

Lab 5 – Content Structure and CSS Page Layout

Aims:

- To understand the importance of designing prior to CSS implementation.
- To mark up a document using HTML5 content models for presentation using CSS.
- To learn the techniques and skills required for assignment 1.

Task 1: Structure and Present a Webpage

Step 1: Folder Creation

- 1.1 Create a **lab05** folder on the Mercury server and upload and test your work from there.
- 1.2 Download the file `surveyhome.html` from Canvas and use it as a template for this lab work.

Step 2: Webpage Design

- 2.1 Using the home page designed Figure 1, identify the HTML elements required to structure `surveyhome.html`. Determine if an “id” or “class” attribute is needed for the HTML elements.

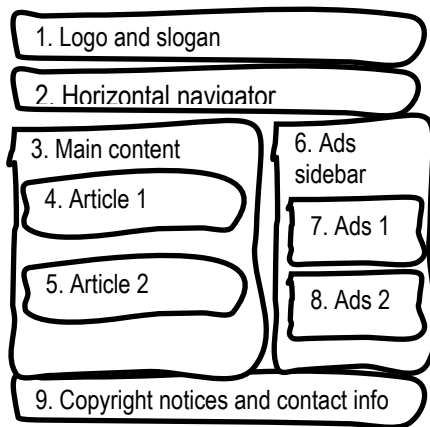


Figure 1: Mock Up of Home Page

	Element	id / class / not required
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

Step 3: Basic HTML

Use Notepad++ (or Sublime Text for Mac users) to open and edit `surveyhome.html`.

- 3.1 Add the HTML general structure below to the document to construct the webpage.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Survey Service</title>
  <meta charset="utf-8" />
  <meta name="description" content="Web Development" >
  <meta name="keywords" content="HTML and CSS" >
  <meta name="author" content="put your name here" >
</head>
<body>
...
</body>
</html>
```

- 3.2 Structure the webpage according to the mock up presented in Figure 1 using HTML5 structural elements, e.g., `<header>`, `<nav>`, `<main>`, `<article>`, `<section>`, `<aside>`, `<footer>` and other appropriate HTML structural elements.
- 3.3 Mark up the document within each HTML structural element using appropriate HTML content elements, e.g., `<h#>`, `<p>`, ``, `<a>`, `` and other appropriate elements. Specify “id” or “class” attribute as needed.

Step 4: Folder and CSS File Creation

4.1 Create a new CSS file named `surveyhome.css`.

4.2 Create a folder named `css` and save `surveyhome.css` in that folder.

Note: A website might have more than one CSS file, so it is a good practice to store all CSS files in a separate folder. See Figure 2 for example.

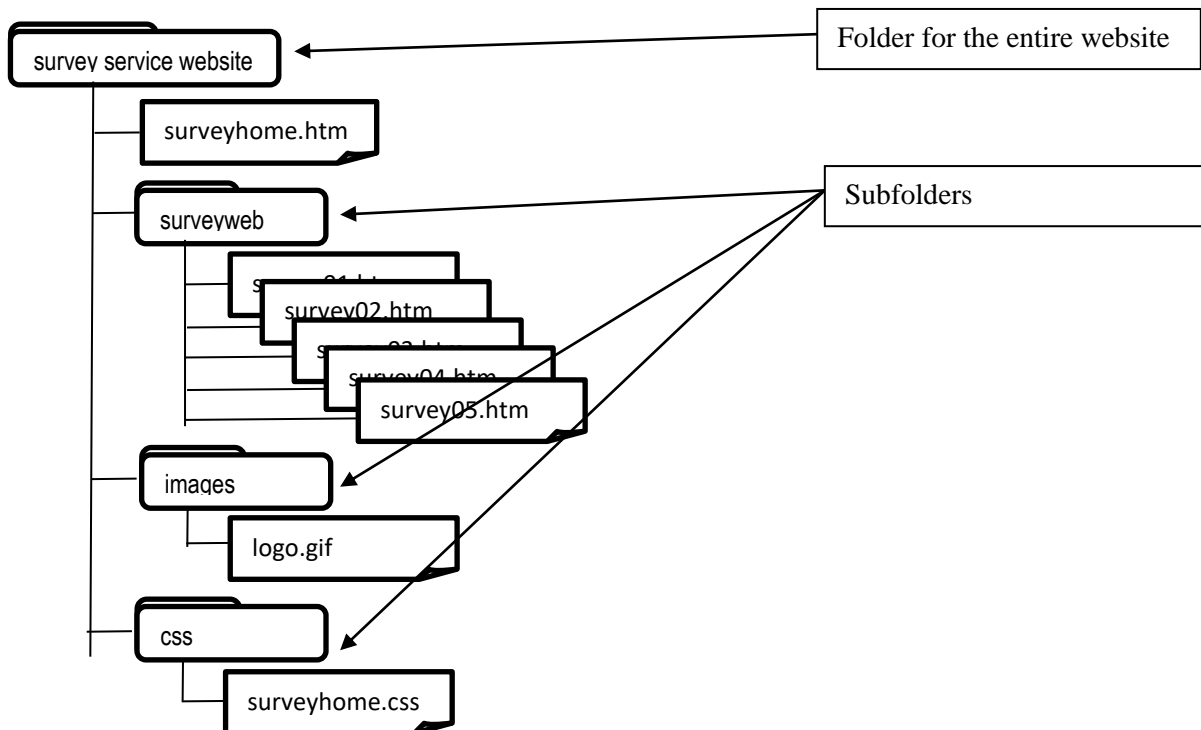


Figure 2: Directory structure

4.3 Add the following code into the head section (below the title element) of `surveyhome.html`. This will link `surveyhome.css` to `surveyhome.html`.

