

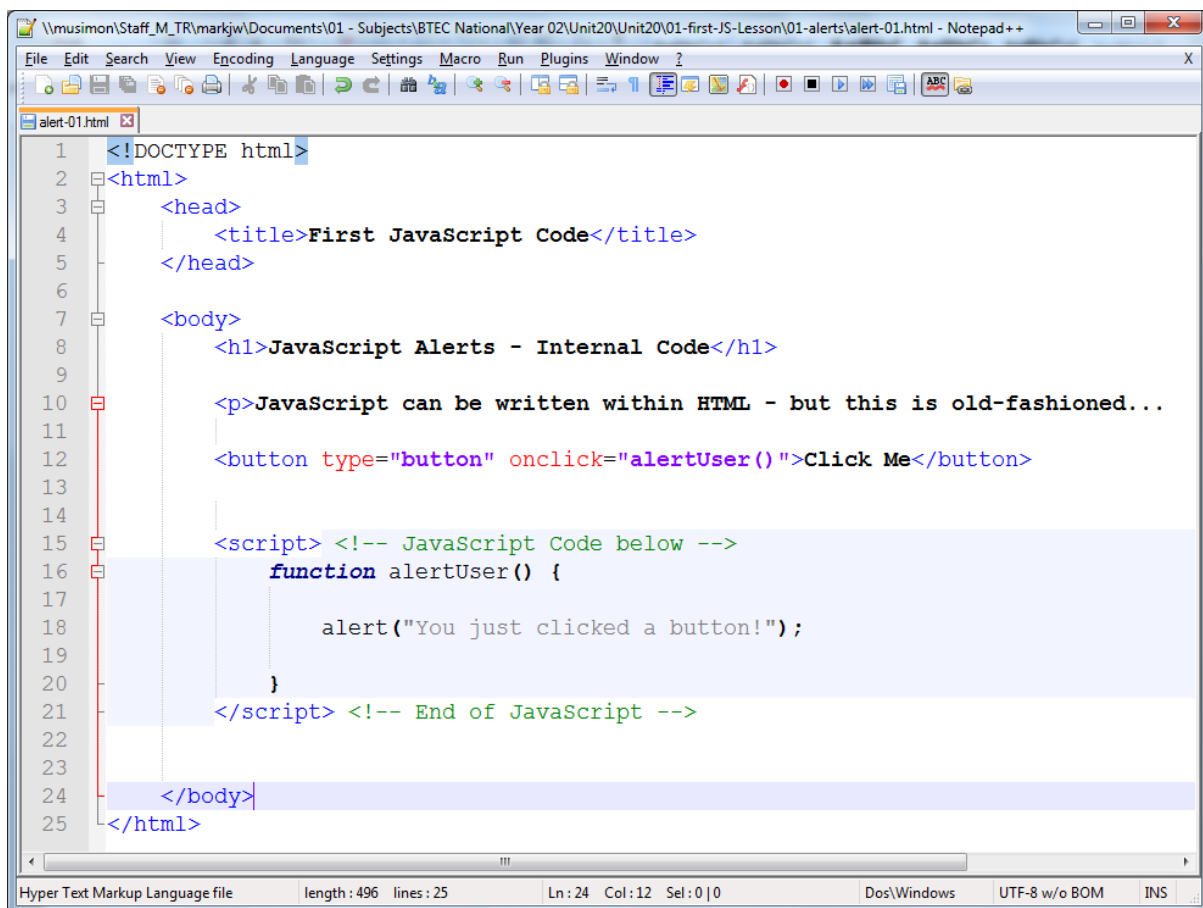
JavaScript – Internal Scripts

JavaScript is used by web developers to add extra functionality to web pages. Modern developers often use JavaScript frameworks – such as jQuery – as the code is tested to run in all web browsers. In order to use these frameworks though you need an understanding of JavaScript coding.

