



Tools for Supporting Educational Technologies

# Introduction to HTML & Dreamweaver

UNSW

EDUCATIONAL DEVELOPMENT & TECHNOLOGY CENTRE



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# Introduction to HTML and Dreamweaver

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# 1. HTML

= Hyper Text Markup Language.

HTML is not a programming language, it is a way of annotating text using "TAGS" such that a web browser knows HOW to display it.

HTML documents are **text only**. When you save an HTML document, you must save only the text, nothing else. The HTML document must also be saved with the correct file extension for it to work in a browser (filename.htm or filename.html).

(\*Note: MS Word and other word processors by default save documents in their own native format. You must go to 'Save As: Text only' when saving HTML documents.)

You can write HTML on a word processor, or Notepad, WordPad, or SimpleText. When you have finished creating the HTML document, the document is opened in a web browser, like Internet Explorer or Netscape Navigator. The browser will interpret the HTML tags for you and display the Web page.

It can be useful to have a look at the HTML behind pages that you find on the web, to see how HTML works. You can do this by viewing the "source code":

1. When you find a page you like, click on VIEW at the top of the screen.
2. Choose SOURCE or PAGE SOURCE from the menu.
3. The HTML code of the document will appear on the screen.

A web editor, such as Dreamweaver, makes it much easier to generate HTML, but it also makes it harder to learn as the program does most of the work for you. It is useful to know how HTML works, even when using an editor like Dreamweaver, because sometimes it is necessary to tweak the code behind the page to make it display as you wish.

## 2. TAGS

Tags USUALLY come in pairs, an opening tag <TAG> and a closing </TAG>.

Most are very easy to understand because the tag is obvious. Here are a few and what they do to text:

| Effect    | Code   | Code in use             | What It Does            |
|-----------|--------|-------------------------|-------------------------|
| Bold      | b      | <b>Bold</b>             | Bold                    |
| Italic    | i      | <i>Italic</i>           | Italic                  |
| Underline | u      | <u>Underline</u>        | Underline               |
| Strong    | strong | <strong>Strong</strong> | <b>Bold</b> (usually)   |
| Emphasis  | em     | <em>Empahasis</em>      | <i>Italic</i> (usually) |

(\*Note: <strong> and <em> are 'phrase elements' rather than 'font elements', in that they refer to the level of impact desired, rather than simply an alteration of font style. The appearance of both font elements and phrase elements can be designated in a Style sheets (see 8. Style sheets).

Tags may be nested to apply multiple formats:

```
<B><I><TT>Text Text</TT></I></B>
```

Tags may apply to blocks of text (eg <p> or <div> tags), individual text elements (eg making a single word bold), or the entire document (eg <head>, <title> and <body> tags).

### Deprecated HTML

The tags that can be used in HTML are constantly changing with technology. Some layout and appearance tags are now 'deprecated', meaning that the use of them will be phased out in favour of more efficient coding solutions, such as Cascading Style Sheets (CSS) (see 8. Style sheets).

Some deprecated HTML tags still in use such are:

<font></font> = type face and attributes

<i></i> = italics

<b></b>= bold

Browser technology is behind current standards and still supports deprecated tags, while inconsistently supporting Style sheet settings. Web page editing tools (such as Dreamweaver) still create deprecated tags but support and edit CSS. It is worth becoming familiar with the tags that are deprecated and the alternatives.

The <font> tag in particular is very useful particularly with regard to WebCT, as it can be inserted into titles and text blocks within WebCT to change the appearance of the type.

## Block level tags, eg:

Paragraph (creates new paragraph): `<p>The quick brown fox jumped over the lazy dog.</p>`

Quotation (Indents text from both sides): `<blockquote> The quick brown fox jumped over the lazy dog.</blockquote>`

## Inline tags, eg:

Emphasis, strong: `<p>The quick brown <em>fox </em> jumped over the <strong>lazy</strong> dog</p>`

(The word FOX will be displayed in Italics and that the word LAZY will be displayed in Bold)

## Document tags, eg:

HTML, head, title, body:

```
<html>
<head>
<title>Fast Foxes</title>
</head>
<body>

<p>The quick brown <em>fox </em>
jumped over the <strong>lazy</strong>dog.</p>

</body>
</html>
```

Some Tags are single ended such as:  
`<br>` starts new line

`<hr>` is a horizontal line

`<img>` inserts an image

## Tag attributes:

Some tags support attributes which change the behaviour of the tag, eg:

- `<hr width="60%">` means draw a horizontal rule that is only 60% of the available screen width wide. Width="60%" is an **attribute** of the `<hr>` tag
- `<font color=red size=3>` ads colour and size attributes to the font display (Note US spelling!). The closing tag in this case simply reads `</font>`.

