

Software Tools – Web Technologies Tuesday 20 April 2021

Activity 1

Using a simple text editor to create **a personal web site** using HTML. Parts of this activity come from www.w3schools.com. You can refer to the lecture notes or this website if you need help writing the HTML for your personal web site.

There are professional HTML editors that can be used to create webpages but using a simple text editor is a good way to learn HTML and CSS. For this activity we'd like you to use Notepad (PC) or TextEdit (Mac).

Step One

Open Notepad (PC)

On Windows 8 or later open the **Start Screen** (the Windows symbol at the bottom left of the screen and type 'Notepad'. On Windows 7 or earlier open **Start > Programs > Accessories > Notepad**

Open TextEdit (Mac)

Open **Finder > Applications > TextEdit**

In **Preferences > Format** > choose "**Plain Text**" and under "**Open and Save**" check the box that says "Display HTML files as HTML code instead of formatted text".

Step Two

Open a new document and type in the following code:

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>

<h1>This is a Heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Step Three

Save the file.

Select **File > Save as** in the Notepad menu.

Name the file "**index.html**" and set the encoding to **UTF-8** (which is the preferred encoding for HTML files).

Step Four

View the file in a browser by right clicking on it and selecting "Open with". This will open the file in a default browser.

Step Five

Inspect the code in your browser. Right-click on your HTML page in the browser and select "View Page Source" (in Chrome) or "View Source" (in Edge), or similar in other browsers. This will open a window containing the HTML source code of the page.

You can inspect an element by right clicking it and choosing "Inspect" or "Inspect Element" to see the HTML and CSS code. Try editing the HTML or CSS in the Elements or Styles pattern that opens. You can see how your editing changes the web page.

Step Six

Add more HTML elements to your webpage:

- a. Experiment with different heading tags <h1> (the most important) to <h6> the least important.
- b. Add some appropriate links to your webpage using the <a> tag. Use absolute URLs e.g.
`This is a link`
And also use relative links to another page on your website e.g.
`holiday pics`
You will need to create this page before you link to it and save it in the same folder as your first web page.
- c. Add some images using the tag and use the alt, width and height attributes as well as the src:
``
- d. Add an numbered or bullet point list. The following example is what sort?
`
 Coffee
 Tea
 Milk
`
- e. Add a table to your personal website:
- f. Add the character set used:
`<meta charset="UTF-8">`
Where should you add this?
- g. Add the language used in the webpage. How do you do this?
- h. Add a table using the <table> tag. Table rows are defined with a <tr> tag; table headers with a <th> tag (default they are bold and centred) and each data cell with a <td> tag (and the elements they contain are regular and left-aligned). The closing </table> tag and a closing </tr> tag are on the next page!

```
<table style="width:100%">  
  <tr>  
    <th>Firstname</th>  
    <th>Lastname</th>  
    <th>Age</th>  
  </tr>  
  <tr>
```

```
        <td>Jill</td>
        <td>Smith</td>
        <td>50</td>
    </tr>

</table>
```

Activity 2

Step One

Style your website by initially defining your CSS in the head of the page using a <style> tag:

```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color: powderblue;}
h1   {color: blue;}
p    {color: red;}
</style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

Step Two

Add a class to your website and also an id tag and then create styles for them. Refer to the lecture notes or https://www.w3schools.com/html/html_css.asp.

Step Three

Create an external CSS file and link to it:

```
<!DOCTYPE html>
<html>
<head>
    <link rel="stylesheet" href="styles.css">
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```