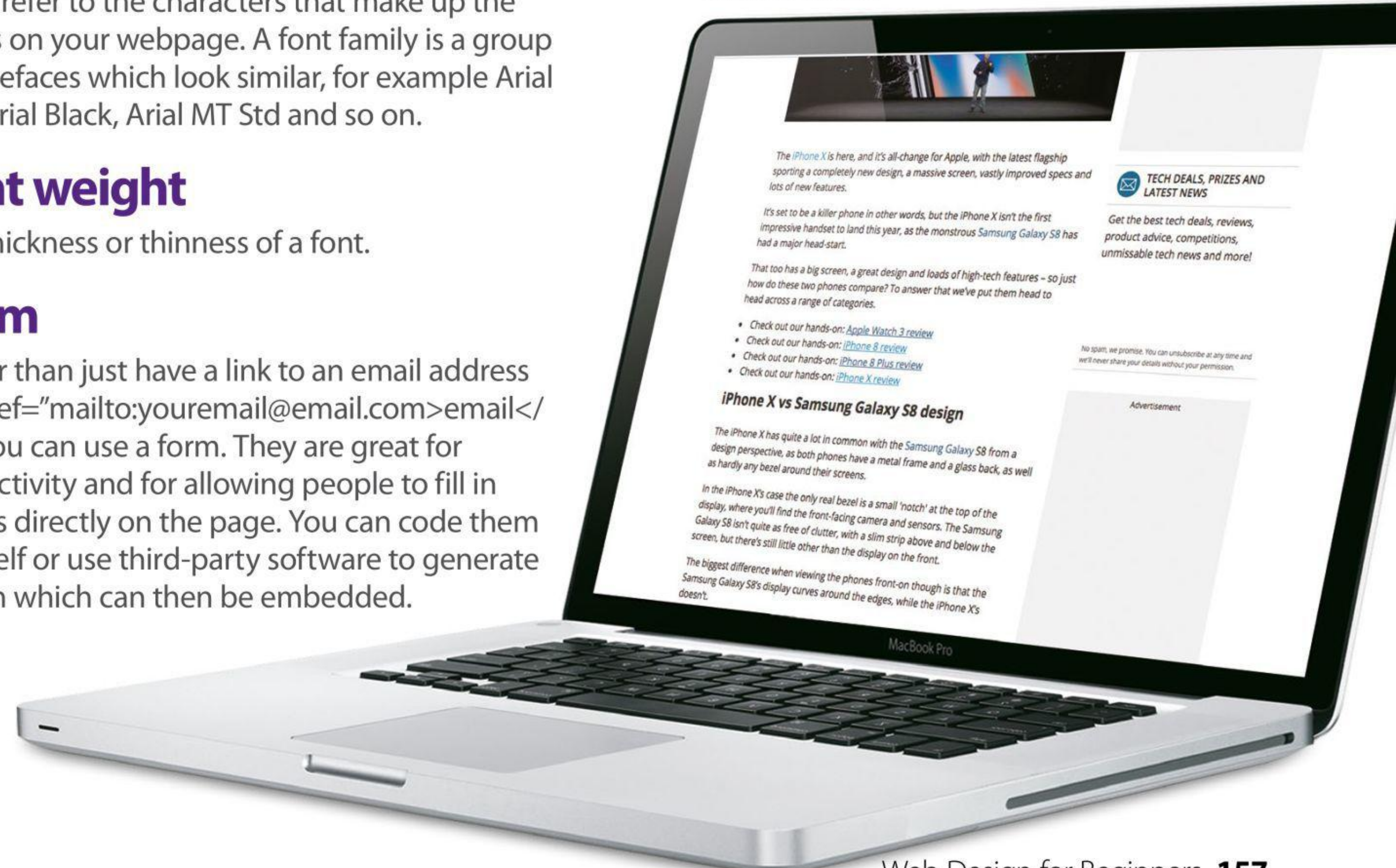
## HTTP

Hypertext transfer protocol is most often used as part of a URL. It sets out the rules of exchange on the web between the server and browser. HTTP does this over a secure and encrypted connection and it is used when sensitive information is being sent online.

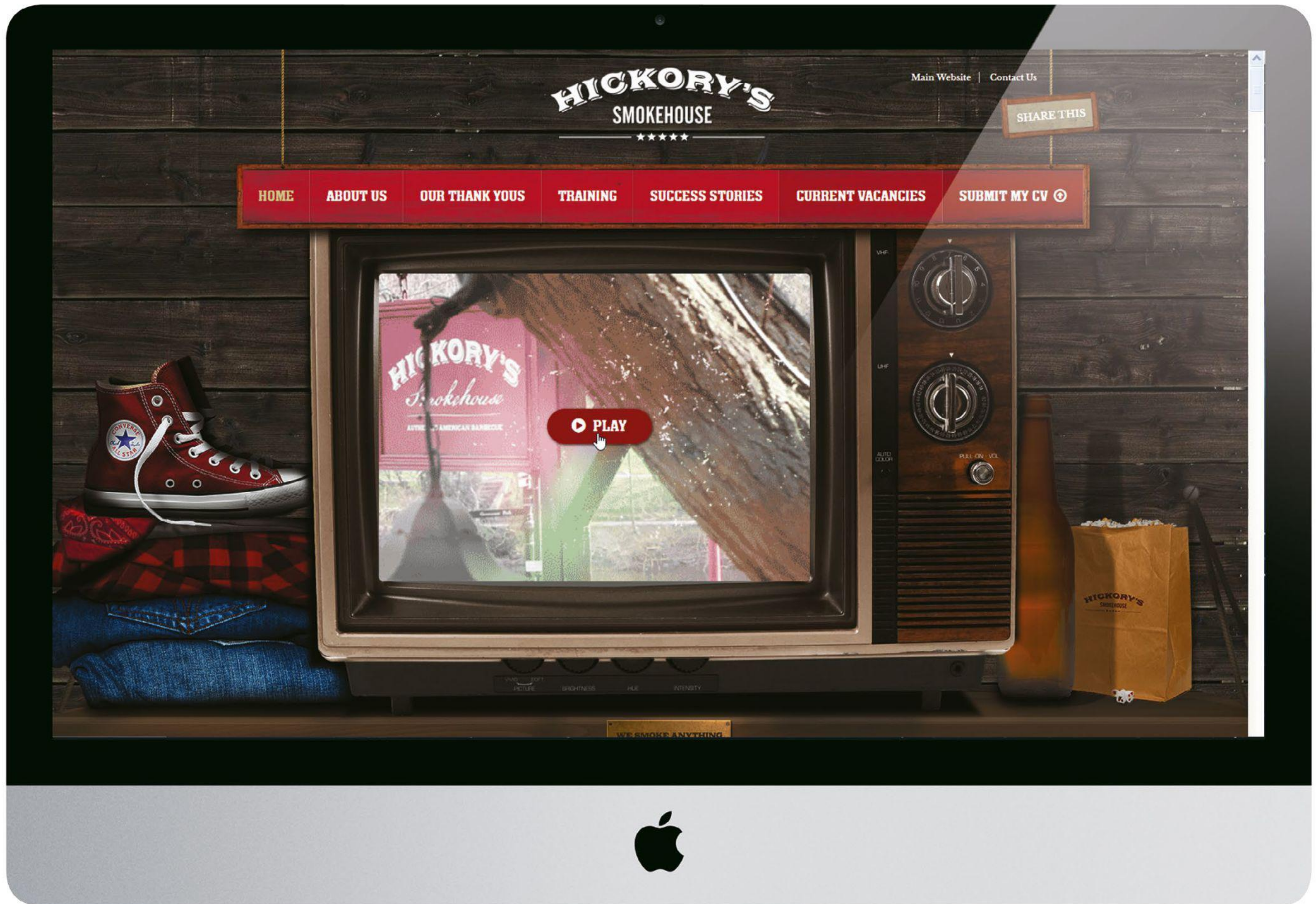
## Hyperlink

Where text or an image can be clicked so that the user is sent to another page or website, this is referred to as a hyperlink. When hyperlinks are carried within text, they will be shown in a different colour or underlined. The cursor will also change when a hyperlink is available on a section of your webpage.

