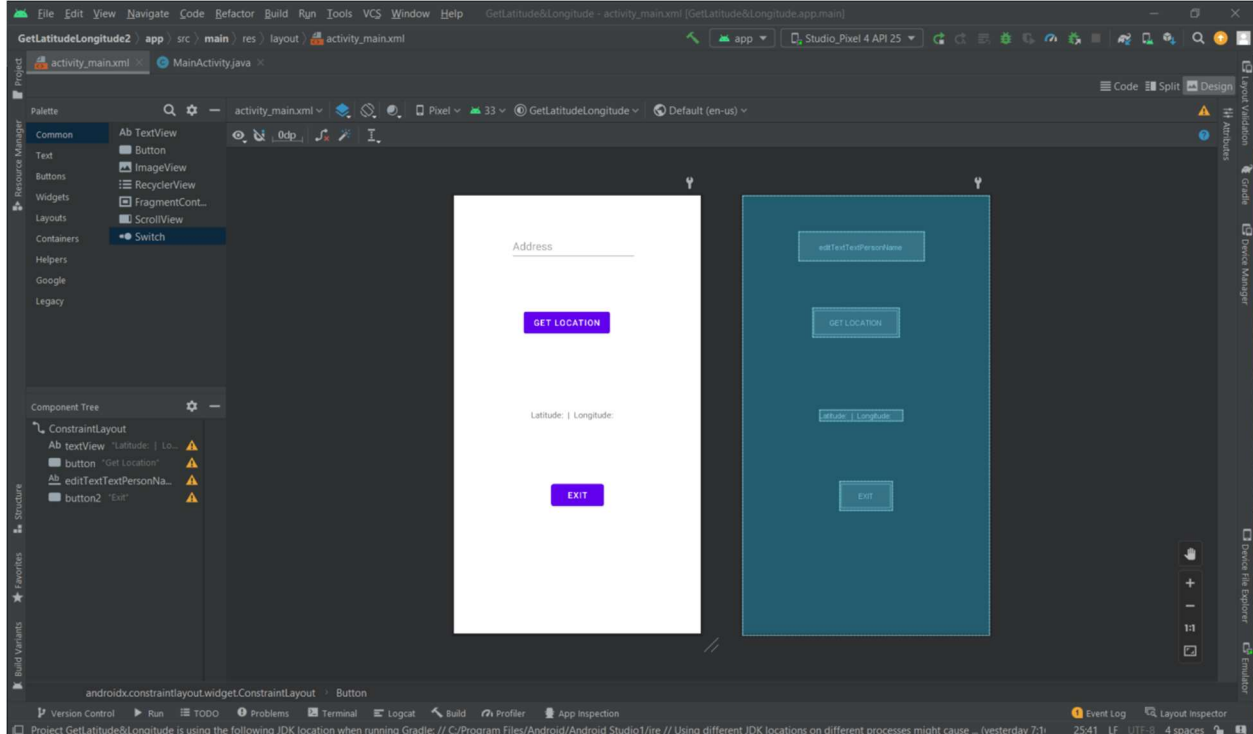


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MY DESIGN:



Main XML

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Latitude: | Longitude:"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.467"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <Button
        android:id="@+id/button"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginStart="116dp"
        android:layout_marginTop="188dp"
        android:onClick="buttonGetLocation"
        android:text="Get Location"
        app:layout_constraintStart_toStartOf="parent"
```

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```
        app:layout_constraintTop_toTopOf="parent" />

        <EditText
            android:id="@+id/editTextTextPersonName"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginStart="94dp"
            android:layout_marginTop="61dp"
            android:ems="10"
            android:hint="Address"
            android:inputType="textPersonName"
            android:minHeight="48dp"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toTopOf="parent" />

        <Button
            android:id="@+id/button2"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:layout_marginStart="148dp"
            android:layout_marginTop="100dp"
            android:layout_marginEnd="148dp"
            android:text="Exit"
            app:layout_constraintEnd_toEndOf="parent"
            app:layout_constraintStart_toStartOf="parent"
            app:layout_constraintTop_toBottomOf="@+id/textView" />

    </androidx.constraintlayout.widget.ConstraintLayout>
```

