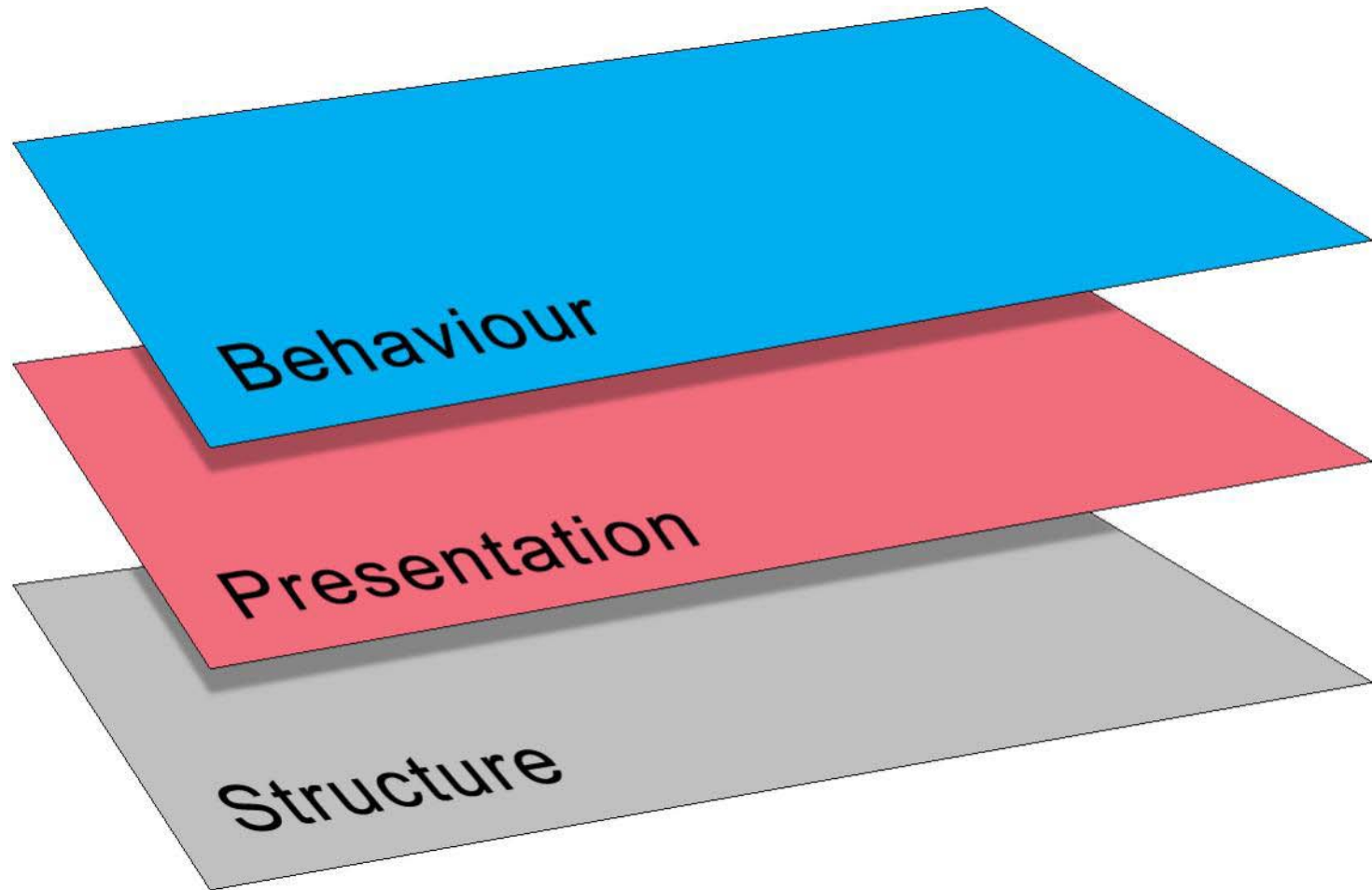


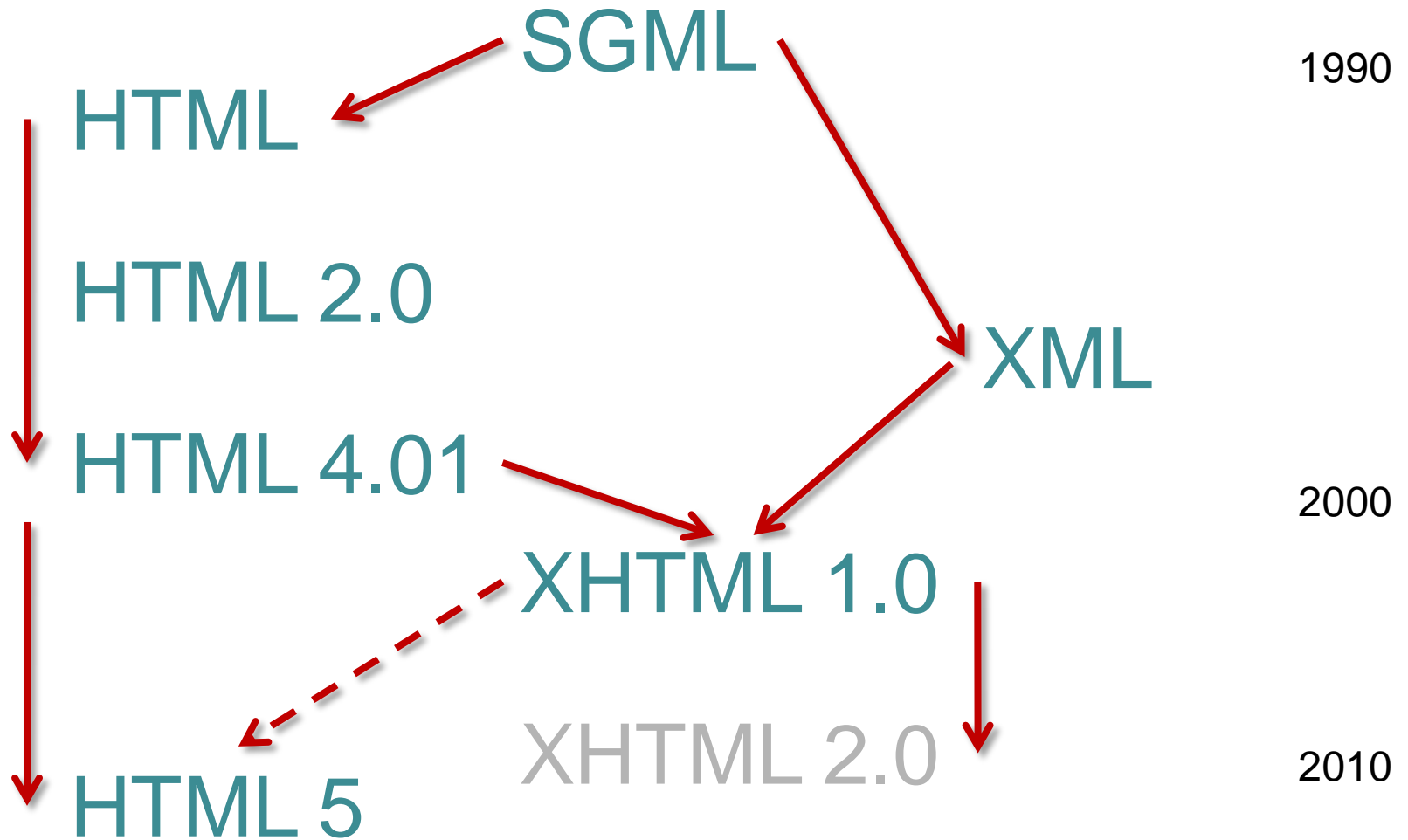
The Structural Layer

Webpage Design

Anatomy of a webpage



A *very* brief history of markup



Standard Generalized Markup Language
HyperText Markup Language
eXtensible Markup Language
eXtensible HyperText Markup Language

A simple question

<p>What is the
purpose
of markup?</p>

A: To add *meaning* to content.

