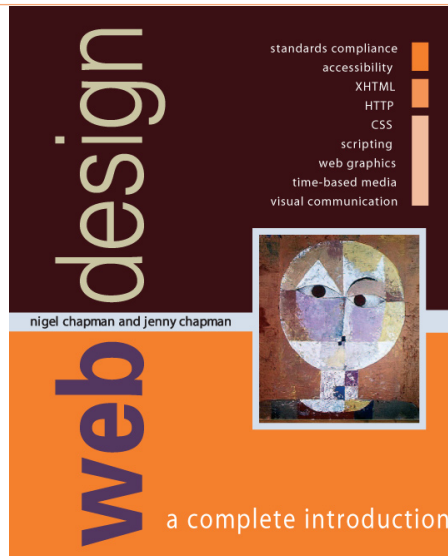
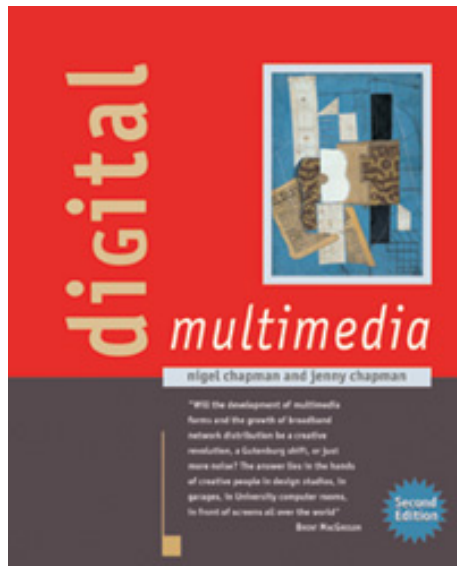


Guided Tour



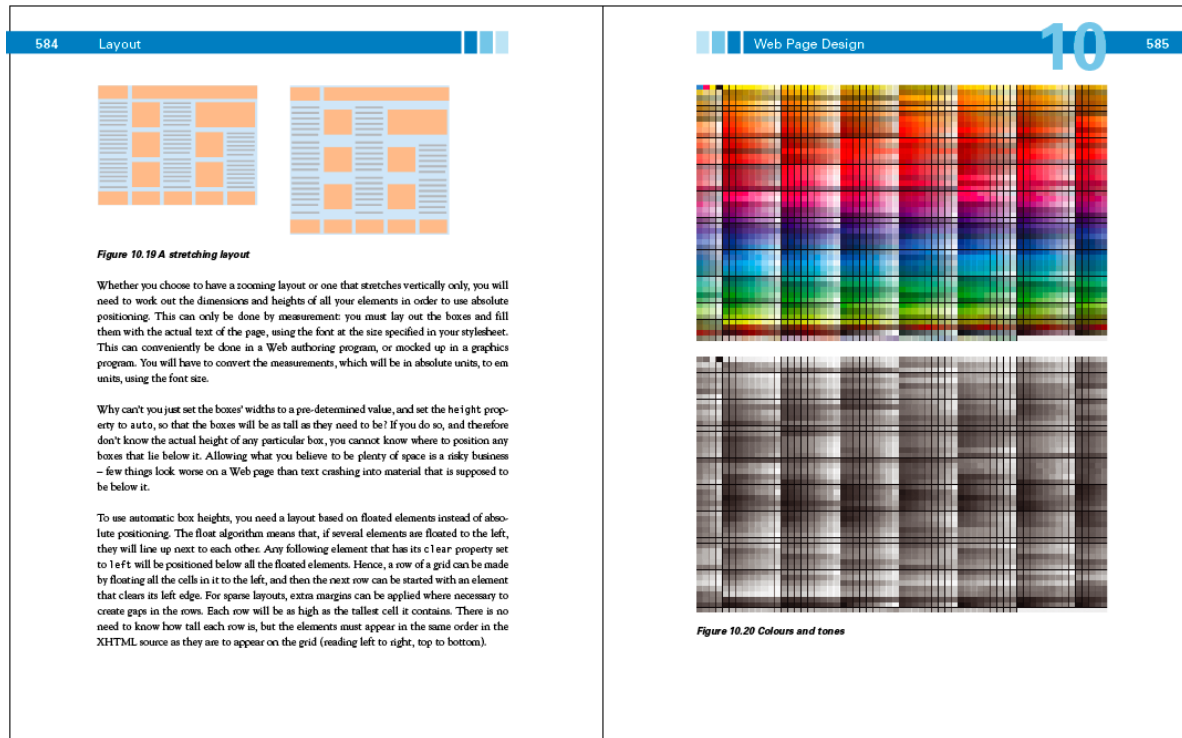
Web Design: A Complete Introduction is by the authors of the popular text books *Digital Multimedia* and *Digital Media Tools*



The book covers all aspects of Web design and is intended as a complete course.



