

The Structural Layer

Webpage Design

XHTML* Elements, attributes and values

* eXtensible Hyper-Text Markup Language

Elements

`<p>`This is a paragraph. It contains
some text.`</p>`

``

Most XHTML elements come in pairs; a few (like the image) are single instances.

Attributes and values

```

```

Like many tags, the image tag has a range of valid attributes (e.g. width and height). Each **attribute** must have a quoted **value**.

Structure and relationships

Block-level elements

`<p>`This is a paragraph. It contains some ``bold`` text. The paragraph is a block-level element.`</p>`

The paragraph is a block level element. Effectively, this means that it begins and ends with a line-break and forms a distinctive "block".

Inline elements

`<p>`This is a paragraph. It contains some ``**bold**`` text. The bold text is an inline element.`</p>`

The `` is an inline element. It does not begin and end with a line-break. Images are inline elements.

Parent elements

`<p>`This is a paragraph. It contains some ``bold`` text. The paragraph is the parent of the bold text.`</p>`

Child elements

`<p>`This is a paragraph. It contains some ``bold`` text. The bold text is a child of the paragraph element.`</p>`

Sibling elements

```
<ul>
```

```
<li>This is a list item.</li>
```

```
<li>This is an adjacent sibling.</li>
```

```
</ul>
```

This is an unordered list. Each list item is the sibling of the other list items. The list items are children of the unordered list parent.

Semantic markup

Incorrect use of markup

`<h1>Page Heading</h1>`

`<p>Some introductory text</p>`

`<h1><small>A sub-heading</small></h1>`

`<p>This is a paragraph. It contains some
bold text and content
relating to the sub-heading above.</p>`

Semantically correct markup

`<h1>Page Heading</h1>`

`<p>Some introductory text</p>`

`<h2>A sub-heading</h2>`

`<p>This is a paragraph. It contains some bold text and content relating to the sub-heading above.</p>`

Incorrect use of markup

`<h2>`This is a list of colours`</h2>`

`<p>`Red`</p>`

`<p>`Green`</p>`

`<p>`Blue`</p>`

Semantically correct markup

`<h2>`This is a list of colours`</h2>`

``

``Red``

``Green``

``Blue``

``

Hypertext Links

Making Links

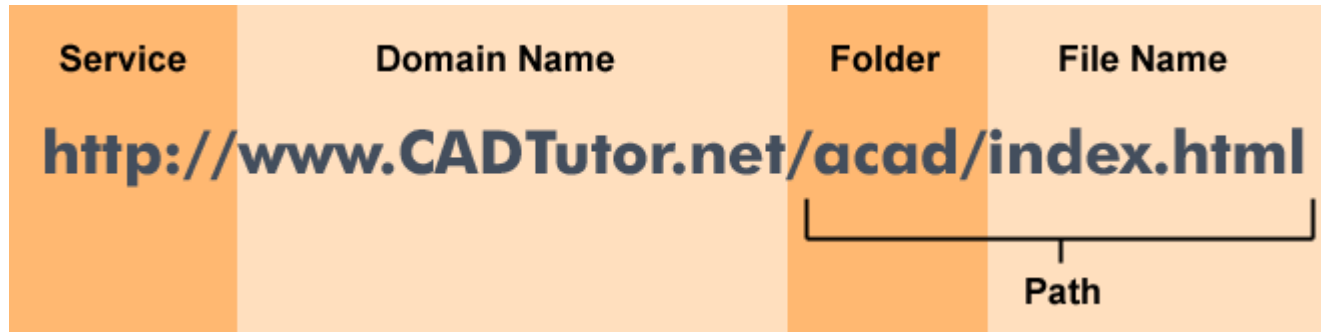
```
<a href="file.html">Text Link</a>
```

```
<a href="file.html" target="_blank">Text Link</a>
```

Making Image Links

```
<a href="file.html"></a>
```

Universal Resource Locator



Absolute links

```
<a href="http://www.mysite/design/file.html">Text Link</a>
```

Absolute links are always used for links to external pages (i.e. those on other domains).

Relative links

```
<a href="../../design/file.html">Text Link</a>
```

Relative links are always used for links to local pages (i.e. those on the same domain).

Relative to document root

```
<a href="/design/file.html">Text Link</a>
```

Links made relative to the document root are very useful for dynamic websites because they work no matter where the link is placed.

Special characters

Character encoding

Some characters that have special meaning in XHTML **must** be encoded in order to display correctly and validate. For example "<" and ">".

