# 4 Layout and Design

*Your layout needs to communicate order and consistency, so the design looks professional and is easy to use. The fonts, colors, textures and images you choose will combine to create the look and feel of your website.*

# The Role of Your Design

Now that you've spent some time planning and creating content, it's time to look at the layout and design of your web pages. Your website design needs to achieve the following goals:

- **Encourage engagement.** Your website design needs to inspire visitors to look around your site and spend some time there. It's easy to focus on this aspect of the design, but don't get carried away. Keep the purpose of your site in mind throughout its development, otherwise you might end up with something that is beautiful, but otherwise useless. Different styles will resonate with different audiences, which is why it's important to understand your target visitors first.

- **Communicate order.** Whether you have five pages or five hundred, your website design needs to make it easy for people to understand which pages are more important, and which parts of each page are most important.

- **Define the boundaries of the website.** Because people can move between websites so easily, it's important that they understand when this has happened. Using a consistent design across your web pages helps to reassure visitors that they are still on your website. You can create different layouts for different page types (your homepage and product pages are bound to look different, for example), but these should share the same design elements. Avoid using radically different color schemes or graphic styles on different pages, otherwise visitors might think they've gone to a different website. Anything that makes the visitor think about using your website, instead of just getting on with doing so, is a barrier to your site achieving its goals.

- **Feel easy-to-use.** Your site navigation needs to feel intuitive to visitors, so that they can easily find things. They want to spend time using your content, not trying to figure out how to find it. Navigation is so important that Chapter 5 is dedicated to it.

- **Inspire confidence.** If you have a site that visitors consider to be professionally designed, they're more likely to come back or spend money with you. People will (sometimes subconsciously) judge the quality of your expertise or services based on how professional your website looks.

# Fixed or Flexible?

One of the challenges of website design is that you don't know how large the user's web browser window will be. Screen sizes vary greatly, and people often resize their browser window so that they can see more than one application on screen, side by side.

The website design is typically contained in a box on the screen (a container box). Sometimes this box has no border, so it's invisible. But how the size of that box is defined governs what happens to the whole web page, at different screen and window sizes. There are several common strategies for dealing with the uncertainty of different screen and window sizes.

## Fixed width design

Fixed width is perhaps the most popular solution to the challenge of different screen sizes. In a fixed width design, the container box has a width that is always the same size. This gives the designer the most control over the look of the final web page, so it makes it easier to create pages that consistently look good.

It takes control away from users, though. If they shrink the browser window, they might have to scroll horizontally as well as vertically to see everything, which is annoying. Users with big screens see the website at a smaller size than their screen could display, but the content remains easy to navigate and read.

On a smaller screen, there is less white space at the sides, and less of the page's height is visible at once. But the core design is preserved, and the web designer remains in control. The Guardian (www.guardian.co.uk) has built one of the many sites that use this strategy.



Above: The Guardian website on a narrow monitor.

Left: The Guardian website on a wide monitor.

## Flexible design

In a flexible design, the website design stretches or shrinks to the size of the browser window.

This strategy reduces the amount of scrolling users have to do, because the content can make optimal use of the screen space available. You can combine a flexible design with a maximum width, so that the site scales down for smaller screens and windows, but doesn't become too wide to read comfortably on large monitors. Flexible design is hard to do well, because everybody sees a different amount of content on screen depending on the size of their monitor and/or browser window.

The Broads Authority (www.broads-authority.gov.uk) uses a flexible design with a maximum width. The content columns expand to use the available space, but the maximum width stops them from becoming too wide.

## Variable content design

Some sites show additional content to users who have larger screens. This needs to be non-essential bonus content, because not everyone will see it. Amazon is a good example of this. Its main books page, for example, expands horizontally to show more books when viewed on a wider screen.

# Using the Grid

Web designers often use a grid to help them position content on screen, within the container box.

