# CIS*4030 – Mobile Computer – Lab Five: Navigation

In this lab you will be learning how to work with Navigation in flutter, and more specifically we will be looking at the Navigation Stack.

Part A: Guelph Attractions

In this part of the lab, you are going to be updating the attractions app you built in the last lab. Start by renaming the app bar title to be "Lab Five Part A – FirstName LastName", and then remove the debug banner. I will be providing you with an updated version of the dummy data for the attractions that will include some more parameters that we will use in this lab. Your job will be to duplicate the app that I have made based on the screenshots I have provided below.
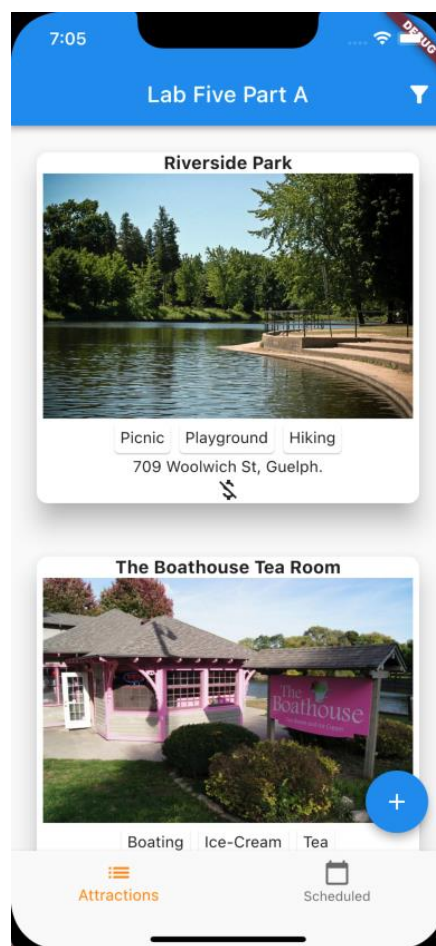