< = <

> = >

& = &

" = "

<p>MA Web Design & Content Planning</p>

Other common structural elements

Lists

```
<ul>
```

```
<li>List item 1</li>
```

```
<li>List item 2</li>
```

```
<li>List item 3</li>
```

```
</ul>
```

Tables

```
<table>
```

```
<tr>
```

```
<td>Row 1, cell 1</td>
```

```
<td>Row 1, cell 2</td>
```

```
</tr><tr>
```

```
<td>Row 2, cell 1</td>
```

```
<td>Row 2, cell 2</td>
```

```
</tr>
```

```
</table>
```

Anatomy of a webpage

XHTML file structure

```
<html>
```

```
<head>
```

```
  <title>Webpage Design</title>
```

```
</head>
```

```
<body>
```

```
  <p>My first web page!</p>
```

```
</body>
```

```
</html>
```

XHTML file structure

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml" dir="ltr" lang="en">
```

```
<head>
```

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

```
<title>Webpage Design</title>
```

```
</head>
```

XHTML DOCTYPE

- XHTML 1.0 Transitional

`<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">`

- XHTML 1.0 Frameset

`<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Frameset//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-frameset.dtd">`

- XHTML 1.0 Strict

`<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">`

XHTML rules & good practice

- All documents must have a document declaration
- All documents must be properly formed
- All tags must be in lower case
- Depreciated tags (e.g. ``) are excluded
- All tags must be closed (even standalone tags) `
`
- All attributes must have explicit quoted values `width="25"`
- The `id` attribute should be used in place of `name`
- All tags must be properly nested





Who controls XHTML?



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Join a Public Developer Gathering	News	Search
 <p>W3C invites the public to participate in a Developer Gathering on 5 November, 1-6pm, and the media to attend a breakfast on 3 November, 7:30-8:30am. The meeting is part of W3C's Technical Plenary Week 2009 in Santa Clara, California, sponsored this year by the Internet Society (ISOC).</p>	<h2>W3C Technical Plenary Week Participants to Address HTML 5 and Other Hot Topics</h2> <p>2009-10-06: The W3C community convenes next month in Santa Clara, California for Technical Plenary Week (TPAC) 2009, this year's edition of an annual week-long opportunity for W3C group participants to share news of progress and to address hot-button technical issues face-to-face, including the future of HTML 5, privacy challenges in an era of powerful Web Applications, and how governments are using the Web to increase transparency and accountability. This year, the Internet Society (ISOC), as part of its mission to support the development of open standards, will sponsor TPAC 2009 and actively participate in the event. In addition to ISOC representatives, participants from other standards development organizations will join in discussion about the health of the "Internet Ecosystem" during the Plenary Day. As previously announced, W3C invites the public to a Developer Gathering on 5 November. In addition, the press are invited to attend a Media Breakfast on 3 November from 7:30-8:30am (Pacific Time) for presentations on some of the key topics W3C will cover during the week. Read the press release and learn more about TPAC 2009. (Permalink)</p>	 <p>Search W3C</p> <input type="text"/> <input type="button" value="Go"/> Search W3C Mailing Lists
Validator Donation Program		Testimonials
 <p>Make a donation or become a sponsor of the W3C Validator.</p>		Marden Edwards Limited  <p>Marden Edwards Ltd provides the manufacturing of bespoke packaging equipment and machines, and works toward creating an accessible workplace in the industrial sector. This is reflected online with its support of Web standards and the Web Accessibility Initiative (WAI). (Member testimonials)</p>
W3C Supporters <p>Help W3C by making a donation through the W3C Supporters Program.</p>		Members <ul style="list-style-type: none">Member Home PageMember SubmissionsCurrent MembersMeetings
Employment <p>W3C is seeking a Chief Executive Officer. Current W3C Fellows Program openings are Business and Technology Communications Specialist; Software Engineer.</p>		
W3C A to Z		

Code Validation



Markup Validation Service

Check the markup (HTML, XHTML, ...) of Web documents

Jump To: [Congratulations](#) [Icons](#)

This document was successfully checked as XHTML 1.0 Strict!

Result: Passed

Address:

Encoding: utf-8 (detect automatically)

Doctype: XHTML 1.0 Strict (detect automatically)

Root Element: html

Root Namespace: <http://www.w3.org/1999/xhtml>



The W3C validators are hosted on server technology donated by HP, and supported by community donations. [Donate](#) and help us build better tools for a better web.

Options

- Show Source Show Outline List Messages Sequentially Group Error Messages by Type
- Validate error pages Verbose Output Clean up Markup with HTML Tidy

[Link](#) on the options is available.

Revalidate

Congratulations

The document located at <http://www.websitearchitecture.co.uk/> was successfully checked as XHTML 1.0 Strict. This means that the resource in question identified itself as "XHTML 1.0 Strict" and that we successfully performed a formal validation using an SGML, HTML5 and/or XML Parser (s) (depending on the markup language used).

"valid" Icon(s) on your Web page

To show your readers that you have taken the care to create an interoperable Web page, you may display this icon on any page that validates. Here is the HTML you could use to add this icon to your Web page:



