<https://www.youtube.com/watch?v=jxeqwspvyho>

8.Develop an android app on Google Map, and should provide following functions.

a. How to incorporate Google Maps into an application.

b. How to register for and receive GPS location information.

c. How to create Google Maps Overlays.

d. Accept city name from user and marks it on map.

e. Explore features like Zoom and map types

Solu:

* Type <https://console.cloud.google.com> in google search
* Select form ->Click on New Project
* Write Project name(u can write the name given in ur android studio or any name)->Click Create button
* Click->Enable App & Services->click->maps SDK for Android select GoogleMaptrc(your file name)->Enable
* Click->Credentials ->API KEY

Select build.gradle

MapsActiity.java

package com.example.googlemaptut;

import androidx.fragment.app.FragmentActivity;

import android.os.Bundle;

import com.google.android.gms.maps.CameraUpdateFactory;

import com.google.android.gms.maps.GoogleMap;

import com.google.android.gms.maps.OnMapReadyCallback;

import com.google.android.gms.maps.SupportMapFragment;

import com.google.android.gms.maps.model.LatLng;

import com.google.android.gms.maps.model.MarkerOptions;

import com.example.googlemaptut.databinding.ActivityMapsBinding;

public class MapsActivity extends FragmentActivity implements OnMapReadyCallback {

private GoogleMap mMap;

private ActivityMapsBinding binding;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

binding = ActivityMapsBinding.inflate(getLayoutInflater());

setContentView(binding.getRoot());

// Obtain the SupportMapFragment and get notified when the map is ready to be used.

SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager()

.findFragmentById(R.id.map);

mapFragment.getMapAsync(this);

}

/\*\*

\* Manipulates the map once available.

\* This callback is triggered when the map is ready to be used.

\* This is where we can add markers or lines, add listeners or move the camera. In this case,

\* we just add a marker near Sydney, Australia.

\* If Google Play services is not installed on the device, the user will be prompted to install

\* it inside the SupportMapFragment. This method will only be triggered once the user has

\* installed Google Play services and returned to the app.

\*/

@Override

public void onMapReady(GoogleMap googleMap) {

mMap = googleMap;

// Add a marker in Sydney and move the camera

LatLng sydney = new LatLng(20.5, 78.9);

mMap.addMarker(new MarkerOptions().position(sydney).title("Marker in Sydney"));

mMap.moveCamera(CameraUpdateFactory.newLatLng(sydney));

mMap.setMapType(GoogleMap.MAP\_TYPE\_NORMAL);

//mMap.setMapType(GoogleMap.MAP\_TYPE\_TERRAIN);

//mMap.setMapType(GoogleMap.MAP\_TYPE\_HYBRID);

// mMap.setMapType(GoogleMap.MAP\_TYPE\_SATELLITE);

mMap.getUiSettings().setZoomControlsEnabled(true);

}

}

AndroidMainfest.xml

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

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

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

package="com.example.googlemaptut">

<!--<uses-permission android:name="android.permission.ACCESS\_FINE\_LOCATION"

tools:ignore="CoarseFineLocation" />-->

<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:supportsRtl="true"

android:theme="@style/Theme.GoogleMapTut">

<!--

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 "AIza"), 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="AIzaSyD1XjYKNeLwZIbdVFsdXWyIqFtFHr4JGYM" />

<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>