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

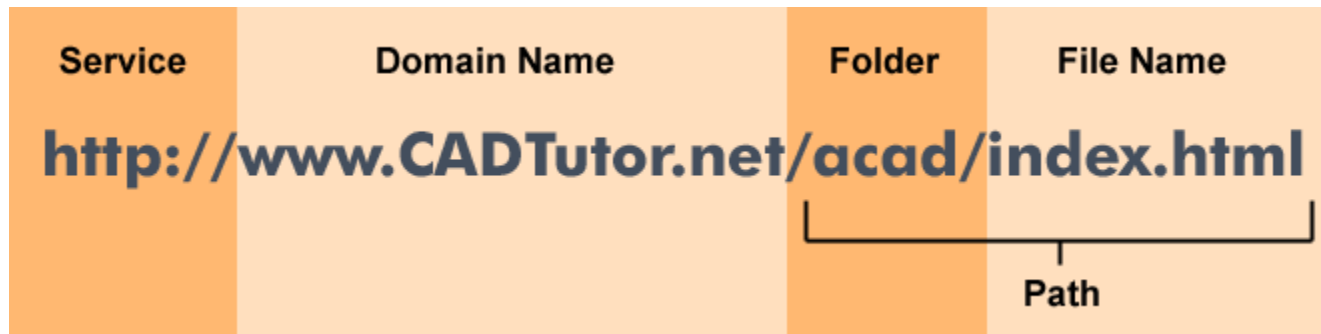
```
<a href="file.html">Text Link</a>
```

```
<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>

Common structural elements

Headings

`<h1>Heading level 1</h1>`

`<h2>Heading level 2</h2>` =

`<h3>Heading level 3</h3>`

Heading level 1
Heading level 2
Heading level 3

The Unordered List

List item 1

List item 2

List item 3

=

- List item 1
- List item 2
- List item 3

The Ordered List

List item 1

List item 2

List item 3

=

1. List item
2. List item
3. List item

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>

=

Row 1, cell 1	Row 1, cell 2
Row 2, cell 1	Row 2, cell 2

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>
```

```
<body>...
```

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?



XHTML™ 1.0 The Extensible HyperText Markup Language (Second Edition)

A Reformulation of HTML 4 in XML 1.0

W3C Recommendation 26 January 2000, revised 1 August 2002

This version:

<http://www.w3.org/TR/2002/REC-xhtml1-20020801>

Latest version:

<http://www.w3.org/TR/xhtml1>

Previous version:

<http://www.w3.org/TR/2000/REC-xhtml1-20000126>

Diff-marked version:

<http://www.w3.org/TR/2002/REC-xhtml1-20020801/xhtml1-diff.html>

Authors:

See [acknowledgments](#).

Please refer to the [errata](#) for this document, which may include some normative corrections. See also [translations](#).

This document is also available in these non-normative formats: [Multi-part XHTML file](#), [PostScript version](#), [PDF version](#), [ZIP archive](#), and [Gzip'd TAR archive](#).