Full colour illustrations and diagrams are provided throughout the text:



The book starts with introductory chapters on **Web Experiences** and **Web Technology**.

These are followed by technical chapters dealing with **Markup** and **Stylesheets**.

After this we proceed to **Web Graphics** and **Time-Based Media**.

Next there follows a substantial chapter on **DOM Scripting**, and a chapter on **Web Applications**.

A chapter is devoted to **Web Accessibility**.

The final chapters cover **Web Page Design** and **Web Site Design**.

You can see the complete **Contents** of the book in detail here on the site:

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Ch9	Ch10	Ch11

A set of **Key Points** is provided at the end of each chapter, before the exercises:

Key Points

Stylesheets are used to specify appearance independently of structure and content.

Rules in CSS

A stylesheet is a set of rules, each consisting of a selector and some declarations. Each declaration sets the value of a property.

The declarations in a rule with an element name (e.g. `h1`) as the selector are applied to all occurrences of that element.

A selector consisting of an element type followed by a dot and a name (e.g. `p.first`) matches all elements whose `class` attribute includes that name.

The selector `*` matches any element. It can be omitted in selectors of the form `*.c`, where `c` is a class name.

A selector consisting of an element name followed by a `#` (e.g. `#summary`) and a name matches the element whose `id` is equal to the name. The element name can be omitted.

These **Key Points** are also supplied as **Lecture Slides** to download from this site:



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Lecture Slides for Chapter 10

If your browser is set to display these file types within the browser window when you click on a download link, you will need to right-click (Windows) or ctrl-click (Mac) to download the file to your own disk. In case of difficulties with downloading, please read the note on the [Lecture Slides overview page](#).

[PDF \[8.1MB\]](#) (best image quality)

[PowerPoint-compatible \[3.6MB\]](#)

[Flash \[3.2MB\]](#) (Web site quality)

Markup 3 XHTML 38

Forms are used to allow users to enter data values.

Controls – input, textarea and select elements – may appear within form elements.

A typical Key Point lecture slide, from Chapter 3

The **Lecture Slides** are available in three formats: PDF, PowerPoint-compatible and Flash.

The PDF versions provide the best quality and are recommended where possible.

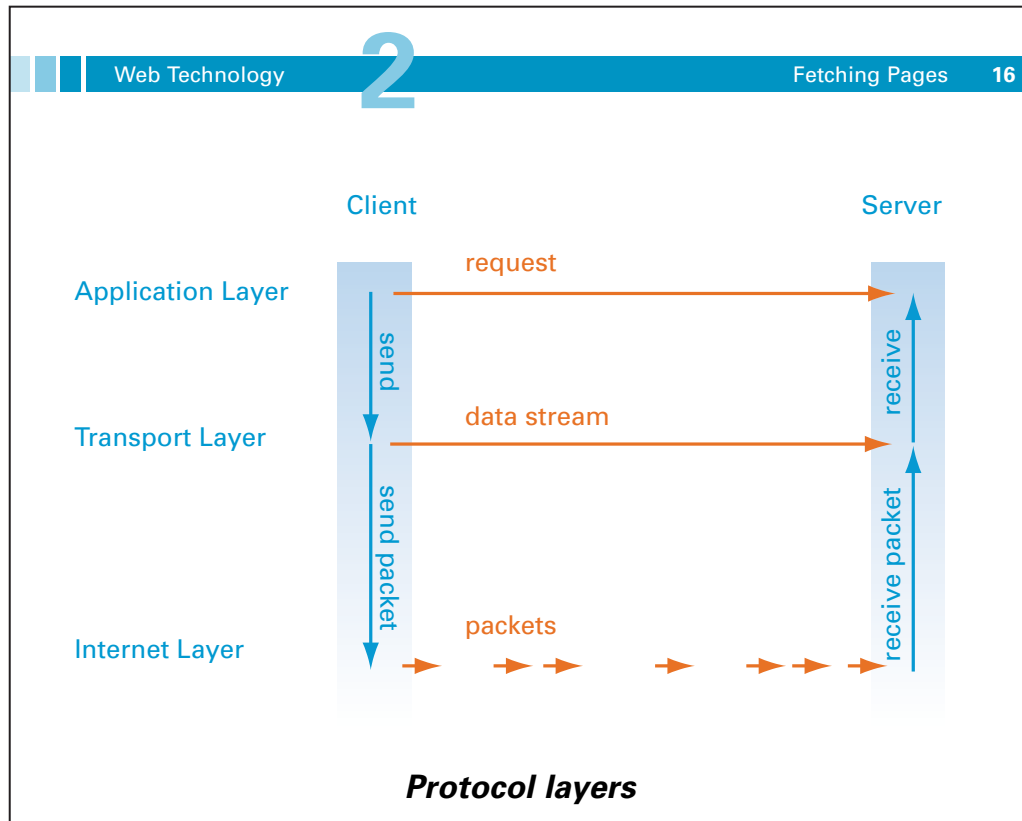
The Flash versions are low resolution and best suited to embedding in Web sites.

