

Lab - HTML basic structure and elements

For this laboratory you will need a basic text editor (NOT Microsoft Word) and a browser. In the laboratories we recommend *notepad++* and *Firefox/Chrome*. If you are using your own machine, these are free and widely available for download.

Task 1 Creating a basic HTML document

Open a new blank text document in the editor of your choice and type in the following lines of HTML, spacing the elements on separate lines

```
<html>
<head>
<title>My first HTML document</title>
</head>
<body>
<h1>HTML</h1>
<p>Hello! This demonstrates the <em>basic</em>
structure of an HTML document.</p>
</body>
</html>
```

Save the file using the name **lab1task1.html**

Note that the *.html* extension is important (some Operating Systems use this to determine which application can be used to open which file).

Start *Firefox* and use *File - Open File* from the menu to select your HTML page. It should be displayed (rendered) in the window. If the content fails to appear, check your HTML and then reload.

Task 2 Creating a blank template

Take the file you created in task 1 and use the save as command to create a copy called **template.html**. It is useful to have a blank template with the basic elements in place, which can then be added to as required. Change the contents of the file to look like this:

```
<html>
<head>
<!--
Created by:
Date:
-->
<title>title</title>
</head>
<body>

</body>
</html>
```

Save your work.

Task 3 Creating an About Me page

Take the template file you created in task 2 and use the text editors *save as* command to create a copy called **aboutme.html**.

Many blogs have an About Me page, which provides a mini profile of the person writing the blog. This task requires you to write a similar page.

Lay the following out in the page, using headings, paragraphs and tables. Use `` and `` elements where appropriate to highlight parts of the text.

Name

Contact email

About me

In this section write a brief paragraph about where you are from, what your hobbies are and other interesting facts (if there are any!)

My course

Write down the name of your course

Modules I am studying

Show the modules you are taking in a table, with the name of the module leader in a separate column

Save your work. Use a browser to check that your mark-up displays correctly.

Next week you will publish this page in your public web space.

Task 4 Looking at an existing pages HTML source

The source markup of a published page can be seen by using Firefox's *View - Page Source* command (a similar command is available in Internet Explorer).

Use a browser to navigate to the HTML page of the W3C, the organisation which co-ordinates the development of the HTML standard:-

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

Use the *View - Page Source* command to see the markup that is used to create the page. There will be a lot of markup which we have not seen yet, but you should be able to make out a head and body section, with a title, headings and paragraphs present.