*Hyperlinks are familiar to web users. Often coloured or underlined, they point you to other areas of the website or internet*



# Glossary



## iframe

An iframe is used when you want to display more than one webpage in a single page. You could, therefore, have two webpages. For example, there could be a menu where clicking on a hyperlink will open a new webpage in a frame on the same page while retaining the menu area.

## Image map

Coded in XHTML, an image map is a picture that is broken down into different clickable areas, each of which send the user to different URLs.

## JPEG

A file format which reduces an image's file size, therefore making pictures quicker to download when they are placed within a webpage.

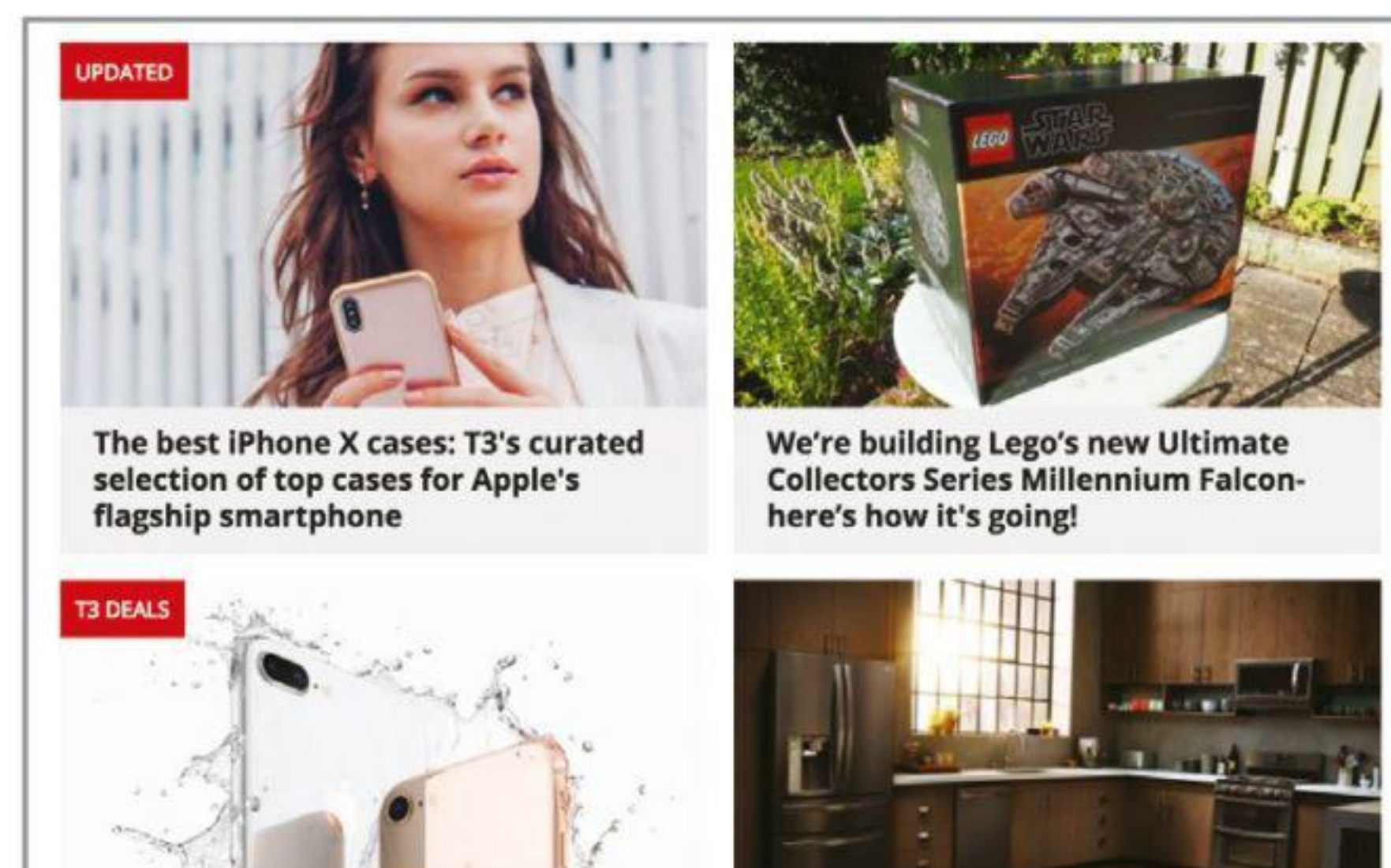
## Keywords

Search engines are important because they point people to your website. Search engine optimisation is therefore crucial and keywords – the terms that people will use to search for your page or content – are one element of that. A keyword used prominently on a page will ensure better ranking.



## Liquid layout

A website with a liquid layout will alter depending on the physical size of the browser window. So if someone minimises their browser, the content will optimise to fit the window, whereas a non-liquid layout will hide some of the content. The containers on the page have their widths defined in percentage terms.



*This is an example of a liquid layout where the content will change to fit within the window. A non-liquid layout will not readjust*

## Metadata

Within the <head> of an HTML document, it is possible to write metatags. These are hidden from view so visitors cannot see them, but search engines will find and make use of such metadata.

## Navigation

Refers to the way people move around your webpages. Your navigation needs to be as simple as possible so that people do not become lost. Navigation is usually in the form of menus but it can also be via links on a page.

## Non-breaking space

In HTML, this refers to a white-space character. Use it when a single white-space is needed such as when indenting a line. It is also referred to by the indicator &nbsp;.

## Outbound link

A hyperlink which sends people to another website. Also called an external link.

## PDF

A portable document format file provides information in a layout that is fixed. PDFs can be



used for a variety of purposes, such as making a printed leaflet available to download from your site or a timetable of events that's too intricate to be placed on a webpage.

## Plug-in

Some web content requires a plug-in – an extra piece of software that expands the possibilities of an existing app. For a browser, for instance, you could have a Flash plug-in to be able to play Flash video. Plug-ins are also available for content management systems. An example of this is an eCommerce plug-in for WordPress to allow users to set up an online store and accept payments.

## Podcast

Web design is not just about the visual. You should be aiming for all sorts of content, including audio. A podcast – which can also be video – is a recording to which visitors can subscribe or download.

## Responsive Design

Responsive Design has become a buzzword for websites. It basically means creating a website that can be used efficiently across all platforms. It ensures consistent user experience whether on a PC, mobile device or tablet, irrespective of your screen and resolution size. It's soon becoming mandatory for web designers to adhere to responsive design as their website can be viewed on any device.

## RSS

Really simple syndication not only allows websites to pull in content feeds from other sites, but it also allows web managers to give visitors the option of subscribing to their feeds. A feed will typically show you a website's headlines and sometimes the first paragraph of text.

