

# INTRODUCTION TO HTML – PART I

## Introduction

These workshop notes describe how to create simple HTML documents for use on the World Wide Web. They are intended for people who have never created a Web page before. Familiarity with using the World Wide Web and a working knowledge of Windows NT/95/98/2000 are assumed. The material is designed for use on ITS managed workstations.

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# I. Introduction

## What is HTML?...

- Hyper Text Markup Language
- A standard set of codes, called tags, used to format all Web pages.
- HTML includes a set of rules defining the way tags can be used and combined.
- Learning HTML means learning the tags and learning the rules.
- You can write it by hand or use an editor package.

## What is a Web page?...

- A text-only file (ascii text).
- Formatted in HTML.
- Interpreted and displayed by a Web browser.
- *Must* be named with a **.htm** or **.html** extension
- Filenames are case-sensitive
- No spaces allowed in file names
- There are no graphics embedded in the text.
- All the graphics are stored as separate files (graphic formats .gif or .jpg), each one referenced by an HTML tag.

## Web browsers...

- Web browsers can read files stored locally on your PC:  
Internet Explorer File menu > **Open** then click on **Browse**
- And read pages stored on a remote web-server:  
Location <http://www.bbk.ac.uk/>
- Pages must be transferred to a web-server to be world accessible.

## Web servers...

- The Birkbeck web server is a UNIX machine called **www**
- The web site is stored in a hierarchical file structure
- Each School and Department has a directory for their pages
- You can create your own subdirectories

## Working method...

1. Plan and design pages
2. Create and edit them locally on your PC
3. Test the pages in Web browsers
4. Transfer files to the remote Web server using an FTP package (file transfer protocol). Some HTML editors have FTP built in.

## HTML basics – syntax...

- Tags are defined using angle brackets, with a formatting code inside:  
<BR> is a linebreak, <B> is bold
- Tags come in pairs, acting on everything that they enclose:  
<B>**bold text**</B>

- The closing tag *always* begins with a forward slash /
- Tags can be in upper or lower case
- Tags can be combined
- They must be nested symmetrically:

```
<P><B><I>bold italic</I></B></P>
```

- Additional tag properties can be set using *attributes*:

```
<P>text</P>
```

```
<P ALIGN="center">text</P>
```

- One tag can have several attributes, separated by spaces:

```
<TABLE WIDTH="580" BORDER="0"
BGCOLOR=" #FFFFCC" >
```

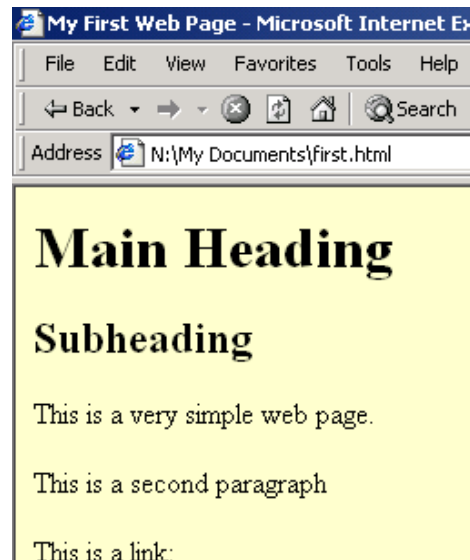
### HTML basics – structure...

- All web pages start with this basic structure of ‘container’ tags which enclose the entire document:

```
<HTML>
<HEAD>
<TITLE>Home Page</TITLE>
</HEAD>
<BODY>
    ← all visible content goes here
</BODY>
</HTML>
```

**A simple web page...**

```
<HTML>
<HEAD><TITLE>My First Web Page</TITLE>
</HEAD>
<BODY BGCOLOR="#FFFFCC">
<H1>Main Heading</H1>
<H2>Subheading</H2>
<P>This is a very simple web page.</P>
<P>This is a second paragraph</P>
<P>This is a link:<BR>
<A HREF="http://www.bbk.ac.uk/">Birkbeck Home Page</A>
</P>
</BODY>
</HTML>
```

**... as viewed in Internet Explorer**

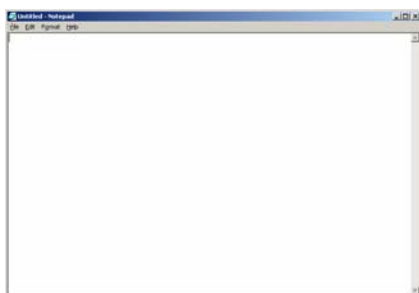
## 2. Getting Started

**Objectives** Login to the PC network, access the Windows desktop and run the software to be used in these exercises.

**Method** You will login and run the Notepad text editor and Internet Explorer.

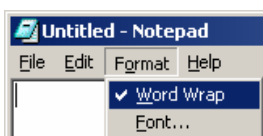
**2.1** Login to the PC using your username and password.

**2.2**



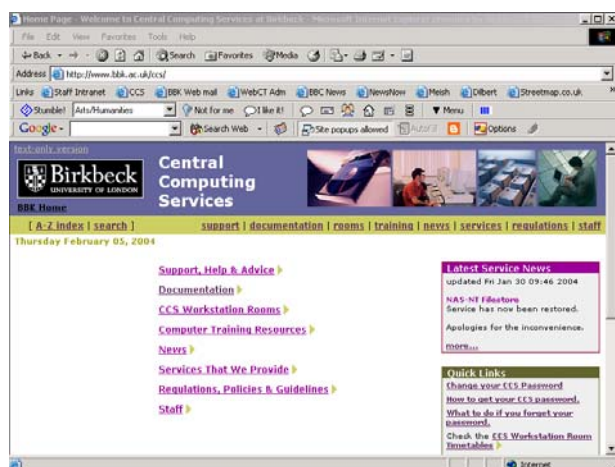
**Fig. 1.1 The Notepad**

Click on the **Start** button at bottom left corner of the screen and select **Programs**, then **Accessories**. Click once on **Notepad** to run the application. A blank document will be opened.



