CA682 Data Visualisation Assignment

Due: Friday 14th December 2018 before 23:59
Submission: upload via loop, 25% of module grade

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 6 minutes. The visualisation should **illustrate a point, answer a question or otherwise tell a story** so select datasets accordingly.
Other visualisation tools may be used (Tableau, Qlikview, etc.) **but** you must include a specific section in your report giving reasons for your design choices.
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
    (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
    (a) Complexity of data
    (b) Transformation of data formats
    (c) Combination of 2 or more data sets or use of big or live data

    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. You should do at least 2 of these.
(3) Report
    (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 (within length).

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 and cleaned the datasets 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. You should also not present more than 3 charts. Projects that are a “sampler” of lots of different charts will also do poorly.