

## Lab 4 – HTML Page Structure and CSS Presentation

### Aims:

- Understand and use HTML structural elements
- Present a web document using CSS
- Gain skills and knowledge to complete Assignment 1.

### Task 1: Structure and Present a Webpage

In this lab, you will structure a webpage named `wis.html` and style it as presented in Figure 1:

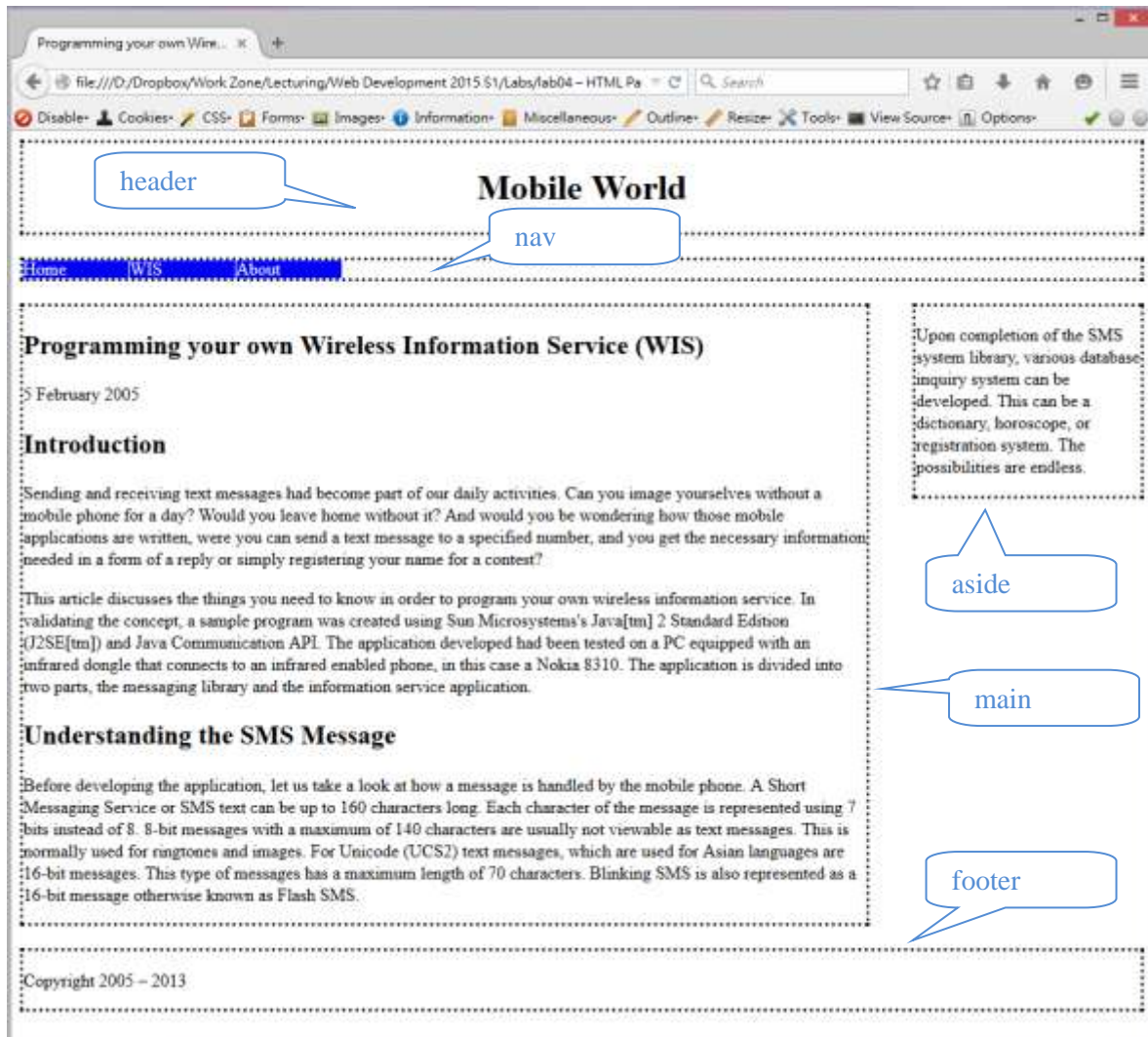


Figure 1. Styled webpage `wis.html`

### Step 1:

- 1.1 Create a `lab04` folder on the server and upload and test your work from there.
- 1.2 Download file `wis.html` from Canvas. Use `wis.html` as a template for today's lab work.

### Step 2:

The text enclosed in `<body>...</body>` tags represents a partial article that contains two sections about creating a Wireless Information Service (WIS) using a mobile phone and a PC.