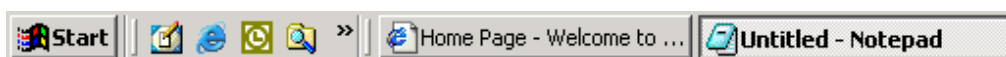
In Notepad, open the **Format** menu and check that **Word Wrap** has a tick beside it, as shown. If not, click once on **Word Wrap** to turn it on.

**2.3** Start **Internet Explorer** by double clicking on the desktop icon, shown left, or use the **Start** menu. The opening screen will resemble Figure 1.2



**Fig. 1.2 The**

**Note** Switch between applications by clicking on the status bar buttons at the bottom of the screen.



### 3. Creating a Simple HTML Document

**Objectives** To create and view a simple HTML document.

**Method** You will create a simple HTML document using Notepad, then view the document using a WWW browser.

**Comments** Notepad is a simple MS Windows editor which can be used to create and edit text files.

**3.1** In the Notepad window type the following text:

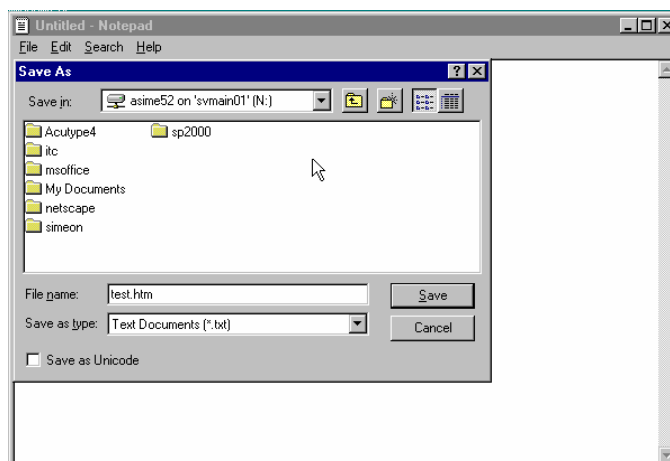
```
<HTML>
<HEAD>
<TITLE>My First HTML Document</TITLE>
</HEAD>
<BODY>
This is my first HTML document.
</BODY>
</HTML>
```

**Note** Notice that you have typed in some HTML tags, which are enclosed in angle brackets e.g. <TITLE>

**3.2** Within Notepad, select the File menu and choose the Save option.

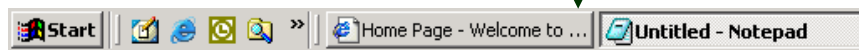
Choose the N: drive (for example) and name the file **test.htm**

Make sure that Save as type: is set to Text Files (\*.txt)



**Note** Make a note of where you save your file. You may wish to create a folder in your **My documents** folder for the files created in these exercises.

- 3.3** Switch to the Internet Explorer window (by clicking the button on the status bar at the bottom edge of the screen, shown below)

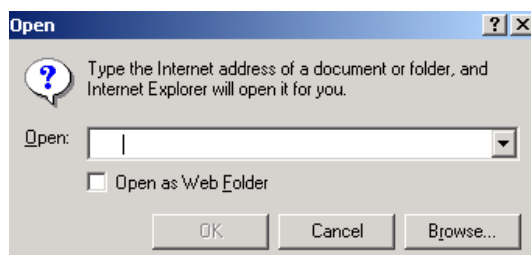


- 3.4** From the File menu click on **Open**

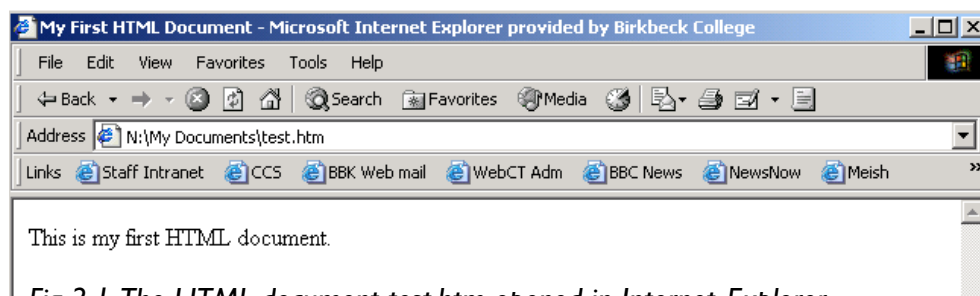
In the Open window, click on the **Browse...** button,

In the Open window, select the **test.htm** file you just saved (you will need to select the N: drive at the top of the window) and click on the **Open** button.

In the Open Page window, click on the **Open** button to open the page in Internet Explorer.



The document will be displayed as shown below.



*Fig 2.1 The HTML document test.htm opened in Internet Explorer*

Notice how the **<TITLE>** of your document is displayed in the header of the Internet Explorer window.

- Note** The **Address** box shows where the file currently being displayed is stored. In Fig 2.1 the address box reads **N:\My Documents\test.htm** This indicates that the file is located on the drive labelled **N:** and is called **test.htm**. If you are working on a standalone PC, your files might be located on **C:** or **D:** drive.

## 4. Adding Text to your HTML Document

- Objectives** To add some paragraphs to your simple HTML document.
- Method** You will add some paragraphs separated by carriage returns, and view them. You will then add the <P> paragraph tag.
- Comments** Paragraphs are delimited by the <P> and </P> tags

- 4.1** Return to the Notepad window and add only the text shown in bold to your document (*replace John Smith with your own name*):

```
<HTML>
<HEAD>
<TITLE>My First HTML Document</TITLE>
</HEAD>
<BODY>
This is my first HTML document.
```

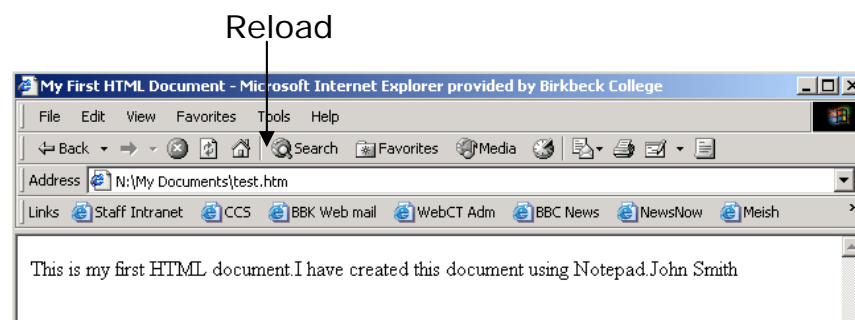
**I have created this document using Notepad.**

```
John Smith
</BODY>
</HTML>
```

Save the file, (File menu, Save option).

