

MapsActivity.java

```
package com.example.gmap2;

import android.Manifest;
import android.content.pm.PackageManager;
import android.os.Bundle;
import android.app.Activity;
import android.content.Context;
import android.location.Location;
import android.location.LocationListener;
import android.location.LocationManager;
import android.widget.TextView;

import android.util.Log;

import androidx.core.app.ActivityCompat;

public class MapsActivity extends Activity implements LocationListener {

    protected LocationManager locationManager;
    protected LocationListener locationListener;
    protected Context context;
    TextView txtLat;
    String lat;
    String provider;
    protected String latitude, longitude;
    protected boolean gps_enabled, network_enabled;

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

```

txtLat = (TextView) findViewById(R.id.textview1);

locationManager = (LocationManager) getSystemService(Context.LOCATION_SERVICE);

if (ActivityCompat.checkSelfPermission(this, Manifest.permission.ACCESS_FINE_LOCATION) !=
PackageManager.PERMISSION_GRANTED && ActivityCompat.checkSelfPermission(this,
Manifest.permission.ACCESS_COARSE_LOCATION) != PackageManager.PERMISSION_GRANTED) {

    // TODO: Consider calling
    //    ActivityCompat#requestPermissions
    // here to request the missing permissions, and then overriding
    //    public void onRequestPermissionsResult(int requestCode, String[] permissions,
    //                                          int[] grantResults)
    // to handle the case where the user grants the permission. See the documentation
    // for ActivityCompat#requestPermissions for more details.
    return;
}

locationManager.requestLocationUpdates(LocationManager.GPS_PROVIDER, 0, 0, this);
}

@Override
public void onLocationChanged(Location location) {

    txtLat = (TextView) findViewById(R.id.textview1);

    txtLat.setText("Latitude:" + location.getLatitude() + ", Longitude:" + location.getLongitude());
}

@Override
public void onProviderDisabled(String provider) {

    Log.d("Latitude", "disable");
}

@Override
public void onProviderEnabled(String provider) {

    Log.d("Latitude", "enable");
}

```

```
@Override

public void onStatusChanged(String provider, int status, Bundle extras) {

    Log.d("Latitude", "status");

}

}
```

activity_main.xml

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

    xmlns:tools="http://schemas.android.com/tools"

    android:layout_width="match_parent"

    android:layout_height="match_parent"

    tools:context=".MainActivity" >


    <TextView

        android:id="@+id/textview1"

        android:layout_width="wrap_content"

        android:layout_height="wrap_content"

        android:layout_centerHorizontal="true"

        android:layout_centerVertical="true"

        android:text="@string/hello_world" />


</RelativeLayout>
```

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>

<manifest xmlns:android="http://schemas.android.com/apk/res/android"

    package="com.example.gmap2" >

    <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
    <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />
    <uses-permission android:name="android.permission.INTERNET" />

    <application

        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.GMap2" >

        <!--
            TODO: Before you run your application, you need a Google Maps API key.

            To get one, follow the directions here:

            https://developers.google.com/maps/documentation/android-sdk/get-api-key

            Once you have your API key (it starts with "Alza"), define a new property in your
            project's local.properties file (e.g. MAPS_API_KEY=Aiza...), and replace the
            "YOUR_API_KEY" string in this file with "${MAPS_API_KEY}".
        -->

        <meta-data

            android:name="com.google.android.geo.API_KEY"
            android:value="AlzaSyCMPwuBikp2aCZ7xOxYo98EBvt8GWsqu2Q" />
```

```
<activity
  android:name=".MapsActivity"
  android:exported="true"
  android:label="@string/title_activity_maps" >
  <intent-filter>
    <action android:name="android.intent.action.MAIN" />

    <category android:name="android.intent.category.LAUNCHER" />
  </intent-filter>
</activity>
</application>

</manifest>
```