Grids are routinely used for designing print products. Newspapers, for example, use column-based layouts. Sometimes, a headline or a picture might span two, three or four columns. But it rarely spans two and a half columns, because that tends to look messy. Whether you're working in print or online, if you can line up blocks of content, it makes your design look tidier.

Take a look at the website for the Drupal content management system (www.drupal.org). The grey stripes have been overlaid to show the 12 column grid that is the foundation of this design.

The top blue section is divided into two halves. The first white section contains three boxes, all aligned to the same grid. Some of the content within these boxes is centered, but most of it sits tightly against the edge of the column. Towards the bottom of the page, the design is two-column again, and aligned to the same grid. Notice how well all the content on the left is aligned, from the logo down to the footer links.

Not everything has to sit rigidly on the grid: you can break out of it for emphasis, and to create some pace in the design. But, if nothing lines up, a web page can look amateurish or chaotic.

# Tips for Good Alignment

To ensure your web page lines up well, follow these steps:

**1** Mark up your content correctly, using the right HTML tags, to identify a heading or a list item, for example. By default, HTML brings consistency, ensuring that all headlines and bullets line up. You'll learn more about HTML in Chapter 6.

**2** Take care when adding spacing using CSS (changing the padding and margin around an element). This can introduce inconsistencies that throw out the natural alignment that HTML gives you. You'll learn how to control spacing using CSS in Chapter 7.

**3** Be careful if you're using a visual editing system to build your web pages. They will often let you place content wherever you want on the page, but won't alert you if you're a few pixels out in lining things up. That can lead to designs that look sloppy.

**4** It's easier to create a strong alignment, and the impression of good design that goes with it, if you align content with the left or right edge of the page or content box. If you center content, the alignment is harder to see. Centered paragraphs are also harder to read, because the start of each line is harder to find. Newcomers often want to center everything, but you should limit your use of center alignment to a few carefully selected parts of your design.

Above: The rule of thirds says that designs based on dividing things into thirds look harmonious. The website of singer and songwriter Lily Allen (www.lilyallenmusic. com) uses three equally big columns on the homepage, and a two-thirds / one-third layout on content pages.

Right: The inconsistent alignment and center-aligned text looks messy.

Far right: The pictures line up with each other, the text above and the company name. The left-aligned main text looks cleaner. The footer is right-aligned with the right-margin of the main content box. This is far from a complete web design, but it does show the difference good alignment makes.

# Thinking Above the Fold

As well as column based layouts, there's another idea the web has borrowed from the newspaper industry: the fold.

When broadsheet newspapers are laid out for sale, they're folded down the middle and only the top half can be seen. The bit that's on show is said to be "above the fold". Newspapers are designed to have their major headlines and photos in this top half of the page, so that people are drawn to them and pick up the paper. The newspaper's branding also appears prominently in this top half, so that people can recognise it immediately.

In web design, the term "above the fold" is used to refer to the first screenful of content. It's what people can see without having to scroll the page, so it is their first impression of your website. It's essential that your website's identity or branding, and its navigation, appears above the fold. By having multiple columns of text, you can also start several different stories above the fold and invite people to click to read more or scroll down the page to finish reading.

Of course, the fold doesn't appear at the same place for everyone. It varies depending on the screen resolution, browser used, and the number of browser toolbars in use. If you're assuming a minimum screen height of 768 pixels, a good place to think of the fold is being 575-590 pixels down the page. But remember that this is the minimum and that people will see lots of different sized screenfuls.

People don't always notice the scrollbar, so you need to provide a visual cue to encourage people to scroll down the page. An easy way to do this is to box some of the content, and stagger where the boxes end. People will understand that if they can't see the bottom border of the box, they haven't seen everything.

Far left: The user has no clue that this page continues below the fold (the red line).

Left: Boxing the left column tells the user the web page continues below the fold, prompting them to scroll.

# Organizing Information

Within each web page, you need to create a hierarchy of information. It needs to be easy for visitors to see what's most important on any given page, and easy for them to skim-read the page to find what they're looking for.