## Script

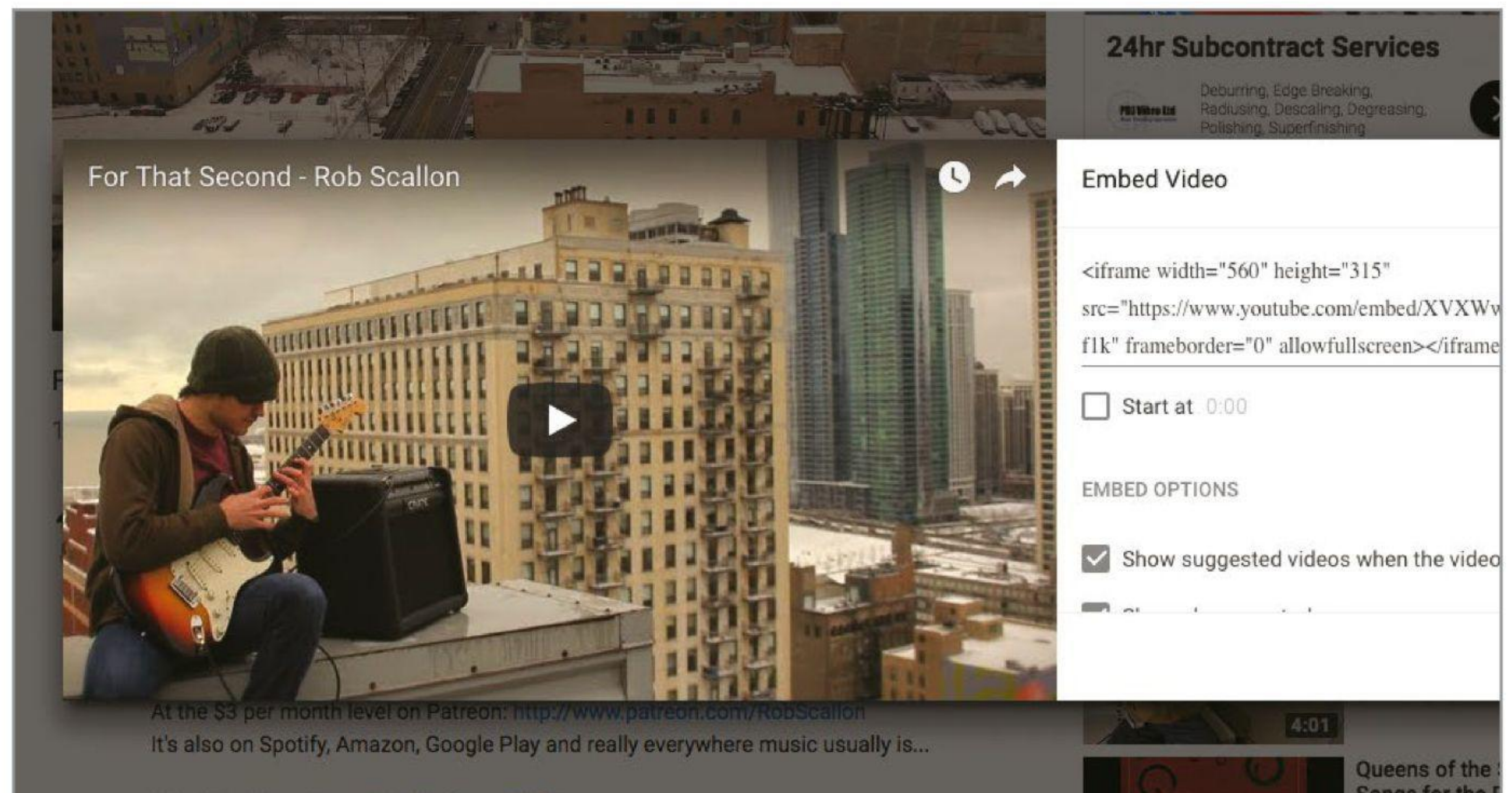
JavaScript is an example of a script, a code that is placed within an HTML page that produces interactive and dynamic elements. This could be a drop-down menu or pop-ups.

## SEO

Search engine optimisation is the act of enhancing your website so that it is picked up by the likes of Google and Bing. It's a complicated area but metadata, inbound and outbound links and allowing RSS feeds to encourage your content to be used within other sites helps.

## Shopping cart

Online shops do not usually require you to buy items individually. Most often you place them in a basket or cart and then check out, paying for them all at the same time.



Many websites make it simple to add dynamic content via embed code such as this on the YouTube site

## Sitemap

If you have lots of content, a sitemap can be used to make sense of it. It is a list of all of the items within your site, organised by their hierarchy or importance, depending on the type of site.

## Social media

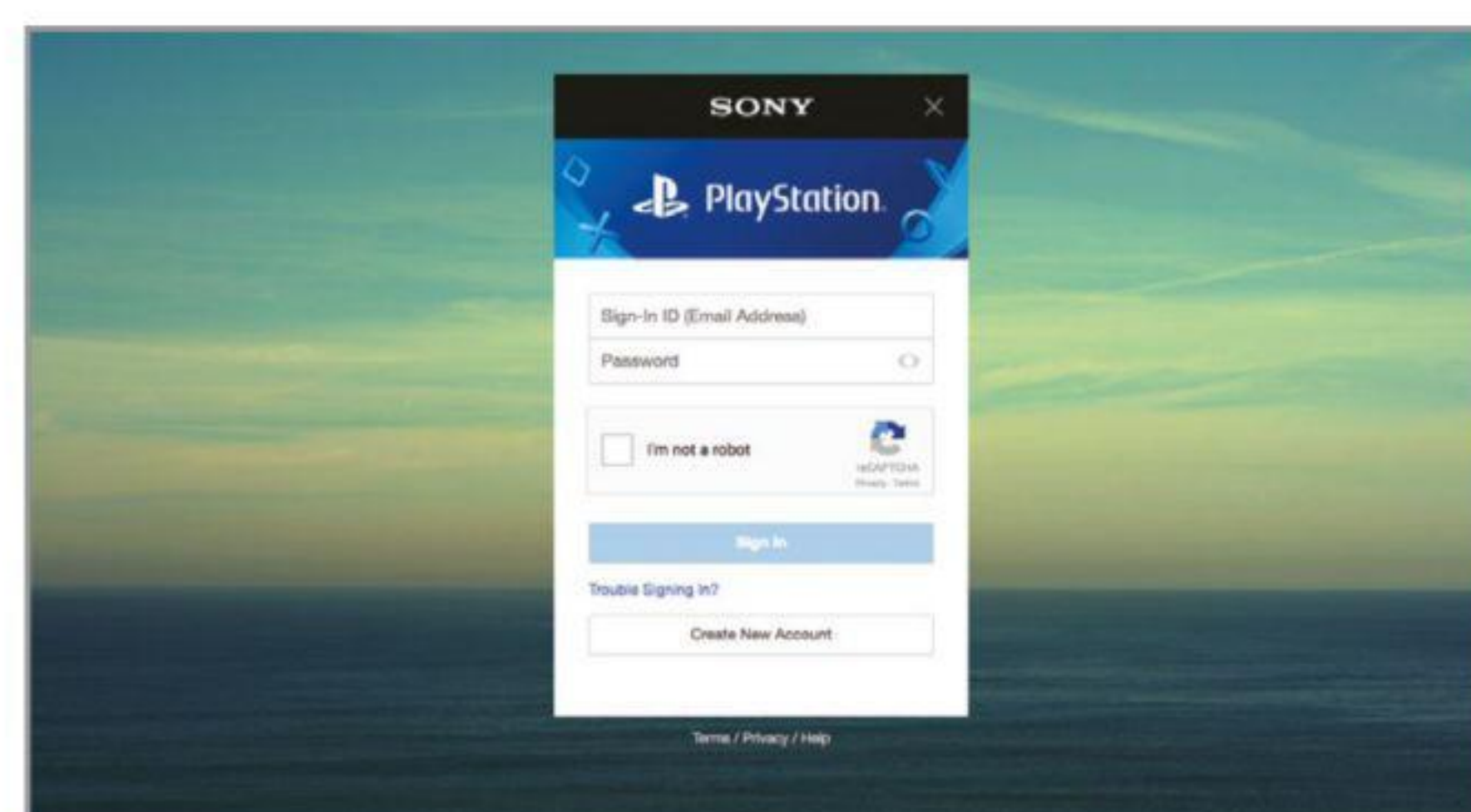
Most people are a dab hand with social media nowadays. From Facebook to Blogger, Twitter to YouTube, there is a rich tapestry of content provided by users. These elements can be inserted into a webpage. They help to drive people to your site too. The developer areas of such sites often carry embed code and individual elements are also embeddable.

