

Team Project Assignment

Scope of the Project

You are about to start a new business that revolutionise the current business practice in the market. Your secret weapon is DATA – providing unprecedented insights to your customers via data visualisation. Through data collected from multiple sources and the beautiful charts developed on it, you are bringing value-add to your customers and helping them make better decisions.

The main product of your start-up company is an APP written in R that provides interactive charts constructed from data.

Business Plan

You need to submit a business plan about your start-up business by **12pm, 10 February 2019**. The business plan is not counted in your final assessment and it is not necessary to be written beautifully in formal business template. However, the plan is crucial for the success of the project and it must address the following points:

- What is the problem that you want to tackle?
- What is the current market practice?
- What are the pain points of current market practice to consumers?
- How are you going to tackle the problem?
 - What data to use and Where to get them?
 - What kinds of data visualization to develop?
- Project Plan

The instructor will then review the business plan with individual teams.

Submission 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 APP 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
- Description about the APP functionalities and the methodology behind.

Zip all your files into one zip file before uploading. Name the file in the following naming format: Project-[class]-[team].zip.

Deadline

Upload your Team Project file onto LumiNUS by Sunday **14 April 2019** (Week 12) **1900 HRS**.

Late submissions will be penalized. That is, if a Team Project file is submitted late but within 24 hours of the deadline, a penalty of 25% of the full marks will be imposed. However, if a Team Project is submitted later than 24 hours after the deadline, the penalty imposed will be 100% of the full marks for Team Project. **Incorrect submission (e.g., using the wrong filename format) will also be penalized 25% of the full marks.**

Presentations

Record a video presentation of your project and upload it to IVLE by **21 April 2019** (Week 13) **1900 HRS**. The presentation cannot be more than 20 mins and every member of the team must participate in the presentation. The video presentation can be recorded using normal smart phone, as long as it can show clearly both the screen and the presenter.

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 questions relevant to the issues/problems.
- **Technical skills.** Students are competent in applying R to manipulate and visualize data, and eventually tackling 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.