Of importance for you to note in this first screen shot is the use of a bottom navigation bar, this will be used to switch between the available attractions list (main page) and the scheduled attractions (that you can book by clicking on an attraction). Next the filter icon at the top can be added through a parameter in the AppBar called actions, and the circular button in the button right corner is added using a parameter called the floating action button.
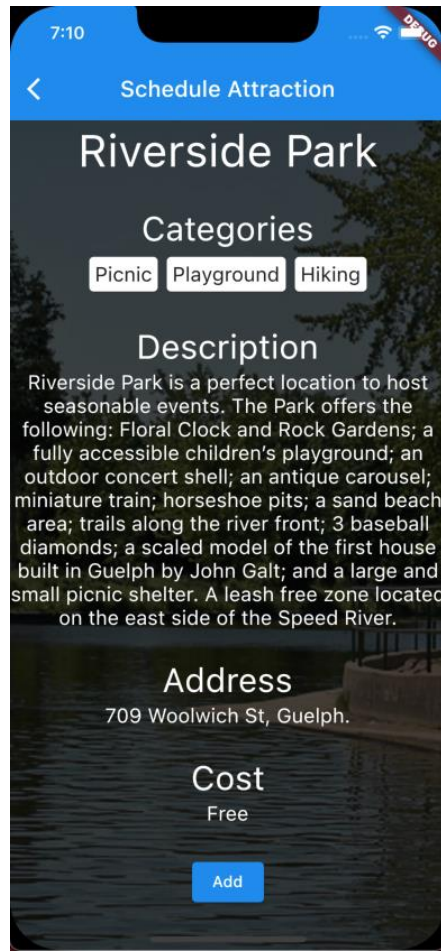
When you click an attraction (in this case 'River Side Park'), a Hero Animation (https://docs.flutter.dev/development/ui/animations/hero-animations#standard-hero-animation-code – I strongly recommend you watch the flutter widget of the day to understand this widget) will go off on the image in the background. Then you will be routed to this new page, the new dummy data for description will be provided to you in the updated data (please note that your screen does not need to be sized identically, try to get it is close as possible, and if it does overflow wrap it in either a ListView or SingleChildScrollView).