Main Java:

```
package com.example.getlatitudelongitude;

import androidx.appcompat.app.AppCompatActivity;

import android.location.Address;
import android.location.Geocoder;
import android.os.Bundle;
import android.view.View;
import android.widget.EditText;
import android.widget.TextView;

import java.io.IOException;
import java.util.List;

public class MainActivity extends AppCompatActivity {

    private EditText editText;
    private TextView textView;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        editText = findViewById(R.id.editTextTextPersonName);
        textView = findViewById(R.id.textView);
    }
}
```

****Android Studio used Emulator Pixel 4 API 25****

```
}

public void buttonGetLocation (View view){

    Geocoder geocoder = new Geocoder(this);
    List<Address> addressList;

    try {
        addressList =
geocoder.getFromLocationName(editText.getText().toString(), 1);

        if (addressList != null){
            double doubleLat = addressList.get(0).getLatitude();
            double doubleLong = addressList.get(0).getLongitude();

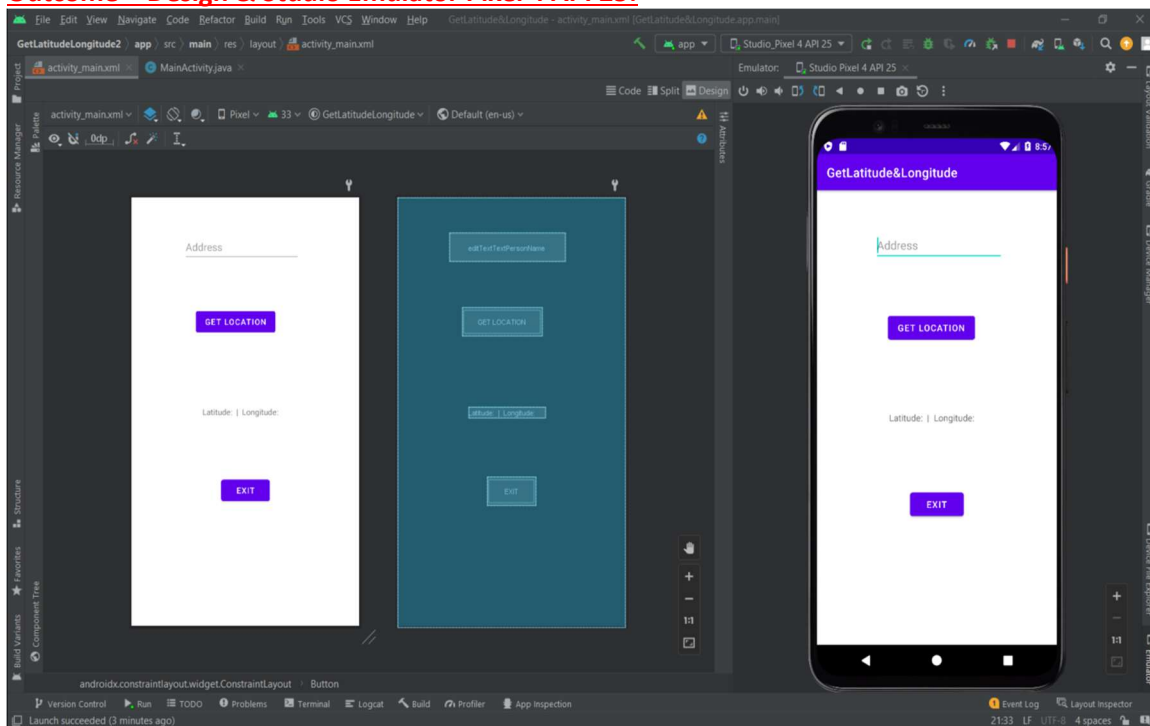
            textView.setText("Latitude: " + String.valueOf(doubleLat)
+ " | " + "Longitude: " + String.valueOf(doubleLong));
        }

    } catch (IOException e) {
        e.printStackTrace();
    }

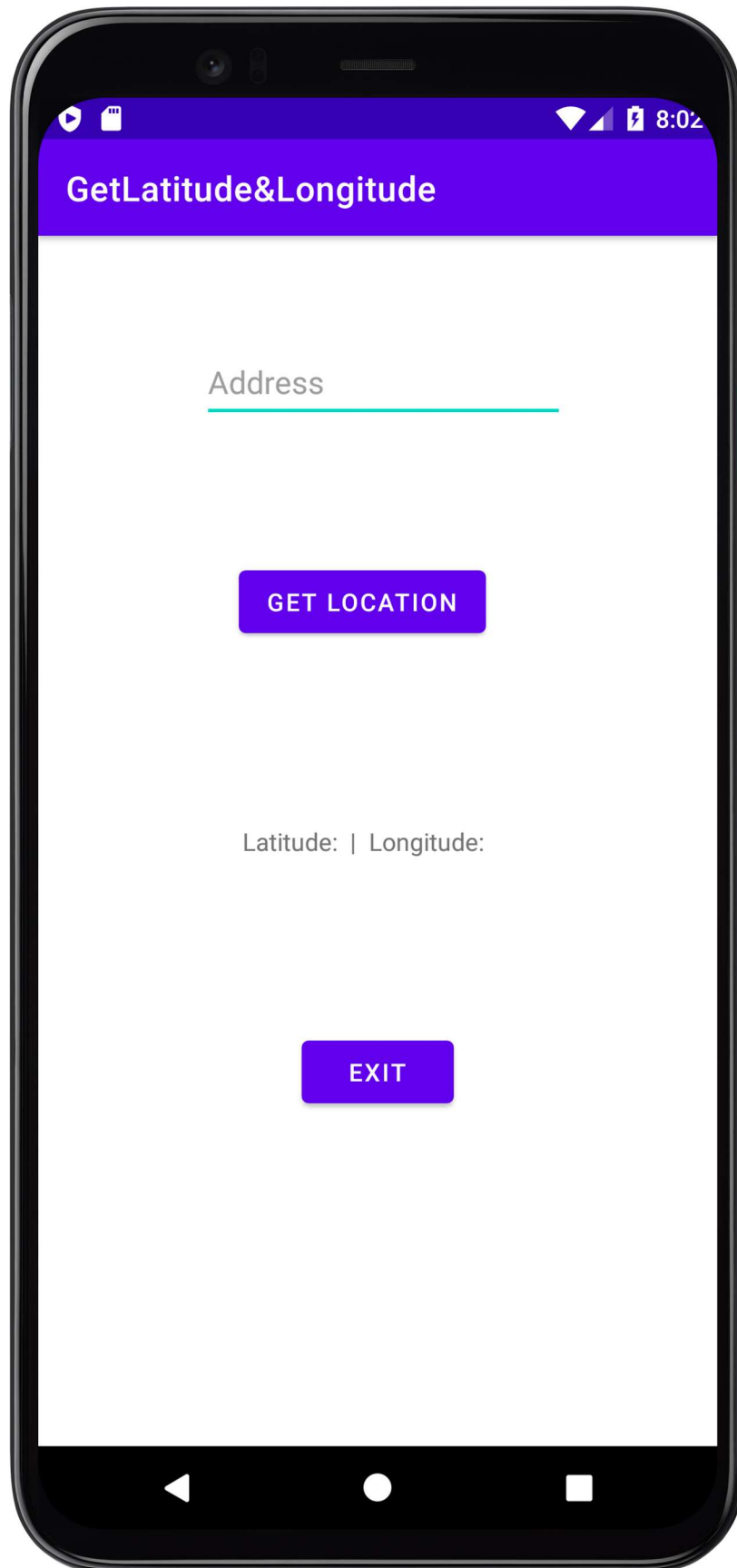
}

}
```