### 3. The Document structure

The document opens with a tag defining the markup language, which is closed at the end of the document:

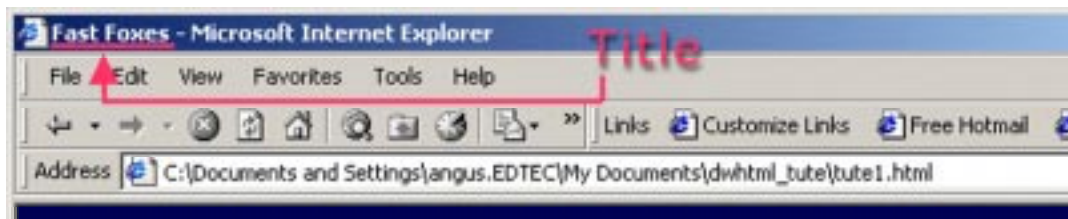
```
<html>
<head>
<title>Fast Foxes</title>
</head>
<body>

</body>
</html>
```

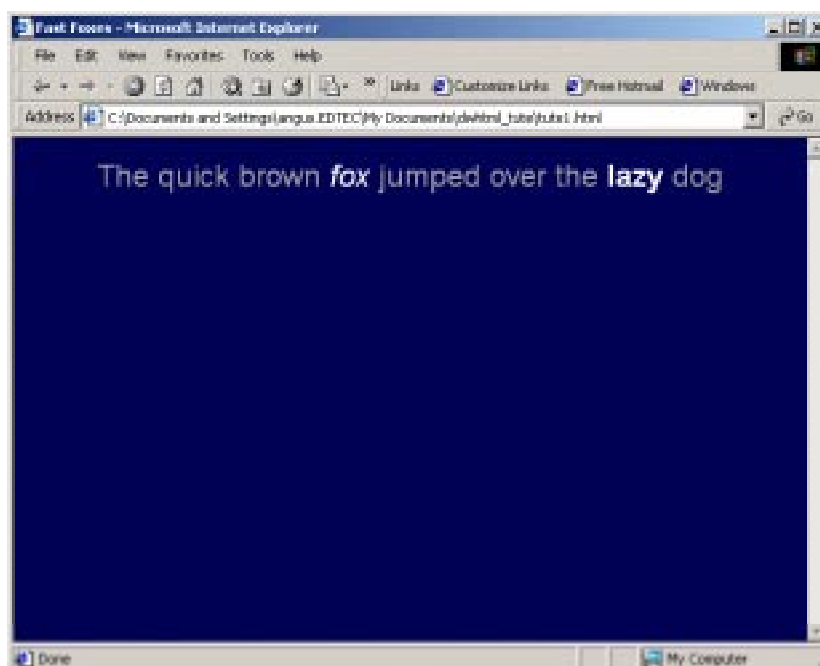
The Document **HEAD** contains information ABOUT the document such as it's TITLE, which will be displayed in the top window bar when the page is viewed in a browser:

```
<html>
<head>
<title>Fast Foxes</title>
</head>
<body>

</body>
</html>
```



The document **BODY** contains everything that is rendered in the browser window:



```
<html>
<head>
<title>Fast Foxes</title>
</head>
<body>

<p>The quick brown <em>fox </em>
jumped over the <strong>lazy</strong>dog.</p>

</body>
</html>
```

## Page properties:

Attributes that apply to the entire document may be set as attributes of the <body> tag. This includes background colour or image, text colour, link colours and page margins.

(\*Note: It is recommended that unless there is a specific reason to do so, link colours should not be changed from the default, as this may adversely affect ease of navigation for users accustomed to the default browser colours.)

eg, for the example above:

```
<body bg color=#3330099 text color=white>

<p>The quick brown <em>fox </em>
jumped over the <strong>lazy</strong>dog.</p>

</body>
```

## Meta tags:

Meta tags are located in the <head> of the document, and a variety of information about the document. Some of this information is used by search engines in order to catalogue your document.