The Flash versions of the [Lecture Slides](#) are also embedded in this site. They are presented as movies with player controls:



Almost all of the illustrations and diagrams in the book are also included in the [Lecture Slides](#).

The only omissions are large tables that contain too much content for reproduction in a slide. These tables are available for download in PDF format.



A typical illustration lecture slide, from Chapter 2

The lecture slides are further supported by **Teaching Notes** for each chapter:

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Teaching Notes for Chapter 2

Computing-based students should find few difficulties in this material. In fact, if they have already taken a course on networks, much of it should be familiar. On the other hand, it may seem like a major obstacle to design students without any technical background, but apart from the essential content below, much of the technical detail can be omitted for these students.

Essential Content

The coverage of URLs is vital and must be included at this early stage.

Every student needs to understand that the page they see displayed in their browser is put together by fetching a collection of diverse resources, and what the main types of resource are: XHTML documents, stylesheets, images and scripts. They also need to know that some pages are dynamically generated. Hence, all the material on pages 36-46 is required, except for the called-out boxes.

In the [Teaching Notes](#) we offer guidance, chapter by chapter, on which topics we think should be stressed, which may be omitted if necessary, and which may cause problems for students with different academic backgrounds.

At the end of each chapter of the book we present three types of **Exercises**:

Exercises

Test Questions

1. Is the bitmapped image produced by rendering a vector graphic always less compact than the original vector image?
2. Is the following statement true or false? Any colour can be represented by three numbers specifying the relative proportions of red, green and blue it contains.
3. When would you *not* use dithering when saving an image in a format that used indexed colour?
4. Explain carefully what is meant by the statement that, in CSS, all RGB colours are specified in the sRGB color space.
5. Why is lossy compression more commonly used for Web graphics than lossless?
6. At what point in JPEG compression is information discarded? Is this the point at which the data is compressed?
7. If you wanted to post a copy of a printed document that you had scanned to a Web page, what file format would you use and why?

Test Questions are relatively simple. Their purpose is to test how well the student has understood the material covered in the chapter.

For each chapter we suggest several **Discussion Topics** that address current or contentious issues in Web design. These topics are intended for group discussions or as the subjects for essay papers.

And for each chapter we suggest several **Practical Tasks** or lab projects related to the chapter's content. Most of these are intended for the individual student rather than for group work.

Answers, hints and tips for the exercises are provided on this site:

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Answers to Exercises, Chapter 5

Test Questions

1. No. It is possible to contrive vector images made up of so many small vectors that rendering them as bitmaps would actually reduce their size. (Vector images of this sort usually result from auto-tracing bitmaps.) Remember that usually a pixel only occupies three bytes, but a vector object will require more. It's only because there are normally relatively few objects in a vector image that the rendered bitmapped version usually turns out larger.
2. The statement as given is false. There are colours that lie outside the RGB gamut. It *is* true that any colour can be represented using three numbers, but the numbers represent more complicated values than the simple proportions of red, green and blue.

For the **Test Questions** we provide a sample answer to each one, but these answers should not be taken as definitive or as the only possible solutions.

Discussion Topics and **Practical Tasks** cannot usually have “correct” solutions so we just provide some hints and tips for these, to guide any student who is having difficulty getting started.

On the Web site we provide suggestions for a range of more substantial **Projects** (which are not in the book), divided roughly into three levels of difficulty:

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Throughout the text of the book you will find special call-out boxes, with a blue frame and a special heading.