- 4.2** Switch to Internet Explorer and click on the **Reload** icon on the button bar near the top of the screen.

Your amended text will display as shown below:



Notice how the three lines of text are displayed as a single line. The carriage returns in the original document have no effect.

- 4.3** Return to Notepad. Enclose each paragraph with the <P> and </P> start and end tags:

```
<P>This is my first HTML document.</P>
```



`<P>I have created this document using Notepad. </P>`

`<P>John Smith</P>`

Save the file.

- 4.4** Return to Internet Explorer and select the **Reload** option (F5). Notice that the three paragraphs are now displayed correctly.

**Note** WWW browsers use the `<P>` tag to identify paragraphs. Carriage returns normally have no effect on the way in which an HTML document is displayed.

## 5. Adding Headers to your HTML Document

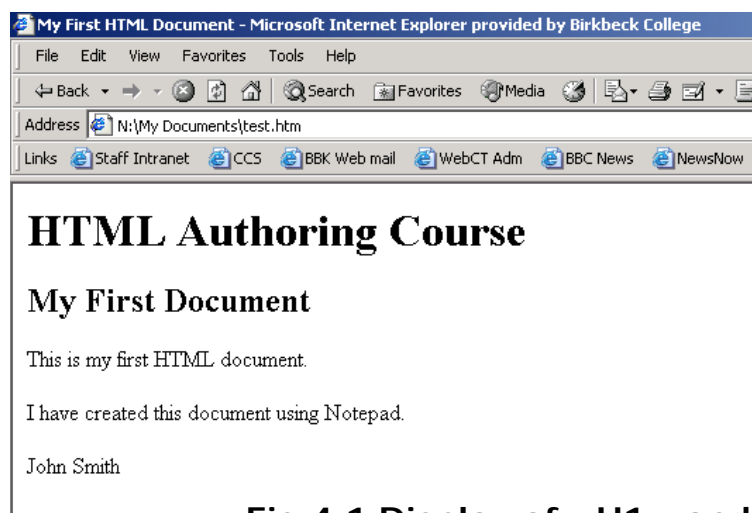
|            |   |
|------------|---|
| Objectives | To use the header tags in your HTML document.   |
| Method     | You will add the <H1> and <H2> header tags.   |
| Comments   | Headings can be delimited using the <Hn> and </Hn> tags. There are six different levels, from <H1> the largest, down to <H6>. Header tags should not be nested. |

**5.1** In Notepad, add only the text shown in bold to your document:

```
<HTML>
<HEAD>
<TITLE>My First HTML Document</TITLE>
</HEAD>
<BODY>
<H1>HTML Authoring Course</H1>
<H2>My First Document</H2>
<P>This is my first HTML document.</P>
<P>I have created this document using Notepad.</P>
<P>John Smith</P>
</BODY>
</HTML>
```

Then save the file.

**5.2** Return to Internet Explorer and Reload your document. Notice how the headers are displayed differently from the main text.



**Fig 4.1 Display of <H1> and <H2>**

## 6. Using Lists

|            |  |
|------------|--|
| Objectives | To add a bulleted list to your HTML document.  |
| Method     | You will use the <UL>, <OL> and <LI> tags.   |
| Comments   | The <UL> ... </UL> tags are used to define the start and end of an unordered list (bulleted). The <OL> ... </OL> tags are used to define the start and end of an ordered list (numbered). The <LI> tag is used to define list items. |

**6.1** In Notepad add only the text shown in bold to your document:

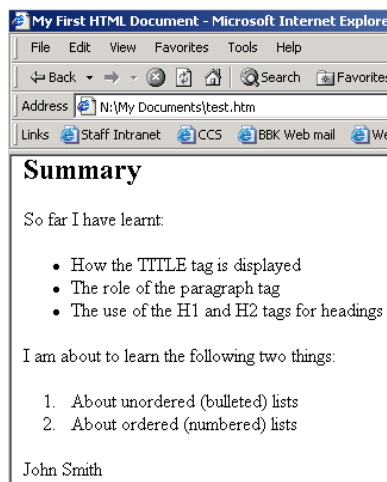
```
<P>I have created this document using Notepad.</P>

<H2>Summary</H2>
<P>So far I have learnt:</P>
<UL>
<LI>How the TITLE tag is displayed</LI>
<LI>The role of the paragraph tag</LI>
<LI>The use of the H1 and H2 tags for headings</LI>
</UL>

<P>I am about to learn the following two things:</P>
<OL>
<LI>About unordered (bulleted) lists</LI>
<LI>About ordered (numbered) lists</LI>
</OL>
```

Then save the file.

**6.2** Return to Internet Explorer and Reload the document. Notice how the unordered and ordered lists are displayed.



**6.3** Create another ordered list using the <OL>, </OL>, <LI> and </LI> tags.

## 7. Task 6 Physical and Logical Tags.

|            |   |
|------------|---|
| Objectives | To use physical and logical formatting tags to create bold and italic text.   |
| Method     | You will use <B> (bold), <I> (italic), <STRONG> and <EM> tags.  |
| Comments   | Physical tags such as <B> and <I> give you control over the appearance of a document. Logical tags, such as <STRONG> or <EM>, define the role of the text in a document as well as changing its appearance. |

- 7.1 Switch to Notepad and add italic <I> and bold <B> tags to the text as shown below in bold:

```
<P>This is my <I>first</I> HTML document.</P>
<P>I have created this document using <B>Notepad.</B></P>
```

Save the file. Switch to Internet Explorer, **Reload** the document and view the changes:

*This is my first* HTML document.

I have created this document using **Notepad**.