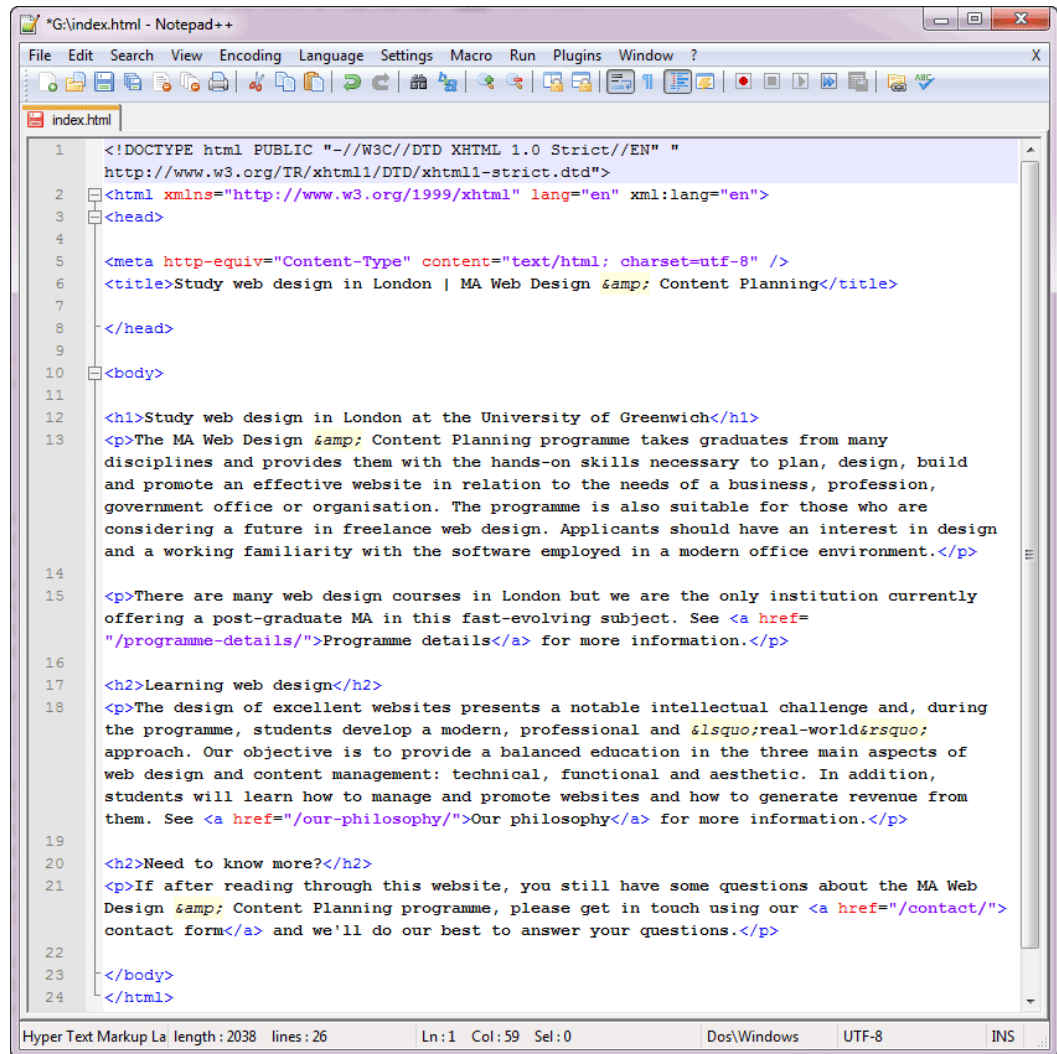
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Abstract

This specification defines the Second Edition of XHTML 1.0, a reformulation of HTML 4 as an XML 1.0 application, and three DTDs corresponding to the ones defined by HTML 4. The semantics of the elements and their attributes are defined in the W3C Recommendation for HTML 4. These semantics provide the foundation for future extensibility of XHTML. Compatibility with existing HTML user agents is possible by following a small set of guidelines.