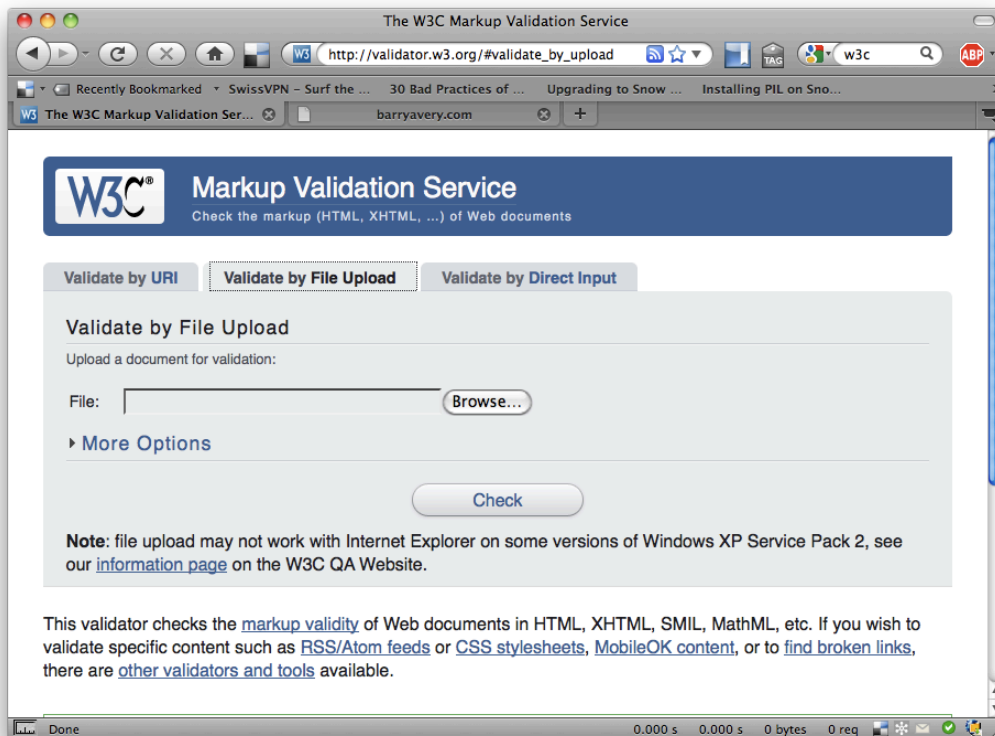
Task 5 Validating and correcting markup

The poorly formatted page *poormarkup.html* is available from

<http://www.barryavery.com>

Use a right mouse click and select *Save link as* to download the file.

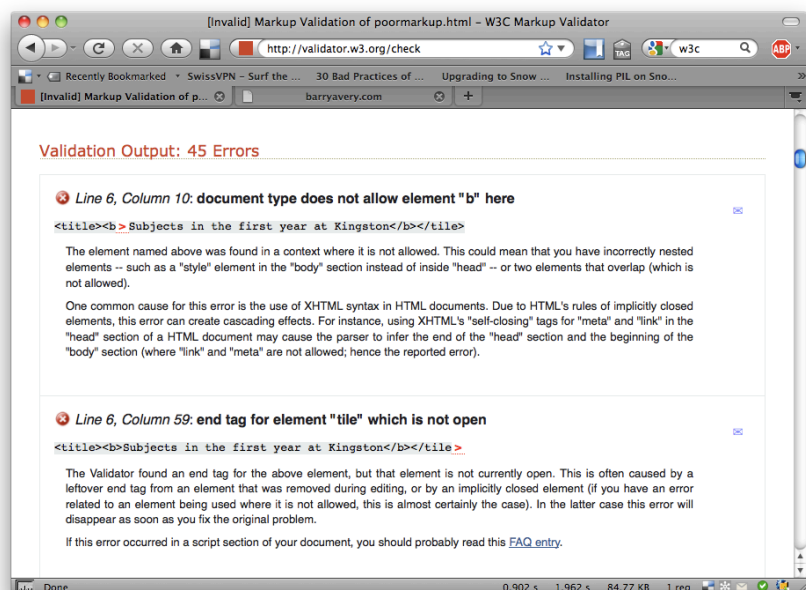
The W3C site runs a free validator which checks the syntax of HTML documents, available at <http://validator.w3.org/>



Select *Validate by File Upload* and browse for the file *poormarkup.html* file. Then click on the Check button. The validator will list the errors.

Read the error messages and use a text editor to correct the HTML.

Keep saving and revalidating the page until you have removed as many errors as possible.



Attributes, Images and links

These next exercises require you to use attributes in various elements to markup a page.

Task 6 Creating a HTML document containing a list and a table of images

From the web site, download the first Word document *campus*.

Implement this content as a web page called *campus.html*

Save your work as you progress, and check it in a browser regularly.

Hints: The page uses combinations of headings (h1) and paragraphs (p). There is also a bullet point list and a 2x2 table, which has images inside. You will need to save the images locally from the URL above (use a right mouse click and ensure that you save all the images and files in the same folder).

At the bottom of the page is a hyperlink that must be inserted. Check that it works correctly in a browser.

Task 7 Creating a more complex page

From the website, download the second Word document *about*.

Implement this content as a web page called *about.html*

Hints: The page uses combinations of headings (h1 and h2) and paragraphs (p). There is also a bullet point list and a table, with a header row. You will need to save the image locally from the URL above.

In the middle of the page is a hyperlink that must be inserted, which links to the page you created in Task 1. Check that it works correctly in a browser.

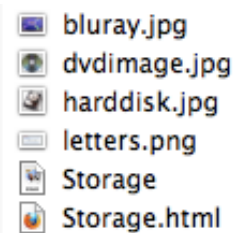
Task 8 Semantically marking up a page

In this exercise, you will take a web page which has been created in Word, and correct the markup.

Create a folder called *task8* and from the URL above, download the compressed file *wordHTML.zip* into it.

Extract the contents – you should end up with 6 files

- 4 images
- the bad markup file, *storage.html*
- a PDF file containing the desired layout for the HTML, *storage.pdf*



Correct the file *storage.html* by removing and fixing the markup, so that it uses the minimum amount of HTML semantically (i.e. headings are H1, H2, paragraphs are P etc.).