Eg:

```
<meta name="description" content="description of the web page content">

<meta name="keywords" content="keyword keyword keyword keyword keyword">
```

## 4. Text formatting

### Heading Commands

Heading commands are used extensively in HTML documents to create headings.

There are six (6) heading commands: <H1> through <H6>. <H1> is the largest and <H6> is the smallest. Here are their relative sizes:

**<H1>This is Heading  
1</H1>**

**<H2>This is Heading 2</H2>**

**<H3>This is Heading 3</H3>**

**<H4>This is Heading 4</H4>**

**<H5>This is Heading 5</H5>**

**<H6>This is Heading 6</H6>**

Heading commands create bold, sized text, with space beneath, as shown above.

### Fonts or Typefaces\*

While you may add a typeface attribute to a <font> tag,  
eg: <font face="Arial ">

The fonts that you specify must be available on the computer of the person browsing the page, or the typeface will revert to whatever is the default display font for the local browser.

To maximise the chances of your page displaying with the 'correct' typeface, you should:

- select a commonly available typeface, which is viewable on all platforms.

- provide alternative similar typefaces, with a 'generic' option (eg: 'sans serif')
- select the typeface for legibility on a computer screen (sans-serif is best)
- eg:<font face="Verdana, Arial, Helvetica, sans-serif ">

### Font Size Commands\*

To control font size in the body of the text, the <FONT> tag with a SIZE attribute may be used. The font size attributes available are:

1 to 7, -1 to -7 and +1 to +7

Sizes 1-7 are 'absolute' sizes, while the 'plus' and 'minus' sizes are relative to the default font. The code is written like this:

<FONT SIZE="+3">This is  
+3</FONT>

<FONT SIZE="+1">This is +1</FONT>

<FONT SIZE="-1">This is -1</FONT>

<FONT SIZE="-3">This is -3</FONT>

When setting font sizes it should be kept in mind that:

- Different browsers on different platforms render font sizes quite differently – test your font sizes before publishing
- Font sizing, like other font attributes, may be more efficiently set in style sheets (see 8. Style sheets).
- Inline font tags override any font attributes in style sheets settings.

### Aligning Text

By default in HTML, text is justified to the left of the screen.

To set text alignment add an attribute to the <p> paragraph tag, eg:

<P ALIGN="right">Text in here is pushed to the right</P>

`<P ALIGN="center">Text in here is centred on screen</P>`

`<P ALIGN="left">Text in here is pushed to the left</P>`.

## The `<DIV>` tag

The block level `<DIV>` tag is a way of dividing the document into blocks for individual formatting. It may be used to apply alignment and many other attributes (such as Stylesheet information) to larger blocks of content, eg:

```
<div align="center">
```

```
<p>This text is aligned in the centre of the screen </p>
```

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

```
<p>so is this image</p>
```

```
</div>
```

(See also 7. Page layout)

\* It should be noted that the `<font>` tag is deprecated, and as such it is preferable to apply text attributes through a Style sheet.

## White space

Spaces and line breaks need to be explicitly stated.

Use the `<br>` tag for starting a new line without a paragraph break and the `'&nbsp;'` character (non-breaking space), for adding more than a single space between characters in your text.

Eg:

| In the code:  |   | Rendered by the browser:              |
|---|---|---------------------------------------|
| One green bottle<br>Two green bottles                   | = | One green bottle Two green bottles    |
| One green bottle  | = | One green bottle                      |
| One green bottle<br><br>Two green bottles               | = | One green bottle<br>Two green bottles |
| One &nbsp;&nbsp;&nbsp;green<br>&nbsp;&nbsp;&nbsp;bottle | = | One green bottle                      |

## 5. Using images

Images are not embedded (or contained within) the HTML file. The HTML code contains a reference to the image file, which instructs the browser to locate and insert the image into the document. The image file therefore needs to be copied to the web server along with the HTML file.

Images must be sized and compressed appropriately for the internet, and saved into a format that browsers can load - JPEG or GIF are the most widely used formats.

