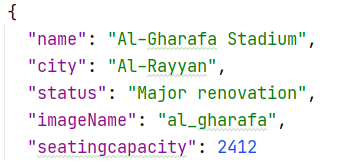
**CMPS 312 Mobile Application Development**

In this lab, you will:

* **Learn how to interact with lists such as search, sort.**
* **Learn how to navigate between screens.**

PART A

1. Use the application “Qatar 2022” that we created in the previous lab.
2. The json file has been updated with a new item seating capacity, so update the Stadium class , stadium card and the stadiumlist.



1. Add a search box to the top App Bar

Graphical user interface, application

Description automatically generated

Figure 1.Search Box

1. Create a dropdown list that filters the stadiums based on the status (To be built, Major renovation or All)

Graphical user interface, timeline

Description automatically generated with medium confidence

Figure 2.Dropdown

1. Create a sort menu that sorts the stadiums based on Seating capacity, and alphabetically based on city and stadium name.

Timeline

Description automatically generated with medium confidence

Figure 3.Sort options

**The stadiums are sorted based on seating capacity (Lowest to highest)**

Graphical user interface, website

Description automatically generated

Figure 4.Sorted based on seating capacity

PART B (NAVIGATION)

In this part we will create a banking application wherein we:

* Will navigate from one screen to another
* Pass values between various screens

Add the following dependency in build.gradle(:app)

implementation "androidx.navigation:navigation-compose:2.4.0-alpha04"

1. Create a composable Navigation function that hosts the *NavHost* and the *navController*
2. Create a sealed Screen class that contains objects for each of **HomeScreen**, **FundTransferScreen**, **DetailScreen** and **ConfirmationScreen**
3. Create composable for all the screens. The name of the composoble should be the same as the name of the object (of that screen) in the Screen class.
4. The HomeScreen UI will be as follows

Graphical user interface, application, Teams

Description automatically generated

Figure 5.HomeScreen

5.When Fund Transfer button is clicked it navigates to FundTransfer screen whose UI will be as Graphical user interface

Description automatically generated

Figure 6.FundTransferScreen

1. After filling the details and On clicking the FundTransfer we will be navigated to a Confirmation page
2. On clicking the Fund Transfer button and navigating to the ConfirmationScreen, we pass all the parameters such as Account Number, Amount, Beneficiary Account Number, and Beneficiary Name to the ConfirmationScreen.
3. The confirmation page has been passed all the parameters from the FundTransfer page.
4. The confirm button raises a toast

Graphical user interface, application

Description automatically generated

Figure 7.ConfirmationScreen

1. The bottom navigation bar navigates between HomeScreen, FundTransferScreen and DetailsScreen