```
<link href="css/surveyhome.css" rel="stylesheet" type="text/css" />
```

Step 5: CSS Positioning

Complete and apply the CSS rules below applicable HTML structural elements shown in Figure 3.

Note: You might need to specify the *id* or the *class* attributes of applicable HTML elements so that they can be properly selected in the CSS file for CSS application.

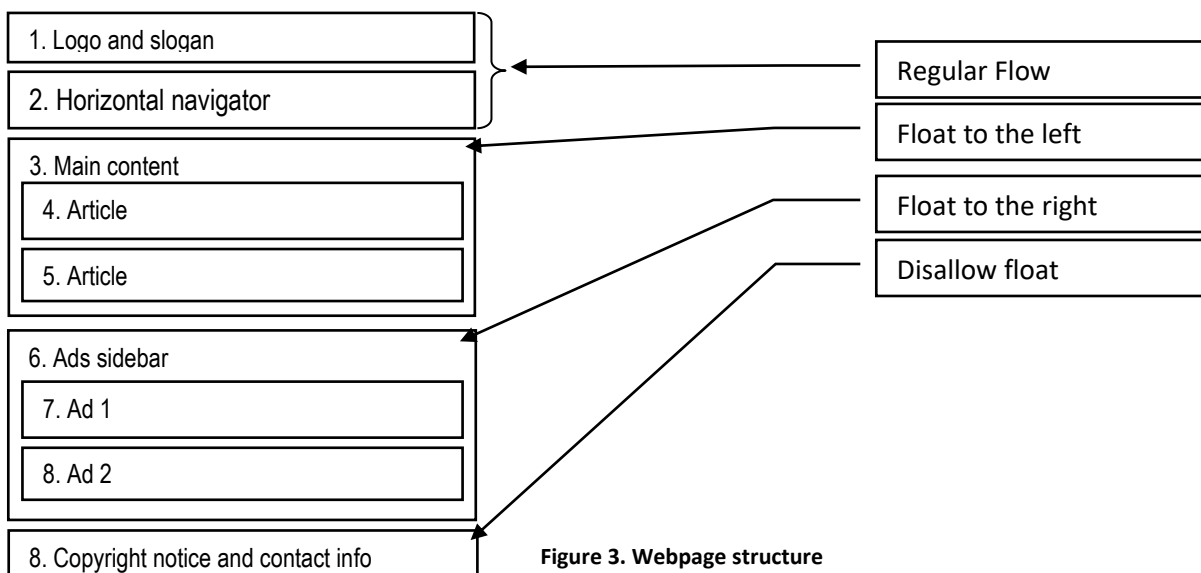


Figure 3. Webpage structure

5.1 For the **<main>** element:

- Float to the left;
- Set width to be 65%;

```

_____ {      /*CSS Selector*/
float        : _____;
width       : _____;
}

```

5.2 For the **<aside>** element:

- Float to the right;
- Set width to be 30%;
- Set font size to be 8px;
- Set font style to b italic;
- Set font color to be green;

```

_____ {      /*CSS Selector*/
float        : _____;
width       : _____;
font-size    : _____;
font-style   : _____;
color        : _____;
}

```

5.3 For the **<footer>** element:

- Disallow other floating elements on both the left and right sides.