## Template

Commonly associated with content management systems, templates (and themes) give websites a standardised and consistent look and feel, which helps to ensure they appear more professional.

## Text editor

A fancy web design package is not needed if you know HTML. All you need is a simple text editor program such as Notepad on the PC, saving the file with the extension .html.



Having a captcha on a web form bars it from being overrun by automated bots that scour the web and randomly fill them in

## Traffic

When people come to your site for whatever reason, they will download data. The amount they transfer is called traffic, although this term is also used to describe the number of people visiting a site.

## WYSIWYG

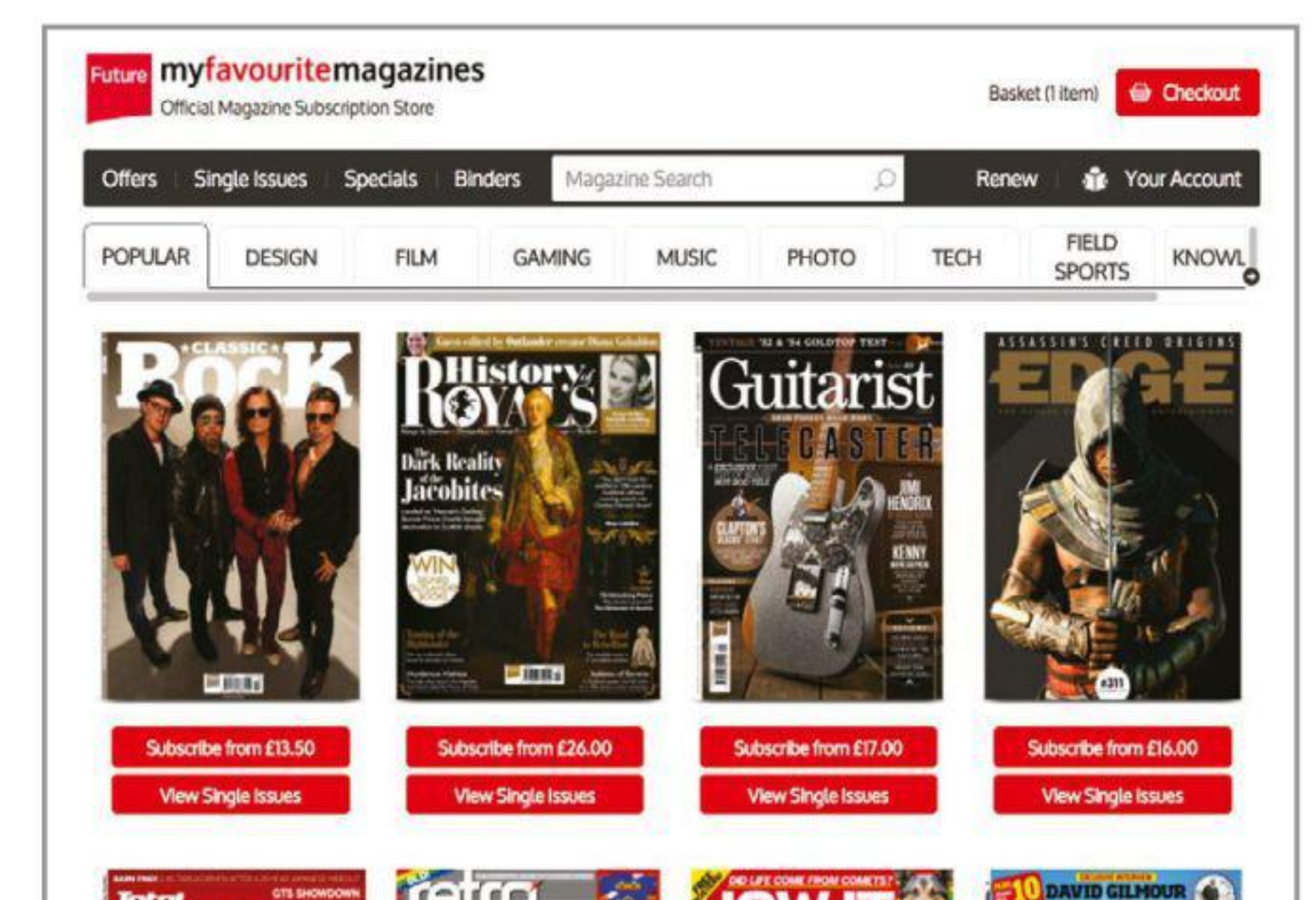
'What you see is what you get' refers to a program that will publish a webpage on the internet that appears exactly as it did within the app. One good example of this is Apple's intuitive and easy-to-use iWeb. It basically means that you will see a webpage exactly as you published it. This is a good starting point for beginners.

## XHTML

Standing for extensible hypertext markup language, it refers to HTML which complies with XML rules.

## XML

Extensible markup language is a markup language used to write other markup languages.



The top of a webpage – the part that shows – is referred to as above the fold. You can scroll to see the rest

# SUBSCRIBE AND SAVE UP TO 74%

Every issue of your subscription, delivered direct to your door. Print & digital editions available.

