

Homework 02 – Linear Layout, Padding, and Layout Parameters

Due: Day 10 – February 21st, 2022 (beginning of class)

Objective:

The goal of this assignment is for you to understand how the linear layout, padding, and layout parameters work in re-creating a provided Android layout.

Instructions:

For this assignment, you will be using **only LinearLayout(s)** to recreate the final layout, given the corresponding design specifications that I have provided below. Your rendered layout in the AVD should be identical to the final layout screenshot that I have provided below (**note: points will be deducted for each missing/different element**). The design specification provides the type of View (“widget”) that I used and shows the boundary of each View (“widget”) as a black outlined rectangle – you must ensure that the boundary of your Views matches the boundaries in the design specification (**note: points will be deducted for each View whose boundary is different**). The **red curly braces** in the design specification indicate the amount of space either (a) between Views or (b) within a View – you must ensure that the space between/within a View matches those explicitly listed (**note: points will be deducted for any spacing that is missing/different**). Finally, the **blue text** indicates attributes of the Views that will need to be modified as well as descriptions of when View(s) are centered horizontally on the screen.

Steps:

1. Create a new empty Android Studio project
(your package name must be your first and last name for grading purposes)
2. Create a new empty Activity named **TipActivity** inside your project that has both a controller file and layout file
(note: you will not be making any changes to the .java controller file)
3. Open the layout file of your TipActivity
4. Right-click on the root of your layout (i.e., ConstraintLayout) >> select **Convert view ...** >> select **LinearLayout** in the list >> **Apply**
5. Begin re-creating the layout, given the corresponding design specifications below
6. **Important:** Each time that you add a View to a Linear Layout, you will need to ensure the View's **layout_weight** parameter is set to **0** before you adjust its attributes

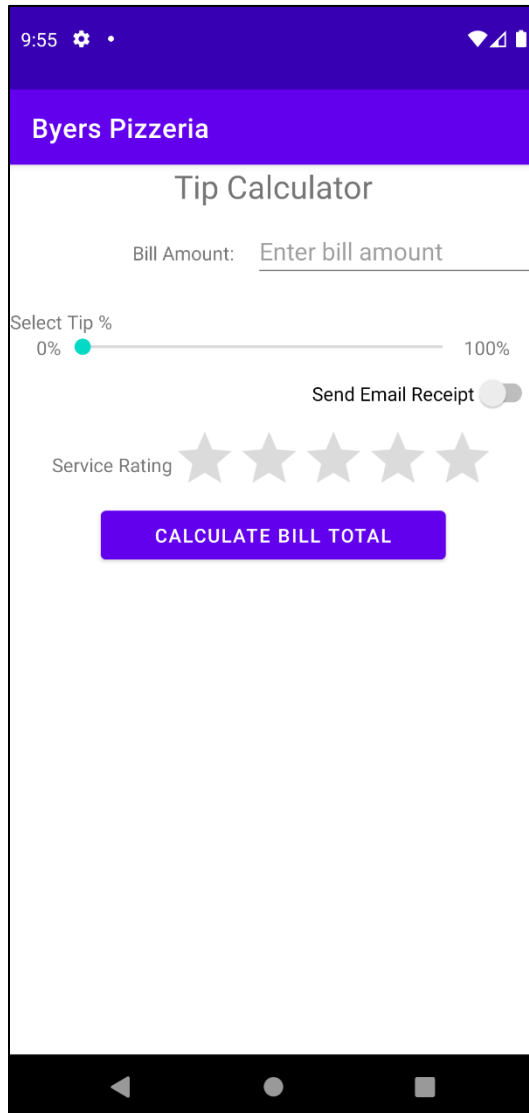
Tips:

- Start from the top and work your way downward to recreate the layout
- You will need to nest LinearLayouts inside of your root LinearLayout at certain points
- Remember, LinearLayouts are Views too and have layout parameters that you may need to change
- You may find it easier to drag-and-drop elements into the appropriate position using the Component Tree subwindow of the Layout Editor. Also, it is easier to re-arrange/nest elements by dragging them around in the Component Tree

Submission:

When you are finished, you must **zip** your Android Studio project. On Moodle, you should upload your zip file to the Homework 02 assignment box

FINAL LAYOUT



DESIGN SPECIFICATION