```

_____ {      /*CSS Selector*/
clear       : _____;
}

```

Step 6: CSS Web Typography and Coloring

6.1 Create and apply CSS rules to HTML elements as indicated in Figure 4.

Note: You might need to specify the **id** or the **class** attributes of applicable HTML elements so that they can be properly selected in the CSS file for CSS application.

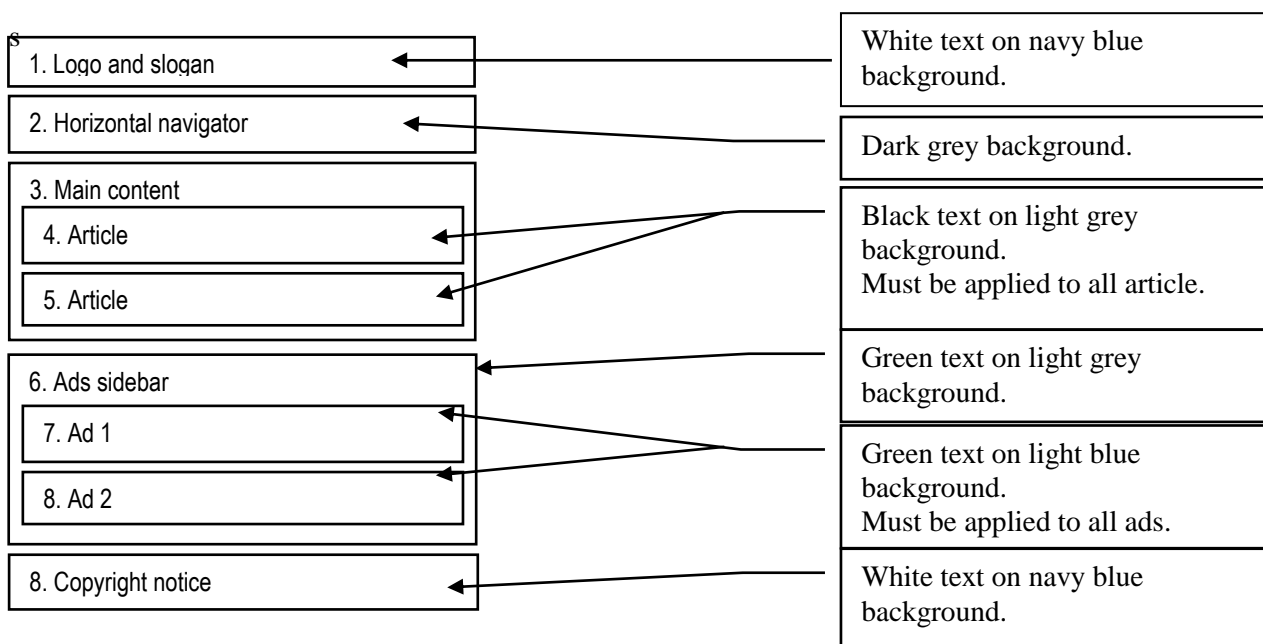


Figure 4. Webpage structure

Step 7: More CSS

Apply more CSS to `surveyhome.html` as instructed below.

Note: You might need to specify the *id* or the *class* attributes of applicable HTML elements so that they can be properly selected in the CSS file for CSS application.

7.1 Complete and apply the following CSS rule to the list element in the `<nav>` part of `surveyhome.html` using an appropriate selector:

- Float the list element to the left;
- Remove all bullet point symbols;
- Eliminate padding and margin; and
- Make the list occupy the entire width.

```

_____ {      /*CSS Selector*/
    float      : _____;
    list-style-type : _____;
    padding    : _____;
    margin     : _____;
    width      : _____;
}

```

7.2 Complete and apply the following CSS rule to all the `<a>` elements in the `<nav>` part of `surveyhome.html` using an appropriate selector:

- Float those `<a>` elements to the left;
- Set width to be 6 times the current font size;
- Remove the underline;
- Set font color to be white;
- Set background color to be blue;
- Set the top and bottom padding to be 0.2em;
- Set the right and left padding to be 0.6 em;
- Set the border to be 1px, solid and white;

```

_____ {      /*CSS Selector*/
    float      : _____;
    width      : _____;
    text-decoration : _____;
    color      : _____;
    background-color : _____;
    padding    : _____;
    border-right : _____;
}

```

7.3 Complete and apply the following CSS rule to all the `<a>` elements in the `<nav>` part of `survyhome.html` using an appropriate **pseudo class selector**:

- Set the background color of the `<a>` elements to be brown on mouse over

```

_____ {      /*CSS Selector*/
    background-color : _____;
}

```

7.4 Complete and apply the following CSS rule to all the `<article>` elements on `survyhome.html` using an appropriate selector:

- Set appropriate width and height; and
- Set the text box shadow to be 3px 3px 3px 2px #797979;

```

_____ {      /*CSS Selector*/
    width      : _____;
    height     : _____;
    box-shadow : _____;
}

```

```
}
```

7.5 Complete and apply the following CSS rule to all the `<h#>` elements in all the `<article>` elements on surveyhome.html using an appropriate selector:

- Set the text shadow to be #aaa 2px 2px 2px;

```
_____ {           /*CSS Selector*/  
  text-shadow      : _____;  
}
```

Step 8: Webpage Testing

8.1 Using WinSCP, upload your files, including HTML, css files and images (if any), onto Mercury.

8.2 To view the pages through http, use any Web browser and type in the following address,

`http://mercury.swin.edu.au/<your unit code>/s<your Swinburne ID>/<folder>/<filename>`

Please refer to the following examples to identify the URLs of your webpages.

Folder on Mercury Web Server	URL
~/cos10005/www/htdocs/index.html	http://mercury.swin.edu.au/cos10005/s1234567/index.html
~/cos60002/www/htdocs/lab05/surveyhome.html	http://mercury.swin.edu.au/cos60002/s1234567/lab05/surveyhome.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 webpages on Mercury.

[IMPORTANT] When the browser authorization request dialog pops up, use your SIMS username and password to confirm access.

Step 9: HTML and CSS Validation

To validate the HTML file use the validator at <http://validator.w3.org>

To validate the CSS file use the CSS validator at <http://jigsaw.w3.org/css-validator/>