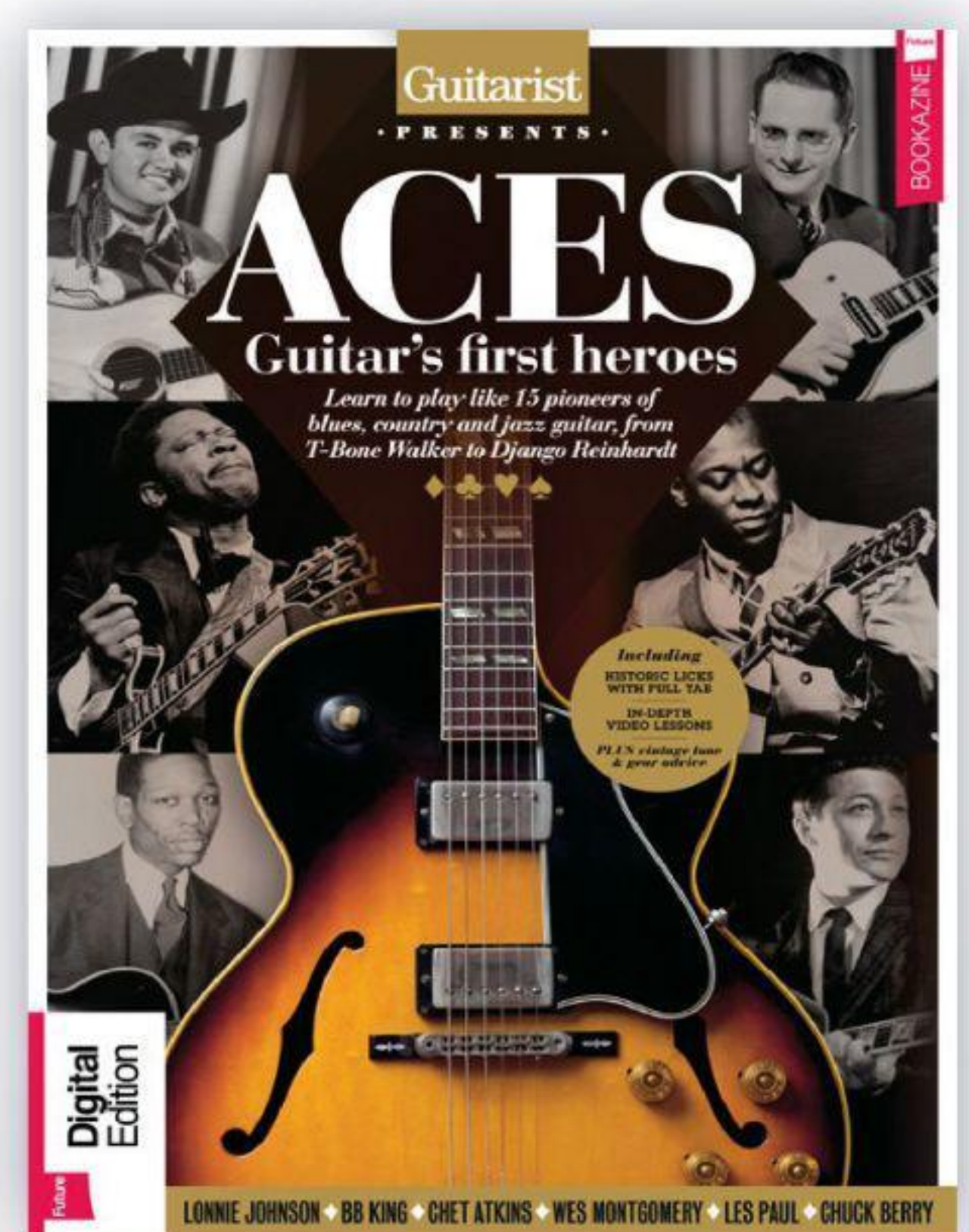
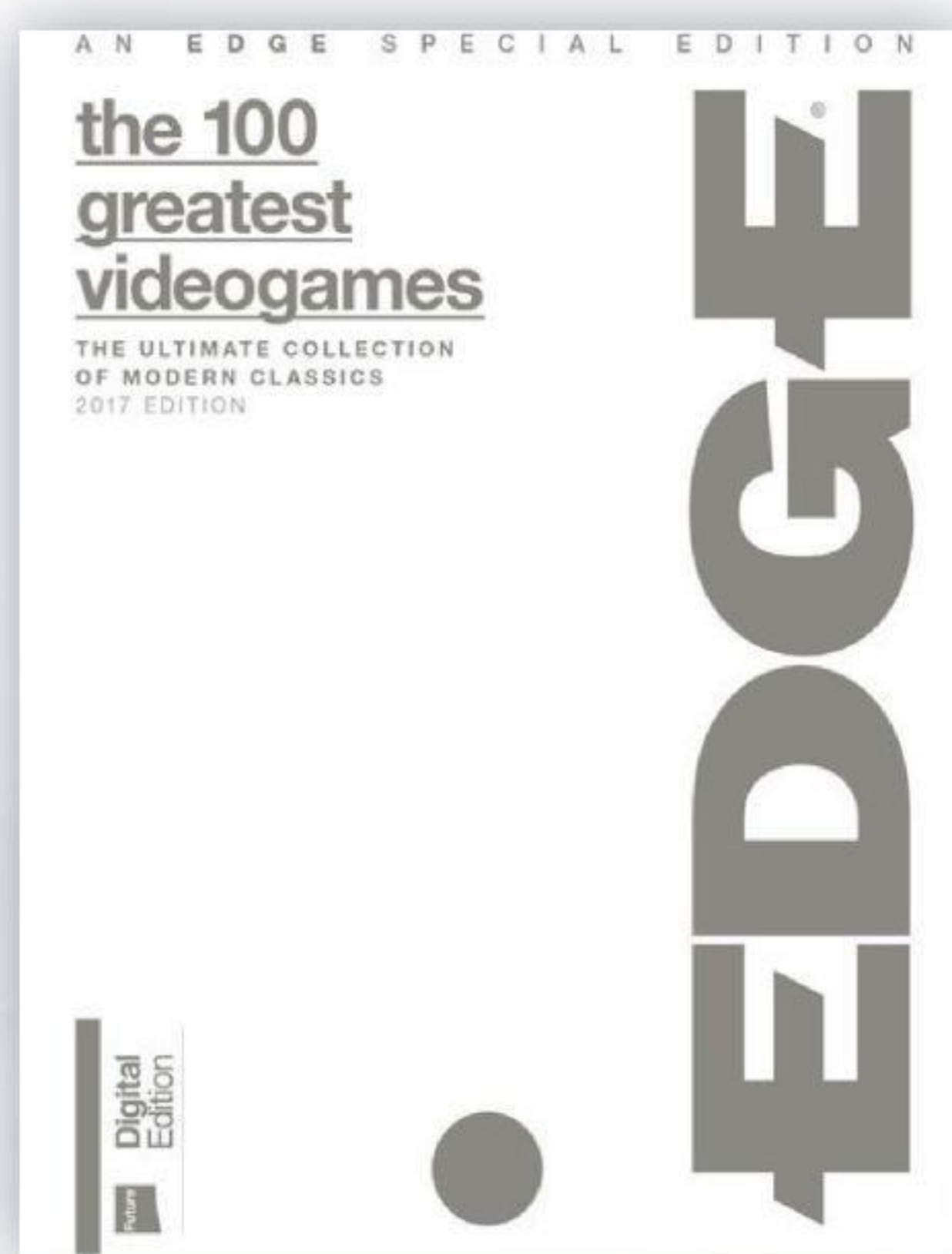


## NEAT STORAGE

Store up to 13 issues of your magazine subscription in a coordinating slip case or ring binder.

