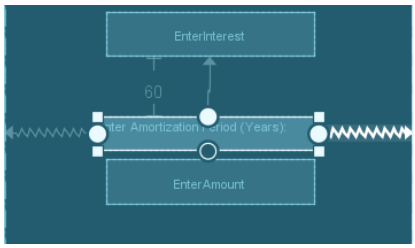
How were the layouts and views used in this assignment?

When making the mortgage Calculator, I started off with the activity_main.xml folder. In which I designed where the textboxes and the user inputs will be.

Layouts are a structure for a user interface in the app. There are many different types of layouts such as linear, relative, constraint, table, frame, list, grid, absolute, WebView and ScrollView. In creating the Mortgage Calculator, the layout that I used is the Constraint Layout. In the constraint layout I was able to add vertical and horizontal constraints to my textview and buttons. I was able to organize the way my application looked a lot better with the constraint layout. I was also able to alight the edge of one view with the edge of another view.

For example:

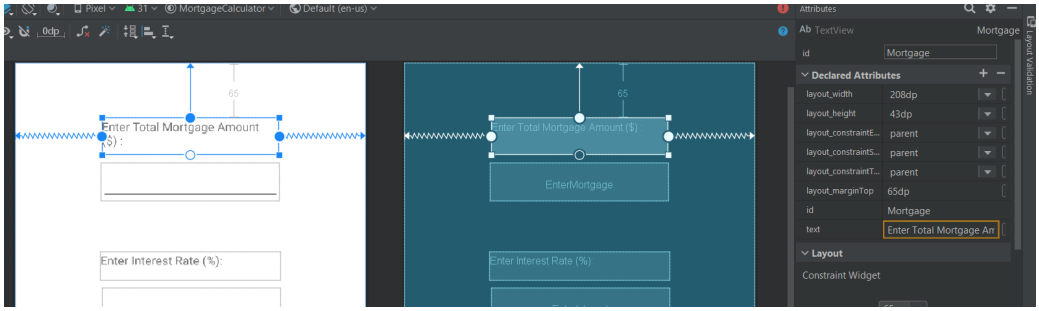


For this Enter Amortization (Years), I was able to constraint it by aligning it with the EnterInterest. Hence why this layout was very helpful in designing the layout of the app. The folder called activity_main.xml is where all the layouts and views take place.

Views are building blocks of our user interface in the Mortgage Calculator, it is the small rectangular shaped buttons that respond to the user input. In the app the views that I used were EditText, and Button. I also used TextView, this view only displays to the user what I have written for them. In my app I had three TextView and when entering the TextView, I named the 3 TextView's as : Mortgage, Interest, Amount and Answer. The great thing that I learned about TextViews is that they can display words to the user like I did for Mortgage, Interest, Amount, but they can also show an output. Like for example The TextView Answer does not have a description, but when the Calculate EMI button is clicked , then the answer is displayed in the TextView with the ID Answer.

I also learned that when I type an ID inside the TextView, I also have an option to add text, in which I can write what to Display to the user, or I can also leave it blank like I did for the Answer TextView.

For example:

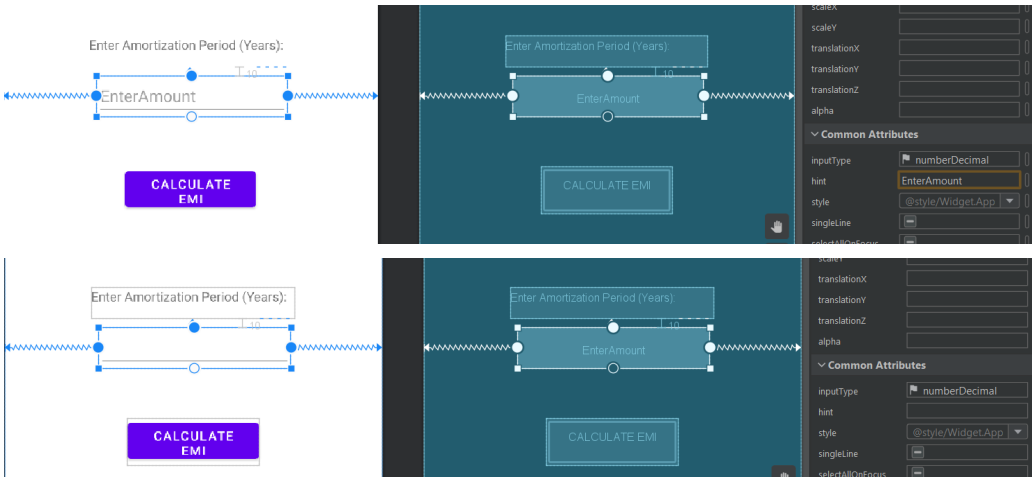


As you can see in this figure, under text, I can write what I want inside the TextView box and it is displayed on the app.

I then used EditText, EditText is a subclass of TextView.

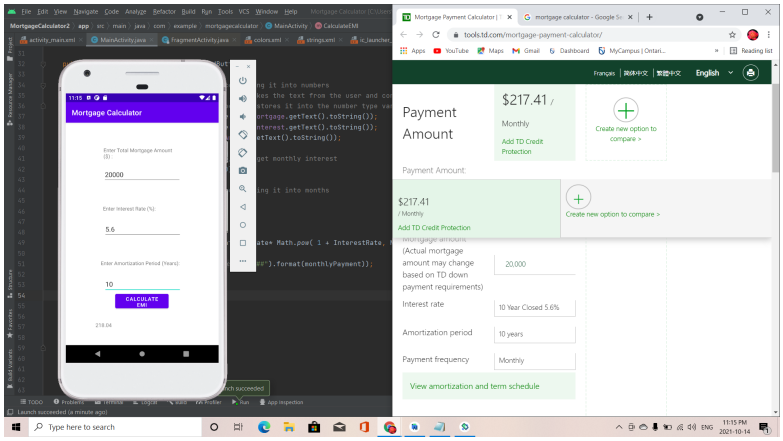
On the EditText, this is where I learned that this view is used for user input. When I was making the Mortgage app, I used the EditText with the input type being numberDecimal as I need the user to type in numbers and not letters. With EditText, I made 3 with the following ID: EnterMortgage, EnterInterest , EnterAmount. When making the EditText I noticed that each text box has a word written inside of it, I wanted the boxes to be clear as I already had a TextView box stating what to input in each box. In order to get rif of the words inside the box I used the hind feature.

Here is what the app has before and after



As you can see, after I took out the word EnterAmount from the hide box, I was able to get a clear textbox for the user to enter the numbers.

When being done with coding my app, I checked my results with the TD calculator, as you can see, my Calculated EMI is very close to the answer by TD



Link to github : https://github.com/alkakumari19/Mobile_Mortgage_Calculator.git