- 7.2 Return to Notepad and replace the italic <I> tags with the emphasis <EM> tag, and the bold <B> tags with the strong <STRONG> tag, as shown below:

```
<P>This is my <EM>first</EM> HTML document.</P>
<P>I have created this document using
<STRONG>Notepad.</STRONG></P>
```

Save the file, switch to Internet Explorer and **Reload** the document. Notice that the appearance of the text is the same.

**Note** Physical formatting tags such as <B> and <I> change the appearance of text in your document. Logical tags, such as <STRONG> and <EM>, change the appearance of text too, but they also define the role of the text within the document.

This can be important if your page is read by a text reader for the visually impaired. If an audio-enabled browser encounters a logical tag, <EM> or <STRONG>, it will interpret its meaning by placing extra emphasis on the word, whereas physical formatting tags like <B> and <I> will not be interpreted differently from the rest of the text.

## 8. Using Hypertext Links

- Objectives** To create a hypertext link in your HTML document.
- Method** You will use the `<A>` anchor tag to add a link to the Birkbeck College home page.
- Comments** The `<A>` tag is used to create links to other files, either locally or on computers systems anywhere on the Internet.

### 8.1 Return to your document in Notepad and add only the text shown below in bold:

```
<P>John Smith</P>
```

```
<A HREF="http://www.bbk.ac.uk/index.shtml">Birkbeck  
College</A>
```

Save the file and then go back to your WWW browser and select the **Reload** option.

Notice how the words Birkbeck College, i.e. the text contained between the `<A...>` and `</A>` tags, is displayed differently from the rest of the text, usually in underlined blue. If you point the mouse at it the pointer changes to a hand symbol. This always indicates that you are pointing at a hyperlink that will take you to another document.

**Note** Notice that the `<A>` tag always uses the syntax

```
<A HREF="http://domain_name/pathname">link text</A>
```

The attribute **HREF** is a mnemonic for 'Hypertext REFERENCE'.

The *domain\_name* is the name of the computer system (Web server) you wish to access.

The *pathname* refers to the name of the file you wish to retrieve and the directory in which it is located.

### 8.2 In Internet Explorer, click on the words Birkbeck College. You will be taken to the college home page, as shown below:



### 8.3 Open the **View** menu and click on the **Source** option. This allows you to

examine the HTML used in the document you are viewing. This is a useful way to learn new tags and steal ideas. Close the source window (by clicking on the x in the top right corner) when you have finished.

Click on the browser Back button to return to your document.

## 9. Task 8 Adding Images

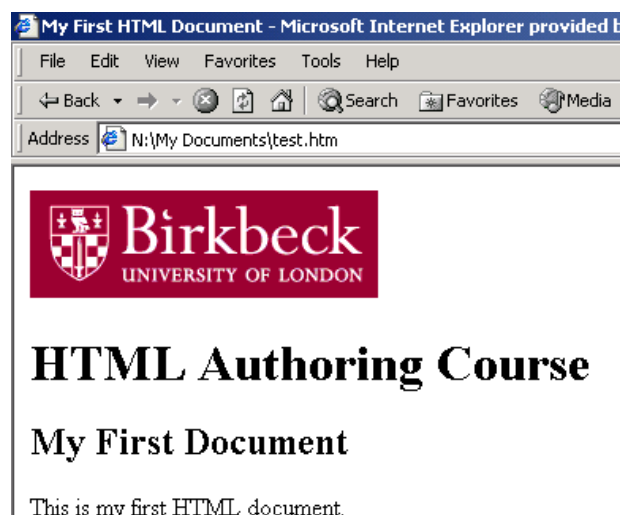
- Objectives** To add an image file to your HTML document.
- Method** You will use the `<IMG SRC="image_filename">` tag to include an image.
- Comments** The `<IMG SRC="...">` tag specifies the location of an image. You will normally use GIF or JPEG image formats in HTML documents.

- 9.1** Return to Notepad and insert the following text after the `<BODY>` tag, as shown below (it may all fit on one line):

```
<BODY>
<IMG SRC="http://www.bbk.ac.uk/images/weblogo220x68.gif"
ALT="Birkbeck, University of London">
```

Save the file and then go to your WWW browser. Use the **Back** option to re-display your original page and then select the **Reload** option. The Birkbeck logo will appear in your document, as shown below.

- Note** The `ALT="..."` attribute is used in order to provide a text alternative for browsers which can't load images, or when loading of images is disabled. If the image was also a link to another page, you would include a full description.



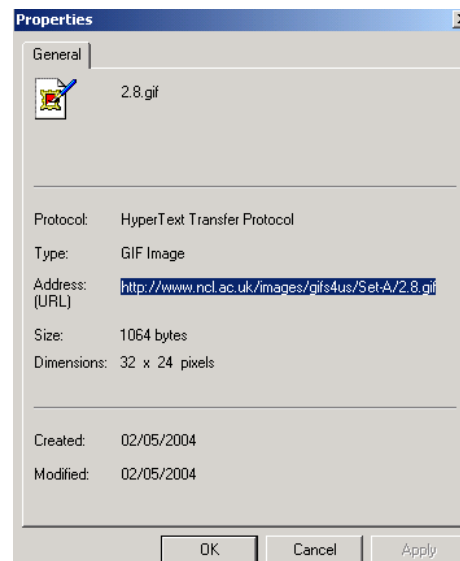
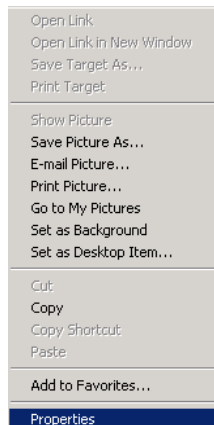
- 9.2** Visit the web page <http://intra.bbk.ac.uk/web/visualid.html> and read the guidelines on use of the college logo.

- Note** You don't have to include the official logo on your pages, but if you do it is important to stick to the guidelines.

### 9.3 Visit the web page <http://www.ncl.ac.uk/images/gifs4us/>

Select one of the sets of clipart (by clicking on one of the links to Set-A, Set-B etc.)

