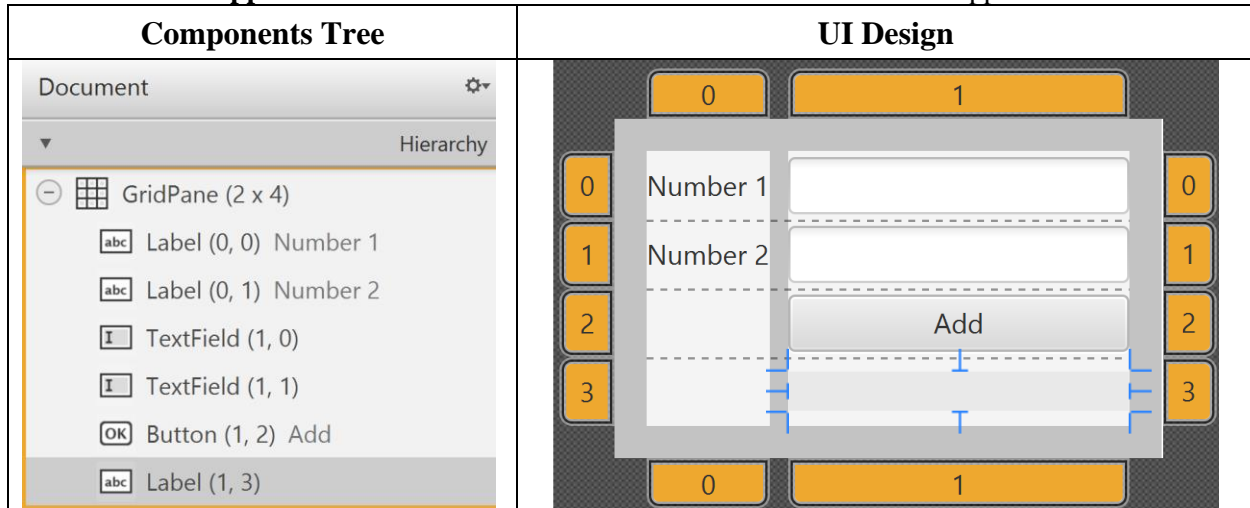


CMPS 251 Tutorial 6 – Fall 2019

Building MVC-based Apps using JavaFX

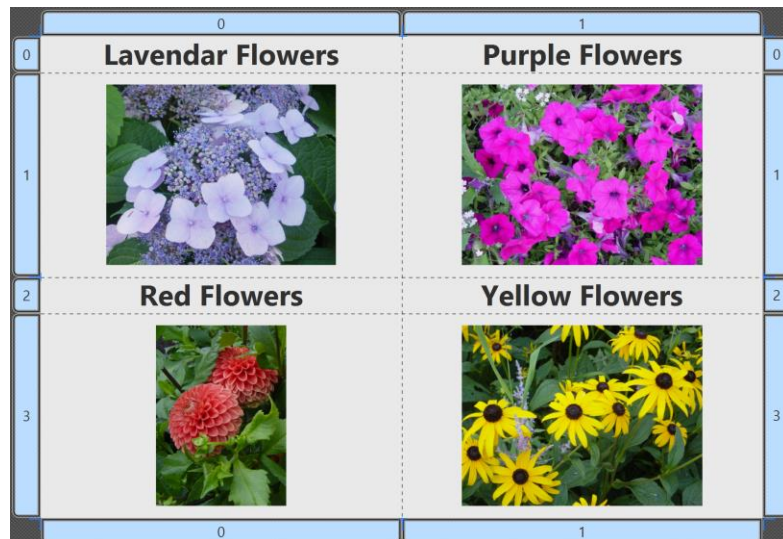
Exercise 1 – Addition App

Create **Addition App** that allows the user to enter 2 numbers and add them. The app UI is shown below.



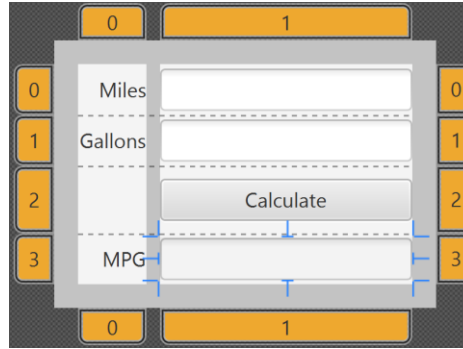
Exercise 2 – Album App

Create an Album App to display follower images as shown below.



Exercise 3 – Miles-Per-Gallon Calculator App

Drivers often want to know the miles per gallon their cars get so they can estimate gasoline costs. Develop an app that allows the user to input the number of miles driven and the number of gallons used and calculates and displays the corresponding miles per gallon. The UI design is shown below:



Exercise 4 – Enhanced Tip Calculator App

Modify the **Tip Calculator** app demonstrated in the lecture to allow the user to enter the number of people in the party. Calculate and display the amount owed by each person if the bill were to be split evenly among the party members.

Exercise 5 – BMI Calculator App

Create a BMI (Body Mass Index) Calculator App that allows users to enter their weight and height and whether they are entering these values in English or Metric units, then calculates and displays the user's body mass index. The formulas for calculating the BMI:

$$BMI = \frac{weightInPounds \times 703}{heightInInches \times heightInInches}$$

or

$$BMI = \frac{weightInKilograms}{heightInMeters \times heightInMeters}$$

The app should also display the necessary information from the National Institutes of Health so that users can evaluate their BMIs as shown in the UI design below:

