

CS 501 Mobile Application Development  
Spring 2023  
Assignment 2 – Views and Constraint Layouts

**Due:** Night of lecture 3, before class.

**Team Members:**

Renming Zhang, Liyu Qu, Melody Chan, Sarah Bonna, Samantha Shih, Huanjia Liang, Yuhe Bian

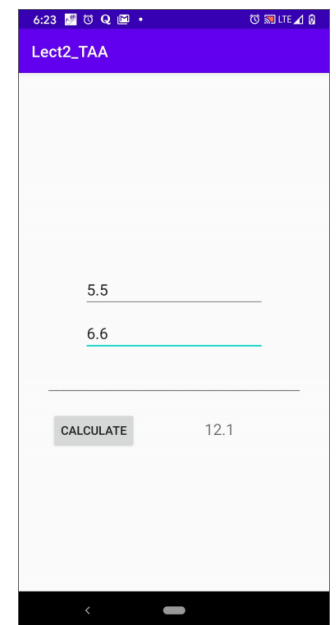
Do not email homework, please submit on Blackboard. You should also take screenshots or recording of your assignment and submit. Post the code on GitHub and submit the link and the videos in a zip file. Portions of this assignment must be done and submitted individually, other parts are to be done as a group. When working as a group, do not divide and conquer, do not assign one problem to one or two people. Everyone must work on each problem. Please be sure to include your team's name and members for the group submission. Only one group submission per team please.

**Assignments:**

1. **(Group)** Create a simple arithmetic program that operate on two operands. It must perform the basic arithmetic operations: Addition, Subtraction, Multiplication, Division, and Modulus.

Use any views of your choice to allow the user to select the operation. For example, you might use radio buttons to choose from a list of options, or a spinner view might be better. You decide how it should work but make it usable and intuitive. As stated, multiple times, this is a seminar class and will require bits of research to use things like radio buttons and/or spinners.

You must also handle error conditions, including divide by zero. A simple "invalid Operand" message will not be sufficient. Be creative, for example divide by zero can say something like, "Divide by Zero not allowed.", etc.



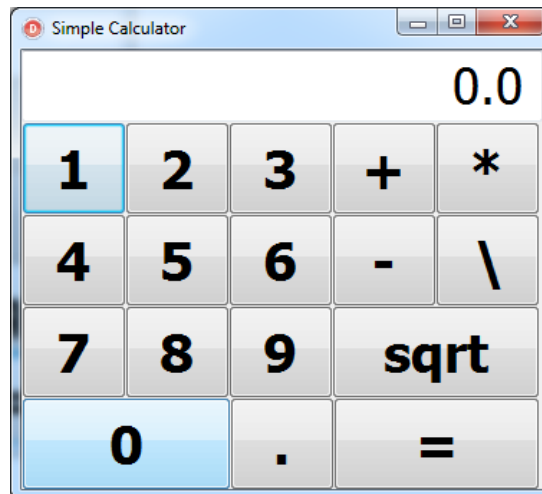
**GitHub link:**

<https://github.com/melodyy0128/BU2023SPR-CS501/tree/master/week2/Assignment2-Q4-Calculator>

**Recording:**

<https://drive.google.com/file/d/104-Rs7-Hmppro-rtML8sO1-S0fRQNo30/view?usp=sharing>

2. **(Group)** Implement a calculator App for Android. The GUI should look very similar to the one shown below, you must use the ConstraintLayout as explained in class. It should work like a real calculator. Clicking on the numbers should update EditText at the top. Users should also be able to type numbers directly in the EditText. Be sure to handle all exceptions, including Divide by zero.



**GitHub link:**

<https://github.com/melodyy0128/BU2023SPR-CS501/tree/master/week2/Assignment2-Q5-Calculator/CalculatorApp-main>

**Recording:**

[https://drive.google.com/file/d/1Z5niZ8PnHZqQlv0yXWvdxuM2pp0c7BQK/view?usp=share\\_link](https://drive.google.com/file/d/1Z5niZ8PnHZqQlv0yXWvdxuM2pp0c7BQK/view?usp=share_link)