# Web & User Interface Design Assignment

#### Overview

"In 2015, Google announced that mobile-friendliness and responsive design would be a ranking factor for search engine algorithm. So, if impressing your audience was not enough, Google said that not keeping up with the times (and the technology) would negatively impact your SEO and rankings."

## Your assignment is to either:

- 1. Build a personal web site that you could use as an online CV (The site should be much more comprehensive than a standard CV)  $\overline{OR}$
- 2. Build a hobby website that could be used to advertise and showcase the hobby as well as communicating with members.

The website must address responsive design.

You may use a CSS Framework. You may not use a website template.

1. **Design (20%) – SUBMISSION 1** 

	Guidelines	Wireframe	Prototype
Marks	6%	4%	10%

- a. Outline the guidelines that you have used to design your prototype. (at least <u>three</u> discussed with respect to your website, with screenshots included highlighting how these concepts have been included)
  - 1. Mental models
  - 2. Metaphors
  - 3. Gestalt laws
  - 4. Miller's chunking
  - 5. Automatic processing
  - 6. Learning theories
  - 7. Nielsen's heuristics
  - 8. ....or any other cognitive theories/interface guidelines that you are aware of
- b. Create a *wireframe* of the website (homepage of mobile, tablet and desktop).
- c. Create a comprehensive **medium fidelity prototype** of your website (a storyboard, or screen prototypes of your website ...), for <u>three</u> sizes e.g., iPhone, iPad and Macbook. This should be one use-case for each device size.

#### 2. Implementation (60%) – SUBMISSION 2

	HTML/HTML5	CSS/CSS3	Responsiveness	Look & feel of website	Other technologies	Javascript
Marks	15%	15%	10%	10%	5%	5%

- 1. Create website using either CSS GRID or a CSS FRAMEWORK of your choice. This website will be graded on:
  - a. Correct use of HTML/HTML5.
  - b. Correct use of CSS/CSS3.
  - c. Setup of the Grid OR incorporation of CSS framework
  - d. Responsiveness of website.
  - e. Responsiveness of images.
  - f. Look and feel of the website

# 2. OTHER FEATURES (10%): The website should have the following:

- 1. *Use of JavaScript:* There should be at least **two** scripts used in the website. At least one of these should be your own code. These should be described in your report.
- 2. *Use of other technologies*. At least <u>two</u> of the following list should be incorporated within your website:
  - a. Videos
  - b. Audio
  - c. iframes
  - d. Use of forms
  - e. ....any other technologies that have not been covered in class

Do the chosen technologies fit in with the theme of the web site?

#### 3. Test & Evaluation (20%) – SUBMISSION 2

	Speed	Responsiveness	Evaluation	Outcome
Marks	5%	5%	5%	5%

- a. Perform the following on your website:
  - 1. Use **one** method for testing how fast your website is:
    - 1. State how fast your website is.
    - 2. Implement and document one change to improve the speed.
    - 3. State how fast your altered website is.
  - 2. Use **one** method for testing how responsive your website is.
  - 3. Use **one** evaluation method to assess the usability and functionality of your website.
    - 1. Description of evaluation methods e.g., survey, interview, expert review ... and why they are appropriate
  - 4. Outcome of test and evaluation:
    - 1. How did your web site fare?
    - 2. How was it mobility-wise?
    - 3. What are the recommendations if the web site was going to be developed further?

### **Submission:**

- What should you submit?
  - Submission 1 (to be submitted by <u>11:30pm on Wednesday 2<sup>nd</sup> December 2020</u>):
     Part 1 (Design) should be submitted as <u>ONE pdf</u> document (ONLY PDF WILL BE ACCEPTED)
  - Submission 2:
    - Part 2 (Implementation): The website (a folder containing all CSS, HTML and JavaScript files (and image files, video files, audio files .....).
    - Part 3 (Test & Evaluation) should be submitted as <u>ONE pdf</u> document (ONLY PDF WILL BE ACCEPTED)
    - Part 2 and 3 must be in a zipped directory named YOURNAME e.g. ANDREACURLEY and uploaded to Brightspace by 11:30pm on Wednesday 30<sup>th</sup> December 2020.
- This assignment counts as 50% of your overall mark.
- The assignment must be completed individually.

\*\* If you use anybody else's code e.g., a grid framework, JavaScript ..., you must state explicitly what it is and where it has been used (both in your report and code files).