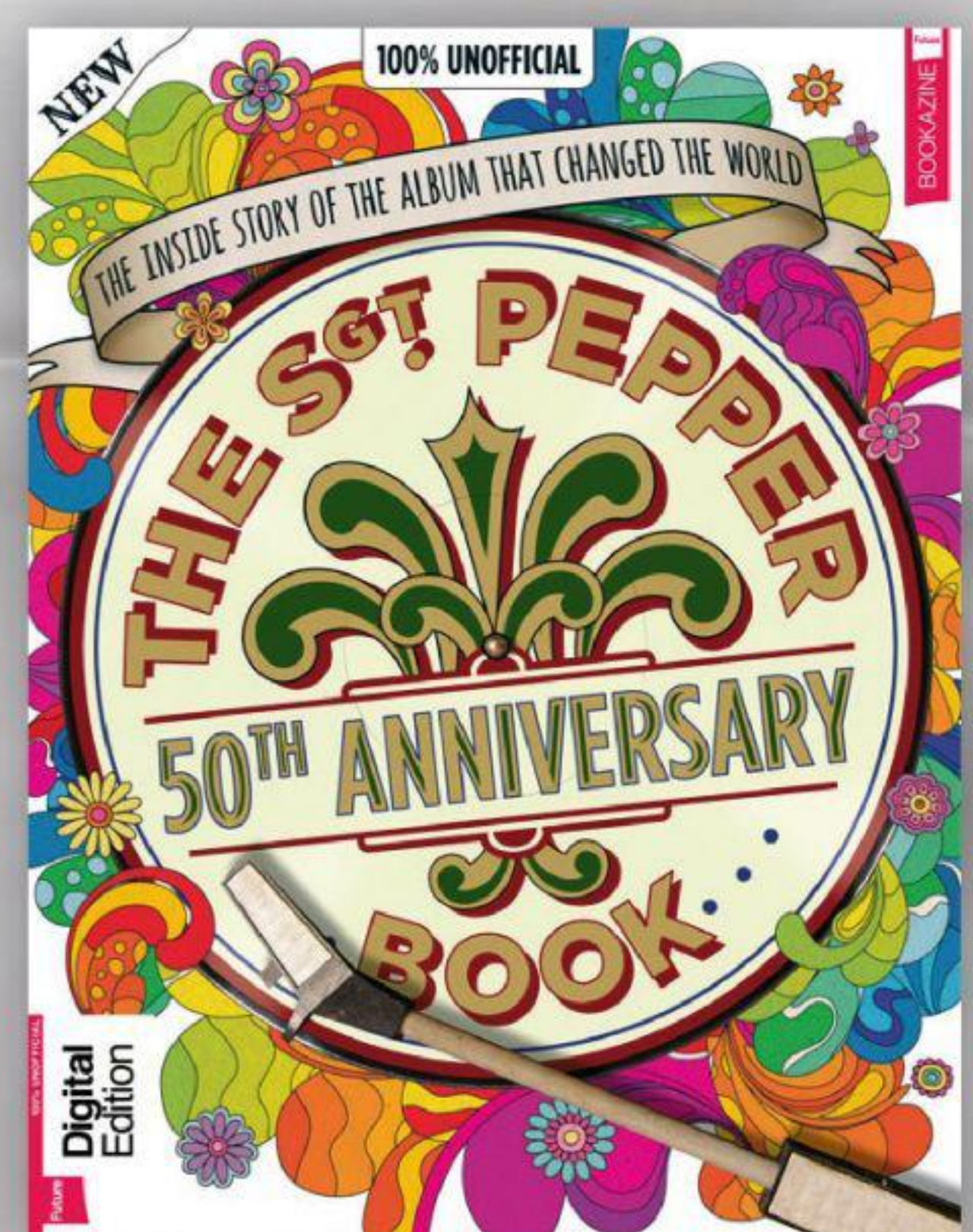
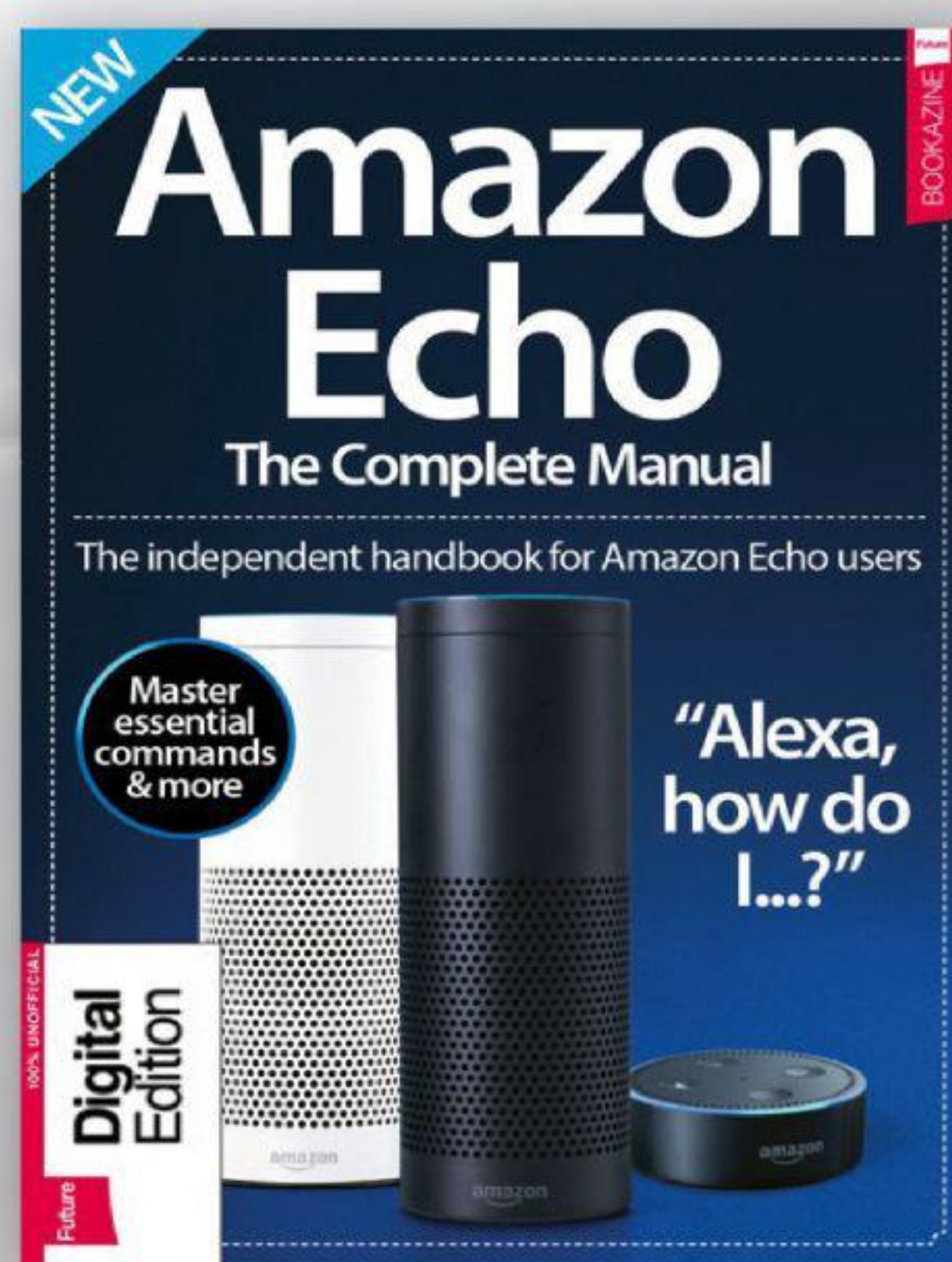
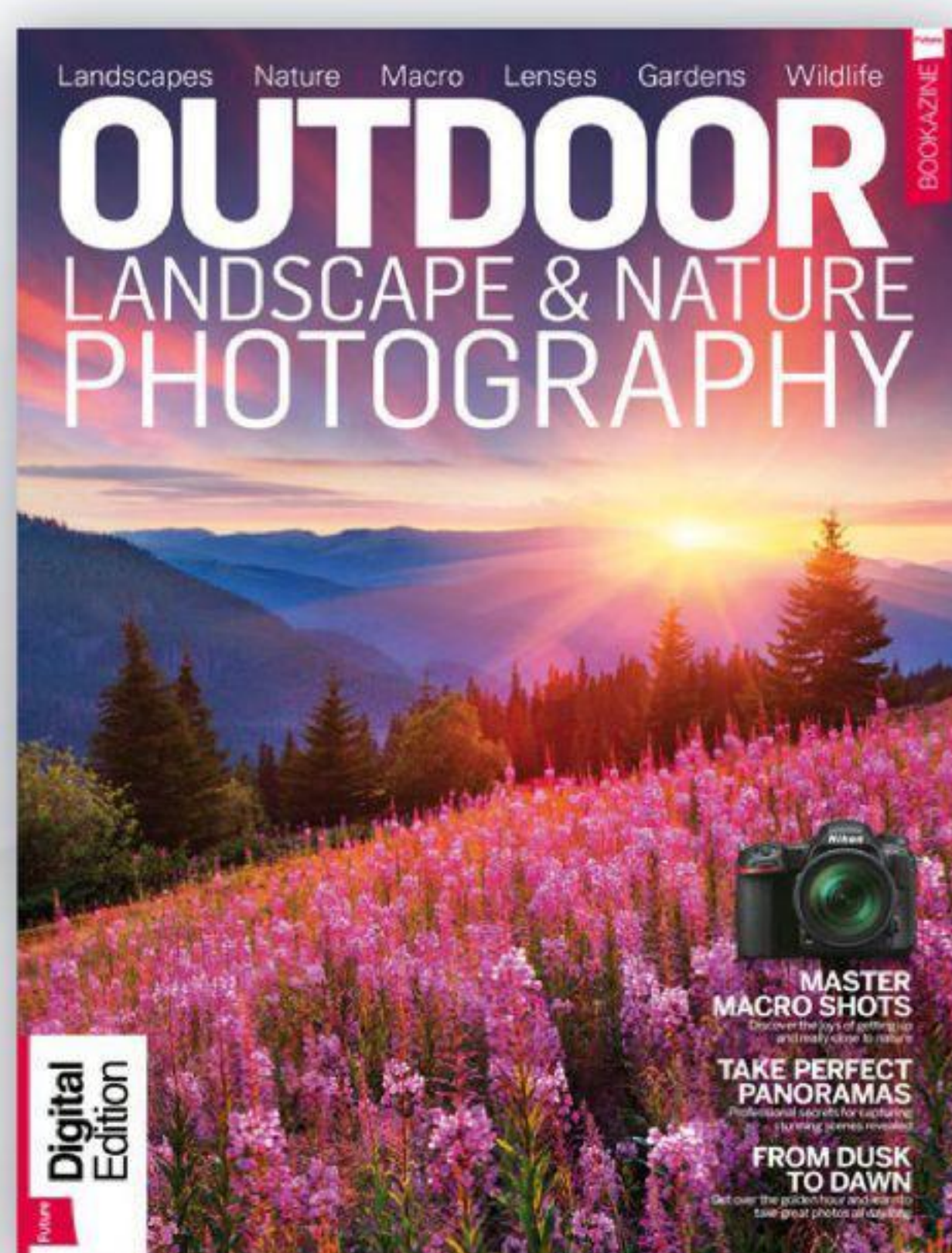


