

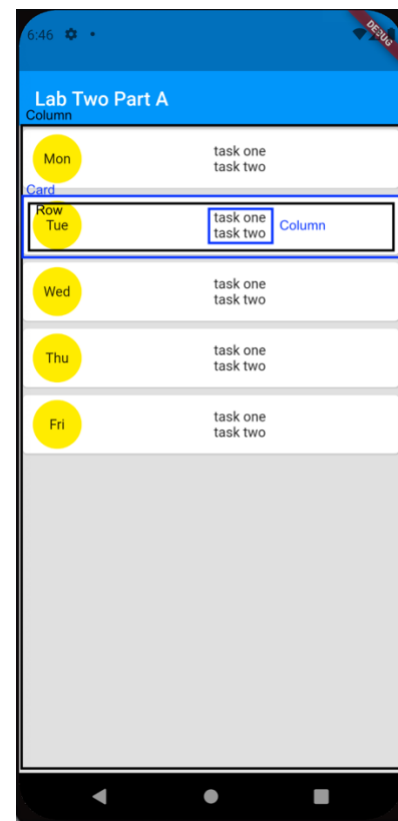
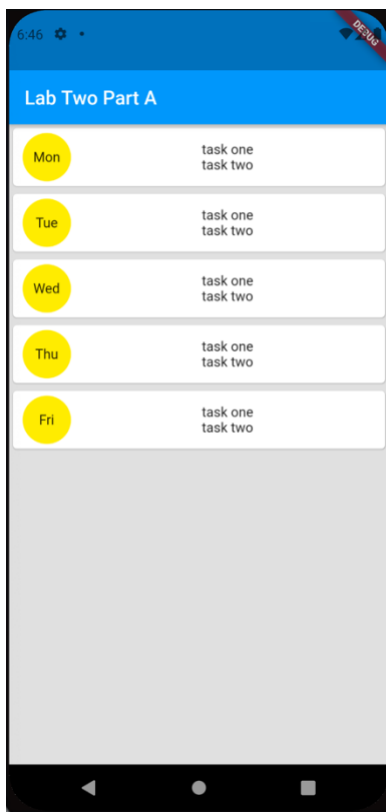
CIS*4030 – Mobile Computer – Lab Two: Layout

In this lab you will be learning how to layout flutter applications to hold more content than one widget on a screen and make good looking applications via the use of layout widgets. The overall goal of this lab is to get you comfortable creating more complex apps with a larger widget tree, and to importantly start thinking about app layout and design in flutter as widgets.

Part A: Building a To-do List

In this portion of the lab, you will be creating a simple to-do list to learn how to work with columns and rows. Start by creating a new flutter project with 'flutter create' and name this project firstname_lastname_lab_two_a. Now similar to the first lab you will need change the title of your app bar to the following: "Lab Two Part A – FirstName LastName" and also remove the debug banner. For this lab you will have to duplicate the to-do app shown in the image below. To assist you, I have also provided an annotated screenshot of the app showing the layout I used to create my app.

