# COMP8054 Assignment #2

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#### 1 Interactive Data Visualisation

The purpose of this assignment is to assess the following **Learning Outcomes**:

- LO1 Discuss data visualisation techniques and principles.
- LO2 Appraise the suitability of a variety of visualisation techniques for the web.
- LO3 Apply a data visualisation technique to a data source.
- LO4 Evaluate the suitability of interactive functionality incorporated into a visualisation technique.
- L05 Combine suitable data visualisation techniques and data sources for web-based viewing.

#### 1.1 OVERVIEW

"Develop a suitable web-based visualisation for a chosen data source. Incorporate interactive functionality that enhances the analysis of that visualisation when viewing online" What you are developing is based on the selection of a particular visualisation technique, it's appropriateness for the domain in question, an objective critique of the approach taken. What, if anything, have you done differently? What improvements were implemented? (Are these evidence-based)

**Hint:** Do not forget your data source as your visualisation will be useless without it, include a "readme.txt" for setup and evaluate your own instructions on a fresh machine to ensure no problems occur when following your steps. Additionally, your visualisation must be embedded in a webpage "index.html" - provide context, that addresses "the explanatory nature of your visualisation"

#### 1.2 SUGGESTIONS

- Read your notes, make informed choices, discuss these early on.
- Prepare your prototypes, test your technical competence, set yourself deadlines and stick to them.
- Show proof of development off in class, discuss as you go.

## 2 SUBMISSION

Submission requires the code (and all necessary dependencies) as well as a screencast. Remember the more straightforward the evaluation the better it is for everyone. When being assessed your project will be deployed to a local web server. After extracting your submission, accessing the top level directory of your folder structure should result in your submission being displayed ("index.html") as depicted in Figure 2.1. All data, third party libraries and necessary dependencies must be included. Details of these should be included in the "readme.txt" with the source of any data or code used.

You submission will contain:

- All code and dependencies related to the project including data in a ".zip" format in the specified dir structure.
- Embedded in the pdf A link to an online walk through (Google drive .mp4) 10 minute video of you demoing your work, articulating your approach and the rationale for the visualisation techniques chosen. (REQUIRED practice with https://www.screencastify.com/)

Prepare your submission by archiving it as a single ".zip" file using the following naming convention.

```
"A2_COMP8054_<Surname>_<First name>_<Student Number>.zip" e.g.
"A2_COMP8054_OReilly_Ruairi_R123456.zip"
```

#### 2.1 Submission Penalties

- Late submissions will be penalised (-10 **points** for ≤ 1 week late, -20 **points** for > 1 week late AND ≤ 2 weeks late and **no submission accepted** after 2 weeks.
- Specified deadline is a **hard deadline** requests for extension will not be considered (there is a formal process for individual extenuating circumstances that can be applied for via your programme coordinator e.g. medically certified illness, bereavement etc.).
- Failure to comply with submission guidelines will also result in a penalty (-10 **points**).

**Tip**: Technical competency can start from W1, build your confidence with the basics and use the support sessions to discuss issues and get feedback.



## Hello World

```
htdocs/
> COMP8054/
 > A2/
 > A2_COMP8054_<SName>_<FName>_<Sno>/
 > A2_COMP8054_<SName>_<FName>_<Sno>/
 >A2_COMP8054_OReilly_Ruairi_R123456/
Parent file that loads visualization, calls all necessary
         > index.html
                                           scripts, data etc.
         > data/
                  >mydata.json 		 Data folder containing files with any data used,
                  >mydata.csv
                                           well organized and laid out.
         >lib/
                                           Any 3rd party libs used (but not claiming credit for) e.g.
                  >thirdPartyLib.js 	
                                           bootstrap.min.js
```

Figure 2.1: Browser view of A2 submission - **note:** your solution is called from "index.html" so it should automatically load when accessed from a browser with a local server running. The expected submission directory structure is depicted below the "Hello World".

## 2.2 Submission Date

This assignment is due on Sunday of Week 12 by 23:59.