

# Technical Log

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By Neil Rafferty (B00451753)

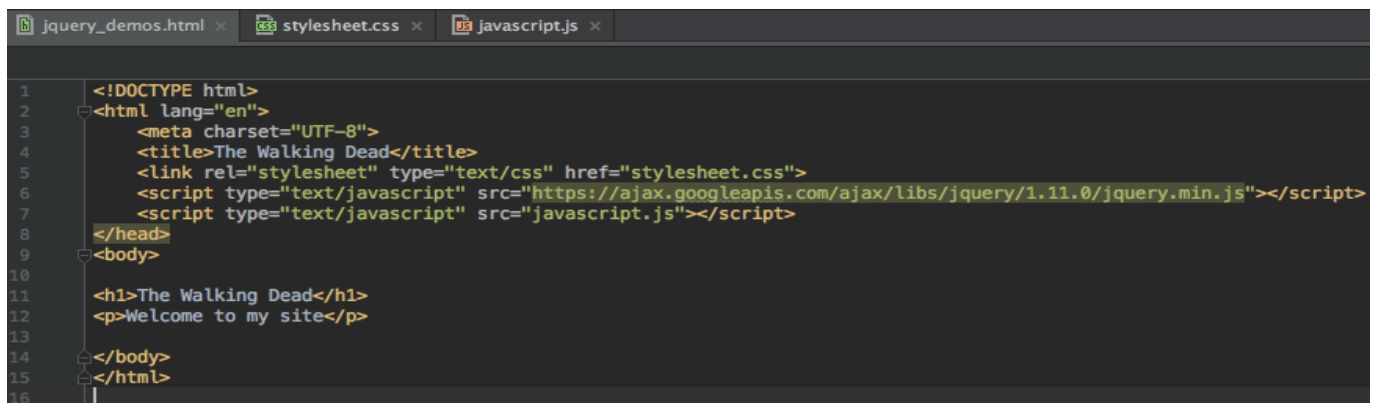
# Introduction

The purpose of this log is to document my process in creating a rich internet application for a final year software engineering module, interactive web computing. This log will also illustrate features of this app and discuss how they were achieved. Note, I have worked in web development before during my placement, however, my exposure to it was limited.

After becoming acquainted with the assignment hand-out I created a new public GitHub repository ([https://github.com/stormrage-neilr/COM\\_554\\_Assignment\\_1](https://github.com/stormrage-neilr/COM_554_Assignment_1)). This was on Friday the 7<sup>th</sup> of October (The first Friday after handout date).

## Project Structure

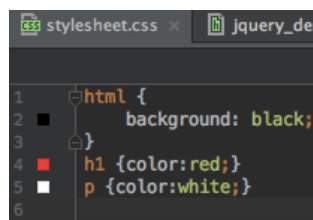
On Saturday the 23<sup>rd</sup> of October I created the project skeleton. The skeleton consists of three files shown at the top of figure 1. The html file is the file connects the three. Line 5 of the code shows where I have linked the CSS file (*using the relative directory location*). On line 6 I import the jQuery library from google (*online*) and line 7 contains the import for the local JavaScript file (*this file is currently empty*). This creates a basic spike through our three main programming languages.



```
1 <!DOCTYPE html>
2 <html lang="en">
3   <meta charset="UTF-8">
4   <title>The Walking Dead</title>
5   <link rel="stylesheet" type="text/css" href="stylesheet.css">
6   <script type="text/javascript" src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.0/jquery.min.js"></script>
7   <script type="text/javascript" src="javascript.js"></script>
8 </head>
9 <body>
10
11   <h1>The Walking Dead</h1>
12   <p>Welcome to my site</p>
13
14 </body>
15 </html>
16
```

**Figure 1:** Initial files and html structure.

Figure 3 Shows how the site looks when adding the basic CSS from figure 2 and with the minimal html. Note, the CSS is currently only using html tag names to select each



```
1 html {
2   background: black;
3 }
4 h1 {color:red;}
5 p {color:white;}
6
```

**Figure 2:** Initial CSS code. **Figure 3:** Initial site.



element and the chosen content is The Walking Dead TV series. This was minimal work but a good, however, it is a good step toward the finished product.

