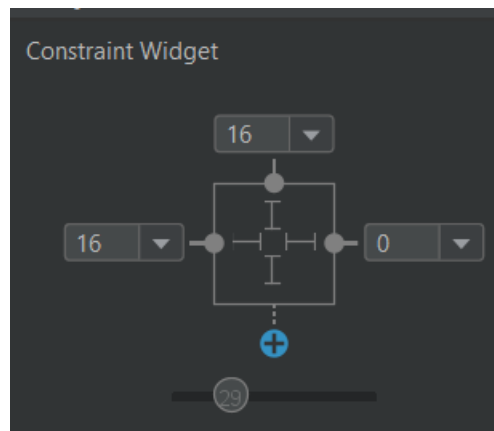


## SOFE 4640 – Mobile Application Development Assignment 1 Report

**Link to Github Repository** - <https://github.com/Janahan10/SOFE4640-Mobile-Dev-Assignments/tree/main/Assignment%201>

For my application I created layouts on two different screens. For the first screen where users enter information, I created a UI layout using text views for headers and edit text views to create a form like screen in XML. All these views were placed in a constraint layout where different views can be located and have their location adjusted by using different horizontal and vertical constraints. All the views were horizontally constraint's were set to 16dp to the left of the screen and 16 vertically to either the top of the screen or the view above.

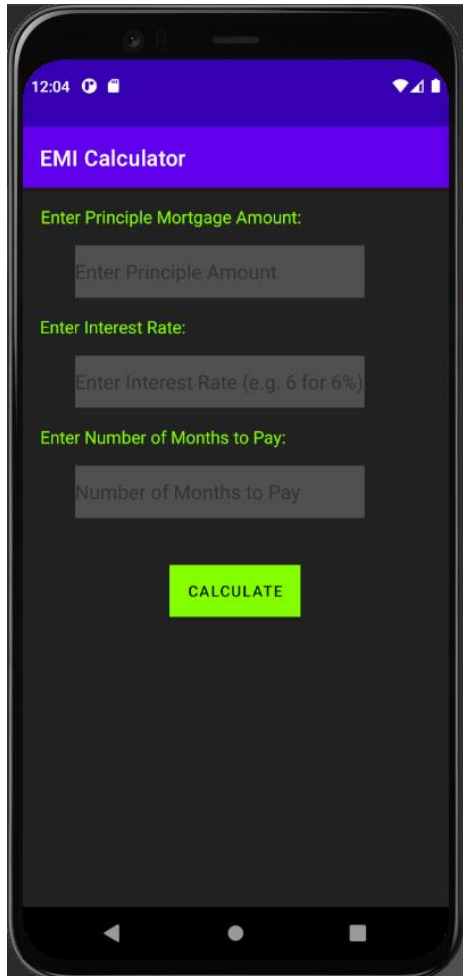
*Image 1: Showing how constraints were set*



Next for calculating the monthly payment, the information from the user via the edit text view were obtained by finding the view using its corresponding id. Afterwards the calculation was done to get the final answer. Moreover, to show the answer on the other screen an intent was used. In order to do this an intent was created in the MainActivity where the intent would start and would be sent to the DisplayPaymentActivity. Furthermore, the answer was sent by calling the `putExtra()` function for the intent and adding the result as a key value pair. On the DisplayPaymentActivity, the value is retrieved by using the `getIntent().getExtras().getString(key)` function. This value is then converted to a string and then displayed in a text view.

The following images show the UI and how the user's information will be used:

*Main Form UI:*



The image shows a smartphone screen with an EMI Calculator app. The app has a purple header bar with the title "EMI Calculator". Below the header, there are three input fields with green labels: "Enter Principle Mortgage Amount:", "Enter Interest Rate:", and "Enter Number of Months to Pay:". Each input field has a grey placeholder text: "Enter Principle Amount", "Enter Interest Rate (e.g. 6 for 6%)", and "Number of Months to Pay". At the bottom of the form, there is a red "CALCULATE" button. The status bar at the top shows the time as 12:04 and various icons. The bottom of the screen shows the Android navigation bar.

*Filled out information:*

12:07

### EMI Calculator

Enter Principle Mortgage Amount:

20000

Enter Interest Rate:

6

Enter Number of Months to Pay:

150

CALCULATE

*Screen showing final calculation:*

