FIT2107-S2-2020 Assignment 3

Code Reviews and Reflection Report

Some part of this assignment will be completed in pairs
Multiple Submissions

Marks:	15% of your final marks.
Due Date:	Part A Week 10, 25/10/2020, 11:55 pm AEST. Part B Week 11, 1/11/2020, 11:55 pm AEST. Part C & D Week 12, 08/11/2020, 11:55 pm AEST.
Submission:	READ THE INSTRUCTIONS CAREFULLY. 1. This assignment will be submitted in 4 parts. The parts A and D are individual submission, whereas the parts B and C are group submissions. All submission will be on Moodle. 2. For part C, the GIT issue board screenshots must be submitted to Moodle as well. As per the faculty policy.
Lateness:	Late penalty of 10% per day after the due date, including the weekends.
Student Statement:	An electronic student statement MUST be accepted as per the faculty policy while submitting your assignment. Once you press the submit button, the electronic student statement will appear, accept it and press continue. If the assignment is left in a DRAFT mode, it will not be accepted for grading. All team members MUST accept the student statement.

Introduction

Software inspection is an important static technique to detect faults early in the software life cycle. The purpose of inspections is to manually scrutinise a software artefact, for example, requirements, design, or code. The purpose of this assignment is to perform a code review on the MyCalendar code and tests created in Assignment 2. In addition, students will write a wrap up/reflection report highlighting the results, the outcome of review process and provide suggestions.

Learning Outcomes

Apply quality assurance techniques such as modern code reviews to code development artefacts.

Part A: Checklist Preparations (Individual)

Based on your experience with past development, the techniques we have learnt so far and the material discussed in the course notes, each team member must build an individual code review checklist for the implementation and the test cases written in assignment 2 for MyCalendar application. You can use the checklist provided in the Week 10 readings as a reference, but we expect each member to come up with their own checklist. Each checklist should be submitted to the Moodle Assignment 3 Part A Turnitin link as a pdf document. The deadline for checklist submission is week 10, Sunday 11:55 PM AEST.

Part B: Code Review Meeting (within your own group)

Next step is to conduct the code review in your own group using the checklists developed in Part 1. The code review process is described in the Week 10 reading notes. Identify the faults or defects in your code and write a report. This report (as a group) should be submitted on the Moodle under the Assignment 3 Part B link as a pdf document. Your report must indicate:

- The time of the review meeting(s).
- A summary of defects identified, if any and by who? And why?
- How have you conducted the review process?
- Other relevant information (optional).

The deadline for report submission is week 11, Sunday 11:55 PM AEST.

Part C: Peer Code Review (With another group)

For a peer review meeting, another team will be reviewing your code. We shall add them as reporter in your GIT repository. As a reporter, they can view your repository but cannot edit it. They will perform a code review activity on your repository and use the GIT board or issue tracker to submit the defects they have identified in your repository. It is up to you how you organise the review meeting with the reviewing team. The team being reviewed should submit the meeting minutes for the review meeting as well as the screenshots of the GIT issue tracker created by the reviewers.

- the time of the review meeting(s).
- who was present?
- How long did it take to conduct the review?
- A summary of defects identified by the reviewers if any and by who? And why?
- How the peer code review process was conducted?
- What was the outcome of the peer review activity?
- Other relevant information (optional).

The minutes should be submitted as a compressed zip file not later than week 12, Sunday 11:55 pm AEST using the Assignment 3 Part C submission link on Moodle.

Part D: Wrap up/Reflection Report (Individual)

The purpose of the report is to discuss the result of the exercise and related topics. Write a concise report in pdf format and submit it using Assignment 3 Part D Turnitin link not later than week 12, Sunday 11:55 pm AEST, covering the following topics:

- What results have you achieved with the code review exercise?
- Suggest changes to the checklists based on your experiences conducting the code inspections. Provide a brief rationale for each change.
- Based on your experience, analyse what, if anything, the process of the peer code reviews added to the process of identifying faults, compared to doing so as an individual as well as group review in your own team or through unit tests. Do you think you would adopt this kind of inspection process for other kind of software artefacts (such as class diagrams etc) in future software development projects? Briefly explain why.
- The rules for inspections state that you should only identify defects, not propose fixes for them. Based on your experience in this assignment as well as your readings, discuss the merits and demerits of this rule. Would you keep it for your own projects? Would you suggest fixes? Why or Why not?

Special Consideration

If a student faces exceptional circumstances (serious illness or injury, family emergency etc.) that prevent them completing the assignment, they may apply for special consideration according to the policy and procedure on the Faculty website:

https://www.monash.edu/connect/forms/modules/course/special-consideration

Assignment Forum

You can ask questions on the discussion forum, which the Lecturer will monitor and respond to daily (and at least once on weekends). All students should monitor this forum - I may clarify aspects of the assignment on the forum and any such clarifications are considered "official". You may of course also email the lecturer or arrange to see him virtually if you prefer.

Marking Criteria

- Appropriateness of checklists, including clarity, and appropriate balance between comprehensiveness and usability.
- Completion of inspection checklist.
- Identification of issues in notes.
- Clarity of description of issues.
- Reasonableness of recommendations for improved checklists after inspection.
- Analysis of value of in-group and peer group (with other group) inspection process.
- Analysis of value of including fixes in group inspection process.
- Clarity of presentation of all documents.

A detailed marking guide is available on the Moodle submission link for every part.