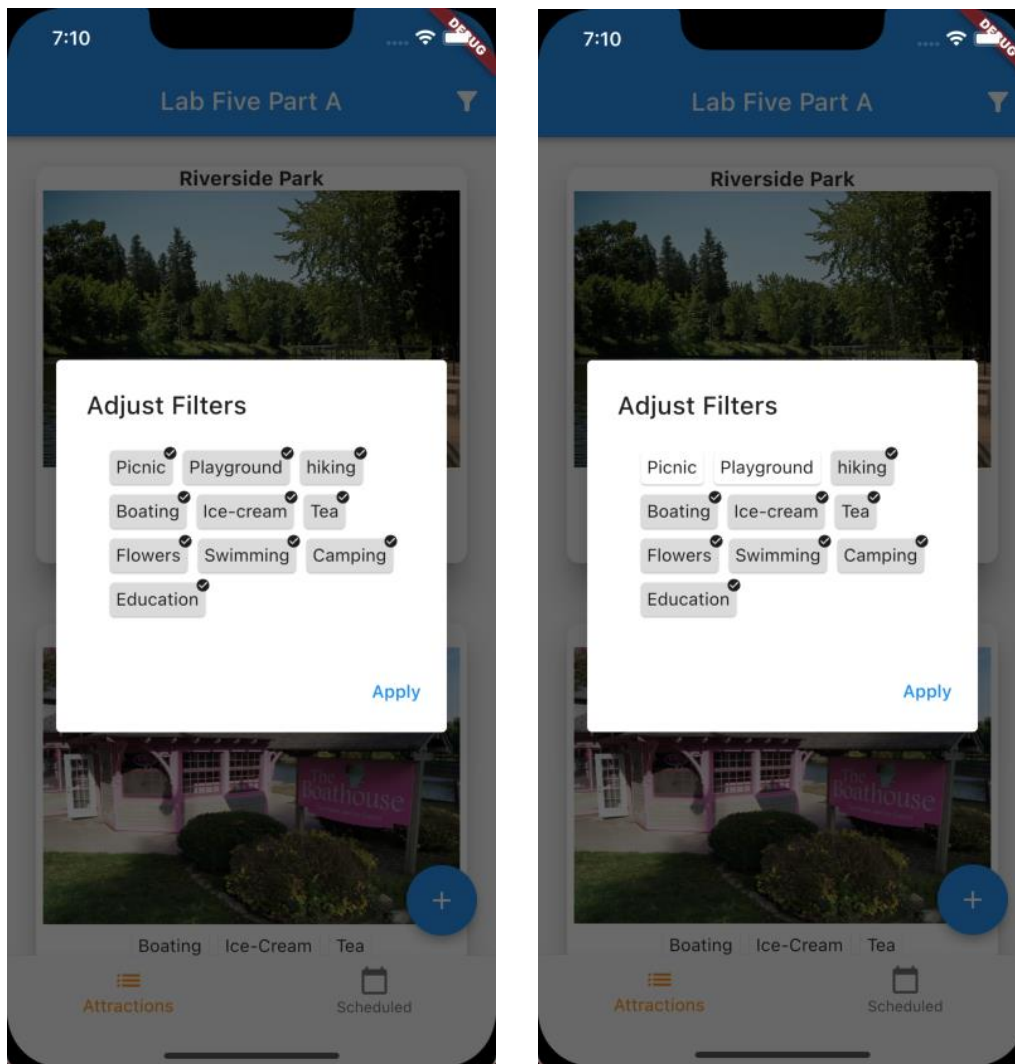
When you click on the filter icon in the app bar this alert dialog will pop up on the screen. Use this page to help you build the popup: https://api.flutter.dev/flutter/material/AlertDialog-class.html. Next, to get the cards in the layout shown in the screen shot use the wrap widget (https://api.flutter.dev/flutter/widgets/Wrap-class.html). As a final note, these filters are currently here just for show – for now they should only be clickable. Do not add functionality that actually filters the content yet.
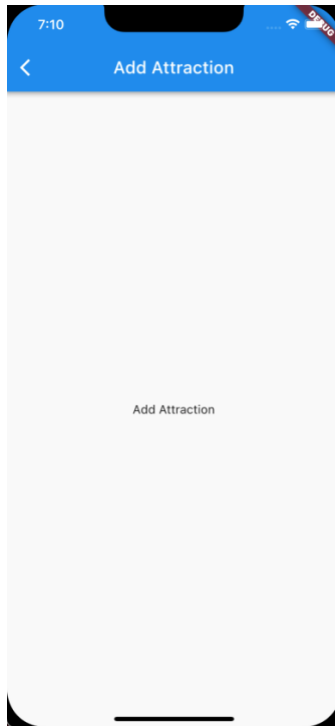
When you click the floating action button this place holder screen should come up. We will add content to this screen later date.
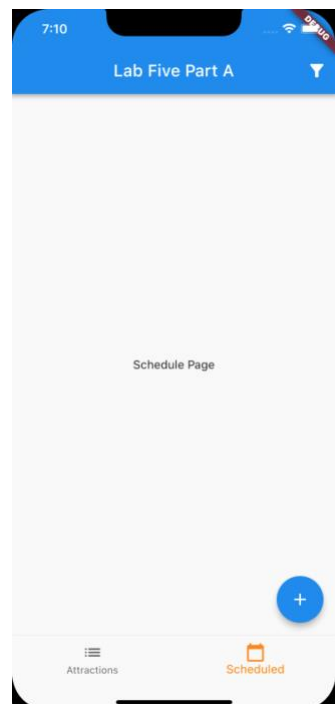
Finally, when you click the 'Scheduled' tab on the bottom, this is what should come up. We will do this at a later date (similarly to add attractions).

