COMP3900/9900
2023 Term 1
Software Quality Assessment

❖ **Software Quality (**due **Friday 21 April 2023 Week 10 @ 9.00pm) (**worth **20%)**

The submission for this assessment should include your entire codebase that you have developed for the project. This assessment is mainly for the **scale and technical depth** of the delivered implementation, the **correctness** of the implementation, its **value/novelty**, its **performance** (e.g., is it too slow for its intended usages), **clarity of your code**, its **design** (including **interface design**), its **structure** and its **organization**, and **ease of use**. The marking criteria to be used are shown below.

❖ *NOTE: The final complete system your team submits will need to be able to be built/compiled (if language used supports this), configured, setup, run, be usable and work on one of the following two (2) environments:*

1. *The **CSE vlab** machines: https://vlabgateway.cse.unsw.edu.au/*

   OR

2. *On the **Lubuntu 20.04.1 LTS virtual machine image** (or recent releases) as described in **Moodle** under **Virtual Machine Guides** section: https://moodle.telt.unsw.edu.au/mod/page/view.php?id=5606508*

   If using this second virtual machine option to host your system, do NOT include the virtual machine as part of your submission, but rather specify in your report that you are using this virtual machine option (and specifying the release if different).

   We will take the software artefacts and setup scripts/instructions you submit and use them with this virtual machine.

❖ Please make sure you also take a look at the Moodle **Software Quality** assessment submission page under **Assessments Hub** section for submission instructions and follow those submission instructions.

If you have any issues making your submission through **Moodle** or if your submission **exceeds 200MB**:

1. Create a **zip** file of your submission with file name:
<TeamName>FinalSoftwareQuality.zip
(where <TeamName> is replaced with your team's name)

2. Use the command line to push this **zip** file to your team's **GitHub** classroom repository by the deadline for this assessment.

3. Follow the instructions on the Moodle submission page to submit a zip file that includes a **Readme.txt** plain text file. This text file should mention that you have uploaded your final submission to your team's GitHub classroom account on time (commit history should reflect this) and include a link in this text file to your submission on GitHub. Also **email your mentor to let them know that you have taken the GitHub** approach to submission.

Note: If your submission exceeds 200MB, you will need to use **git-lfs** to push your submission to your team's GitHub account: **https://git-lfs.github.com/**

Software Quality Marking Criteria

Category	Max Mark	Team Mark	Comments
Technical Depth and Novelty (45%)	**9**		
Implementation far from completion	2.3		
Complete implementation according to the scope of all project objectives without solving technical challenges	4.5		
Complete implementation and solving some technical challenges	6		
Completed with some degree of technical novelty	7.5		
Completed, with good degree of technical novelty, and functional novelty	9		
Correctness and Performance (30%)	**6**		
Unacceptable performance, buggy even with a few tests	1.5		
Overall correct but slow	3		
Overall correct and efficient	4		
No issues during demo and project testing (by the assessors)	5		
Robust and excellent performance	6		
Code Style, Structure, and Readability (12.5%)	**2.5**		
Messy code structures, difficult to read	0.7		
Readable but not organized	1.3		
Code is well structured and readable with some documentation	1.7		
Well structured and easy to read with ample documentation	2.1		
Easy to read, well documented, and demonstration of excellent coding style and practice	2.5		
Interface and Usability (12.5%)	**2.5**		
Primitive interface and difficult to use	0.7		
Poor interface design but still usable	1.3		
Generally good design with usability issues on some use cases	1.7		
Generally good design and ease to use in all aspects	2.1		
Professional interface design and excellent usability	2.5		
Total Mark (out of 20)	**20**		