Outcome – Design & Studio Emulator Pixel 4 API 25:



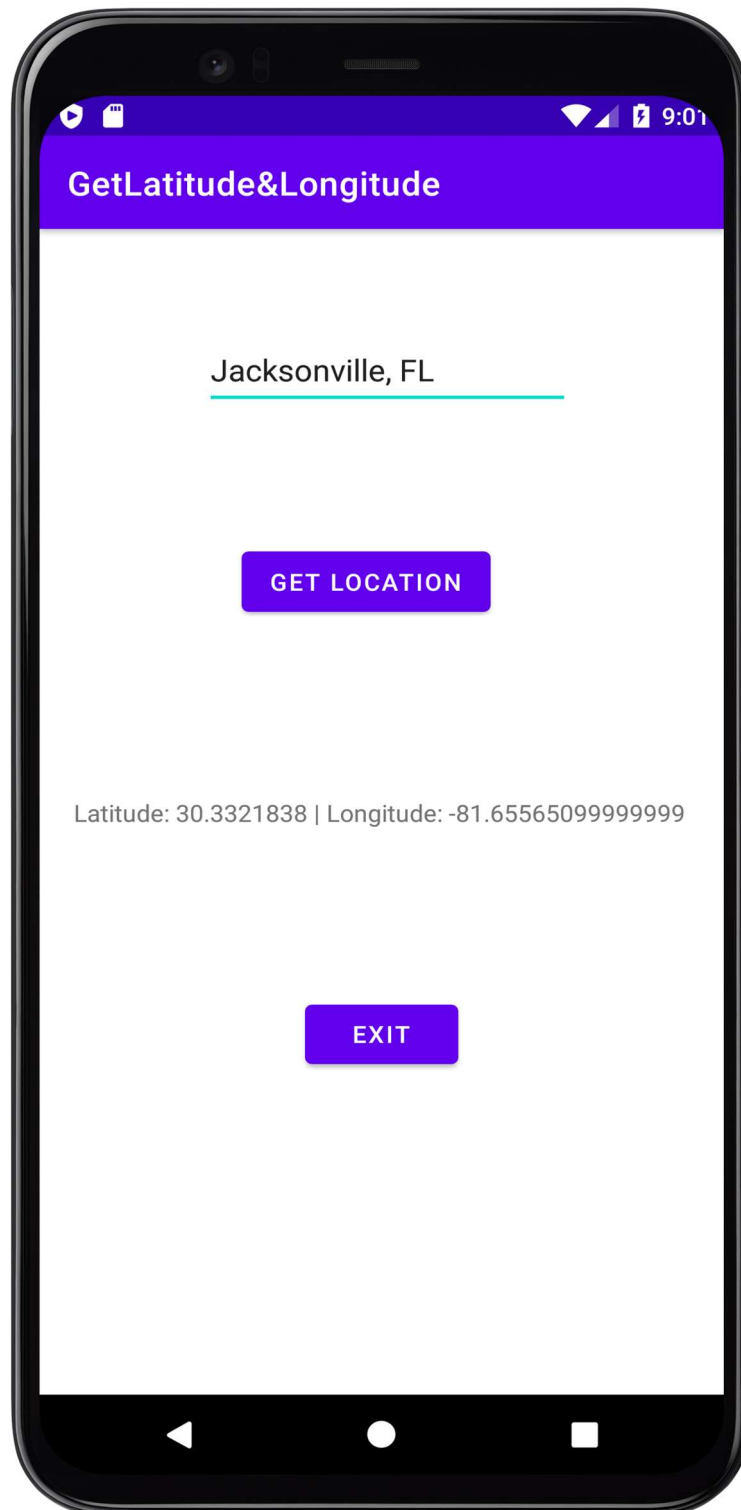
****Android Studio used Emulator Pixel 4 API 25****



****Android Studio used Emulator Pixel 4 API 25****

Performed Test:

