MONASH University

Faculty of Information Technology

FIT3162/3164
COMPUTER SCIENCE /
DATA SCIENCE PROJECT 1

Weekly Project Progress Report Assignment

This document has 4 pages, including this cover page.

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FIT3162 Computer Science/FIT3164 Data Science
Software Project
Semester 1, 2021

Weekly Project Progress Report

Due Date:	Weekly during scheduled workshop
Value:	5% of final Assessment
Assignment Type:	Individual
Mode of Submission:	Tutor to view and assess during the workshop session.

Learning Outcome targeted

1. Evaluate and select research methods and techniques of data collection and analysis appropriate to a particular project
2. Search, access, and analyse research literature as part of the process of developing solutions to problems
3. Work effectively in collaborative teams
4. Develop and test a substantial piece of software or hardware

Purpose of this assignment

The main purpose of this assignment is to

1. Encourage Students to plan and undertake project execution activities in a regular and consistent manner.
2. Provide Students opportunities to self monitor their progress and recognise early their need to undertake remedial action if their progress falls behind.
3. Allow the Teaching Staff to monitor and feedback on the Student's progress on a regular basis

See Next page for Assignment Specification

Assignment Specification

All Students will be required to report on their activities completed or in progress in relation to their project carried out during the previous week, or since they last met with their Tutor. Evidence of progress should also be provided as much as possible.

The report will be in the form of a document, eg, Google Doc, Word or text, that will be shown to the Tutor during the weekly workshop session. The document will show:

1. What activities was undertaken by the student during the previous week, and what degree of completion was reached, if it is a long term activity.
2. If progress is minimal, what was the reason for minimal progress.
3. What does the student plan to do in the following week or until the next scheduled meeting with the Tutor.
4. If progress was less than planned, what remedial action does the student intend to undertake to make up for falling behind.

Examples of evidence of progress can be: segment of code written, section of report written, notes on research carried out, list of and sample of material collected such as dataset, reading material or other relevant material, notes of meetings. Other evidence may also be presented.

Marking Criteria

This assignment contributes 5% of the mark towards the total mark for this unit.

Students will be assessed on 10 such reports over the full 12 weeks semester.

Therefore each report will contribute 0.5% mark.

The full weekly mark will be awarded if the student is able to show the report document as specified above AND the Tutor is satisfied that the activities described show adequate progress by the student.

Note: during the weeks (x2) where the student's Team will be making their oral presentations, the student will be awarded the full mark for the weekly report, if they attend and participate in their Team presentations, and does not have to show their weekly progress report in those weeks.

A template is provided below as a suggestion for the report content and format.

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Weekly Project Progress Report - FIT 3162/FIT 3164

Name: Tah Wen Zhong, Jason Toh Zhern Wee, Ethan Hor Sheng Jian
Semester Week: 2

What has been accomplished over the previous week

- Setup GitHub repository
- Completed all base and ensemble prediction models
- Completed preprocessing methods
- Completed F1 and AUC evaluation methods
- Added interfaces for the main program
- Added a confusion matrix evaluation method
- Added algorithm which performs all required preprocessing techniques
- Added feature selection functions
- Designed and developed the main program which combines feature selection, preprocessing and all the base, ensemble prediction models and evaluation models.
- Successfully output AUC evaluation results for NASA datasets.
- Performed bug fixing on any errors occurred throughout the lifetime of the program.

What degree of completion was reached in comparison to previous week set goal

Goals

- Fix bugs found in evaluation methods
- Fix reading error for PROMISE repository datasets
- Add confusion matrix for accuracy, FPR and FNR evaluations
- Successfully output evaluation results for all datasets
- Rework flowchart to include recent additions
- Add charts to visualize evaluation results

Completion percentage:

100%

Note

All goals were met.

Optional: What was the reason for failing to meet the set goal

None

What is the goal set for the following week

- Analyze and report findings based on the following topics:
    - Effectiveness with inclusion of feature selections methods
    - Effectiveness of different metric types
    - Effectiveness for different degrees of imbalance
- Add matplotlib functions for better visualizations

Optional: What will be undertaken to make up for missed goal
None

Use additional space above if required