Think of it like a newspaper. The size of the headlines, and their position on the page, tells you a lot about the relative importance of different stories.

Here are some tips for organizing the content on your web page:

- Larger text looks more important than smaller text.

- Things higher up the page tend to be more important than things further down the page.

- Be consistent. If you have 20 different sizes of text, it will be difficult for people to gauge their relative importance. Use up to three different types of headings which are consistently formatted. Using the HTML <h1> to <h3> tags correctly will enforce consistency by default.

- Use bulleted lists and subheadings to structure your content. You can create them using HTML, so they're part of the language of navigating the web.

- You can use contrasting color or spacing around elements to call attention to them. Audiobook company Audible (www.audible.com), for example, could use a text link that says "continue" to bring people into its subscription process. But it uses a bright orange button with space around it, so that there's no mistaking the most important action on this page.

# Creating a Color Scheme

The typical computer can display millions of colors, so how do you choose a handful that work well? The good news is that there are lots of tools that encapsulate the important color design theories, and they're often free. Here's a suggested approach:

**1** Think of a starting color. You could take it from your company logo, your favorite color, or from the association of a color with a particular meaning or mood. Red spells danger or romance, green references nature, and blue communicates stability, for example. If you have an image that will be a prominent part of your design, you could take the color from that. The pipette tool in Photoshop can be used to grab a color from a photo, so you can find out its RGB color number.



**2** Open a color scheme tool. You can find one at www.colorschemedesigner.com, and Adobe has one called Kuler at http://kuler.adobe.com. You might have one built in to your web design software or image editing software too.





Above: The CoffeeCup HTML Editor includes a color scheme creator.

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Above: Contrast-A, by Das Plankton, offers much more in-depth analysis of contrast. It's free to use at http://www.dasplankton.de/ContrastA/ and can also be downloaded for free from the Adobe Marketplace.

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**Hot tip**

Don't be afraid to use black on white for large areas of text. It offers the best contrast, so it's easy to read. Most of the major websites (including search engines, news sites, shops, and social networks) use black text on a white background for their core content.

Right: The Color Contrast Checker helps you make sure your foreground and background colors make a legible combination.

**3** Choose your starting color. You usually do this by clicking it on a color wheel. Using Kuler, you can also type in a hex value of the color or its RGB value.

**4** Choose what type of color scheme you would like to create. You have several options here. A monochromatic scheme uses shades of one color. A complementary scheme uses two colors that are directly opposite each other on the color wheel. A triad uses three colors that are the same distance apart on the wheel. There's also a split complement triad, which uses one color, and the two colors beside its complement on the other side of the wheel. An analogous color scheme uses colors that are next to each other on the color wheel. Experiment to see what works well for you.

**5** Note the color numbers in the palette provided. You'll need to put them in your CSS code later.

**6** To make sure that your site is easy for everyone to read, it's important to make sure there is enough contrast between your foreground and background colors. Take a screengrab of your color combination (text on background) and then use an art package to make it grayscale, to see how legible it is. Alternatively, enter your colors into the Color Contrast Check at http://snook.ca/technical/colour_contrast/colour.html. It will tell you whether your colors comply with accessibility guidelines.

# Using Gradients

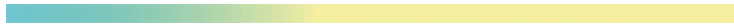Solid blocks of color can be overwhelming, if the color is a warm one like red or yellow, or might just look a bit flat if not. That's why websites often use a gradient instead, where one color fades into another. The easiest way to do this is to create a background image that represents part of the gradient, and then repeat it.

For example, this stripe of color:

is set as a repeating background on the website for web surfing game Wild Mood Swings (www.wildmoodswings.co.uk), like this:



You can use a gradient to soften any area of color, however big it is. You could apply a gradient image as the background to a button, to give it a 3D look that makes it stand out.

