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**Assignment 1**
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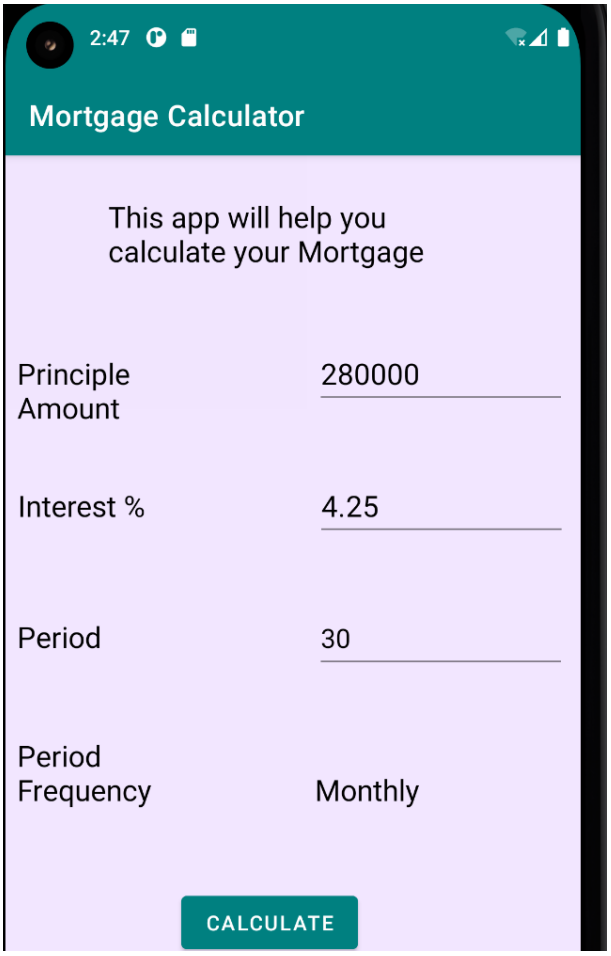
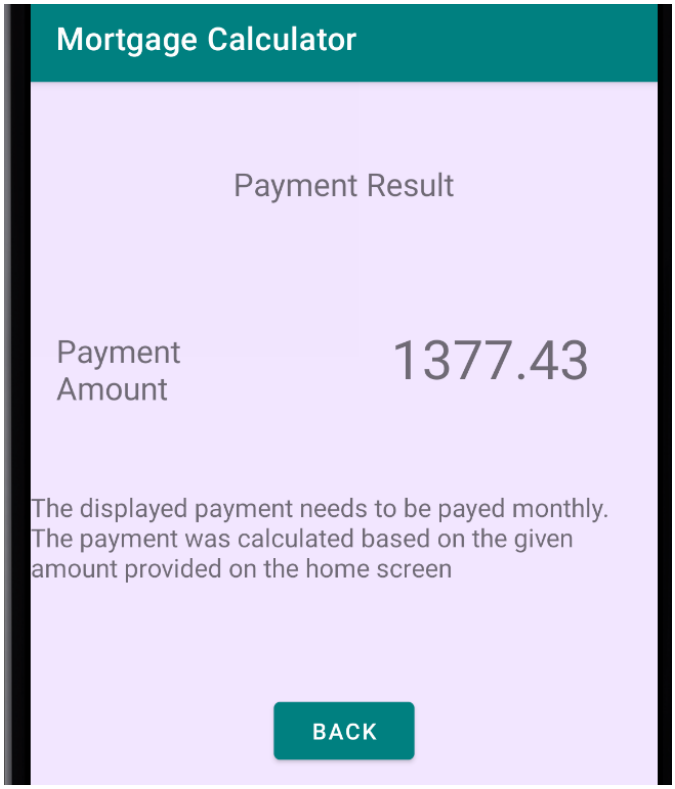
**APP Description**

The application was developed in order to help a user calculate the EMI(equated monthly installment) based on the given principal amount. The user can enter their principal amount, interest and the length of mortgage payment.Based on the provided input from the user the application will calculate the required EMI. The application incorporates different layouts, views and intent to make the application easy to use.

**Home Screen**




**Result Page**




**Equation used for calculating the EMI mortgage**

M = P*[r*(1+r)^n/ ((1+r)^n)-1]

**Functionality**

**Layout:**

**Table Row:** A layout defines the structure of a user interface in an application. All elements in a layout can be distinguished using a hierarchy of viewGroup and a View object. In my application, I have used the" tableRow" constraint layouts structure to align the different views within the viewGroup for example the Principle Amount (textView) and the input box(Number Decimal view) are placed inside tableRow (viewGroup) to align horizontally.

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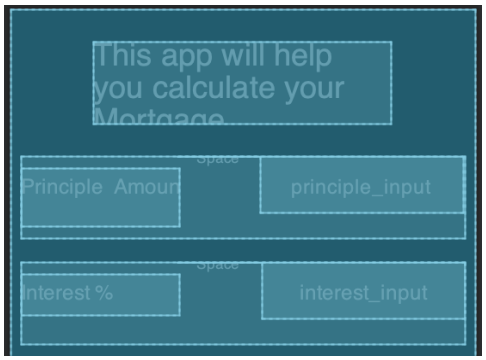
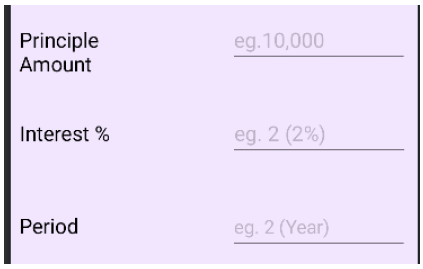
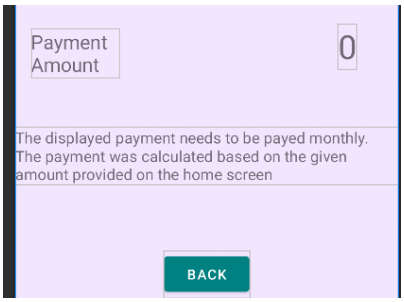



**View TextView and Number(Decimal):** A view class represents the basic building blocks for user interface components. Some of the key functionality of a view class are event handling and drawing. Examples of views are buttons, textView and widgets. In my application I have incorporated textViews and buttons. I have used textViews as place holders to guide users how to use the application.




**Button(intent- navigation):** Intent is a messaging object that is used to request an action from another app component. There are two different types of intents. Explicit intent and Implicit intent. Explicit intents are specifically used with the application in conjunction with other app components to perform a task. Implicit intents are used in conjunction with another app component to perform or handle a task. In my application I have used intent for navigation between two activities and to pass data from one activity to another. For example the homepage will accept the user input and perform the required calculations and display the answer on the second activity.