### 9.4 Move the cursor over one of the images and then hold down the right mouse button. A menu will be displayed (as shown in figure 9-2). Click on the **Properties** option.



You will now see the properties for that picture, including its address

Highlight the address and copy it (use either right-click – Copy or CTRL+C)

Return to **Notepad** and add the tag: `<IMG SRC="">`

Open the **Edit** menu and use the **Paste** option to insert the image's URL between the quotes, as in the example shown below (your number will differ):

`<IMG SRC="http://www.ncl.ac.uk/images/gifs4us/Set-B/3.7.gif">`

### 9.5 Return to the clipart collections and right mouse click on another image. This time select the **Save Picture As..** option, and save it to the same location as your **test.htm** file – write your filename below as a reminder; it will be x.x.gif.

My filename is \_\_\_\_\_ .gif

Add another **IMG** tag to your page, but this time instead of inserting the full URL, insert just the filename between the quotes, as in the example below:

`<IMG SRC="2.6.gif">`

**Note** If you refer to an image just by its filename, as above, the image file must be stored in the same directory as the web page file.

You can also link to images stored in parent directories and subdirectories, in relation to the location of the HTML file:

```
<IMG SRC="images/2.6.gif">
```

(The file "2.6.gif" is stored in a subdirectory of the current location, called images)

```
<IMG SRC="../../2.6.gif">
```

(The file "2.6.gif" is stored in the parent directory of the current location)

## 10. Creating a Simple Table

|            |   |
|------------|---|
| Objectives | To create a simple table in your HTML document.   |
| Method     | You will use a number of basic table tags. These include <TABLE>, <TR>, <TH> and <TD>.  |
| Comments   | Tables are a useful tool for improving layout and fitting more information onto a page. Note that old browsers do not support them, and that they can cause difficulties for audio-enabled browsers as used by the visually impaired. |

- 10.1** Return to the Notepad program. Select a suitable place in the body of the document for placing your table and add the following text:

```
<TABLE BORDER="1">
<TR>
<TH>Contents</TH>
</TR>

<TR>
<TD>Task 1</TD>
<TD>Getting Started</TD>
<TD>Page 1</TD>
</TR>

</TABLE>
```

The <TABLE> ... </TABLE> tag is a container for the whole table.

The <TR> ... </TR> tags define a table row and within this you use the <TD> ... </TD> tags to define cells in the row (table data).

The <TH> tag defines a heading, making the text inside it bold and centred.

Text, images and other HTML tags can all be included inside a table, but must only be positioned inside the <TD> ... </TD> or <TH> ... </TH> container tags.

- 10.2** Save your document. Return to your browser and **Reload** the page. The table should now appear in your document as shown below:





## HTML Authoring Course

|                 |                 |        |
|-----------------|-----------------|--------|
| <b>Contents</b> |                 |        |
| Task 1          | Getting Started | Page 1 |

### My First Document

This is my first HTML document.

I have created this document using Notepad.

- 10.3** You can merge cells of your table using the **COLSPAN** attribute in the **<TR>** and **<TH>** tags. Return to your document in Notepad and add the text shown below in bold to the **<TH>** tag:

**<TH COLSPAN="3">**

This makes the cell span three columns as shown below:

| <b>Contents</b> |                 |        |
|-----------------|-----------------|--------|
| Task 1          | Getting Started | Page 1 |
| Task 2          | Using Colour    | Page 2 |
| Experiments     |                 | Page 3 |

You can use the **ALIGN** attribute to position data within each **<TD>** cell. Add more rows to your table and experiment with **COLSPAN** and **ALIGN** attributes, as in the example row shown below:

```
<TR>
<TD ALIGN="right">Task 2</TD>
<TD ALIGN="center">Using Colour</TD>
<TD>Page 2</TD>
</TR>
```

or try:

```
<TR>
<TD COLSPAN="2" ALIGN="center">Experiments</TD>
<TD>Page 3</TD>
</TR>
```

#### 10.4 There are other TABLE attributes you can experiment with.

To set the width of the whole table, add:

`<TABLE WIDTH="50%">` to define as a percentage of the total screen width

or

`<TABLE WIDTH="580">` to define as an absolute value in pixels.

**Note** You need to consider all users when setting table widths. The smallest screen display generally in use measures 800 pixels wide by 600 pixels high, so it is generally a bad idea to set a width greater than 760 (allowing for a scroll bar).

To remove the table border, use:

`<TABLE BORDER="0">`

To set the spacing between cells (cellspacing) and spacing between the cell contents and the border (cellpadding), set a distance in pixels, for example:

`<TABLE CELSPACING="5" CELLPADDING="10">`

To align cell contents vertically, use:

`<TD VALIGN="top">`

`<TD VALIGN="bottom">`

`<TD VALIGN="middle">`

#### 10.5 Open the URL

[http://home.netscape.com/assist/net\\_sites/table\\_sample.html](http://home.netscape.com/assist/net_sites/table_sample.html)

to see several more table examples.

## 11. Task 10 Finding Out More

**Objectives** To find out more about HTML

**Method** You will access some of the information available on the Web to find out more about HTML.

**Comments** Many resources are available to assist Web authors. Some useful starting points are included here.

#### 11.1 Visit the primary reference site for HTML:

<http://www.w3.org/MarkUp/>

This is a good place for reading about current developments, and you will also find the official HTML specifications here.

## 11.2 Visit the Netskills Training Materials site:

<http://materials.netskills.ac.uk/login.html>

The Netskills organisation produce a broad range of training materials which can be used for self training. Birkbeck has a site licence and if you register at this site you can download the modules. Each module consists of a Powerpoint presentation and Word workbook and there is a lot there for web authors. To register to use the materials:

Click on the Register link

Fill out the form, entering Birkbeck College as the organisation.

Click on Proceed with Registration

Scroll down and click on the I agree button.

Enter a username and password (make one up, don't use a real one), then click on Continue with Registration.

Scroll down and click on the Login button.

You will now see the full list of training modules with brief descriptions.