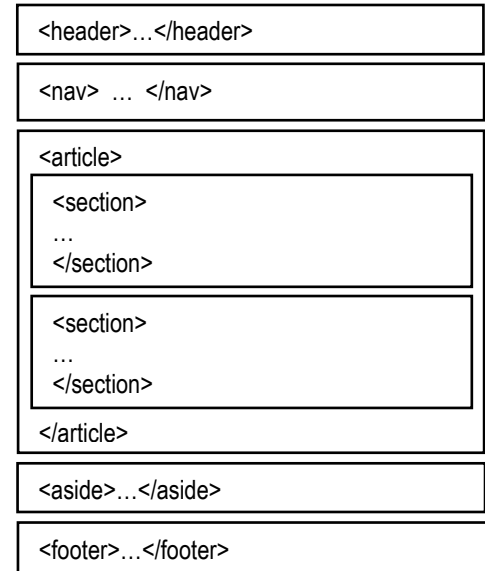
- 2.1 Using NotePad++ (or Sublime Text for Mac users), structure `wis.html` using appropriate HTML5 structural elements, including:

- `<header>...</header>`, `<nav>...</nav>`, `<article>...</article>`, `<section>...</section>`, `<aside>...</aside>`, `<footer>...</footer>`
- Other structural elements may also be used. such as `<summary>...</summary>`, `<time>...</time>`, `<div>...</div>`, and `<span>...</span>`

## 2.2 Use other HTML elements as needed:

- Heading `<h#>...</h#>`, paragraph `<p>...</p>`, horizontal rule `<hr />`
- List `<ol>...</ol>` or `<ul>...</ul>`, table `<table>...</table>`, Image `<img ... />` and anchor `<a ... >...</a>`
- Special characters

An example web page structure is presented in Figure 1 for your reference.



**Figure 1. Webpage Structure**

## Step 3:

### 3.1 Add the following content into the correct position within the webpage.

- Title in `<header>...</header>` of the webpage

Mobile World

- A menu list in `<nav>...</nav>` as navigator of the webpage. Do not forget to use `<a>...</a>` to create hyperlinks that direct users to other webpages on your web site. The navigator should have at least the following hyperlinks.

[Home](#)  
[WIS](#)  
[About](#)

- Copyright notice in `<footer>...</footer>` as footer of the webpage.

Copyright 2009 – 2014

- Extra notes in `<aside>...</aside>` on the webpage

## Step 4:

Create and save a new file named `style.css`. In `style.css`, specify the CSS rules that will style `wis.html` as shown in Figure 2.

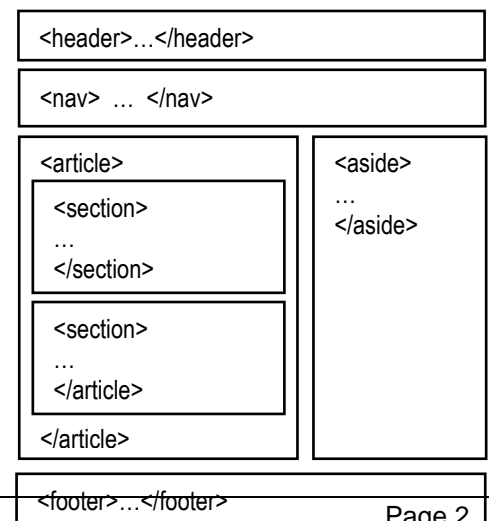
### 4.1 Using Notepad++ (or Sublime Text for Mac users), add the following CSS code into the `style.css` file

```

main {
  overflow:auto;
}

nav {
  height:1em;
  line-height:1em;
  margin:20px 0px;
}

```



**Figure 2. Web Page Structure**

```
header, nav {
    border-style:dotted;
}

article {
    float:left;
    width:75%;
    border-style:dotted;
}

aside{
    float:right;
    width:20%;
    border-style:dotted;
}

footer {
    clear:both;
    border-style:dotted;
    margin-top: 20px;
}
```

**Note:** You can modify the percentages used in those CSS rules and see the differences made to the web page structure.

4.2 To link the CSS to the `wis.html`, add the following code into the `<head> ... </head>` section of the web page

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

4.3 View the web page in a browser and see if the presentation of the web page has been changed.

### Step 5:

5.1 Using Notepad++ (or Sublime Text for Mac users), open `style.css` and add the CSS rules presented below that will present the menu list as a horizontal navigation bar, similar to the one in Figure 3.

Home	WIS	About
------	-----	-------

**Figure 3. Horizontal Menu**

```
ul {
    float:left;
    width:100%;
    padding:0;
    margin:0;
    list-style-type:none;
}

a {
    float:left;
    width:6em;
    text-decoration:none;
    color:white;
    background-color:blue;
    border-right: 1px solid white;
}

a:hover {
    background-color: #2288ff;
}

header h1 {
    text-align:center;
}
```

**Note:** You can modify the above CSS rules and see what those changes will do to the presentation of the web page. This way, you can find out what each CSS rule is used for.

### Step 6: Test and view web pages.

6.1 Using WinSCP (or Filezilla for Mac users), upload your files, including `wis.html` and `style.css`, onto Mercury.

6.2 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 web pages.

Folder on Mercury Web Server	URL
~/cos10005/www/htdocs/index.html	<a href="http://mercury.swin.edu.au/cos10005/s1234567/index.html">http://mercury.swin.edu.au/cos10005/s1234567/index.html</a>
~/cos60002/www/htdocs/lab04/wis.htm	<a href="http://mercury.swin.edu.au/cos10005/s1234567/lab04/wis.html">http://mercury.swin.edu.au/cos10005/s1234567/lab04/wis.html</a>

**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.

### Step 7: HTML and CSS Validation

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

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