Writing XHTML

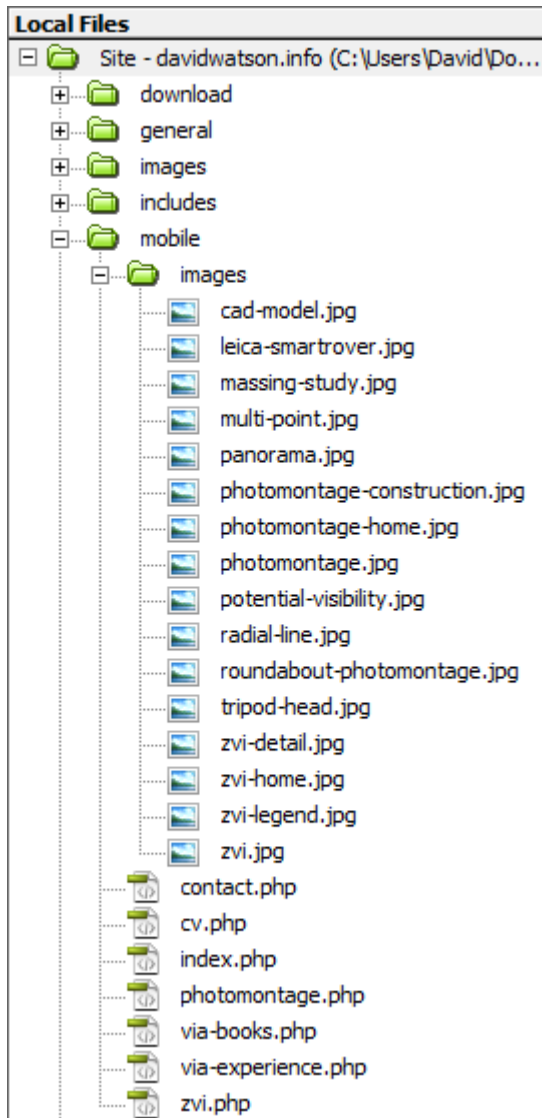
- Use a simple text editor to write your markup
- Get one with code highlighting to make life easier
- Notepad++ is a good choice but any text editor will do



```
*G:\index.html - Notepad++
File Edit Search View Encoding Language Settings Macro Run Plugins Window ?
index.html
1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN" "
  http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
2 <html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
3 <head>
4
5 <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
6 <title>Study web design in London | MA Web Design & Content Planning</title>
7
8 </head>
9
10 <body>
11
12 <h1>Study web design in London at the University of Greenwich</h1>
13 <p>The MA Web Design & Content Planning programme takes graduates from many
  disciplines and provides them with the hands-on skills necessary to plan, design, build
  and promote an effective website in relation to the needs of a business, profession,
  government office or organisation. The programme is also suitable for those who are
  considering a future in freelance web design. Applicants should have an interest in design
  and a working familiarity with the software employed in a modern office environment.</p>
14
15 <p>There are many web design courses in London but we are the only institution currently
  offering a post-graduate MA in this fast-evolving subject. See <a href=
  "/programme-details/">Programme details</a> for more information.</p>
16
17 <h2>Learning web design</h2>
18 <p>The design of excellent websites presents a notable intellectual challenge and, during
  the programme, students develop a modern, professional and &quot;real-world&quot;
  approach. Our objective is to provide a balanced education in the three main aspects of
  web design and content management: technical, functional and aesthetic. In addition,
  students will learn how to manage and promote websites and how to generate revenue from
  them. See <a href="/our-philosophy/">Our philosophy</a> for more information.</p>
19
20 <h2>Need to know more?</h2>
21 <p>If after reading through this website, you still have some questions about the MA Web
  Design & Content Planning programme, please get in touch using our <a href="/contact/">
  contact form</a> and we'll do our best to answer your questions.</p>
22
23 </body>
24 </html>
Hyper Text Markup La length: 2038 lines: 26 Ln:1 Col:59 Sel:0 Dos/Windows UTF-8 INS
```