```
<img alt="W3C XHTML 1.0 Strict icon" data-bbox="301 677 343 697" style="vertical-align: middle;"/> <code><img alt="W3C XHTML 1.0 Strict icon" data-bbox="301 677 343 697" style="vertical-align: middle;"/> </code>
```



```
<img alt="W3C XHTML 1.0 Strict icon" data-bbox="301 729 343 750" style="vertical-align: middle;"/> <code><img alt="W3C XHTML 1.0 Strict icon" data-bbox="301 729 343 750" style="vertical-align: middle;"/> </code>
```

A [full list](#) of icons, with links to alternate formats and colors, is available: If you like, you can download a copy of the icons to keep in your local web directory, and change the HTML fragment above to reference your local image rather than the one on this server.

Linking to this result

If you would like to create a link to this page (i.e., this validation result) to make it easier to revalidate this page in the future or to allow others to validate your page, the URI is <http://validator.w3.org/check?uri=http%3A%2F%2Fwww.websitearchitecture.co.uk%2F> (or you can just add the current page to your bookmarks or hotlist)

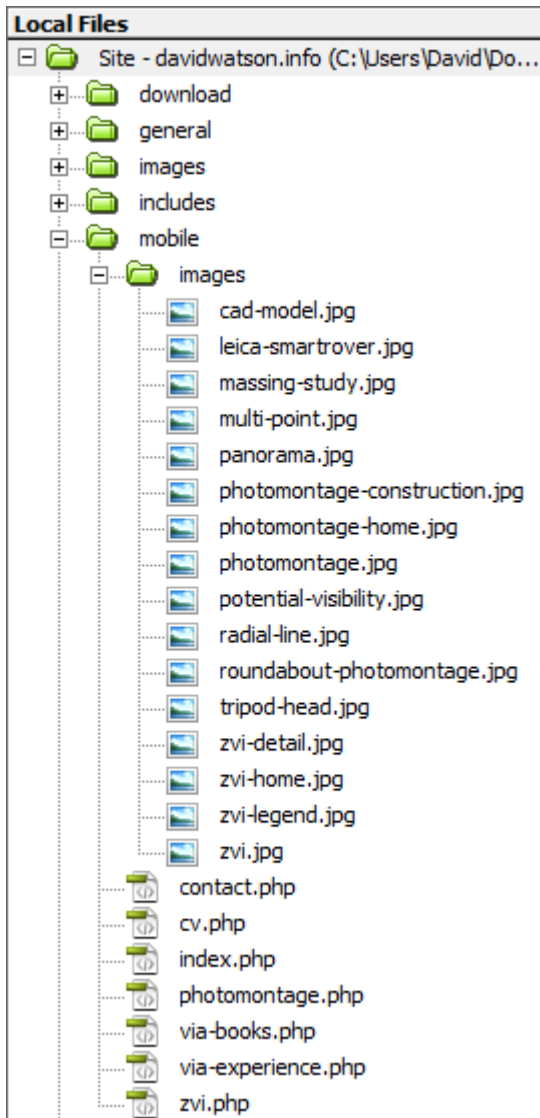
Validating CSS Style Sheets

