



## Mobile Application Development

### Assignment 1: EMI calculator

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## Layouts/Views:

Given the simplistic nature of this app, the layout is very simple. I used a constrained layout in order to line up the components simplistically as there are not many components needed for this application.

In terms of actual content, all that was needed was 3 text boxes and a button for the first screen. I used the hints to communicate the format of data to be entered, and a hidden 3rd text box to communicate if an error occurred. In the activity, we can use these views to get the data as they are user editable. Once the button is pressed, convert the entered data into variables that can be passed to the next activity.

The second screen only needed to display the final value. Given its simplistic nature, it would be easy to do the calculations on this activity and to practice sending multiple values to another activity. This screen also contains a back button to go back to the other screen for another calculation.

## Activities:

There are two activities in this project, the main and the calculation result. The Main activity is in charge of getting user input. Using editable fields, we can grab the text as a string and then convert it to a double value. In this way, we have gotten a double from the user.

When the user clicks the button on the main activity, an intent is sent out to the next activity specified, in this case CalculationResult.kt. Using a bundle, we can send data along with this intent. Wrapping our data in a bundle, we pass the values to the CalculationResult while also calling it from our intent.

CalculationResult only has one intent that is used to re-invoke the MainActivity in order to go back to the previous screen. The values are taken from the bundle that was sent along with the activity to do the calculations. Once the final value has been calculated, display it.