## Title Image & Navigation Bar

The next day I replaced the header and paragraph with a title image and a navigation bar. In figure 4 we can see the html structure of these elements. These elements are contained in the body tag of the html document and I added id's and classes to help me select the corresponding elements when applying my CSS styles. In figure 5 I set the contents of the ul to the centre of the screen. Figure 6 shows the li items being configured to show as a line and the removing of the bullet point normally shown to the left of the list item (this is the 'display:inline' code on line 19).

Next, we can see how the hover function has been configured using CSS (figure 7). The effect of figure 4 to 7 can be seen in the navigation bar in figure 9 (note: register is being hovered over in this screenshot).

The title image, taken from blogspot.com (The walking dead poster 51), is stored locally in a folder called 'res'. The relative

```
11 <img id='title_image' src='res/title_image.png'>
12 <div id='navBar'>
13   <ul id='nav-ul'>
14     <li class='nav-li'>TV Series</li>
15     <li class='nav-li'>Thing 1</li>
16     <li class='nav-li'>Thing 2</li>
17     <li class='nav-li'>Game</li>
18     <li class='nav-li'>Register</li>
19   </ul>
20 </div>
```

Figure 4: Title image and navigation bar html.

```
12 #nav-ul {
13   padding: .5%;
14   text-align: center;
15   color: #555;
16 }
```

Figure 5: nav-ul CSS.

```
17 .nav-li {
18   padding: .25%;
19   display: inline;
20   margin: 20px;
21 }
```

Figure 6: nav-li CSS.

```
22 .nav-li:hover{
23   background: #555;
24   color: #111;
25 }
```

Figure 7: Hover effect CSS.

```
26 #title_image{
27   display: block;
28   margin-left: auto;
29   margin-right: auto;
30 }
```

Figure 8: Title image CSS.

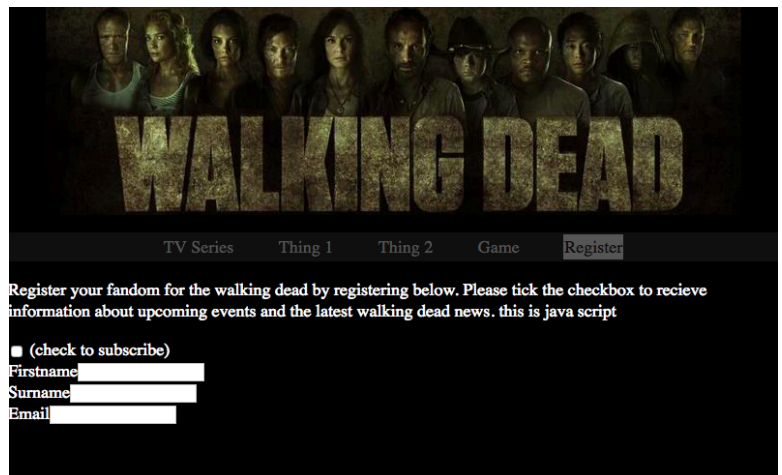


Figure 9: Title and navigation bar display.

path to this image can be seen on line 11 in figure 4 and the image has been centred on the screen by setting the left and right margins to auto scale (figure 8, lines 28 & 29).