Part B: Recipe App

In this part of the lab, you are going to be updating the recipe app you built in the last lab. Start by renaming the app bar title to be "Lab Five Part B – FirstName LastName", and then remove the debug banner. I will be providing you with an updated version of the dummy data for the recipes that will include some more parameters that we will use in this lab. Your job will be to duplicate the app that I have made based on the screenshots I have provided below.
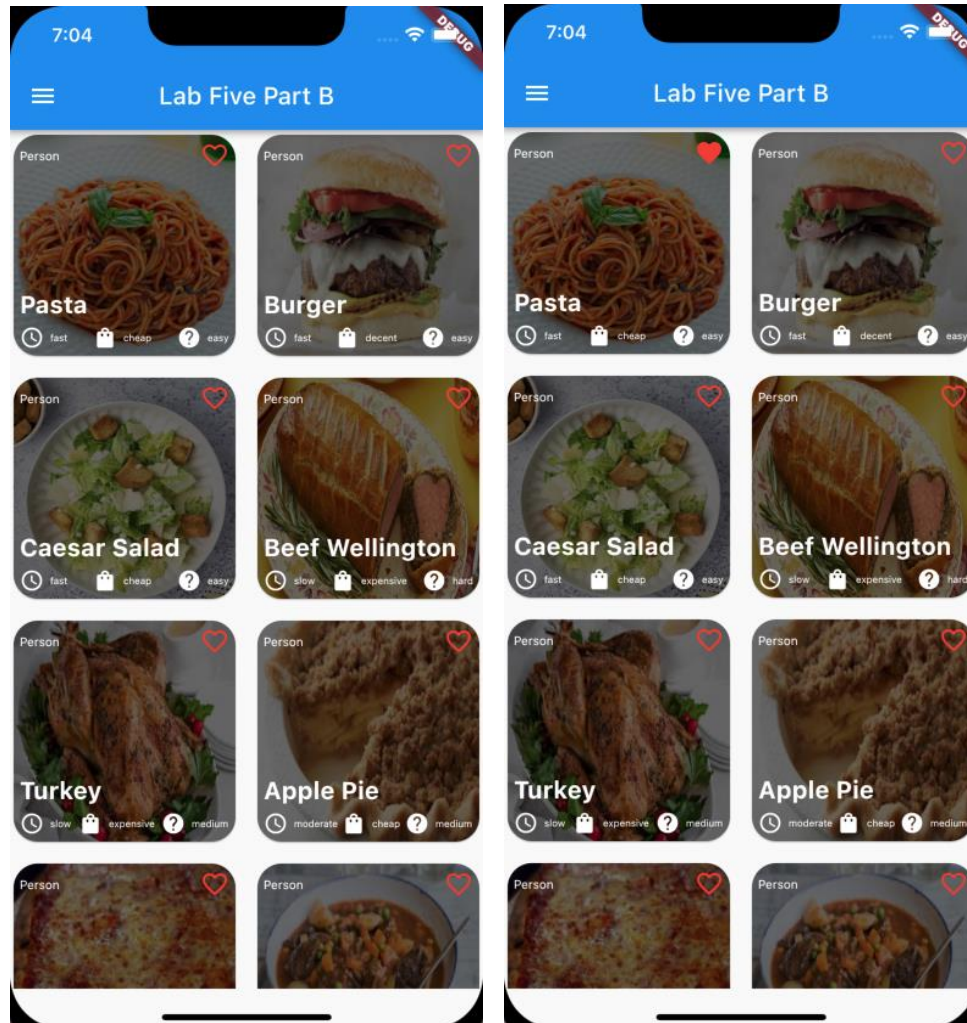

