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College of Computer and Information Sciences,

Department of Computer Science

CS 392 Software Engineering 2

Assignment #1: Quality Assessment

September 27, 2022

On this assignment each group of students will answer question to assess their understanding of **software and code quality**. Students will work in groups of 3-4 students and use previous project from SWE1 of one of the student as a material in this assignment. Students will collect their in one document to be submitted in addition to a five minute power point presentation recorded and submitted with the other assignment materials.

Questions:

1. Discuss the software quality of the project you submitted in SWE 1, Alhilal Alahmar system, according to the quality attributes shown in Figure 24.2 in Sommerville's book. You should consider each attribute in turn and explain how it might be assessed. **(2 marks)**
2. Look up code review tools available. Select a tool, read about it and provide a brief review on it. (Description of the tool, Features, How to install, sample of the code review results.. etc). **(3 marks)**
3. Students' groups will pick one Android app for delivery service in Saudi Arabia, then use **MobSF** tool¹ to perform static analysis. Summarize the results of the overall quality the app in terms of source code quality (e.g., security issues, clean code, code documentation, etc.)? **(5 marks)**

Extra Information about MobSF:

What is MobSF static analysis tool? Is an automated mobile application static/dynamic analyzer. It supports mobile apps binaries APK, and XAPK, along with zipped source code. The tool helps to perform static and dynamic analysis for apps quality perspectives, such as security assessments, and reliability.

How to use MobSF static analysis tool? Complete tutorial can be watched on YouTube channel: <https://www.youtube.com/watch?v=rFRuzxGMeM8>

Report structure: the report structure as follow:

- Cover page: include university logo, team members' names, emails and IDs, supervisor name.
- Write each question with its answer.
- Prepare a brief presentation with your results and video record it.

¹ <https://github.com/MobSF/Mobile-Security-Framework-MobSF>

What to submit?

- The answers report
- The code review results you got from the tool
- The Project evaluated in Question 1.
- The presentation in a video.