Current location

MainActivity.java

package com.example.maaps1;  
  
import android.Manifest;  
import android.content.pm.PackageManager;  
import android.location.Location;  
import android.os.Bundle;  
  
import androidx.annotation.NonNull;  
import androidx.core.app.ActivityCompat;  
import androidx.fragment.app.FragmentActivity;  
  
import com.google.android.gms.location.FusedLocationProviderClient;  
import com.google.android.gms.location.LocationCallback;  
import com.google.android.gms.location.LocationRequest;  
import com.google.android.gms.location.LocationServices;  
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 android.annotation.SuppressLint;  
import com.google.android.gms.location.LocationResult;  
import com.google.android.gms.location.Priority;  
public class MainActivity extends FragmentActivity implements OnMapReadyCallback {  
  
 private GoogleMap mMap;  
 private FusedLocationProviderClient fusedLocationClient;  
 private LocationRequest locationRequest;  
 private LocationCallback locationCallback;  
  
 private static final int *LOCATION\_PERMISSION\_REQUEST\_CODE* = 1000;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 fusedLocationClient = LocationServices.*getFusedLocationProviderClient*(this);  
  
 // Modern LocationRequest using Builder API  
 locationRequest = new LocationRequest.Builder(Priority.*PRIORITY\_HIGH\_ACCURACY*, 10000)  
 .setMinUpdateIntervalMillis(5000)  
 .build();  
  
 locationCallback = new LocationCallback() {  
 @Override  
 public void onLocationResult(@NonNull LocationResult locationResult) {  
 if (!locationResult.getLocations().isEmpty()) {  
 Location location = locationResult.getLastLocation();  
 if (location != null) {  
 updateMap(location);  
 }  
 }  
 }  
 };  
  
 // Initialize map safely  
 SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager().findFragmentById(R.id.*map*);  
 if (mapFragment != null) {  
 mapFragment.getMapAsync(this);  
 }  
 }  
  
 @SuppressLint("MissingPermission")  
 @Override  
 public void onMapReady(@NonNull GoogleMap googleMap) {  
 mMap = googleMap;  
 LatLng india = new LatLng(20.5937, 78.9629);  
 mMap.moveCamera(CameraUpdateFactory.*newLatLngZoom*(india, 5f));  
 if (ActivityCompat.*checkSelfPermission*(this, Manifest.permission.*ACCESS\_FINE\_LOCATION*) != PackageManager.*PERMISSION\_GRANTED*) {  
 // Request location permission if not granted  
 ActivityCompat.*requestPermissions*(this, new String[]{Manifest.permission.*ACCESS\_FINE\_LOCATION*}, *LOCATION\_PERMISSION\_REQUEST\_CODE*);  
 return;  
 }  
  
 mMap.setMyLocationEnabled(true);  
 fusedLocationClient.requestLocationUpdates(locationRequest, locationCallback, getMainLooper());  
 }  
  
 @Override  
 public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions, @NonNull int[] grantResults) {  
 super.onRequestPermissionsResult(requestCode, permissions, grantResults);  
 if (requestCode == *LOCATION\_PERMISSION\_REQUEST\_CODE*) {  
 if (grantResults.length > 0 && grantResults[0] == PackageManager.*PERMISSION\_GRANTED*) {  
 onMapReady(mMap); // Retry map setup with permission granted  
 }  
 }  
 }  
  
 private void updateMap(Location location) {  
 LatLng userLatLng = new LatLng(location.getLatitude(), location.getLongitude());  
 mMap.clear(); // Optional: clear old markers  
 mMap.addMarker(new MarkerOptions().position(userLatLng).title("You are here"));  
 mMap.moveCamera(CameraUpdateFactory.*newLatLngZoom*(userLatLng, 15f));  
 }  
}

activivty\_main.xml

<?xml version="1.0" encoding="utf-8"?>  
<LinearLayout 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="fill\_parent"  
 android:layout\_height="fill\_parent"  
 android:baselineAligned="false">  
 <fragment  
 android:id="@+id/map"  
 android:name="com.google.android.gms.maps.SupportMapFragment"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent" />  
</LinearLayout>xz

AndroidMsnifest.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">  
  
 <uses-permission android:name="android.permission.INTERNET" />  
 <uses-permission android:name="android.permission.ACCESS\_COARSE\_LOCATION" />  
 <uses-permission android:name="android.permission.ACCESS\_FINE\_LOCATION" />  
  
 <application  
 android:allowBackup="true"  
 android:dataExtractionRules="@xml/data\_extraction\_rules"  
 android:fullBackupContent="@xml/backup\_rules"  
 android:icon="@mipmap/ic\_launcher"  
 android:label="@string/app\_name"  
 android:roundIcon="@mipmap/ic\_launcher\_round"  
 android:supportsRtl="true"  
 android:theme="@style/Theme.Maaps1"  
 tools:targetApi="31">  
  
 <!--  
 *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}".  
 -->  
  
 <!-- Add this line to your application tag -->  
 <meta-data  
 android:name="com.google.android.geo.API\_KEY"  
 android:value="@string/google\_maps\_key" />  
  
  
 <activity  
 android:name=".MainActivity"  
 android:exported="true">  
 <intent-filter>  
 <action android:name="android.intent.action.MAIN" />  
  
 <category android:name="android.intent.category.LAUNCHER" />  
 </intent-filter>  
 </activity>  
 </application>  
  
</manifest>

under res-->values-->

google \_map\_api.xml

<?xml version="1.0" encoding="utf-8"?>  
<resources>  
 <string name="google\_maps\_key" templateMergeStrategy="preserve" translatable="false">AIzaSyACfjoiPd6A7cYWghgSRsJ0449Jb1iYZCI</string>  
</resources>