Internal JavaScript Code

The first method of including JavaScript into our web pages we will investigate is by embedding code within our HTML.

1. Open a new html file and save it as **internal-js.html** and save it to your javascript-tasks folder.
2. Next add the following code to the file:

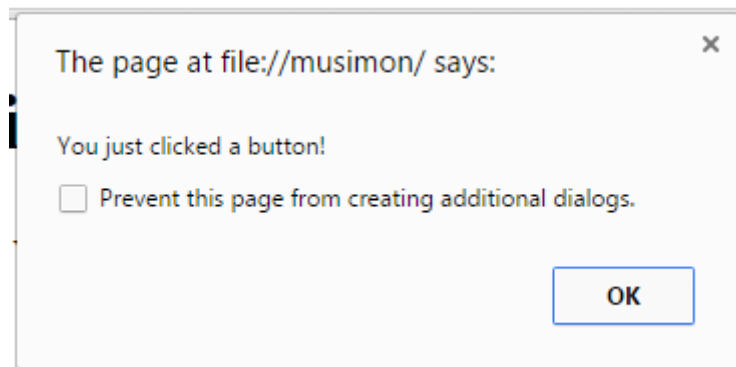


```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>First JavaScript Code</title>
5   </head>
6
7   <body>
8     <h1>JavaScript Alerts - Internal Code</h1>
9
10    <p>JavaScript can be written within HTML - but this is old-fashioned...
11
12    <button type="button" onclick="alertUser()">Click Me</button>
13
14
15    <script> <!-- JavaScript Code below -->
16      function alertUser() {
17
18        alert("You just clicked a button!");
19
20      }
21    </script> <!-- End of JavaScript -->
22
23  </body>
24 </html>
```

3. Save the file, then test it in a browser:



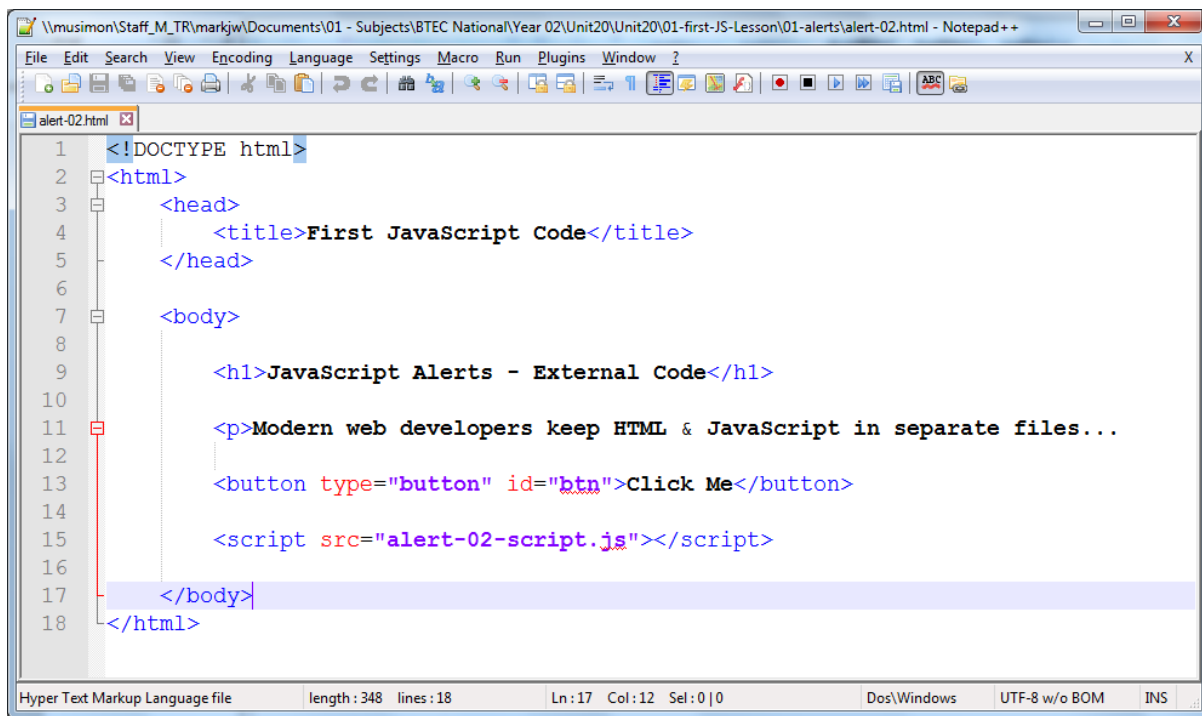
4. Single left click the button and an alert box should display:



