Mobile App Development – Assignment #1

**GitHub Reference**: <https://github.com/TaimourArshad1/MobileAppDevAssignment1/tree/main>

**Layouts**

The application used two different layouts, activity\_main.xml and activity\_result.xml. The layout where the user inputs their values is the activity\_main. Users can input their mortgage, interest rate, and amortization period here. The activity\_result layout is the layout that displays the calculation of the monthly payment, also has a button to let users go back to previous layout.

**Views**

Several kinds of views were used for this application. The views used were TextView, EditText, Buttons, FloatingActionButtons, and Spinners. I used TextViews to display headings and subheadings on the activity.main layout. I also used it to display the monthly payment on the activity\_result layout. I used a single EditText view to allow user to input mortgage principal amount. I used Spinners, which are dropdowns, for the interest rate and amortization period inputs. I utilized two Buttons on each layout, one to calculate the mortgage and navigate user to result page. Another one to go back to calculator (main page) to do another calculation. Finally, I used two FloatingActionButtons placed next to interest rate and amortization period. The purpose of these question mark buttons is so readers who are not informed about either interest rate or amortization period can learn more about them.

**Intents**

I used four different intents, two implicit and two explicit. I used two implicit intents for the FloatingActionButtons when the user clicks on the question mark. I used ACTION\_VIEW and uri.parse to open browsers so the user can learn more about interest rate and amortization period. Furthermore, I used to explicit intents to navigate between layouts and to pass the payment value. In MainActivity, I also used putExtra() to pass data from the current class to ResultActivity. I pass the data to this class so I can print it on the activity\_result layout. For the explicit intent in ResultActivity, I added an intent to navigate back to MainActivity if user wants to make another calculation. Also used getDoubleExtra() to receive the double variable passed from the intent in MainActivty.