Team Project Assignment

Scope of the Project

The team should develop a case, address a series of questions related to the case, and use R to build models to answer the questions based on a set of data. The project must involve at least two of the following modelling techniques:

- Simulation
- Linear regression
- Classification
- Clustering
- Text analytics

Report Requirement

Each team must submit

(a) a report in form of HTML or PDF file generated from R Markdown that contains both the case description and R source codes,
(b) an R script containing the models built for the case that is executable, and
(c) the data file if the data is offline data in csv format. If the data was crawled from Internet, then just specify the website in the report.

The report must include, but not limited to, the following components:

- Case description
- Data source
- Case questions
- Modelling methodology
- Findings and conclusion

Evaluation Criteria

The project will be evaluated on the following criteria:

- ***Case appropriateness***. The case should address a real life problem with clear objectives. The background of the case is adequately described.
- ***Data quality***. Data is authentic, comprehensive and relevant in supporting the needs of the case study. It will be a plus if the data is consolidated from multiple sources.
- ***Analysis.*** Students must demonstrate a sophisticated understanding of the main issues/problems in the case and raise appropriate research questions relevant to the issues/problems.
- ***Technical skills.*** Students are competent in applying R to manipulate and visualize data, construct and evaluate models, and eventually answer questions raised in the case.
- ***Writing.*** Professional practices of writing styles. Clear succinct and well written text with insightful charts.

The team will be awarded bonus points for novelty of the case and application of techniques beyond the course coverage.

Project Timeline

- Submit a project proposal by **10th Feb**. The proposal could be very informal as long as it can illustrate clearly your team's idea of what to do and how to do. It may be written as a formal Word document or simply an email. To make a good project case, you may identify a problem that you are interested in, then source for data on Internet; Or you may obtain some data online first, then build a case from the data.
- A video presentation of the project together with the project report should be submitted to IVLE by **00:01am 21st April**.