

# FACTFILE: GCSE DIGITAL TECHNOLOGY



## Unit 2

### DIGITAL AUTHORING CONCEPTS



## Multimedia Authoring

### Learning Outcomes

Students should be able to:

- Demonstrate understanding of how HyperText Markup Language (HTML) tags is used to manage the following elements in website creation
  - Titles and
  - Page body, including the following:
    - > Colours and fonts
    - > Headers
    - > Lines of text
    - > Paragraphs
    - > Images
    - > Sound
    - > Video
    - > Tables
    - > Links and
    - > Lists
- Interpret logic behind a short extract of HTML code

### Creating web pages using HTML

HTML stands for Hypertext Markup Language and is the language used to create web pages. It makes use of tags. These define the structure of a web page and tell the browser how to display the content of the web page. The tags themselves are not displayed.

Tags are normally used in pairs, for example an opening tag and a closing tag. Tags are surrounded by arrows and look like this: **<html>** A closing tag uses a forward slash and looks like this: **</html>**

#### Activity:

1. Open a web page
2. Right click and select 'View Source'

3. The text you see is HTML code
4. Can you spot any tags? Make a list below

**Remember that HTML was written by an American and therefore uses American spelling e.g. center instead of centre, color instead of colour.**

## Creating a HTML document

- Create a folder in your My Documents area called **'My Webpage'**
- Open **Notepad**
- Type in the following tags:

```

Untitled - Notepad
File Edit Format View Help
<html>
<head>
<title> My First Webpage </title>
</head>

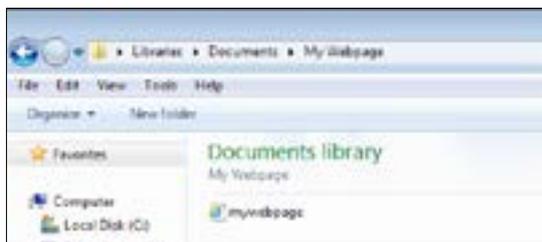
<body>
Hello world

</body>
</html>

```

- Inside the <body> tags, you had entered the words 'Hello World'. You will see it displayed on the webpage. There is no formatting applied to it.

- When saving the document, you must give it the file extension .html so that it is recognised as a webpage
- Save the notepad document in your 'My Webpage' folder as my **webpage.html**
- Open your My Documents> My Webpage folder. It should look like this:



- You will see the 'mywebpage.html' document you created. Double click on it to open and it will open in a web browser



- Notice the title of the tab is 'My First Webpage' which was inserted inside the <title> tag

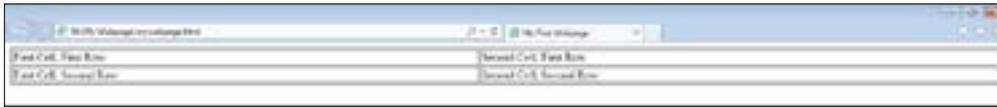
## Using tags in a HTML document

Use the following tags to edit the appearance of your first webpage. Remember all of these tags need to be inserted within the <body> tags. Each time you make a change to the Notepad document 'Mywebpage.html', you

	Tag	Example
<p><b>Font</b> You can change the font colour and type using the font tag. Experiment with different types and colour.</p>	<code>&lt;font&gt;...&lt;/font&gt;</code>	<code>&lt;font face="arial" color="blue"&gt;Hello world&lt;/font&gt;</code>
<p><b>Outcome:</b></p> 		
<p><b>Headers</b> Text inside these pair of tags are formatted as Header 1, this is usually the biggest and most prominent kind of titled content on the page.</p>	<code>&lt;h1&gt;...&lt;/h1&gt;</code> <code>&lt;h2&gt;...&lt;/h2&gt;</code> <code>&lt;h3&gt;...&lt;/h3&gt;</code> <code>&lt;h4&gt;...&lt;/h4&gt;</code> <code>&lt;h5&gt;...&lt;/h5&gt;</code> <code>&lt;h6&gt;...&lt;/h6&gt;</code>	<code>&lt;h1&gt;Hello world&lt;/h1&gt;</code> <code>&lt;h2&gt;Hello world&lt;/h2&gt;</code> <code>&lt;h3&gt;Hello world&lt;/h3&gt;</code> <code>&lt;h4&gt;Hello world&lt;/h4&gt;</code> <code>&lt;h5&gt;Hello world&lt;/h5&gt;</code> <code>&lt;h6&gt;Hello world&lt;/h6&gt;</code>
<p><b>Outcome:</b></p> 		
<p><b>Line Break</b> <code>&lt;br&gt;</code> This is used to take a new line.</p>	<p>Hello World <code>&lt;br&gt;</code> Hello Everyone</p>	
<p><b>Outcome:</b></p> 		

