CA682 Data Visualisation Assignment (Individual 25%)

Due: Friday 25th March 2019 before 4.00 P.M
Submission: upload via loop and submit the hard copy personally to me during the class
25% of module grade. Your submission folder should contain the video, report & dataset. The folder must be named with the exact full name of the student.

Overview: Create a data visualisation using (for example) D3.js or Python visualisation libraries, write a short (4-5 page) report describing the dataset(s) and the process you used, present the visualisation in a screencast lasting no more than 7 minutes. The visualisation should **illustrate a point, answer a question or otherwise tell a story** so select datasets accordingly.

Your submission should contain the following:

(1) Short report in PDF or DOC format
(2) Video file of the screencast showing your presentation with commentary describing the process of creating and interacting with the visualisation
(3) Source code and link to datasets

Marking criteria:

(1) Visualisation (50)
- (a) Suitability
- (b) Difficulty
- (c) Interactivity or animation

Marks will be awarded, for example, for choosing an appropriate graph type, following good design principles, building a challenging visualisation, including some interactivity or animation of data, etc.

(2) Datasets (30)
- (a) Complexity of data
- (b) Transformation of data formats
- (c) Combination of 2 or more data sets

Marks will be awarded, for example, for using different sources, using public APIs, importing live data, performing data cleansing, transformation of data, use of big data or big data techniques, etc.

(3) Report (20)
- (a) Professional (ie. well laid out, clearly expressed, spell checked, within length)
- (b) Explanation of the purpose and critique of your visualisation.
- (c) Video explains and demonstrates the visualisation

Example report outline

1. Introduction - question being explored or the purpose of the visualisation
2. Dataset - reference the source of the dataset(s) and how they were collected
3. Process - describe how you processed, converted or imported the dataset(s) and what tools you used to create the visualisation.
4. Result - critically analyse the outcome of your visualisation. What principles of data visualisation did you apply? Were there aspects you think could be improved upon? Were there effects or functionality that you were technically unable to achieve?

Note: A simple bar chart on a limited amount of static data is a guaranteed fail.