

BCS 371 Lab – NavHost

Overview

In this lab you will create an app that allows the user to navigate between different screens using a NavHost.

Create a project

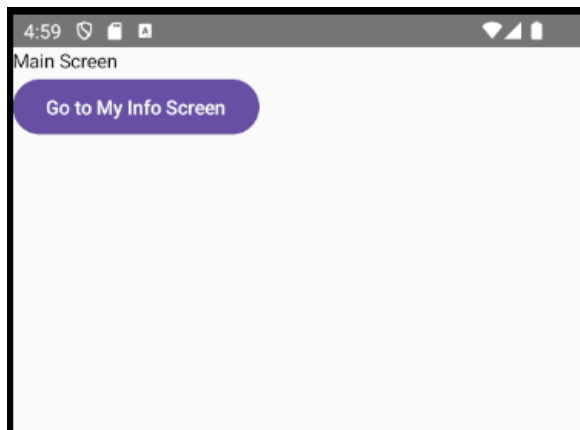
Create a new Android application in Android Studio. Choose the **Empty Activity** type to create an empty activity that uses Jetpack Compose.

Setup the main screen

Create a Kotlin file named MainScreen.kt. Add a composable function named MainScreen. Here is the function header:

```
@Composable
fun MainScreen(navController: NavHostController, modifier: Modifier=Modifier)
```

It should look like the following:



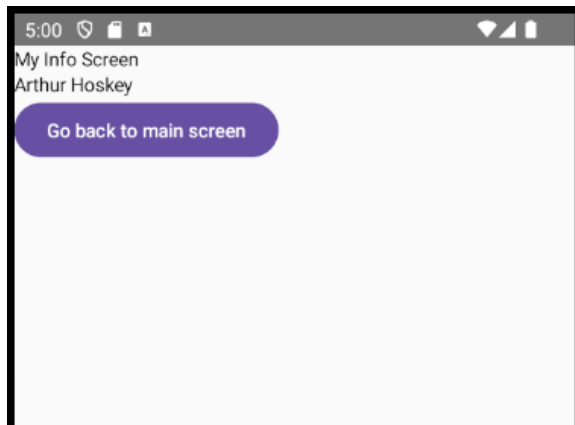
You should not add code to the button click event handler yet.

Setup the my info screen

Create a Kotlin file name MyInfoScreen.kt. Add a composable function named MyInfoScreen. Here is the function header:

```
@Composable
fun MyInfoScreen(navController: NavHostController, modifier: Modifier=Modifier)
```

It should look like the following:



You should not add code to the button click event handler yet.

Setup the NavHost

Create a Kotlin file named `Nav.kt`. Add a composable function named `Nav`. Do the following in this function:

- Here is the method header:
`@Composable`
`fun Nav(modifier: Modifier)`
- Create a `NavController` instance.
- Define a `NavHost` which has both the main screen and the my info screen as destinations.
- Set the main screen as the starting destination in the `NavHost`.

Setup MainActivity

Update the code in `MainActivity.onCreate` so that it calls `Nav`.

Run the app

You should see the main screen appear when you run the app. The button will not work yet because we have not added an event handler yet (next section).

Update main screen

Add an event handler for when the Go to My Info button is pressed. It should navigate to the my info screen when it is pressed.

Update my info screen

Add an event handler for when the Go Back to Main Screen button is pressed. It should navigate back to the main screen. This should happen by programmatically popping the back stack (not by using the back button on the device).

Run the app

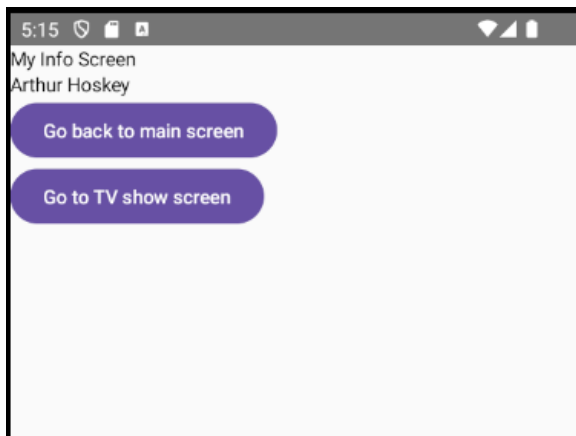
You should now be able to navigate between the screens when the buttons are pressed.

Add TV show screen

Add a screen to display the names of TV shows that you like. You should only be able to navigate to it through the my info screen. Update the app as follows:

- Create a TVShowScreen.kt file.
- Add a method named TvShowScreen.
 - Add code to display the screen name and the names of three TV shows.
 - Add a button with the text “Go back to previous screen”. This button should pop the back stack when pressed.
- Update NavHost
 - Add TV show screen as a destination.
- Update MyInfoScreen.
 - Add a button that will cause it to navigate to the TV show screen.

Here is a screenshot of the update my info screen:



Here is a screenshot of TV show screen:

