

CS409 Project: Project Proposal (Total: 20 points)

Deadline: October 16, 11.59pm

The class project (Invitation links: https://classroom.github.com/g/nJLg4_dw) is a group-based project where students will be divided into groups of three (Only two groups in the entire class could have four members). The objective of the project is to allow student to apply the knowledge that they learned in the class to testing real-world applications. Each group need to choose three apps (one app per student) across different categories from the list of open-source

Android apps at: <https://github.com/topics/android-apps>

or <https://github.com/pcqpcq/open-source-android-apps> or

<https://github.com/Mybridge/amazing-android-apps> or

<https://apt.izzysoft.de/fdroid/index.php/?repo=main>

Note that the class will not provide any hardware/devices so it is not advisable to select the apps that require particular devices (e.g., apps from the “Android Wears” categories). All group members should carefully discuss and agree upon 3 (or 4) Android apps based on the criteria listed below:.

- Ease of use: The project could be **compiled successfully** without errors. The app could be executed in a device. *All selected projects should fulfill this criteria.*
- Existing Tests: The project contains some **test cases for future comparison**. *All selected projects should fulfill this criteria.*
- Popularity: **The number of stars** in GitHub or the number of downloads in Google Play.
- Actively Maintained: There are recent commits (**within a year**) to the projects.
- Number of GitHub issues: The project should have at **least 10 open** (unresolved) GitHub issues that are **bugs-related** (You need to check if the 10

GitHub issues are bugs **instead of questions/feature request**). *All selected projects should fulfill this criteria.*

- Likelihood of finding new bugs: Projects with **many bug reports** (GitHub issues) may **indicate that it is easier to find bugs** in these projects but less likely to find new bugs (not duplicates of existing bugs).
 - Size: The project contains **many Java/Kotlin classes that can be potentially tested**.
1. List the **names and student ids** of the members in your group. *(1 point)*
 2. Each group should select a unique group name. The group name will be used for the setting up the GitHub repository. List the group name that your group has selected. *(2 points for successfully setting up your group GitHub repository)*
 3. Each group needs to select three projects (the group with four members need to choose four projects). Each member of the group will be responsible for his own project. To ensure that each project gets to test different projects, each group needs to post on this link:
<https://docs.qq.com/sheet/DZnRMdVhrak9wVmFa>
for each of the selected project. For each app, **a maximum of two teams** could choose the same apps. The selection is based on first-come-first-served basis, which means that the first two group to post the name and link of the selected project wins the bid for that project and other groups need to select other project. What are **names** and **links** to the open-source project that your group select? *(Total : 4 points)*
 - a) Choice 1:
 - b) Choice 2:
 - c) Choice 3:
 - d) Choice 4 (Only for team of four):
 4. Why do your group select this project? Explain the reason in terms of the criteria below: *(Total: 13 points)*
- Ease of use: Have you successfully compiled and executed the app? (2 points)
 - Existing Tests: Do the project contain some test cases? *(2 points)*
 - Popularity: How many stars does the project have in GitHub? Is the project available for download in Google Play? If yes, what is the number of downloads in Google Play? *(3 points)*

- **Actively Maintained:** When is the latest commits to the project? *Please make sure that the latest commits was within a year ago* (2 points)
- **Likelihood of finding new bugs:** How many bugs-related GitHub issues do the project have? *The project should have at least 10 open (unresolved) GitHub issues that are bugs-related (You need to check if the 10 GitHub open issues are bugs instead of questions/feature request).*
- How many of these bugs-related issues has been resolved/closed? (2 points)
- **Size:** What is the Lines of Codes of the project? (2 points)

**All answers for Question 1-4 should be posted in README.md*