Click on the View Module Files button to the left of each title to access the materials:

---

|   |   |
|---|---|
|  | <b>Web Page Design</b>  |
| →   | <small>This training module investigates the issues of good and bad practice in the composition of Web pages, including structure, content and accessibility.</small> |
|   | <small>You are covered by the educational schedule for this module (<i>expires 20/01/2002</i>)</small>  |

---

Netskills also run excellent HTML authoring workshops, which are highly recommended. Their current workshop program is listed at:

<http://www.netskills.ac.uk/workshops/forthcoming.html>

## 11.3 These sites are also worth a look.

The WebMonkey HTML Teaching Tool:

<http://www.hotwired.com/webmonkey/teachingtool/>

The NCSA Beginners Guide to HTML:

<http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html>

Web Design Group reference site:

<http://www.htmlhelp.org/>

You will find lots more at the Yahoo subject index site:

<http://dir.yahoo.com/>

In the Yahoo index displayed on the left-hand side of the page, click on the Computers **heading**, and then on the World Wide Web link on the next page. You'll find several categories including HTML and Beginners Guides.

## 12. Task 11 Adding a Background Colour

**Objectives** To familiarise yourself with background colours.  
**Method** You will set the background colour for an HTML document.  
**Comments** Using a background colour can change the impact of your HTML page.

**12.1** Using Notepad, type the following into a new document:

```
<HTML>
<HEAD>
<TITLE>My Colour HTML Document</TITLE>
</HEAD>
<BODY>
<H2>This is my document</H2>
</BODY>
</HTML>
```

Save the file, (File menu, Save) as colour.htm

Open the file in Internet Explorer.

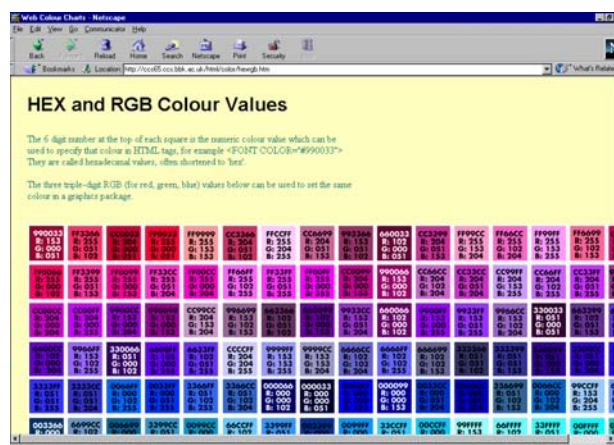
**12.2** Return to Notepad and replace the <BODY> element with the following:

```
<BODY BGCOLOR="#FFDDDD">
```

Note the spelling of BGCOLOR. Save the file again, then return to Internet Explorer and select the Reload button. The background colour should now be pink.

**12.3** In Internet Explorer, open the URL:  
<http://www.bbk.ac.uk/ITS/html/color/hexrgb.htm>

The following page will be displayed:



Return to Notepad and try a few of the colours listed in Fig 11-1 by replacing the value "#FFDDDD" in the <BODY> tag. The hash-mark # is required.

## 13. Task 12 Adding Colour to Text and Links

|            |   |
|------------|---|
| Objectives | To change the colour of your document's text and hypertext links.   |
| Method     | You will use a number of <BODY> element attributes. These include TEXT="#rrggbb", LINK="#rrggbb" and VLINK="#rrggbb"  |
| Comments   | (#rrggbb represents a hexadecimal colour value, e.g. #FF0000 is red. Three pairs of digits are used to specify the proportion of red/green/blue in a particular colour, hence known as RGB colour values.)<br>Setting colours in the BODY tag will change the text and link colours for the whole page. |

- 13.1** Use Notepad to open the file colour.htm and replace the opening <BODY> element with the following:

```
<BODY BGCOLOR="#FFFFFF" TEXT="#FF0000">
```

Save the file.

- 13.2** Switch to Internet Explorer and **Reload** the page. Your document should now have red text on a white background.

- 13.3** Return to Notepad and add the following hypertext link to your document, positioning it inside the <BODY> .. </BODY> tag:

```
<A HREF="http://www.netskills.ac.uk/">Netskills WWW  
Site</A>
```

Now add the text shown below in bold to your opening BODY element:

```
<BODY BGCOLOR="#FFFFFF" TEXT="#FF0000" LINK="#00FF00">
```

- 13.4** Return to your browser and **Reload** the page. The hypertext link to Netskills should now appear as green.

- 13.5** Return to Notepad and add the text shown below in bold to the BODY element:

```
<BODY BGCOLOR="#FFFFFF" TEXT="#FF0000" LINK="#00FF00"  
VLINK="#CD7F32">
```

Save the file.

- 13.6** Return to Internet Explorer and **Reload** the page. The Netskills link will now appear in gold when the link has been visited.

## 14. Task 13 Adding Background Images

- Objectives** To add an image to your HTML document background.
- Method** You will use the **BACKGROUND**="*image.gif*" attribute of the **BODY** tag.
- Comments** Using an image file as a background allows you to use textured effects.

- 14.1** In Notepad, open the file **colour.htm** and replace the opening **<BODY>** tag with the text below:

```
<BODY  
BACKGROUND="http://www.bbk.ac.uk/ITS/html/color/blue_paper.gif">
```

Save the file.

- 14.2** Return to Internet Explorer and **Reload** the page. Your page should now have a blue, textured background.
- 14.3** In Notepad, replace the image file name 'blue\_paper.gif' with one of the following:

```
yellow_stucco.gif  
multidot_paper.gif  
pink_fabric.gif  
rock.gif
```

Save the file and view the change in Internet Explorer.

- Note** Any image can be used as a background, in .gif or .jpg format. Usually it is a small 'tile' that is repeated across the page. A large image will slow the loading of the page.

## 15. Adding local Font Settings

- Objectives** To change the colour of short segments of text, overriding the main **<BODY TEXT>** colour setting.
- Method** You will use the **<FONT COLOR="#rrggbb"> .. </FONT>** attribute.
- Comments** The **<FONT>** tag is useful for changing the colour of text independently of the overall page settings within the **<BODY>** tag. It can also be used to change the font size and face.