- Successful Test
- Auto populated the Latitude and Longitude for location Jacksonville, FL



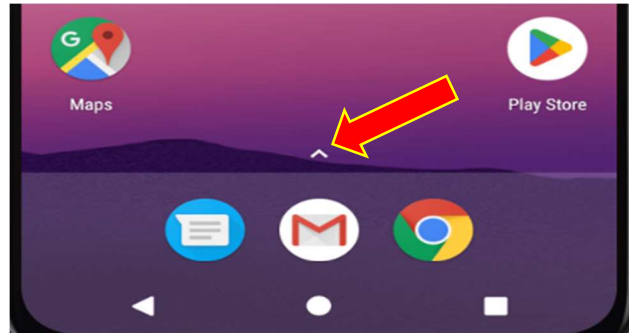
****Android Studio used Emulator Pixel 4 API 25****

- Clicked Exit
- Android Main page.

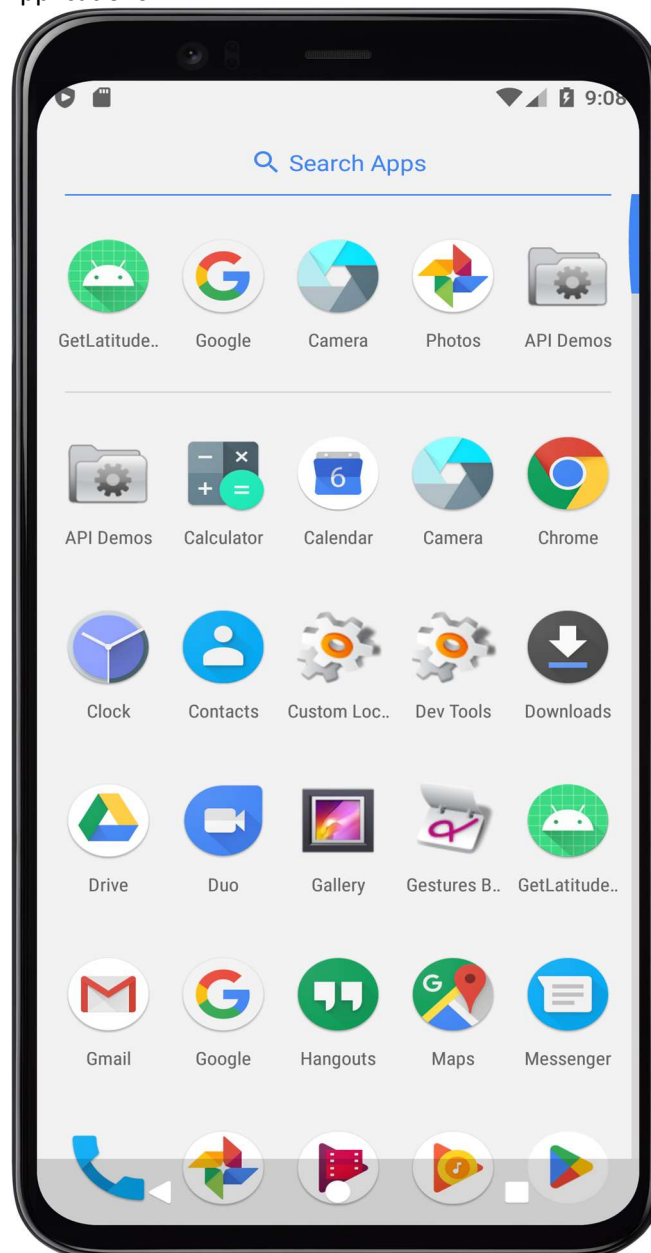


****Android Studio used Emulator Pixel 4 API 25****

- Click the upper arrow.



- Displays all Android Applications.



****Android Studio used Emulator Pixel 4 API 25****

- Click any desired application – example Camera.



****Android Studio used Emulator Pixel 4 API 25****

- Click the left arrow to take you to the main applications.

