## SENG3011 Github Repository Structure

Each Teams should maintain their Github repository in following structure:

Folders are marked in blue colour. PHASE\_1 folder should contain source code for API, API documentation related code and resources, and any test scripts you develop. PHASE\_2 folder should contain two folders for source code for platform you develop and any related documentations.

Reports folder should contain four documents (.md or pdf). These are working documents throughout the semester. They will be evaluated as deliverables in respective weeks with relevant source codes.

Initially certain information can be incomplete.

The README.md file should contain following content at each deliverable:

- Team Name and Members (D1)
- Team API Documentation URL (by Week 5)

You must document your API in swagger, host online and provide a URL which will correspond to your team's software releases throughout the workshop. At week 5, API doesn't need to be complete, but Swagger specification needs to be hosted online and API should be callable online even though it may return incomplete results.

Under the Reports folder, each document should contain following information by the respective deliverables.

#### 1. Management Information (D1, D4)

Provide a project plan showing team member responsibility, work arrangements and any information team members will be using to coordinate their activities. You should also mention any software tools used by the team to assist project management. Continue updating this as the project progresses in D1 and D4.

# 2. Design Details (D1, D2, D4)

## 2.1. Initial documentation (D1)

- Describe how you intend to develop the API module and provide the ability to run it in Web service mode
- Discuss your current thinking about how parameters can be passed to your module and how results are collected. Show an example of a possible interaction. (e.g.- sample HTTP calls with URL and parameters)
- Present and justify implementation language, development and deployment environment (e.g. Linux, Windows) and specific libraries that you plan to use.

## 2.2. API design and testing details (D2)

- Describe final architecture of your API, justify the choice of implementation, challenges addressed and shortcomings.
- Provide the URL of your API specification.

#### 2.3. Platform Design (D4)

- The use cases / requirements of the API and the analytics platform
- Software architecture
- How it integrates with your API at a high level, such as how you communicate with the API, data conversion practice at client web application and any mapping you do between data retrieved and visualized.
- Add any other relevant information to your design i.e. all additional APIs used in your project, algorithms you've employed, etc

## 3. Testing Documentation (D2, D4) 3.1. API Testing (D2)

- Describe the testing processes used in the development of API, referring to the data and scripts included in Phase\_1 folder. This should describe your testing environment and/or tools used, and limitations (e.g. things that are not tested). Describe your testing process i.e. how your team conducts testing using the test data (e.g. in which order) and an overview of test cases, testing data and testing results.
- Describe the output of testing and what actions you took to improve the test results.

At D2 your Phase\_1/TestScripts folder should contain:

- 1. Test input files
- 2. Test configuration files (if any)
- 3. Result files (if any)
- 4. Software or scripts used during testing (if any)

## 3.2. Platform Testing (D4)

- Describe the testing processes used in the development of the platform. You may include a sub-folder in Phase\_2 folder to include any data, scripts you used to test the platform.
- Describe the output of testing and what actions you took to improve the test results.

# 4. Final Report

Your final report should contain:

- A **summary** of the key benefits/achievements of your project relating back to your design/implementation
- Team organisation and conclusion/appraisal of your work
  - o Responsibilities/organization of the team
    - Ultimate breakdown of team composition and responsibilities
  - o How did the project go in your opinion?
    - Major achievements in project
    - Issues/problems encountered
    - What kind of skills you wish you had before the workshop (this way we can try include them in other courses)
    - Would you do it any differently now ?
      - I.e. tools, different technology, time management, etc

#### • Peer Assessment

By default, it is assumed that all team members have contributed equally. If this is not the case, the given peer assessments must be filled, signed by all team members and included in the report.