<p><b>Paragraph</b></p> <p>This will insert paragraphs. You use the &lt;p&gt; to start the paragraph and the &lt;/p&gt; tag to end it.</p>	<pre>&lt;p&gt; Hello Everyone &lt;/p&gt;  &lt;p&gt; Hello, this is my first webpage. &lt;/p&gt;</pre>	
<p><b>Outcome:</b></p> 		
<p><b>Image Tag</b></p> <p>The image tag is used to insert an image into a web page. Images are link to the web page and then inserted.</p> <p>Note this tag does not have a closing tag.</p> <p>Save the school logo for your school into your 'My Webpage' folder. Call it 'logo.jpg'.</p> <p>You can change the width and height of it also.</p>	<pre>&lt;img src="..."&gt;</pre>	<pre>&lt;img src="logo. jpg" width="100" height="100"&gt;</pre> <p>If your image doesn't appear properly, check you have saved it in the right folder and the filename is spelled correctly.</p>
<p><b>Sounds</b></p> <p>This will insert an audio track. Ensure the sound file is saved in the same folder as the web page.</p>	<pre>&lt;audio controls&gt;... &lt;/audio&gt;</pre>	<pre>&lt;audio controls&gt; &lt;source src="track1. mp3" type="audio/ mpeg"&gt; &lt;/audio&gt;</pre>
<p><b>Video</b></p> <p>This will insert a movie file. Make sure the video is saved in the same folder as the web page.</p> <p>This does not have a closing tag. Like the image earlier, you can set the video to be a certain width and height.</p>	<pre>&lt;embed src="movie.wmv" height="200" width="300" /&gt;</pre>	
<p><b>Tables</b></p> <p>You can insert a table and use rows and columns to structure your page.</p> <p>Each table row is defined with the &lt;tr&gt; tag. Each cell is defined with &lt;td&gt; tag.</p> <p>You can set the width to 100% so it is across the whole page. You can make this smaller if you wish.</p> <p>If you want a border, set it to '1', otherwise set it to '0'.</p>	<pre>&lt;table width=100%&gt; &lt;tr&gt; &lt;td&gt; First Cell, First Row &lt;/td&gt; &lt;td&gt; Second Cell, First Row &lt;/td&gt; &lt;/tr&gt;  &lt;tr&gt; &lt;td&gt; First Cell, Second Row &lt;/td&gt; &lt;td&gt; Second Cell, Second Row &lt;/td&gt; &lt;/tr&gt; &lt;/table&gt;</pre>	

**Outcome:**



**Links**

To insert a link you use the a href tag. It needs to be closed using </a> otherwise everything after this tag will also be a hyperlink.

If you must in the target=\_blank, the website will open in a new tab. If you want it to open in the same tab, then leave this out.

Insert a link in your website to the CCEA website. The URL is [www.ccea.org.uk](http://www.ccea.org.uk)

```
<a href="http://www.ccea.org.uk/"
target="_blank">
Visit CCEA</a>
```

**Outcome:**



**Lists**

An ordered list uses numbers and the <ol> tag.

An unordered list uses bullet point and the <ul> tag.

The <li> tag is used for each item on the list.

```
<ol>....</ol>
```

**Ordered list e.g.**  
1, 2, 3

```
<li>....</li>
```

**Unordered list e.g. bullet point**

Colours

```
<ul>
<li>blue</li>
<li>red</li>
<li>yellow</li>
</ul>
```

Subjects

```
<ol>
<li>Maths</li>
<li>English</li>
<li>Science</li>
</ol>
```

**Outcome:**



## Questions

1. What does HTML stand for?
2. What is the HTML tag for the largest heading?
3. What is the HTML tag for inserting a line break?
4. In a pair of tags what character is additionally inserted to end a tag?
5. What tag do you use for a numbered list?
6. What tag do you use for an unordered list?
7. What is the tag for inserting an image called "image1.jpg"?
8. The following code is from the CCEA Digital Technology website. Explain what this web page would look like: (5 marks)

```
<p> The specification supports the aim of the Northern Ireland Curriculum to empower young people to achieve their potential and to make informed and responsible decisions throughout their lives, as well as its objective: </p>
```

```
<ul>
```

```
<li> to develop the young person as an individual </li>
```

```
<li> to develop the young person as a contributor to society </li>
```

```
<li> to develop the young person as a contributor to the economy & environment </li>
```

```
</ul>
```

```

```

## Bibliography

- [http://www.teach-ict.com/gcse\\_computing/ocr/215\\_communications\\_networking/HTML\\_importance/miniweb/pg3.php](http://www.teach-ict.com/gcse_computing/ocr/215_communications_networking/HTML_importance/miniweb/pg3.php)
- <http://www.bbc.co.uk/schools/gcsebitesize/ict/software/webdesignrev2.shtml>
- <https://www.w3schools.com/tags/default.asp>