These boxes are used for detailed notes on **Emerging Technology**, **Terminology**, **Technical Detail**, and **Browser Quirks**.

```
<meta http-equiv="expires" content="Fri, 23 Apr 2010 23:00:00 GMT"/>
```

It is common practice to use an element of this sort to extend the `content-type` header, by adding a specification of the character set. Whereas Web servers can map filename extensions to media types in order to create the `content-type` header, they may not have any mechanism for determining character sets. Hence, it is recommended that all documents have some element such as

```
<meta http-equiv="content-type" content="text/html; charset=utf-8"/>
```

in their head.

As well as metadata, the document head may contain stylesheet definitions and scripts, using the `style` and `script` elements. We will describe these elements in Chapters 4 and 7, respectively. It may also include a `base` element, which has a single attribute `href`, whose value is a URL. If a `base` is present, the URL will be used instead of the document's own URL when resolving relative URLs. There are several scenarios where this can be useful. Suppose, for instance, you have copied the file `index.html` from `www.desperatesw.co.uk` to some other server, to make some changes to it. Then, unless you also copy the rest of the site, any relative URLs will not be correctly resolved, unless you add a `base` element to the document head, setting the base URL to the file's original location, thus:

```
<base href="http://www.desperatesw.co.uk/index.html"/>
```

Technical Detail

Media Types for XHTML Documents

Since XHTML is also XML, a question arises of what media type should be used for XHTML documents. The same question will arise for any XML-based language, so the IETF has extended the notation for media types to include a suffix `+xml`, at the end of the sub-type, to accommodate such languages. The recommended media type for XHTML documents is `application/xhtml+xml`. For XHTML documents (the majority) that are compatible with HTML 4, the established content type `text/html` may also be used, and many Web servers are configured to do this. The media type `application/xml` may also be used for XHTML documents, but this means that user agents will treat the document as XML, which will rarely be the appropriate thing in the case of a Web page. A final possibility, which is even less often likely to be appropriate, is `text/xml`, which should cause the XML source to be displayed in the browser.

A typical page with a call-out box

To assist students with little technical knowledge and anyone whose first language is not English, we provide an extensive interactive [Glossary](#) on this site.

The Glossary is also presented as a simple list of terms and as a typeset PDF document available for a small fee.

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Glossary

accessibility adsl aliasing animation bandwidth broadband cross-platform data data transfer rate edit frame HTML **hypermedia** Internet jpeg kbps link lossy compression **markup** markup language Mbps network quicktime software system tag Web browser Web page Web site **World Wide Web** XHTML

Glossary term

accessibility

In the context of the World Wide Web, features of Web sites which ensure that the content of the sites can be accessed by people with disabilities of any kind.

See also

[Web Accessibility Initiative](#)

Using the interactive glossary online

All the important code examples, and the working Web pages and elements that are described in the book, are provided in the Teaching and Learning section of the site under [Examples](#).

We also provide image files for download for some Figures where it will be useful for students to look at the original files.

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Examples for Chapter 9

Images Demonstrating Red/Green Confusability

[Download the image files.](#) Zip archive, 1.3MB.

Figure 9.1



Experiment with simulating how this image file will appear to people with different types of defective colour vision. There are links to useful simulation applications in the [Design Tips on Designing for Accessibility](#) under the heading Colour Blindness Testing and Image Correction.

Examples, including image files, are provided for download

On the Web site we have included a set of **Design Tips** organized by subject, which we will add to in response to queries:

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Information	Projects	General
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		Markup and CSS
		Vis Comm

The site also features a technical **Blog** to which we will post short articles on topical subjects and discussion points in Web design at frequent intervals.



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The Web Design Book Blog

[Web 2.0 and Visual Design](#) · 1 day ago

Tim O'Reilly recently posted his latest attempt at a [definition of Web 2.0](#). As a definition, it doesn't seem to be very useful, and it's surely telling that, having produced a single sentence definition, he goes on to qualify it, to add five numbered paragraphs of expansion and some extra commentary. However, in the course of doing so, he inserts a quotation from Eric Schmidt (currently Google's CEO): *Don't fight the internet*. O'Reilly goes on to explain: "Think deeply about the way the internet works, and build systems and applications that use it more richly, freed from the constraints of PC-era thinking [...] It was Web 1.5, the dotcom bubble, in which people tried to make the web into something else, that fought the internet, and lost." (One of the commenters on the post says the same thing in a slightly different way: "Web 2.0 was the moment when we stopped using computers and started using the Internet.")

The Blog discusses topical issues in Web design

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You can find out more about us at our own site: www.macavon.co.uk

But briefly, we are...

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and its supporting Web site.