### Attributes of Images

The reference to the image in the HTML code may also contain a variety of attributes, such as source, size, border and description.

Eg:

```

```

- src = file name and path to the image file\*
- width and height = width and height in pixels of the image
- border = width (in pixels) of any border around the image
- alt = text description of the image\*
- Required attribute

Other possible attributes are alignment (to control placement on the page and text wrapping), low source (a low-res image that appears while the browser is loading the larger image), and vertical and horizontal space (for space around the image).

### src attribute and file paths

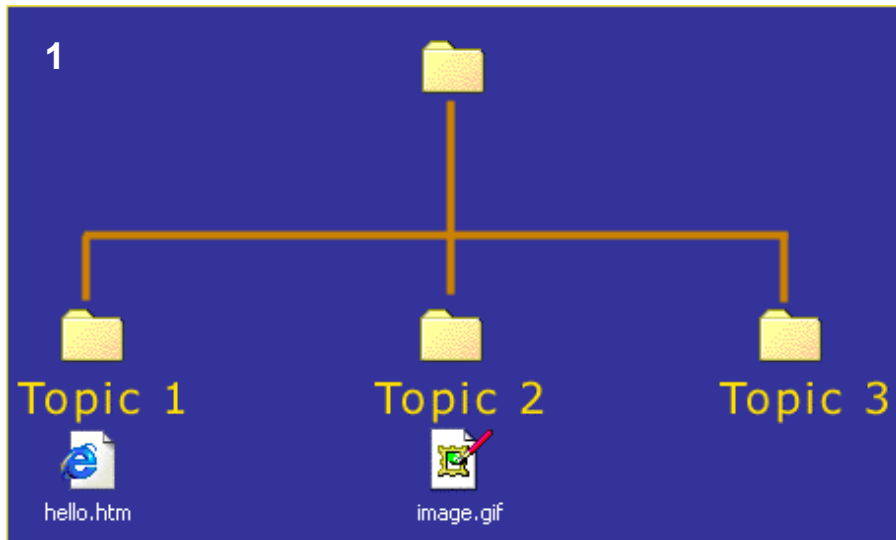
The source attribute (src) describes a pathway from your current document to the image file. This is called a 'relative' file path. It is possible to provide a full URL-based pathway in the 'src' attribute, however this is not to be recommended.

Problems can occur when an 'absolute' file path to an image on your hard disk cannot be accessed by the web server once the web page is uploaded.

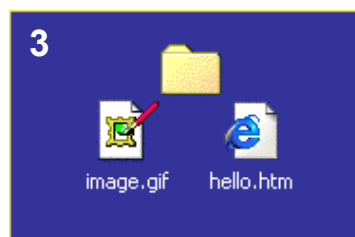
The usual relationship between HTML documents and their associated images is to either have them in the same directory, or place images in a subdirectory named 'images'. Once the relationship is established, the files should not be moved independently, or links within the HTML will need to be re-established.

Eg:

1. From "hello.htm" to the image "image.gif", the pathway is: `../topic2/image.gif`



2. From "hello.htm" to the image "image.gif", a the pathway is: `topic2/image.gif`
3. From "hello.htm" to the image "image.gif", a the pathway is: `image.gif`



## 6. Links

Links, or 'hyperlinks' allow the web user to navigate between documents by clicking with their mouse on a link, which may be a piece of text or a graphic.

You may create links to other websites (external), to pages in your own site (local), or to a location on the same page (anchor).

To link to local documents (those within your own web site) use the relative file path of the document, including any required directory information, eg:

```
<a href="(../other folder/filename.html ">Link text</a>
```

External files (those in other websites) are called using the full URL, eg:

```
http://www.edtec.unsw.edu.au
```

### Links Syntax

Links are created by using the <a>(anchor) tag with an 'href' attribute, which works like the image 'src' attribute:

```
The quick brown <a href="http://www.fox.com">fox</a>  
jumped over the lazy <a href="dog.html">dog</a>
```

links the word 'fox' to the fox website, and the word 'dog' to an html document called 'dog'.

- <A> stands for Anchor. It begins the link to another page.
- HREF stands for Hypertext REFerence – refers to the address of the linked document
- 'http://www.fox.com' is the FULL ADDRESS of the link. 'HREF=address' is an attribute of the Anchor tag.
- The text contained within the <a href> </a> tags is what becomes the functional link on the page rendered by the browser. It will, by default, appear as underlined, usually blue, text, and the mouse cursor will become a pointer as it rolls over.
- </A> closes the link tag.