File naming and folder structure

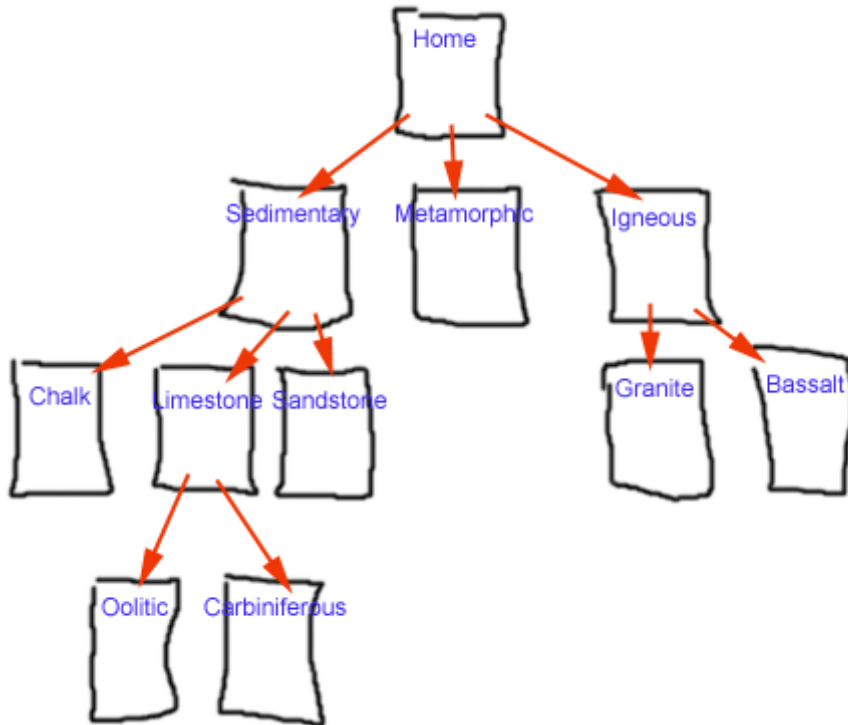
File Naming



- 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)
- The homepage is always called “index.html”

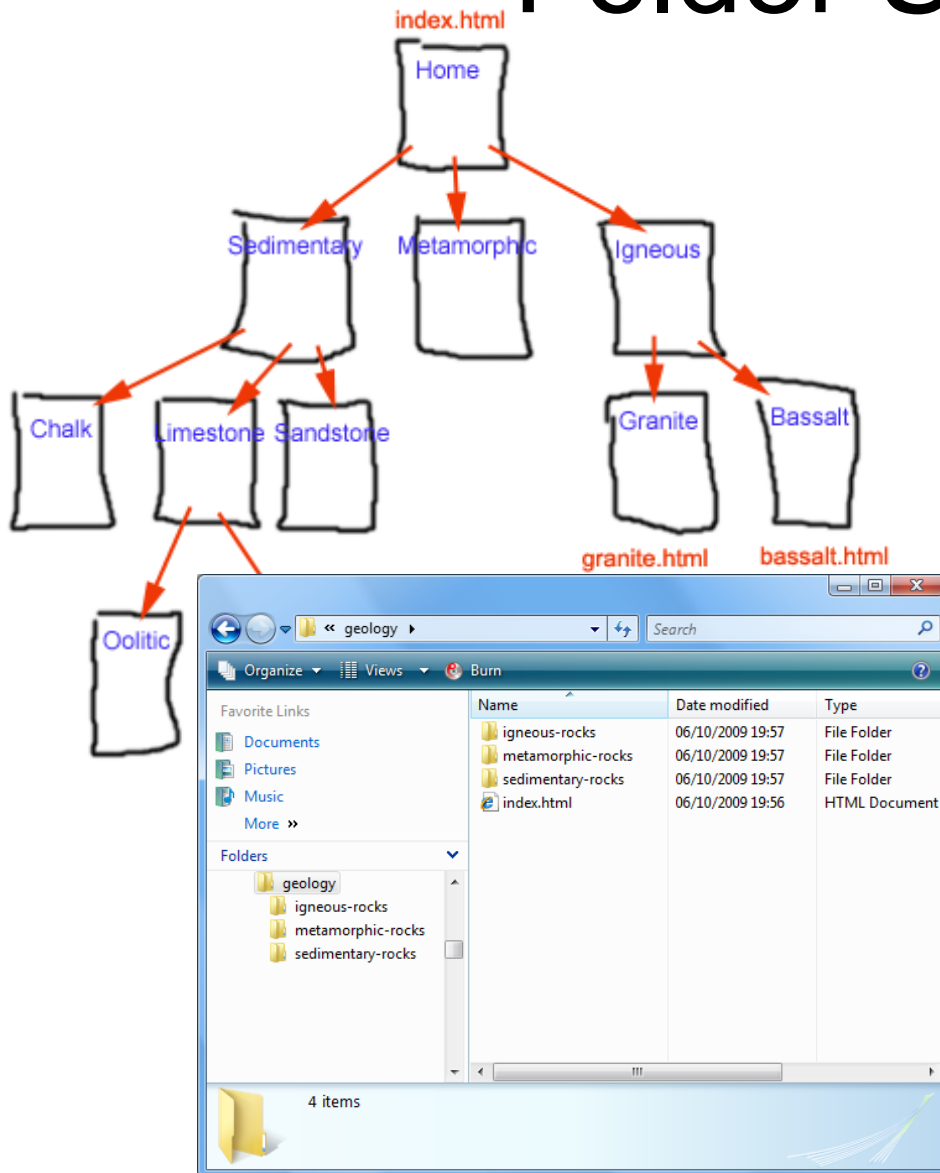
*Has SEO implications (Google)

