# CSCB07 – Software Design

# Project

## Logistics

1. This is a group project that is worth 20% of the course grade.
2. The due date is Dec 4th, 2023.
3. Attending the tutorial sessions during the weeks of Nov 13, 20, and 27 as a group is mandatory and will be counted towards your participation grade.
4. The contribution of each student will be evaluated separately. That is, students belonging to the same group might end up getting different grades.
5. Please use Piazza for any general questions related to the project.

## Project Description

You are required to develop an Android mobile application to enhance the student experience within the CMS department and facilitate communication regarding departmental events and announcements. For students, the application offers a POSt qualification checker, a platform to submit complaints, notifications for important announcements and events, and the ability to RSVP for events along with the option to provide feedback. Administrators can post announcements, schedule department events, access event feedback data, and review student comments and complaints.

## Requirements

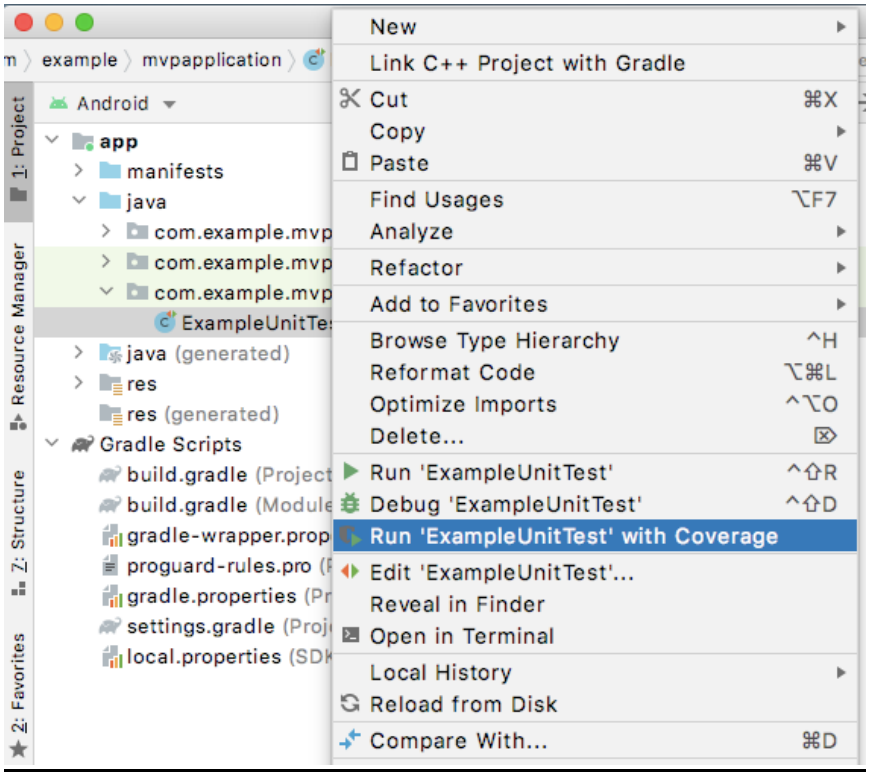
1. Develop the application based on the user stories listed below.
2. Use Scrum for the application development process:
    a. Choose a Scrum Master
    b. Conduct “Standup” meetings and document them
    c. Use Jira to keep track of the user stories and make sure your TA is added to the project. You can refer to this tutorial for more information.
    d. You should have 2-3 sprints.
3. Keep track of the changes made to the code using some version control system and make sure the TA has access to your project as well.
4. Test the application according to the instructions listed below.

# User Stories

1. As a student, I want to sign up and login to my account so that I can securely access my data.
2. As a student, I want to check whether I qualify for POSt by answering a few basic questions, so that I don't have to search for that information and risk misinterpreting the requirements.
3. As a student, I want to submit complaints, so that the department can become aware of any challenges I may be experiencing.
4. As a student, I want to be notified about all announcements and scheduled events, so that I can stay informed and ensure I don't miss any important academic or social events.
5. As a student, I want to RSVP for an event, so that I can know about the latest updates, confirm my participation, and secure a spot at the event if interested.
6. As a student, I want to submit a comment and/or a numeric rating for an event that I attended, so that I can provide feedback about my experience.
7. As an admin, I want to post announcements, so that students can become aware of the latest updates.
8. As an admin, I want to schedule upcoming events for the department with participant limit, so that students can become aware of future events and RSVP if interested.
9. As an admin, I want to be able to view for each event, student feedback and a summary of the numeric ratings (count and average), so that I can improve future events.
10. As an admin, I would like to view the complaints submitted by students, so that the department can incorporate student feedback to better support their needs.

# Testing

1. Refactor the **login module** of your application according to the Model-View-Presenter approach.
2. Write JUnit tests to validate the presenter according to the following guidelines:
    - Each test method should validate a specific behavior and should not contain any code that is not relevant to the behavior being validated. Test methods that violate any of these conditions will be discarded.
    - Use Mockito to simulate the interactions with the model and the view.
    - Write as many unit tests as needed to maximize line coverage of the presenter. You can generate coverage information in Android Studio as follows:




# Submission

The Scrum Master should upload the following deliverables as a single archive file (.rar or .zip) to "Project" on Quercus by Dec 4th, 2023. Finalizing these deliverables, however, is the responsibility of the group as a whole.

1. The application code
2. A document including the following information:
    a. The main tasks done by each member of the group
    b. A summary of each of the Scrum meetings

# Grading Scheme

- *Individual grade = Group grade * individual contribution*
- Group grade:
    a. Implementing the main functionalities (40 points)
    b. Code quality (10 points)
    c. User interface design and ease of use (15 points)
    d. Version control (10 points)

e. Scrum (15 points)

f. Testing (10 points)

- *Individual contribution* is a percentage that represents the relative contribution of each group member. It will be computed based on the following:

    a. Project document

    b. Version control activity

    c. Involvement in the Scrum process

    d. Participation during the meetings with the TA