Fresh Books (www.freshbooks.com) uses a gradient on its navigation tab and its button, as well as in its blue background. Central Snowsports (www.centralsnowsports.com.au) uses gradients in its predominantly pink design, to create a sense of texture.

# Choosing Fonts

The style of text you use on your website has a huge impact on its design. Some fonts are playful, some are business-like; some speak of tradition, while others look futuristic. All this information is conveyed before somebody has even read what the text says.

You should use fonts that convey the personality of your site, where possible, although there are lots of technical limitations on this. When the web browser displays text, it uses the fonts on the visitor's PC. That means you're limited to a relatively small set of safe fonts if you want everyone to see the same thing.

However, you can give the browser a list of font options, so you could request a daring and relatively rare font and give the browser a safe substitute if that font isn't available. You could use a font that comes with Adobe Creative Suite or Microsoft Office, for people who have those packages, for example, and declare a basic font that comes with the operating system, as a back-up.

For small pieces of text, such as a headline, you could create a picture that shows the text and put that in your web page. That approach is always used for logos, and could also be used for small headlines, but it should be used selectively. It makes your web page slower to load, creates a lot of work for you, in building and editing the site, and makes it harder for search engines and users of assistive technology to understand your content. If you're using Flash, you can embed a font in your Flash file, too, so you can send the font over the internet with your content.

Harrington

Jokerman

Old English Text

Palace Script

Rage Italic

Ravie

ROSEWOOD STD

Snap ITC

STENCIL STD

Pay attention to the size of the text and its color. Some fonts look good at larger sizes but not at smaller, and vice versa. You can use color to change how heavy the font looks on screen, too. A big blocky font can be softened by changing its color from black to blue, for example.

# What is Your Look and Feel?

The look and feel of your website is what results from all the decisions you make about its content and design.

It is a combination of:

- The images you use. Both the style of your content images and photography, and the choice and arrangement of any decorative images.

- The attitude suggested by your text, and the language it uses.

- The color scheme you have chosen.

- The fonts you use to convey your information and draw attention to important elements.

- The way you arrange elements on the page to accentuate what is important.

You need all these elements to work in harmony. If you were promoting an industrial rock band and had lots of metallic textured images, it would look strange to have a fancy handwritten font, or lots of bright kid-friendly colors. Sometimes you can subvert conventional wisdom, but it's usually better to play it safe.

Using design elements consistently sends a signal to your visitors that you've paid attention to the details. It's easy to put things onto a screen. It takes more care to combine them so that they look like they belong together in a single design. Work within a palette of four or five colors (plus shades or tints, as appropriate). Make the spacing between different elements on your web page consistent. Choose one or two fonts and use them throughout.

The rule of thumb is that, if things look similar, they should be exactly the same. If they're nearly the same, it just looks sloppy. If you don't want things to look the same, then make them radically different. Leave no doubt that you have deviated from the norm to add contrast or emphasis, or to call attention to them.

When you're developing the elements of your look and feel, keep your intended audience in mind. Think about the kinds of magazines they read, the TV shows they might watch, the films they prefer, and their favorite websites (until yours is built, at least). Use a visual language that will make them feel at home.

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# The Right Look and Feel

To understand the importance of the look and feel, let's take a look at three websites that cater for different audiences.

Saga (www.saga.co.uk) offers services, including insurance and holidays, to the over 50s. The homepage is clear and easy to navigate but offers lots of options. It's designed to work on an older computer with an 800x600 screen and has an option to enlarge the text.

The Mr Men website (www.mrmen.com/uk) is designed for children to use by themselves. There are few navigation options, which are shown using bold icons. The color palette is bold and exciting, and Flash animation is used to bring the characters to life. A voice tells children what the buttons mean when they roll the mouse over them.

The website for heavy rock magazine Metal Hammer (www.metalhammer.co.uk) has a gritty and dirty look to it, with paint and blood splattered in the background. It reflects the look of the magazine and the aesthetics of heavy metal album artwork.