**CMPS 312 Mobile Application Development**

**Lab 8 – Review of Model-View-ViewModel (MVVM) Architecture and Navigation**

Create MVVM-based Students App to review and practice MVVM and Navigation.

Open the App StudentGradeSystem. It has all the dependencies and json files added. Reop to load them.

**1. Students List Screen**

* 1. Add a Student List screen to display the list of students. When the screen loads it should get the students list and display them in a LazyColumn as shown in Figure1.

Add the necessary entities, repository and ViewModel classes.

A picture containing text

Description automatically generated

Figure 1 StudentList Screen

1.2. Provide a delete icon next to each student in the list to allow the user to click it to delete the student.

1.3. Add a Floating Action Button (FAB) to the Student List screen to allow adding a student. When the user clicks on the add button, the app should navigate to Add student screen.

1. **Add Student**

Graphical user interface, application, Teams

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2.1 Create Student Screen to allow the user to a add a student. The user can enter the student first name, the student last name then select the Grade from a dropdown that lists all the grades in grades.json.

When the user submits the form, the app should add the student and navigate back to the StudentList screen.

If implemented correctly the StudentList screen should now display the newly added student.

2.2. Add a title and a back arrow to the screen, when the back arrow is clicked then the app should navigate up to the StudentList screen.