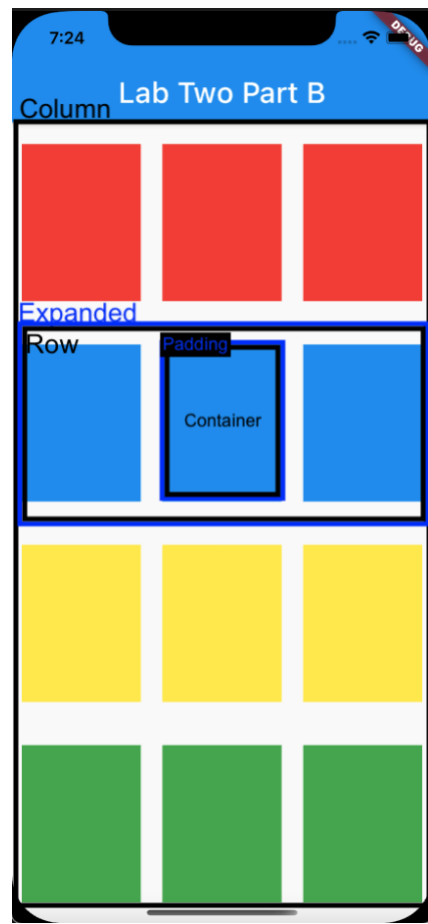
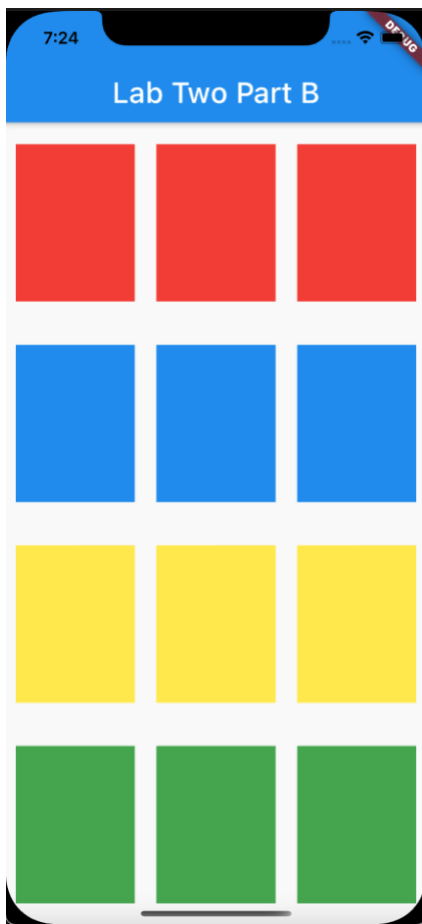
Note: I have purposely not included the widget for the yellow circle. As a hint you can do this in a couple of ways: 1) by styling a Container widget, 2) by using a library widget (check the material library to find this widget).



Part B: Building a Color Grid

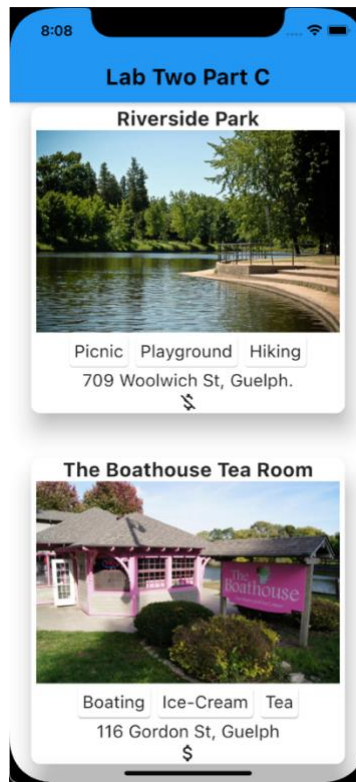
To start this lab, similar to part A you will need to create a new flutter project with 'flutter create' and name this project `firstname_lastname_lab_two_b`. Now you will again have to rename your app bar title to: 'Lab Two Part B – FirstName LastName' and again remove the debug banner. This part of the lab will have you build a 4 x 3 grid of coloured squares (note the colours you use do not matter). Similar to part A you will have to duplicate the app I have created using the layout guidelines I have provided you with.

Note: I did not provide you with the padding values, as a hint the vertical padding is double the horizontal padding.



Part C: Breaking down an App Screenshot into Widgets

In this part of the lab you will be annotating a provided app screen that I have created. Your job will be to annotate this app screen in a similar way to the apps for part a and b. As a note you do not have to label anything in the app bar, the text widgets, the icon, the image, or even the padding. I expect you to label the layout of the app (Columns and rows), and to label card widgets. An image of the app is available below for an example. We will include a downloadable image in courselink please use the image in courselink to annotate the image (i.e., do not screen shot and annotate off this document).



Submission

For this submission you will need to create a **PDF** document and include all necessary screenshots from part A, part B, and part C. For part A & B only show a screenshot of the final app. For part C you will need to include the screenshot of the annotated application. Submissions should be made to CourseLink->DropBox->Lab 02. This lab is due at 11:59pm next Wednesday 2 February 2022.

IMPORTANT: As this is a mobile development course you will have to submit screenshots using only a mobile emulator or device. Furthermore, your screenshots **MUST** show the whole emulator, including the status bar.