# Activity 2 – HTML Markup and Validation

**Aims:**

- To use a text editor to mark up content with HTML5
- To validate a web page.
- To gain skills and knowledge towards completing Assignment 1.

## Task 1: Creating HTML Elements (2 marks)

**Step 1:**

    1.1 Create a new text file and type the following HTML5 code.

```html
<!DOCTYPE html>
<html lang="en">
<head>
        <meta charset="utf-8" />
        <meta name="description" content="Web development" />
        <meta name="keywords"   content="HTML Markup" />
        <meta name="author"     content="put your name here" />
        <title>My First HTML5 webpage</title>
</head>
<body>
        <!-- Web Development Unit Outline -->
        <!-- All HTML contents to be placed here -->
</body>
</html>
```

> **Note: This file can be used as a template for creating HTML5 web pages. All HTML contents should be placed between the &lt;body&gt; and the &lt;/body&gt; tags.**

    1.2 Save the file as unitoutline.html.

**Step 2:**

    2.1 Using NotePad++ (or Sublime Text for Mac users), open the text file unitoutline.txt, which is available on Blackboard. (Please use Lab2_Files.zip on Canvas)

    2.2 Copy everything in unitoutline.txt and paste it into unitoutline.html between the &lt;body&gt; tag and the
&lt;/body&gt; tag.

2.3  Open unitoutline.html in a browser and see what it looks like.

> Note: NotePad++ is not available on Mac OS. Instead, Mac users can use Sublime Text, available at **http://www.sublimetext.com/2.**

## Step 3:

3.1 Mark up the text contents in unitoutline.html using the HTML elements discussed in Lecture 2, e.g.,
- Headings <h#>…</h#>, Paragraphs <p>..</p>, Horizontal Rules <hr />
- Lists <ol>..</ol> or <ul>…</ul>, Tables <table>…</table>, Images <img …> and Anchors <a …>…</a>

For instance, headings can be marked up using heading elements:
```
<h1>HIT1091</h1>
<h2>Web Development</h2>
```

[IMPORTANT] Please use unitoutline.pdf, which is available on Canvas, as a guide to determine which HTML elements to use. The Swinburne logo is available on Canvas as unitoutline_logo.png.

## Step 4:

4.1  Use WinSCP (or Filezilla for Mac users with port number 22) to connect the mercury server and create a new folder 'lab02' under the unit folder on the mercury server  ~/cos10024/*s<your Swinburne ID>*/www/htdocs.

4.2  Using WinSCP, upload the file **'unitoutline.html'** from your local machine to the *lab02* folder on the server.

## Step 5: Test and view web pages.

5.1 To view the pages through http, use any Web browser and type in the following address,
**http://mercury.ict.swin.edu.au/cos10024/*s<your Swinburne ID>*/<folder>/<filename>**

Please refer to the following examples to identify the URLs of your web pages.

| Folder on Mercury Web Server | URL |
|---|---|
| ~/cos10024/www/htdocs/index.html | http://mercury.swin.edu.au/cos10005/s1234567/index.html |
| ~/cos10024/www/htdocs/lab02/unitoutline.html | http://mercury.swin.edu.au/cos10024/s1234567/lab02/unitoutline.html |

> Note: You can copy the URLs in the table, but remember to replace the unit codes and student id in the above examples with yours to obtain the URLs of your web pages on Mercury.

[IMPORTANT] When the browser authorization request dialog pops up, use your SIMS username *and* password to confirm access, **NOT** your mercury username and password.
## Step 6: Validate the page and fix any errors displayed and revalidate.

6.1 Use the validator at http://validator.w3.org  to validate your unitoutline.html.

There are two ways to use the online validator:
1. Use the 'Validate by File Upload' interface for validating HTML files on your local machines; or
2. Use the "Validate by URI" for web pages on the mercury server.

To validate web pages more conveniently, you can add an Add-on named Web Developer to your Firefox, available at [Web Developer Add-on for Firefox](#). A Web Developer toolbar will be added to your Firefox (see Figure 1 below). You can open the web page in Firefox and from the Web Developer toolbar click "Tools" -> "Validate HTML" or "Validate Local HTML" to validate the web page.
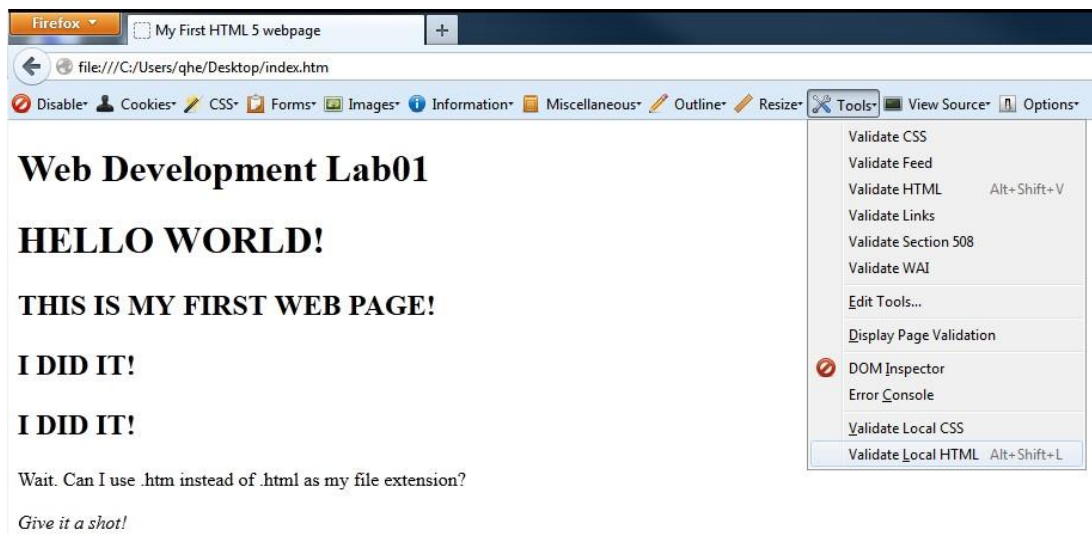


**Figure 1. Web Developer Toolbar for Firefox**

**Note: Chrome users can install Web Developer from this web page:** [Web Developer Extension for Chrome](#).