COMP5048 Visual Analytics 2018 Assignment 2 (Group Assignment)

<u>Deadlines:</u> (submit to Canvas and hard copy to School of Computer Science Reception mail box)

- 1) <u>Initial report (5 marks): week 8 Sep 26, Thursday 5pm</u>
- 2) Presentation/demo (10 marks): week 10, Oct 17, Thursday 5pm
 - each group has a 7 min. presentation in one of the weeks 10, 11, 12 (Oct 17, Oct 24, Oct 31) Thursday 6-9 pm, lecture room.
- 3) Final report (15 marks): week 13 November 7, Thursday5pm

Choose **one** of the data sets below and produce **good visualisations** which are **useful for analysis** of the data.

More specifically:

- **Design** (i.e., define *tasks*, determine what *analysis* and *visualisation* to use)
- *Implement* (i.e., determine what **tools/implementation** to use)
- <u>Evaluate</u> with a given data sets and associated analytic tasks.

For VAST challenges, see the specific task details in the links below.

You can use any software you like or implement your system using existing tools, but *you must accurately acknowledge all your sources*.

Data Sets:

- 1. VAST Challenge 2019: Mini Challenge 1 (https://vast-challenge.github.io/2019/MC1.html)
- 2. VAST Challenge 2019: Mini Challenge 2 (https://vast-challenge.github.io/2019/MC2.html)
- 3. World happiness report (https://www.kaggle.com/unsdsn/world-happiness)
- 4. Goodreads books (https://www.kaggle.com/jealousleopard/goodreadsbooks)
- 5. International football results (https://www.kaggle.com/martj42/international-football-results-from-1872-to-2017)
- 6. Trending YouTube videos (https://www.kaggle.com/datasnaek/youtube-new)
- 7. Top Spotify tracks (https://www.kaggle.com/nadintamer/top-spotify-tracks-of-2018)
- 8. Rain in Australia (https://www.kaggle.com/jsphyg/weather-dataset-rattle-package)
- 9. New York City Airbnb (https://www.kaggle.com/dgomonov/new-york-city-airbnb-open-data)
- 10. Suicide rates (https://www.kaggle.com/russellyates88/suicide-rates-overview-1985-to-2016)

Marking Criteria:

- Quality of your Solution (esp. visualisation) to support analytic tasks
- Quality of your Implementation
- Quality of your Report, Presentation and Demo

Initial report should be in the following format (min 5 pages):

- 1. Introduction
 - 1.1 Dataset
 - 1.2 Tasks
- 2. Design and Approaches
 - 2.1 Analysis
 - 2.2 Visualisation
- 3. Implementation
- 4. Evaluation
- 5. Planning
- 6. References

<u>Presentation</u> should be in the following format (max 10 slides):

- 1. Introduction
 - 1.1 Dataset
 - 1.2 Tasks
- 2. Design and Approaches
 - 2.1 Analysis
 - 2.2 Visualisation
- 3. Implementation
- 4. Evaluation
- 5. Progress and Planning

Final report should be in the following format (10-15 pages, excluding Appendix):

- 1. Introduction
 - 1.1 Data set and Tasks
 - 1.2 Aims and Contribution
- 2. Design
 - 2.1 Analysis
 - 2.2 Visualisation
- **3.** Implementation
- 4. Evaluation
 - 4.1 Results
 - 4.2 Discussion
- 5. Conclusion
- **6.** References
- 7. Appendix: Group meeting minutes (0.5-1 page per week: week 6-12)
- **8.** Appendix:Codes