FIT5147 Visualisation Project (40%)

In this continuation of the Data Exploration Project you get a chance to create an interactive visualisation that communicates some of your findings from the Data Exploration Project.

It is an individual assignment and worth 40% of your total mark for FIT5147.

Relevant learning outcomes for FIT5147:
5. Choose an appropriate data visualisation;
6. Implement interactive data visualisations using python, R and other tools.

Details of task:

1. Identify which findings from the Data Exploration Project you wish to communicate and who the intended audience is. Be selective, you do not need to and should not communicate everything you found. The intended audience might be your classmates, general public or politicians or whoever you like.
2. Design a narrative visualisation to communicate your findings to the intended audience. It should allow some viewer interaction and be designed using the five-sheet design methodology.
3. Implement your visualisation as a web-based presentation using R or JavaScript and D3. In unusual cases you may use other tools but you need to obtain prior permission from your tutor.
4. Presentation to the tutorial class [Week 12]
   Submit final report and source code [Start Exams: 10/6/19]

Report & Final Product: At the start of the Exam Period you need to submit (through Moodle) a directory containing the implementation code for your narrative visualization and a written report of no more than 15 pages excluding Appendix. It must be organised with section headings as follows:

1. *Introduction*: Precise description of what message you wanted your narrative visualisation to convey and who the intended audience is.
2. *Design*: Description of the visualization design process. This should summarise the 5 design sheets, detailing the alternatives you considered and the justification for choosing your final design.
3. *Implementation*: Description of the implementation including libraries used and reasons for the implementation decisions for your narrative visualisation.
4. *User guide*: Instructions for viewing and exploring the narrative visualisation using a standard web browser and images showing how the visualization works.
5. *Conclusion*: Summarise what you achieved and a reflection on what you learnt in this project and what in hindsight you might have done differently to improve the result
6. Appropriate references and bibliography
7. Appendix: Your 5 design sheets (images are perfect)

Your report should contain images of the final product as well as pointing out any reasons why your project was difficult, e.g. large data set, use of D3 etc.

The uploaded code must contain all data and files required to run your visualisation.

Marking Rubric (40%)

Design [15%]
/5 Appropriate use of five design sheet methodology and evaluation of alternatives
/7 Quality of final design: clear signposting of messages and intended narrative, provision of appropriate context for reader, good use of colour, references to data sources and appropriateness for intended audience
3/ Justification of final design in terms of human perceptual system and human communication assumptions

Implementation [7%]
/5 Correctness and robustness, speed, accessibility
/2 Comments and code quality

Difficulty [10%]
Degree of difficulty, e.g use of non-tabular data, large dataset, D3 programming, sophisticated user interaction [10%]

Presentation [3%]
/1 Quality of oral presentation (confidence, speed, voice) and quality of slides (legibility, design, images etc)
/1 Logical structure
/1 Choice of content (completeness, appropriate level, discussion of design and implementation alternatives)

Written report [5%]
/1.5 Quality of writing, referencing, images, logical structure
/3.5 Completeness