[myfavouritemagazines.co.uk](http://myfavouritemagazines.co.uk)



# DISCOVER MORE GREAT GUIDES & SPECIALS

From photography to music and technology to field sports, there's something for everyone.



Our magazines and binders make perfect gifts too. And don't worry if you're not quite sure which titles they'll enjoy the most because we have a great choice of gift vouchers available to buy.



✓ No hidden costs    🚚 Shipping included in all prices    🌐 We deliver to over 100 countries    🔒 Secure online payment

**FUTURE** myfavouritemagazines  
Official Magazine Subscription Store

myfavouritemagazines.co.uk

# HOW TO USE FileSilo

EVERYTHING YOU NEED TO KNOW ABOUT ACCESSING YOUR NEW DIGITAL REPOSITORY

To access FileSilo, please visit [www.filesilo.co.uk/bks-1714](http://www.filesilo.co.uk/bks-1714)

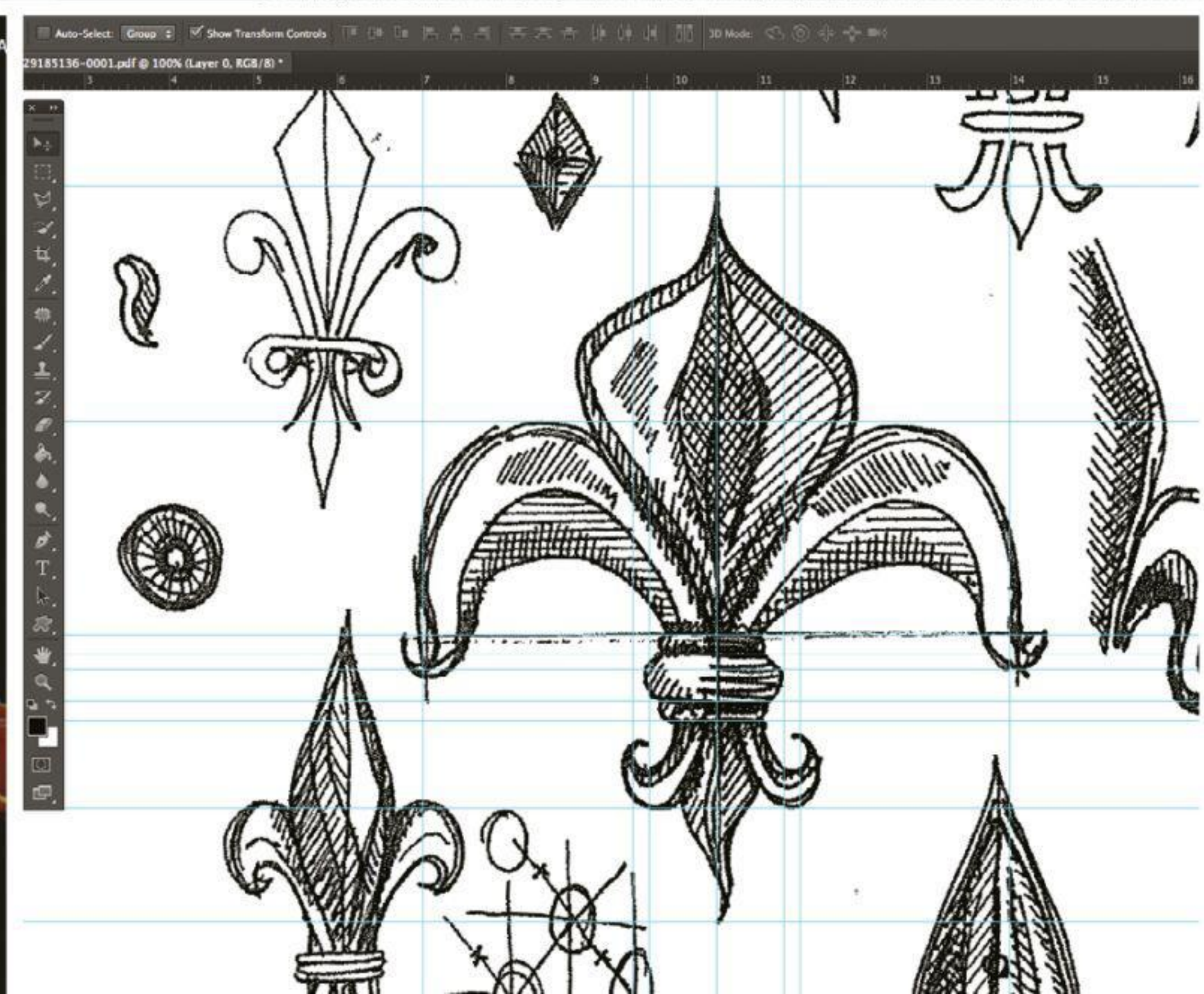
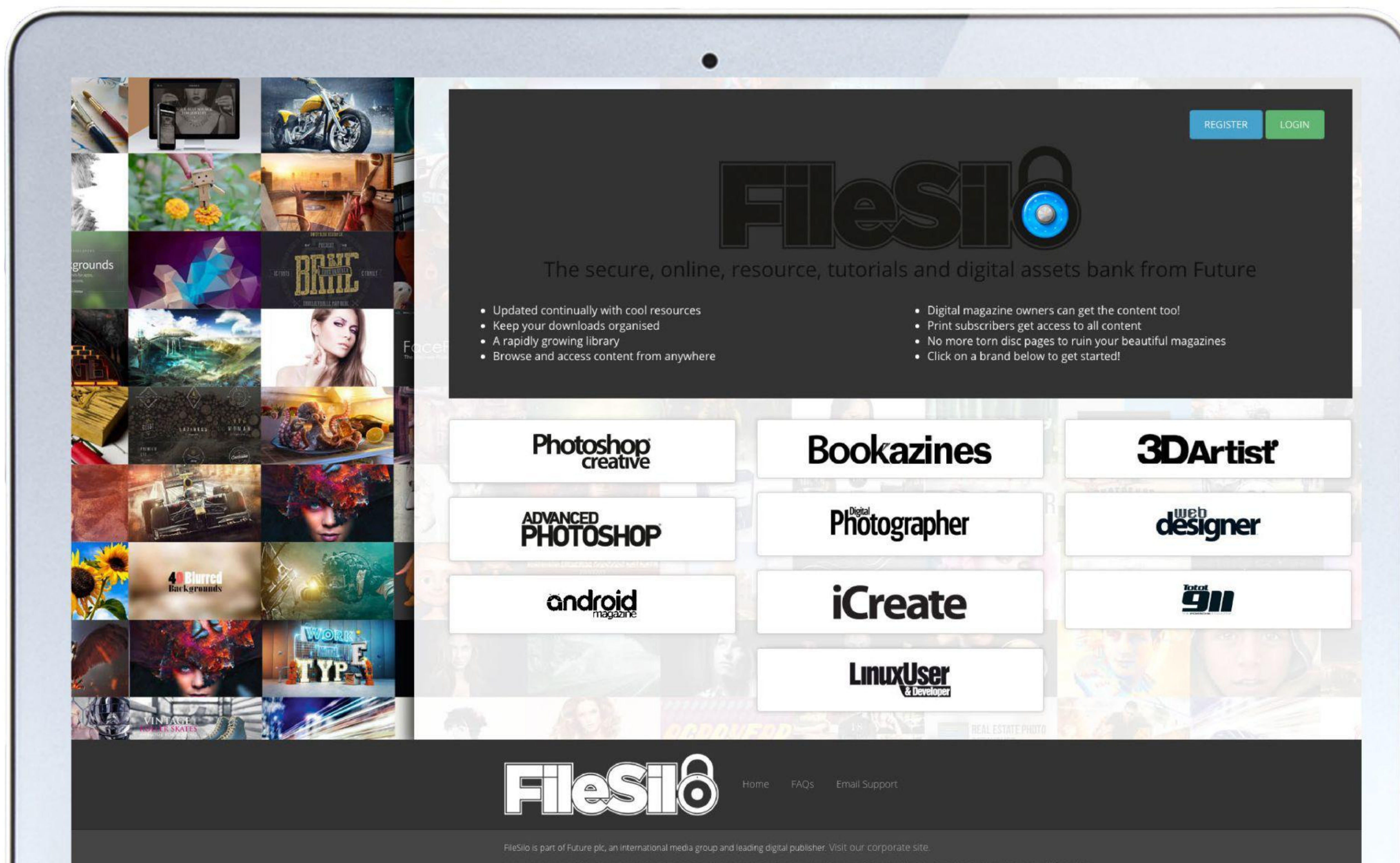
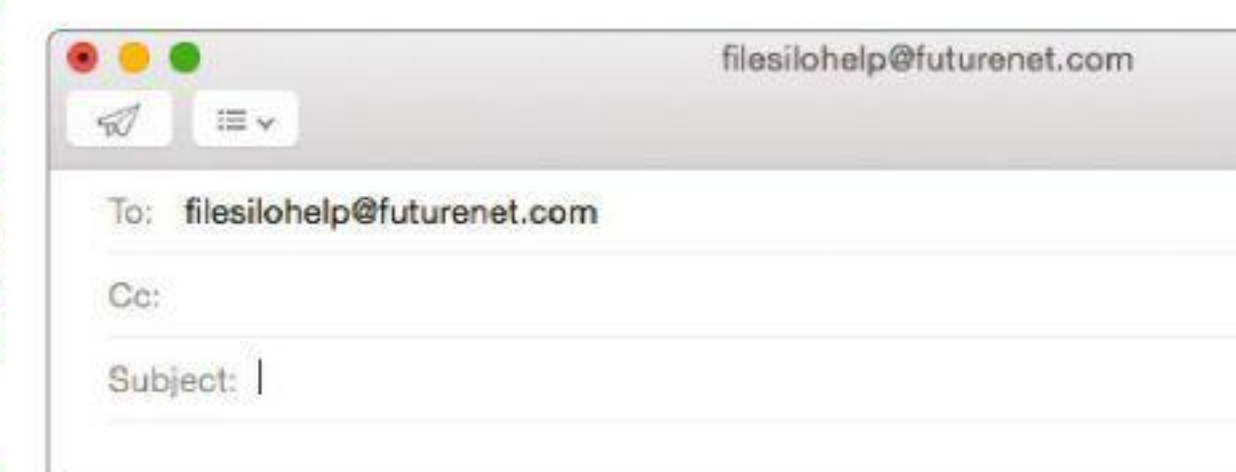
**01** Follow the on-screen instructions to create an account with our secure FileSilo system, log in and unlock the bookazine by answering a simple question about it. You can then access the content for free at any time, and download it to your desktop.