Images may also be used to anchor links:

```
The quick brown <a href="http://www.fox.com">fox</a>  
jumped over the lazy dog  
<br><a href="dog.html"></a>
```

In this case, an image called 'doggy.gif' is a link that goes to 'dog.html'.

### Page anchors

Anchors within a page may also act as targets for links, as in:

[Link to top of page](#)

This is done by placing a named anchor at the spot you wish to link to, then using that anchor name as the href, eg:

`<a name="top"></a>`Top of page

[page content]

`<a href="#top">`Link to top of page`</a>`

Try the link here: [go to top](#)

### Target attribute:

By default, a link will open its target document in the same browser window. The target attribute can be used to open the link in a new window (target="\_blank").

## 7. Page Layout

The layout control inherent in HTML is virtually non-existent – think of a very basic word processor with left, centre, right alignment, and the ability to wrap text around images. Then consider the fact that the text display size may vary considerably from browser to browser, depending on platform, software and user settings, and it is clear that the control of the final page display is quite limited.

A widely used 'workaround' for this is to place content into table cells to hold it in place on the page.

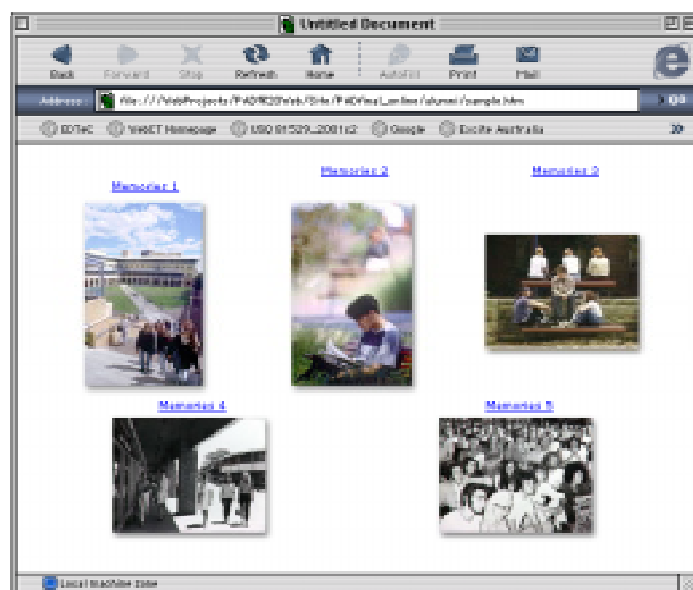
### Tables

Table cells may be treated as individual layout areas, with the ability to vary alignment and background colours, they may also be combined or divided to accommodate the content.

Eg:

Page set up in Dreamweaver table (top)

Page with table viewed in browser (below)



Tables used for layout purposes may be difficult to interpret for viewers using screen readers or browsing without graphics – they can be identified as layout tables using the 'name' and 'summary' attributes, eg:

```
<table width="100%" name="navigation" summary="layout table contains navigation links">
```

## **Layers (the DIV tag)**

Another mechanism for positioning page elements is the <DIV> tag.

DIV tags (called 'layers' in Dreamweaver) allow absolute or relative positioning for blocks of content, even layered over each other. Current HTML standards deprecate the use of tables for layout, in favour of the DIV tag, but it must be said that rendering of some DIV attributes is still inconsistent between browsers, so layout tables are still widely used.

Some positioning of elements may also be set in stylesheets (in combination with the DIV tag).

## 8. Style sheets

The future of web publishing has the separation of page formatting from the actual text or image content of web pages. This means that block level formatting tags such as <font>, <b>, <i> etc will no longer be supported in browsers in the future and have already been “deprecated” by the international standards body the “W3C Consortium”.

The method by which this separation is to occur is via the “Cascading Style Sheet” or CSS for short.

CSS is VERY powerful, can be used to control the appearance of hundreds of web pages in a single site OR only a single page in hundreds pages on a web site.

