**Final Assignment – 50%**

**Submission Date: Friday, December 18th @ 21:00**

**Submission Method: Detailed Below**

**Part A: 60%**

You are required to download a HTML 5 template which consists of two HTML pages. **The template must be approved by myself in advance**, as no two students will be allowed use the same template.

When the template is loaded, include a button on the template called ‘redesign’. When this button is clicked, make changes to the template as follows

* Substantial redesign of the main parts of the page
* The creation of at least 10 new elements, each appropriately styled to fit in with the design of the page
* Removal of at least three components (<divs> etc.) of the original page
* Document your code

On the second template page, employ/implement two APIs/libraries/both of your choice. **The APIs/libraries must be approved by myself in advance** and in general should not be based on rendering JSON data, but rather implementing functionality (e.g., while you are not allowed to Google maps, the emphasis would be on drawing a map rather than rendering data). Your implementation of the APIs should, if possible, compliment the template.

A distinction level award will require the following:

* At least 300 lines of JavaScript
* Adding your own classes to the page
* Medium to advanced implementation of APIs/libraries
* Code documentation
* Ability to demonstrate and explain what you have done
* Advanced JavaScript (e.g., nested loops to create elements or alter styles)
* Maintenance of good design when changing page

**Part B: 40%**

You are required to download and render JSON data via an API endpoint. The API endpoint should not be one we have used before. When displaying the JSON data you should dynamically create and style elements to render the data. You must have the endpoint approved by myself in advance. You cann use sample code from the Internet

A distinction level award will require the following:

* The ability to render JSON from more than one endpoint
* The ability to perform PUT/UPDATE operations
* The ability to render your own JSON data (I.e. JSON data written by yourself)

**Note: ALL code must be your own. Turnitin (anti-plagiarism) will be used to check your code for originality.**

**Submission dates and deadlines:**

**Monday, December 7th @ 17:00 – Choice of template for Part A approved. Choice of APIs/Libraries approved**

**Monday, December 14th @ 17:00 – API endpoint(s) for part B approved**

**Submission of Work (Friday, December 18th):**

**Place ALL of your code (just the code/JSON that you wrote) into a single word document called ‘Assignment’ and post to the Turnitin link on the ‘Final Assignment’ section of Moodle.**

**Zip all of your work EXCLUDING your screencast into a single zip file and upload to the ‘Assignment-Code’ section of the ‘Final Assignment’ section of Moodle**

**Record a 5-minute screencast outlining how your code works and demonstrating its functionality. The video must not exceed 5 minutes or 100MB in size. Upload this screencast to the ‘Screencast’ link on the ‘Final Assignment’ section of Moodle.**