**02** Once you have logged in, you are free to explore the wealth of content available on FileSilo, from great video tutorials and exclusive online guides to superb downloadable resources. And the more bookazines you purchase, the more your instantly accessible collection of digital content will grow.

**03** You can access FileSilo on any desktop, tablet or smartphone device using any popular browser (such as Safari, Firefox or Google Chrome). However, we recommend that you use a desktop to download content, as you may not be able to download files to your phone or tablet.

**04** If you have any problems with accessing content on FileSilo, or with the registration process, take a look at the FAQs online or email [filesilohelp@futurenet.com](mailto:filesilohelp@futurenet.com).







# Web Design for Beginners

Everything you need to know to get started with web design

### Build a site

## An introduction to CSS

If HTML provides the structure for a website, CSS provides the form. This is the language that will make your site stand out.

Creating a professional-looking website is the goal of every web designer. While HTML provides the structure, CSS is what makes the site look good. It's the language that controls the layout, colors, and fonts of your website. This article provides a comprehensive introduction to CSS, covering everything from basic selectors to advanced techniques like the cascade and inheritance.

**Build a site**  
Learn how to code with HTML and CSS

### WordPress

## What's new in WordPress 5.0?

Content editing with WordPress is getting a complete facelift. See what's changed in the new version of the world's most popular CMS

WordPress 5.0 is a major update for the world's most popular CMS. It introduces a new block editor, Gutenberg, which allows users to create content using a visual interface. Other new features include a new theme editor, a new site editor, and a new user interface. This article provides a detailed overview of all the new features and how to use them.

### 5 REASONS TO USE THE GUTENBERG EDITOR

1. EASIER TO USE
2. CREATE SOMETHING NEW
3. PROMOTE DEVELOPER AND USER SYNERGY
4. WYSIWYG IS REALLY WYSIWYG
5. STEP INTO THE FUTURE

Is WordPress 5.0 better than its predecessors?

**Work with WordPress**  
Get online with the popular hosting platform

### Photoshop & Graphics

## NEW WAYS TO WORK WITH PHOTOSHOP

War has long been waged over designing in Photoshop versus designing in the browser. But, maybe it's time we all just got along.

The development of HTML5 and CSS3 has opened up new possibilities for web designers. This article explores how to use Photoshop to create web-ready graphics and how to integrate them into a website. It covers topics like creating responsive designs, using layers and masks, and optimizing images for the web.

**Photoshop & Graphics**  
Use creative effects to enhance your site

### Customise your site

## THE PERCEPTION OF COLOUR

HOW DO TONE, TONE AND SHADE INFLUENCE THE USER EXPERIENCE? FIND OUT HOW TO USE THE BEST COLOUR PALETTE IN YOUR SITE DESIGNS TO ENGAGE YOUR AUDIENCE

Color is a powerful tool for web designers. It can influence the user's mood, behavior, and perception. This article explores the psychology of color and how to use it effectively in web design. It includes a color wheel, a color palette, and tips for choosing colors that work well together.

### Why colour matters

Color defines the personality of a design. It's more powerful than shapes, symbols and words. It's totally subjective, so know your audience. Be single-minded, own a simple color palette and be remembered.

### How colour works on the web

In the golden age of the web that we're experiencing now, we've ignored for a long time the power of color. Color is a powerful tool for web designers. It can influence the user's mood, behavior, and perception. This article explores the psychology of color and how to use it effectively in web design.

**Customise your site**  
Tweak your website and add brilliant features

## Free assets

- Fonts, wallpapers and HTML templates
- Over 90 minutes of video tuition
- Files to help you follow the tutorials

