package com.example.program8;  
  
import androidx.fragment.app.FragmentActivity;  
  
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 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.program8.databinding.ActivityMapsBinding;  
  
import java.io.IOException;  
import java.util.List;  
  
public class MapsActivity extends FragmentActivity implements OnMapReadyCallback {  
  
 private GoogleMap mMap;  
 private TextView tv;  
 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 Bengaluru and move the camera  
 LatLng Bengaluru = new LatLng(13, 78);  
 mMap.addMarker(new MarkerOptions().position(Bengaluru).title("Marker in Bengaluru"));  
 mMap.moveCamera(CameraUpdateFactory.newLatLng(Bengaluru));  
 }  
  
 public void setmMap(GoogleMap mMap) {  
 this.mMap = mMap;  
 }  
  
 public void onSearch(View view) {  
 List<Address> addressList = null;  
 EditText et\_location = (EditText) findViewById(R.id.et1);  
 String location = et\_location.getText().toString();  
 if (location != null || location.equals("")) {  
 Geocoder geocoder = new Geocoder(this);  
  
 try {  
  
  
 addressList = geocoder.getFromLocationName(location, 1);  
 } catch (IOException e) {  
 e.printStackTrace();  
 }  
  
  
 Address address = addressList.get(0);  
 LatLng latLng = new LatLng(address.getLatitude(), address.getLongitude());  
 mMap.addMarker(new MarkerOptions().position(latLng).title(location));  
 mMap.animateCamera(CameraUpdateFactory.newLatLng(latLng));  
 }  
 }  
  
 public void onType(View view) {  
 if (mMap.getMapType() == GoogleMap.MAP\_TYPE\_NORMAL) {  
 mMap.setMapType(GoogleMap.MAP\_TYPE\_SATELLITE);  
 } else {  
 mMap.setMapType(GoogleMap.MAP\_TYPE\_NORMAL);  
 }  
 }  
  
 public void onZoom(View view) {  
 if (view.getId() == R.id.zoomin) {  
 mMap.animateCamera(CameraUpdateFactory.zoomIn());  
 }  
 if (view.getId() == R.id.zoomout) {  
 mMap.animateCamera(CameraUpdateFactory.zoomOut());  
 }  
  
 }  
}