We are going to start by removing the like count in the top right corner (I didn't like how it looked). Then we are going to turn the heart icon into an interactable component – you can use GestureDetector or IconButton to do this. So, if a recipe is liked (isFavourite == true) the non-outlined favourite icon should be displayed, but if the recipe is not liked (isFavourite == false) the outlined favourite icon should be displayed. Next, I want you to look in the top left corner, to get that icon there you will need to use the drawer parameter in the Scaffold (not appbar).

When you press on a card now, it will bring you to that recipe's specific page (take note of the app bar). Please note again (similar to part a) we will be providing you with all the updated dummy data in a new dart file. Something else to keep note of is that if the heart icon is activated in the gridview screen it should be activated in this screen as well. Importantly, in this widget the content below (not including the photo) should be wrapped in a scrollable widget (i.e., ListView), this means when you swipe on the screen the photo should be stationary.
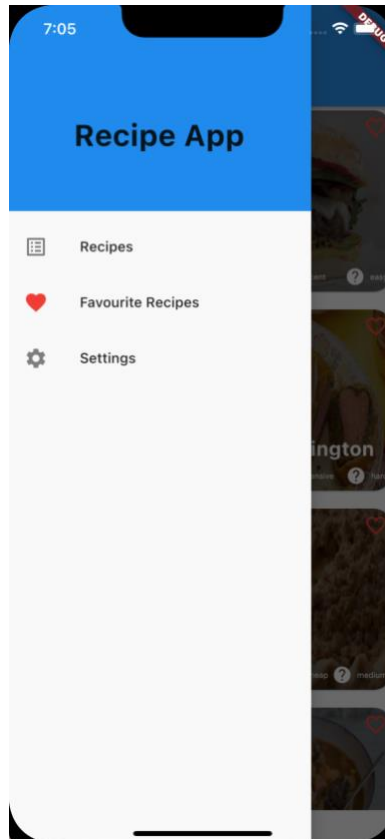
If the drawer icon is pressed (the top left icon on the main screen), a Drawer should be displayed. There is a widget you can use to add this type of functionality to your application (https://docs.flutter.dev/cookbook/design/drawer). Each of these items (recipes, favourite recipes, and settings) should take you to another page (recipes takes you to the main page you already built).
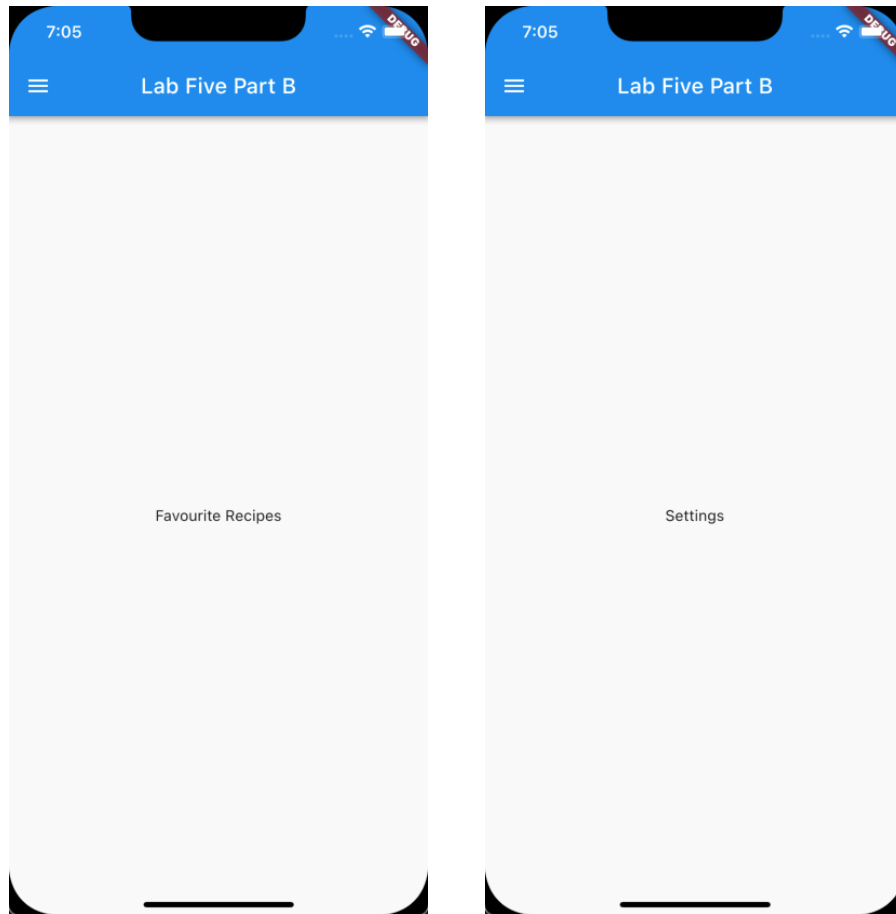
We're just going to build temporary pages for favourite recipes and settings. Please note the drawer icon again in the top left. This should bring up the same menu you accessed from the main page (recipes page).

Submission:

For this lab, you will need to submit a single video file (**must** be mp4, mov, or m4v format) that will show both of your apps in use, and you will need to perform the following tasks with each app below:

Attractions App:
1) Select the boat house attraction card.
2) Select the back arrow (top left corner)
3) Select the Guelph Lake Conservation Area card.
4) Select the back arrow (top left corner)
5) Select the filter icon (top right corner)
6) Uncheck hiking, Ice-cream, Tea, Flowers, Swimming and Education
7) Click anywhere on the screen that is not the card (this should dismiss the popup)
8) Select the calendar icon in the bottom tab bar
9) Select the list icon in the bottom tab bar
10) Press the floating action button

Recipes App
1) Favourite the Burger, Caesar Salad, Apple Pie, Pizza, and Chicken Pot Pie
2) Select the Burger card
3) Unfavourite the burger recipe
4) Scroll through the content
5) Select the back arrow (top left corner)
6) Select the Beef Wellington card
7) Scroll through the content
8) Select the back arrow (top left corner)
9) Select the drawer icon (top left corner)
10) Select Favourite Recipes option
11) Select the drawer icon (top left corner)
12) Select the Settings option
13) Select the drawer icon (top left corner)
14) Finally, go back to the main page with the recipes option