## Menu Item jQuery Functionality

After tinkering with the code, learning from the mode during my studies practicals in class and spending some time on my other modules I started to introduce some jQuery functionality on Wednesday the 26<sup>th</sup> of October. However, before we discuss how the jQuery code works I want to briefly outline two changes to our html file. The first is that the navBar div tag in figure 4 has been changed to a nav tag and id's such as

'home-button' have been added to the li elements. The second is that section elements have been created for hosting material relevant to the corresponding li (as shown in figure 10).

```

33 <!--
34 Home Content:
35 -->
36 <section id="home-content" class="hidden" class="content">
37   <div class="wrapper">
38     <p>this is a Home paragraph</p>
39   </div>
40 </section>
41
42 <!--
43 Seasons Content:
44 -->
45 <section id="seasons-content" class="hidden">
46   <div class="wrapper">
47     <p>this is a Seasons paragraph</p>
48   </div>
49 </section>
50

```

**Figure 10:** Sections.

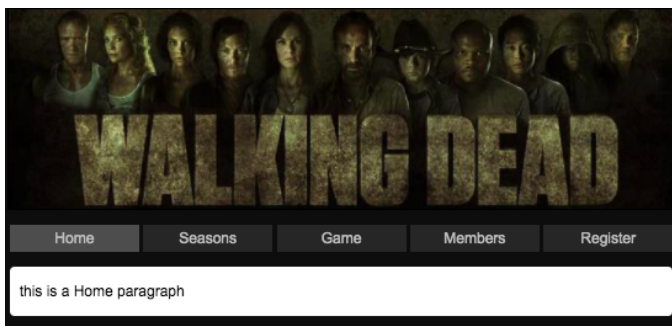
```

5 //Navigation button events - hide and show content.
6 $("#home-button").click(function () {
7   //Highlighting correct navigation bar button on click
8   $(".nav-li").removeClass("selected");
9   $(this).addClass("selected");
10  //Hide all sections and show the corresponding section
11  $(".section").addClass('hidden');
12  $("#home-content").removeClass('hidden');
13  //Adding css to the section
14  $("#home-content").addClass('content');
15 });

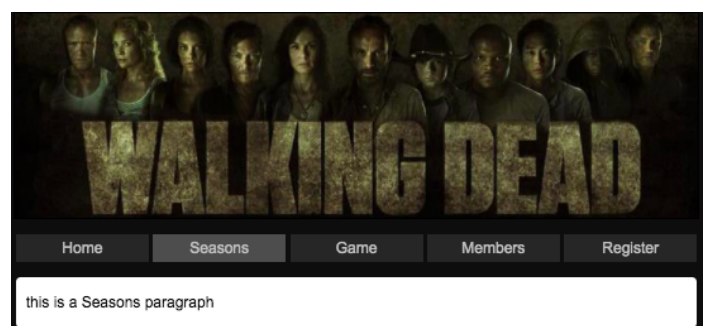
```

**Figure 11:** Menu item functionality.

The code in figure 11 adds functionality to the navigation bar li elements. It firstly finds and adds a click event onto the li element using the aforementioned id (line 6). Then the code hides and show the corresponding sections by adding and removing a 'hidden' class. This class relates to the CSS property 'display:none' making the section vanish and appear as the class is added and removed. Note, the hide() and show() methods may have also been used but I wanted to demonstrate the use of the addClass() and removeClass() methods. This code also adds and removed a 'selected' class to highlight the li element that has been selected in a similar way. The result is demonstrated in figure 12 and 13 (note the change in wording in the two paragraphs).



**Figure 12:** Home contents.



**Figure 13:** Seasons contents.

*The walking dead poster 51*, viewed 27 October 2016,

<[http://1.bp.blogspot.com/-E6T6LmRhFzI/UM5Dt7Dd1wI/AAAAAACJIU/-vTS0wIJlnI/s1600/the\\_walking\\_dead\\_poster51.jpg](http://1.bp.blogspot.com/-E6T6LmRhFzI/UM5Dt7Dd1wI/AAAAAACJIU/-vTS0wIJlnI/s1600/the_walking_dead_poster51.jpg)>.

Register your fandom for the walking dead by registering below. Please tick the checkbox to receive information about upcoming events and the latest walking dead news.