External JavaScript

Much like when we created external CSS files and linked to them, we can create external JavaScript code. External JS code is the preferred method for modern web developers, as this creates cleaner, more agile code.

5. Open a new html file and save it as **external-js.html** and save it in your javascript-tasks folder.
6. Next add the following code to the file:

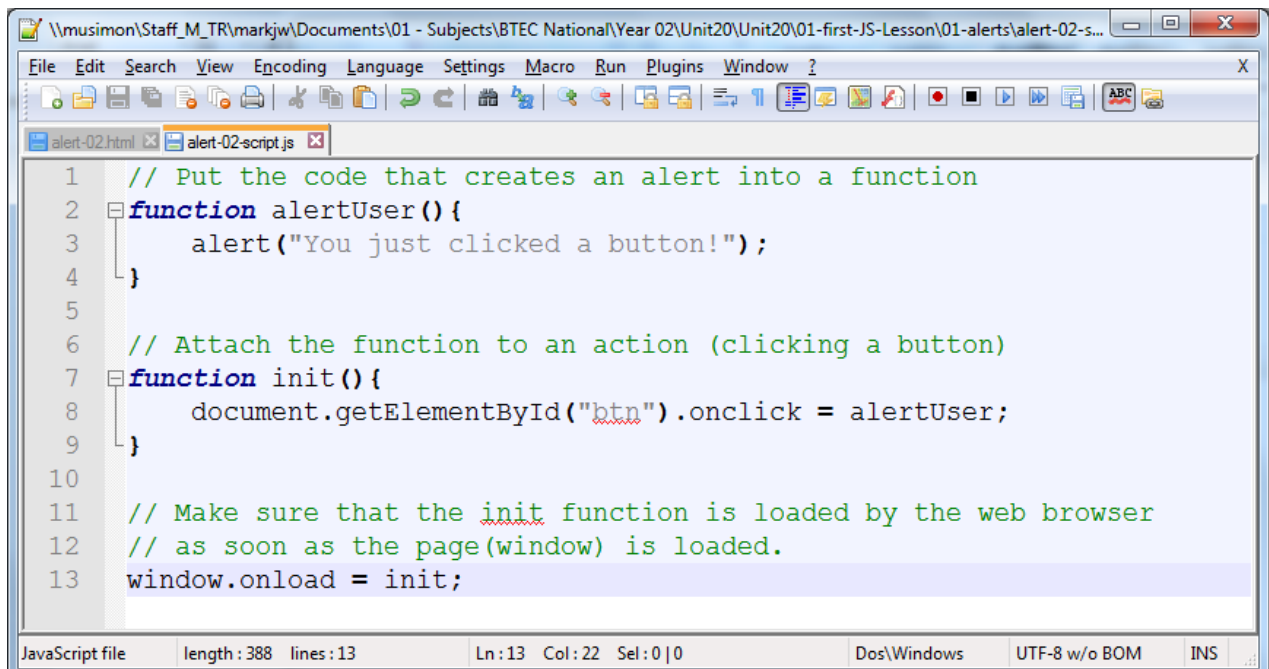


The screenshot shows a Notepad++ window with the file 'alert-02.html' open. The code is as follows:

```
1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title>First JavaScript Code</title>
5   </head>
6
7   <body>
8
9     <h1>JavaScript Alerts - External Code</h1>
10
11    <p>Modern web developers keep HTML & JavaScript in separate files...
12
13    <button type="button" id="btn">Click Me</button>
14
15    <script src="alert-02-script.js"></script>
16
17  </body>
18 </html>
```

The status bar at the bottom indicates: Hyper Text Markup Language file, length: 348, lines: 18, Ln: 17, Col: 12, Sel: 0 | 0, Dos\Windows, UTF-8 w/o BOM, INS.

