**PR-29**

**29 Develop a program to get the current location of using Google Map**

**XML Code**

<?xml version="1.0" encoding="utf-8"?>  
<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent">  
  
 <fragment  
 android:id="@+id/GoogleMap"  
 android:name="com.google.android.gms.maps.SupportMapFragment"  
 android:layout\_width="match\_parent"  
 android:layout\_height="match\_parent" />  
</FrameLayout>

**Java Code**

package com.example.pr29\_currentlocation;  
  
import androidx.annotation.NonNull;  
import androidx.appcompat.app.AppCompatActivity;  
import androidx.core.app.ActivityCompat;  
  
import android.Manifest;  
import android.content.pm.PackageManager;  
import android.location.Location;  
import android.os.Bundle;  
  
import com.google.android.gms.location.FusedLocationProviderClient;  
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;  
  
public class MainActivity extends AppCompatActivity implements OnMapReadyCallback {  
  
 private GoogleMap mMap;  
 private FusedLocationProviderClient fusedLocationClient;  
 private static final int *LOCATION\_REQUEST\_CODE* = 100;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 SupportMapFragment mapFragment = (SupportMapFragment) getSupportFragmentManager()  
 .findFragmentById(R.id.*GoogleMap*);  
 if (mapFragment != null) {  
 mapFragment.getMapAsync(this);  
 }  
  
 fusedLocationClient = LocationServices.*getFusedLocationProviderClient*(this);  
 }  
  
 @Override  
 public void onMapReady(@NonNull GoogleMap googleMap) {  
 mMap = googleMap;  
 getCurrentLocation();  
 }  
  
 private void getCurrentLocation() {  
 if (ActivityCompat.*checkSelfPermission*(this, Manifest.permission.*ACCESS\_FINE\_LOCATION*) != PackageManager.*PERMISSION\_GRANTED* &&  
 ActivityCompat.*checkSelfPermission*(this, Manifest.permission.*ACCESS\_COARSE\_LOCATION*) != PackageManager.*PERMISSION\_GRANTED*) {  
 ActivityCompat.*requestPermissions*(this,  
 new String[]{Manifest.permission.*ACCESS\_FINE\_LOCATION*, Manifest.permission.*ACCESS\_COARSE\_LOCATION*},  
 *LOCATION\_REQUEST\_CODE*);  
 return;  
 }  
  
 fusedLocationClient.getLastLocation()  
 .addOnSuccessListener(this, location -> {  
 if (location != null) {  
 LatLng currentLatLng = new LatLng(location.getLatitude(), location.getLongitude());  
 mMap.addMarker(new MarkerOptions().position(currentLatLng).title("You Are Here"));  
 mMap.animateCamera(CameraUpdateFactory.*newLatLngZoom*(currentLatLng, 15f));  
 }  
 });  
 }  
  
 @Override  
 public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions,  
 @NonNull int[] grantResults) {  
 super.onRequestPermissionsResult(requestCode, permissions, grantResults);  
 if (requestCode == *LOCATION\_REQUEST\_CODE*) {  
 if (grantResults.length > 0 && grantResults[0] == PackageManager.*PERMISSION\_GRANTED*) {  
 getCurrentLocation();  
 }  
 }  
 }  
}

**permission tags**

<uses-permission android:name="android.permission.INTERNET"/>  
<uses-permission android:name="android.permission.ACCESS\_FINE\_LOCATION"/>  
<uses-permission android:name="android.permission.ACCESS\_COARSE\_LOCATION"/>

<meta-data

android:name="com.google.android.geo.API\_KEY"

android:value="AIzaSyAqZIR66GxoqcpbMuba0XlqB\_fW1k5LfcQ" />

**Dependencies in build.gradle(:app)**

dependencies {

implementation 'com.google.android.gms:play-services-maps:18.2.0'

implementation 'com.google.android.gms:play-services-location:21.0.1'

implementation 'com.karumi:dexter:6.2.1'

}

**Theme in res/values/styles.xml**

<resources>

<style name="Theme.GoogleMaps" parent="Theme.MaterialComponents.DayNight.DarkActionBar">

<item name="colorPrimary">#6200EE</item>

<item name="colorPrimaryVariant">#3700B3</item>

<item name="colorOnPrimary">#FFFFFF</item>

</style>

</resources>