- 15.1** In Notepad, add the following to the file **colour.htm**:

```
<P>This is the default text colour.</P>  
<P><FONT COLOR="#FF33CC">This colour is set with the  
FONT tag.</FONT></P>
```



Save the file.

- 15.2** Switch to Internet Explorer and Reload the page. Your document should now have some pink text where you used the FONT tag.

In Notepad, add the following to your page:

```
<P><FONT SIZE="5">This is size 5 text</FONT></P>  
<P><FONT SIZE="-1">This is -1 size text</FONT></P>
```

Save your file, switch to Internet Explorer and Reload the page. You should now have some large and small text.

**Note** You can set the font SIZE as a number from 1 (smallest) up to 7, or as a relative value such as '+2' or '-1', in relation to the default text size (which is '3').

- 15.3** We will now try changing the font face. In Notepad, add the following to your page:

```
<P><FONT FACE="Arial, Helvetica, sans-serif">This font is  
<B>Arial</B></FONT></P>
```

Save the file, switch to Internet Explorer and Reload the page. The text above should appear in san-serif style.

**Note** Not all computers use the same font names. For example Arial, a common Windows PC font, is often called Helvetica on Macintoshes and 'sans-serif' on Unix machines. Therefore, when you use the <FONT FACE attribute it is advisable to include all the equivalent font names found on different platforms, separated by commas as in the example above.

- 15.4** The COLOR, SIZE and FACE attributes of the FONT tag can be combined together. Try adding the following to your page, or experiment with your own combination:

```
<P><FONT COLOR="#CC3333" SIZE="4" FACE="Arial,  
Helvetica">This is dark red, size 4 text</FONT></P>
```

Save the file and view in Internet Explorer.

## 16. Adding Colour to Tables

**Objectives** To change the background colour of table cells.

- Method** You will use the `BGCOLOR="#rrggbb"` attribute of the `<TR>`, `<TD>` and `<TABLE>` tags.
- Comments** Adding background colour to table cells is a useful design technique. However, this attribute is not recognised by some older browsers so you should ensure that the page is still readable without the table background (white text on a dark table background will not show up if the main page background is also white).

**I6.1** Use Notepad to add the following to your `colour.htm` file:

```
<TABLE WIDTH="400" BORDER="0">
<TR BGCOLOR="#00CCCC">
<TD>Row 1, cell 1</TD>
<TD>Row 1, cell 2</TD>
</TR>
<TR>
<TD BGCOLOR="#66FF66">Row 2, cell 1</TD>
<TD BGCOLOR="#00CC99">Row 2, cell 2</TD>
</TR>
</TABLE>
```

Save the file.

**I6.2** Return to Internet Explorer and Reload the page.

Your page should now display a coloured table, with a turquoise row at the top and a light and dark green cell in the bottom row.

**I6.3** In Notepad, remove the `BGCOLOR` attributes from the `<TR>` and `<TD>` tags and add a `BGCOLOR` attribute to the main `TABLE` tag as shown below:

```
<TABLE BGCOLOR="#00CC99" WIDTH="400" BORDER="0">
```

Save the file. Switch to Internet Explorer and Reload the page. The whole table should now have a green background.

**I6.4** In Notepad, add a `BGCOLOR` attribute to the first cell as shown below in bold:

```
<TABLE BGCOLOR="#00CC99" WIDTH="400" BORDER="0">
<TR>
<TD BGCOLOR="#000000">Row 1, cell 1</TD>
```

Save your file. Return to Internet Explorer and Reload (F5).

You should see a green table with a single black cell at top left. This illustrates the way in which individual cell attributes override the settings in the top-level `<TABLE>` tag.

## 17. Optional Task - Checking Your HTML

|            |   |
|------------|---|
| Objectives | To validate your HTML document.   |
| Method     | You will use the 'Web Design Group HTML validation service' and learn what a DOCTYPE tag is.  |
| Comments   | Use of HTML validation (rules checking) is recommended. HTML is a standard, and the rules concern which tags and attributes may be used, their syntax, and the ways in which they can be positioned and nested within a document. |

- 17.1** Return to the WWW browser and type the following address, known as a URL (Uniform Resource Locator), into the Location box at the top:

<http://www.htmlhelp.org/tools/validator/direct.html>

Press the <ENTER> key to visit the site. The WDG (Web Design Group) Validator will be displayed.

**Note** There have been several versions of HTML, each of which has added new features. Level 2.0 is an early version that includes only simple tags with no tables, frames or fancy fonts. Level 3.2 is the version we are using in this course, and includes tables, frames and font tags. The most recent version is HTML 4.0, which comes in two flavours - transitional and strict. Because there are several versions of HTML in use it is good practice to add a 'DOCTYPE' tag at the start of your document to show which version you are using. In particular, HTML validators require one in order to know which set of rules to apply when checking your document for errors.

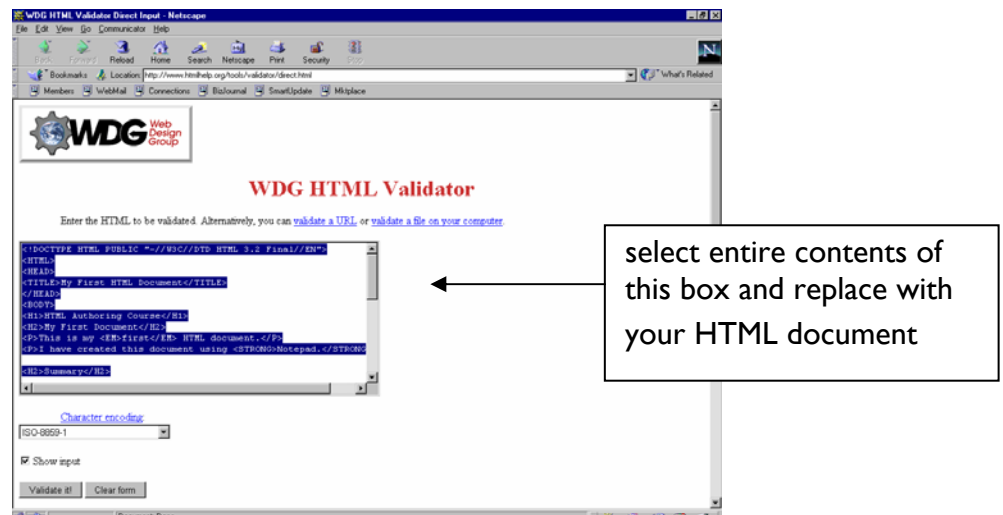
- 17.2** Return to Notepad. At the start of your document, above the opening <HTML> tag, add the text shown below in bold (this line must be typed exactly as shown and is case-sensitive):