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

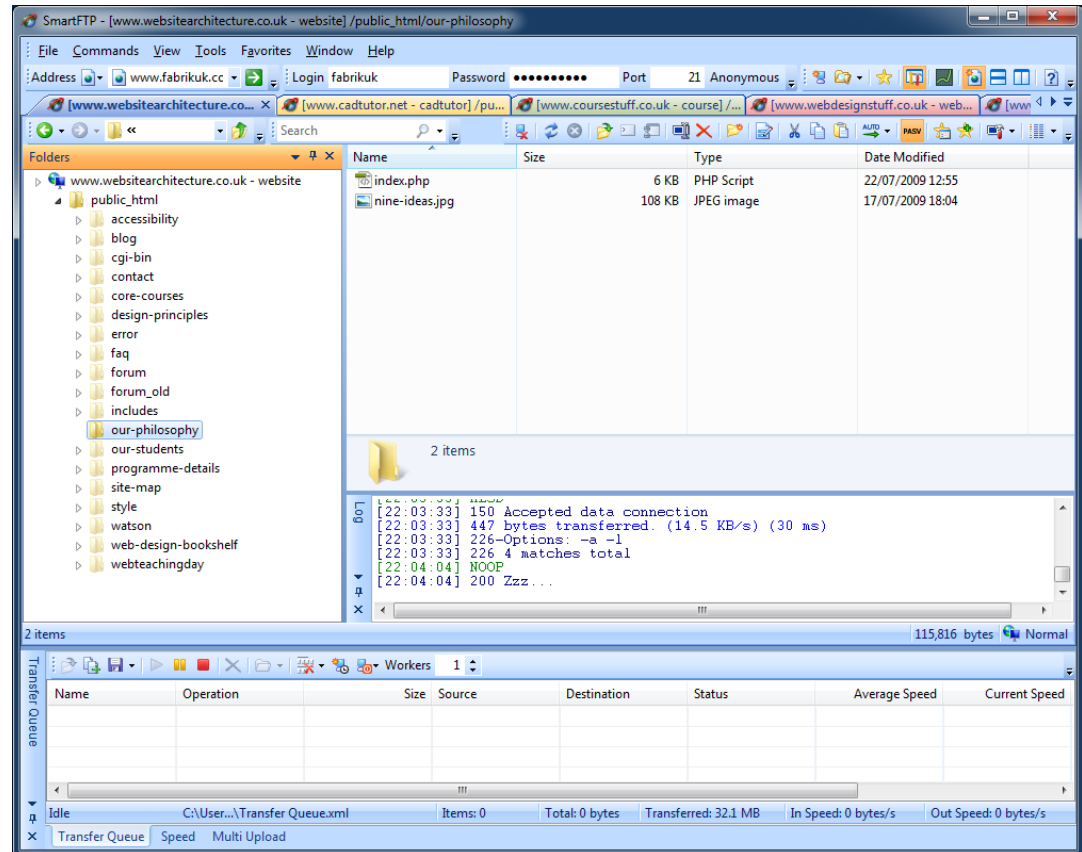
Folder Structure



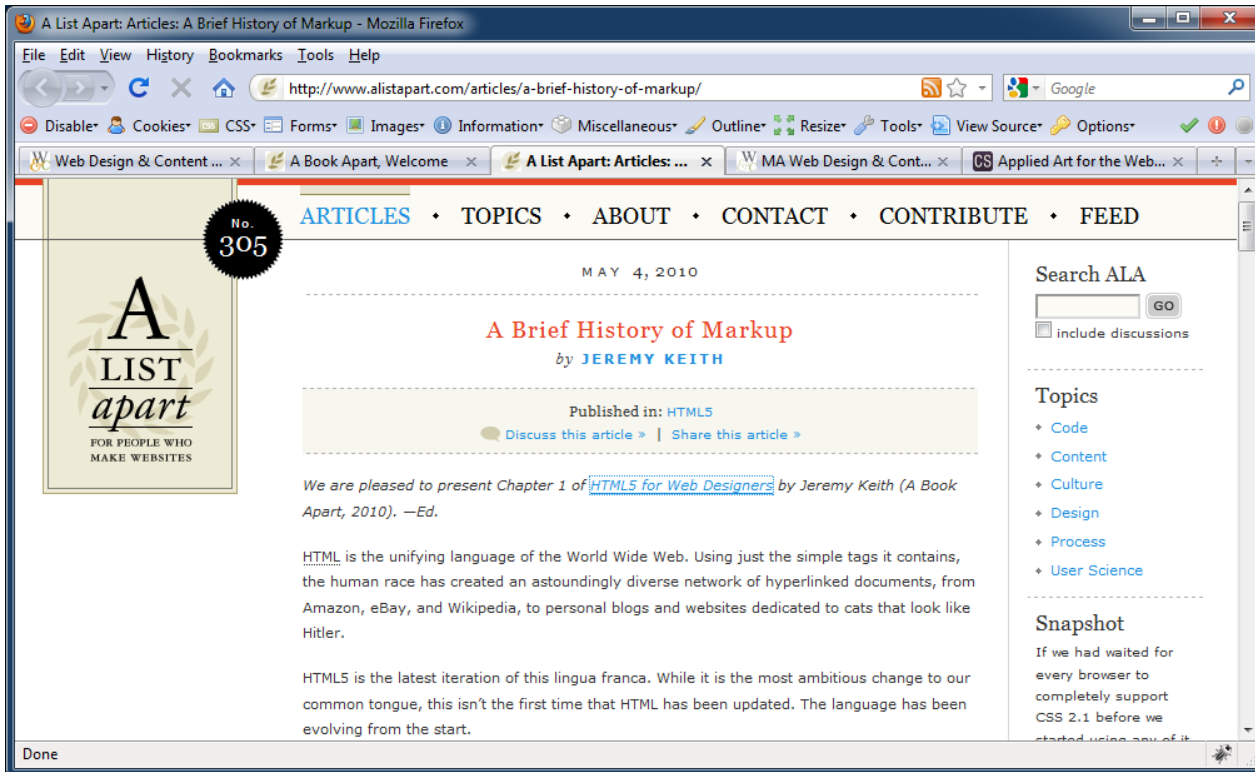
- The home page is always called “index” although the extension may vary
- The index.html file is placed in the root folder
- Use a folder structure that mirrors site structure
- Give your HTML files and folders obvious names (for ease of use as well as SEO)
- Current trend is to use SEO names for folders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

FTP Client

- Use a FTP client to upload files from your local computer to the web server
- Any FTP software will do; FileZilla is a good choice, as is SmartFTP or Cyberduck
- Always maintain a backup copy of your website locally



Web Browser



- Check your webpage using a reliable (standards compliant) browser; Firefox is a good choice
- Consider adding the Firebug and Web Developer plug-ins for better functionality

Code Validation


- Always validate your XHTML using the W3C Markup Validation Service
- The service uses the doctype to determine what type of markup you are using
- Correct any errors in your markup

W3C 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:	<input type="text" value="http://www.websitearchitecture.co.uk/"/>
Encoding:	utf-8 <input type="button" value="(detect automatically)"/>
Doctype:	XHTML 1.0 Strict <input type="button" value="(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

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

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="438 685 478 705" style="vertical-align: middle;"/><br><code><img alt="W3C XHTML 1.0 Strict icon" data-bbox="438 685 478 705" style="vertical-align: middle;"/></code><br><code><img alt="W3C XHTML 1.0 Strict icon" data-bbox="438 735 478 755" style="vertical-align: middle;"/></code></pre>

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.


```

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