Style sheets work on the same principle as styles in Microsoft Word, that is you define a style then you apply to a block of text. Styles are usually applied to an HTML document in one of two ways. The easiest way is to “Redefine an HTML tag”. This means that the behaviour of that tag is consistently modified across the document.

Example:

```
<style type="text/css">
<!--
p { font-family: Verdana, Arial, Helvetica, sans-serif; font-size: medium; color:
#FF0000}
h3 { font-family: Verdana, Arial, Helvetica, sans-serif; font-size: x-large; color:
#00FFFF}
-->
</style>
```

This code, placed in the head of the document, redefines the <p> and <h3> tags, applying font, colour and size attributes. These override text attributes set in the <body> tag, however text attributes set in a <font> tag will override the style sheets.

To use the style sheet globally, add a link tag into the head of your document:

```
<link rel="style sheets" href="sample.css" type="text/css">
```

And save the tag definitions in a separate document with a .css extension:

```
p { font-family: Verdana, Arial, Helvetica, sans-serif; font-size: medium; color:
#FF0000}
h3 { font-family: Verdana, Arial, Helvetica, sans-serif; font-size: x-large; color:
#00FFFF}
```

You can also define and name individual styles which are called classes. These classes are then applied to individual sections of text by using either the <DIV> or <SPAN> tags....

Example:

```
<DIV class="pretty">Little Girls are....</DIV>
```

## WHERE DO STYLE SHEETS LIVE

Style Sheets can reside in several locations...

**Document head within the <HEAD> </HEAD> tags:** A style sheet can be defined in the header of a document. This means that the style information is available to only that document.

**Externally:** A style sheet can be written into a text file which is saved with a .css extension. This file can then be brought into any html document within you site by placing the <LINK > tag in the document header. This is a very powerful tool as it allows you to define things such as type faces, link colours for a web site globally. Any alterations to the .css file will affect every page which is linked to it.

**Inline:** Style information can also be placed within the body of a document. This is achieved by assigning a style attribute to a tag such as a <p> tag or <span>,<div> etc block level tag. The style information is then written directly to the tag.

Example:

```
< div style="font-family:Arial,Helvetica,sans-serif; font-size:10pt">Blah Blah Blah</div>
```

This style is ONLY available within the block tag in which it is defined.

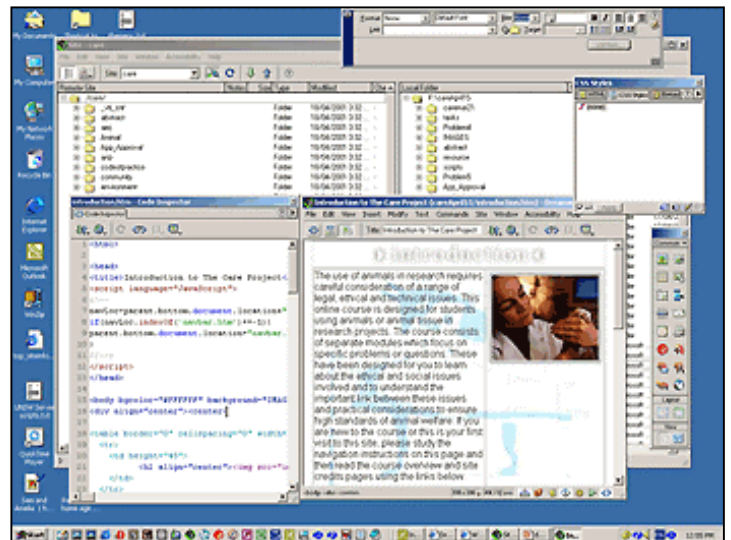
WebCT supports the use of CSS, the most browser-proof method being to embed the styles into your HTML document.

## 9. Dreamweaver Tools and Features

- Dreamweaver Tools and Features
- visual composition environment
- HTML code editing environment
- site management
- user code library
- templates
- inbuilt HTML, CSS and Javascript reference book
- macro, automate repetitive tasks
- CSS editing and management
- filtering

### Dreamweaver Interface

- Site management window
- Visual editing window
- HTML editing window.
- Multiple property palettes



### Dreamweaver Site Management

- rename files; updates all links to that file.
- replace a file and change all links from old file to new.
- synchronise files with the web server.
- help you work collaboratively with others.
- get a visual look at the relationships between files
- site wide search and replace