If you use CSS in your document, you can [check it using the W3C CSS Validation Service](#).

1 TOP

File naming and folder structure

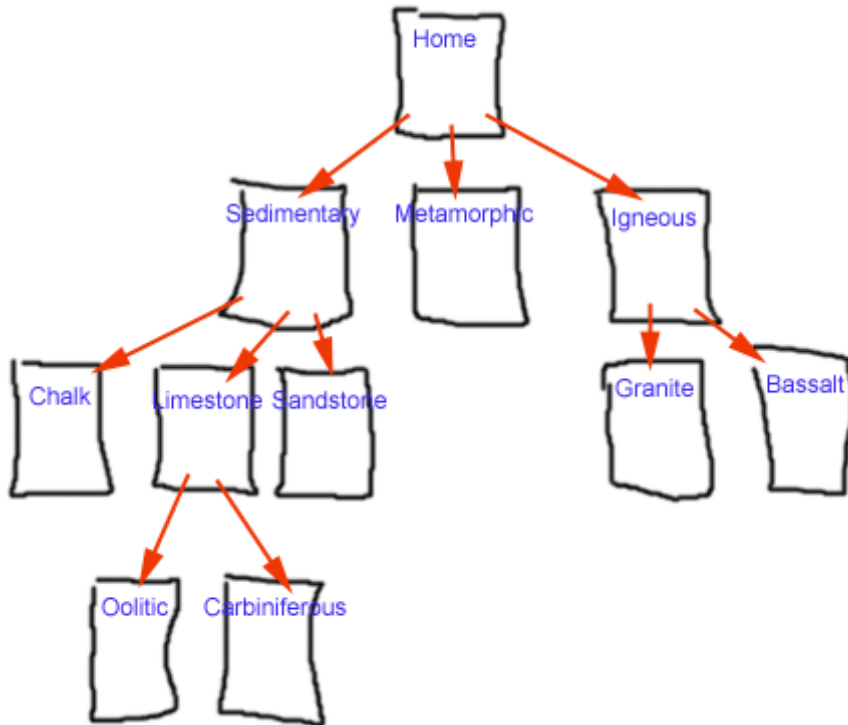
File Naming



- Files & folder names should all be in lower case
- Avoid using spaces or other none alphanumeric characters
- The hyphen* or underscore should be used if you need a space
- Make sure file naming is descriptive and systematic
- HTML filenames should be descriptive (SEO)

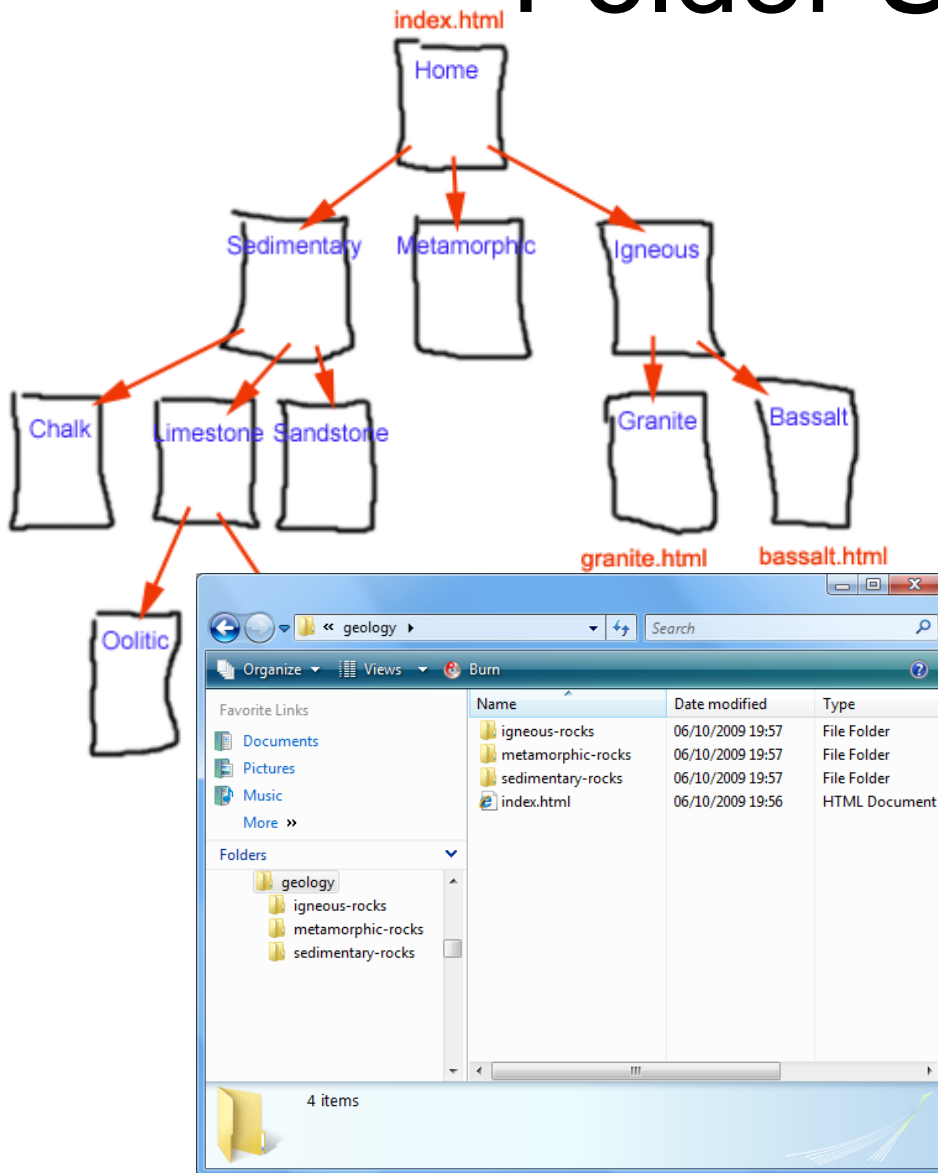
*Has SEO implications (Google)

Website Structure



- Categorise and arrange your information
- Always design your website on paper first
- Most sites use a hierarchical structure
- Limit first order categories to 6 or fewer
- Limit structure depth to 4 unless there is a good reason

Folder Structure



- The home page is always called “index” although the extension may vary
- The index.html file is placed in the root folder
- Use a folder structure that mirrors site structure
- Give your HTML files and folders obvious names (for ease of use as well as SEO)
- Current trend is to use SEO names for folders and then "index" for files

```
<end type="slideshow" />
```