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2  
Final//EN">  
<HTML>
```

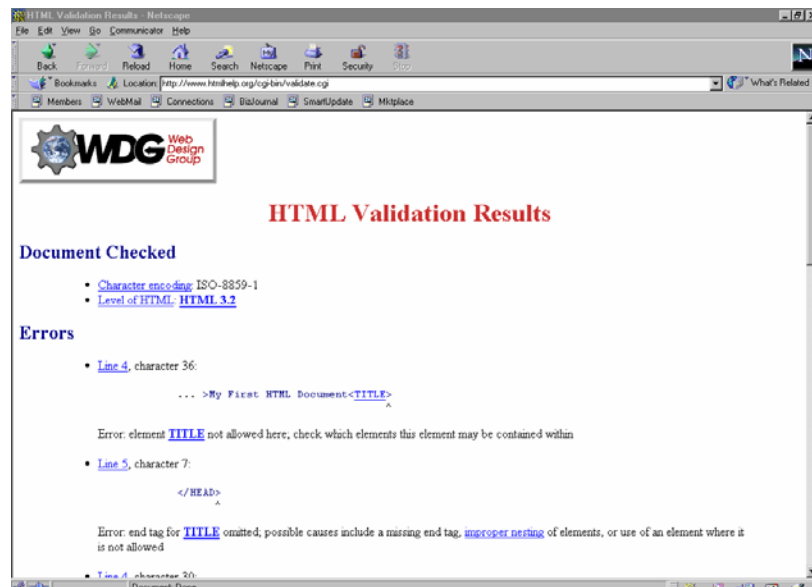
This is the DTD or 'Document Type Declaration' for HTML Level 3.2

- 17.3** In Notepad, select your entire document by opening the **Edit** menu and choosing the **Select All** option. Then select the **Copy** option, to copy your document to the clipboard.

- 17.4** Switch to Internet Explorer. Block the entire contents of the validation text box, as shown below in Fig 8.1. Then overwrite the contents using the **Paste** option from the **Edit** menu, (or by pressing the CTRL + V keys). This will paste the contents of your HTML document into the validator form.



- 17.5** Click on the **Validate it!** button (you may need to scroll down to see it.) If there are no errors in your document the following screen will be displayed (after a short wait):



If your document contains errors, they will be listed with a description.

- Note** If you receive a list of errors you should make a note of the first one, return to the validation form (using the browser 'Back' button) and correct it. Then resubmit the document by clicking on the 'Validate it!' button again, and repeat corrections in this way until all errors are removed. Remember to apply the changes to your original file in Notepad.

Certain errors can cause a whole series of 'cascading errors' and very often, fixing the first one will also correct the others in the list.

- Some HTML editors, such as Softquad's HotMetal Pro or Macromedia Dreamweaver, have built-in validators and will always produce valid HTML. (Not all packages are reliable however, and some produce non-standard HTML that would not pass a validation test, for example

### Microsoft Word)

- Most editors will create the opening DOCTYPE tag for you. As we've seen in the previous exercises, a Web page will still display without one so they are not essential, but must be included if you want to use an online validation service.
- You will find other DOCTYPE tags and descriptions of the differences between versions of HTML (and lots of reference links) at <http://www.htmlhelp.org/tools/validator/doctype.html>
- There is another good validator at <http://validator.w3.org/> which can be used to check live pages on a Web server.
- The WebXact validator at <http://webxact.watchfire.com/> will analyse web pages for their accessibility to people with disabilities.

## 18. Web Page Design Guidelines

- Plan what you want to say and do.
- How will the information be used?
  - will the pages be printed?
  - will the pages be used to 'springboard' to other pages.
- How will the information be navigated?
  - hierarchical or flat?
- Design a template and reuse it.
- Design the pages before writing them.
  - 'storyboarding'
  - 'prototyping'
- Look at other web pages for what is good and bad.
- Consider the use of graphics:
  - too much will slow loading of the page.
  - too little will result in a dull page
  - but no graphics are preferable to bad graphics.
- How will the page look on various platforms, in various browsers, on different size screens?
- Indicate who is responsible for the pages, and the date last modified.
- If appropriate, include a copyright notice.
- Include a link to the Birkbeck home page.
- Provide navigation paths through your pages.
- Be consistent with naming, headings and titles.
- Test all URL references regularly.
- Avoid 'under construction' signs. Pages should be completed before publishing!

Use of the Birkbeck Logo - Web guidelines: <http://intra.bbk.ac.uk/web/>

Birkbeck Code of Practice for the WWW:  
<http://intra.bbk.ac.uk/regs/webcode.html>

Birkbeck Guidelines for Personal Web Pages:  
<http://intra.bbk.ac.uk/regs/webguide.html>

## **19. HTML Resources**

### **Free Clipart Sites**

A few of the many sites where you can download free icons, graphics and backgrounds for your web pages:

Clip Art Warehouse  
<http://www.clipart.co.uk/>

Icon Bazaar  
<http://www.iconbazaar.com/>

Animated Image Factory  
<http://www.animfactory.com/>

See Yahoo for more sites:  
[http://dir.yahoo.com/Arts/Design\\_Arts/Graphic\\_Design/Web\\_Page\\_Design\\_and\\_Layout/Graphics/](http://dir.yahoo.com/Arts/Design_Arts/Graphic_Design/Web_Page_Design_and_Layout/Graphics/)

### **Graphic Banner Generators**

Instant Online Banner Creator  
<http://www.crecon.com/oem/littlegraphics/>

### **Meta Tag Generators**

Meta Tag Builder  
<http://vancouver-webpages.com/META/mk-metas.html>