7. Create a new file in Notepad++, change the language to JavaScript and save the file as **external-js-script.js**, then add the following code:

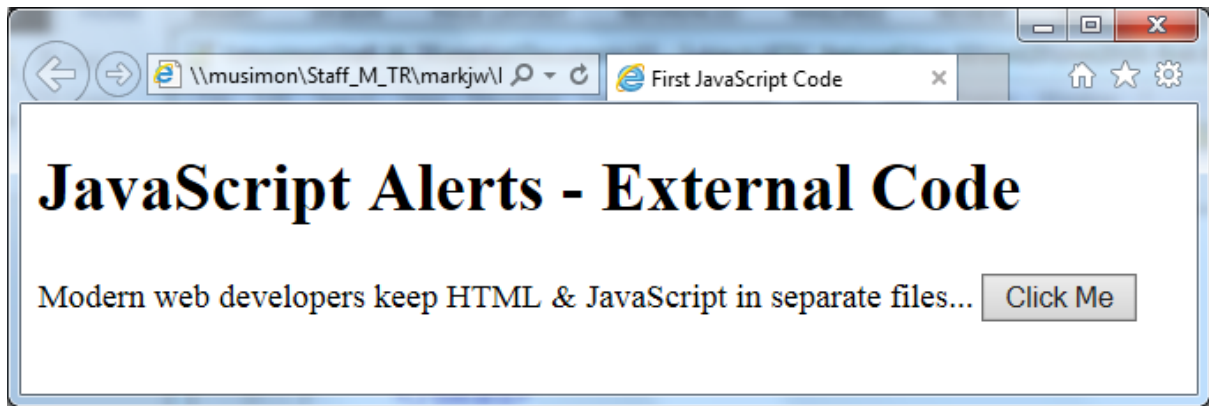


The screenshot shows a Notepad++ window with the file 'alert-02-script.js' open. The code is as follows:

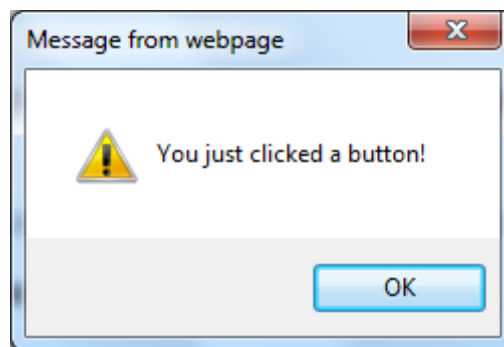
```
1 // Put the code that creates an alert into a function
2 function alertUser() {
3   alert("You just clicked a button!");
4 }
5
6 // Attach the function to an action (clicking a button)
7 function init() {
8   document.getElementById("btn").onclick = alertUser;
9 }
10
11 // Make sure that the init function is loaded by the web browser
12 // as soon as the page(window) is loaded.
13 window.onload = init;
```

The status bar at the bottom indicates: JavaScript file, length: 388, lines: 13, Ln: 13, Col: 22, Sel: 0 | 0, Dos\Windows, UTF-8 w/o BOM, INS.

8. Save all code and then run the **HTML** page:



9. Click the button to display the alert box:



Both scripts create the same output (an alert box), but modern web developers strive to keep all HTML, CSS and JavaScript code as separate as possible.

Assignment Alert!

You will be required to create both internal and external JavaScript code for assignment 2.