**Practical no.31**

**Title:Deploy map-based application Part-I**

**Roll No.:**15 **Batch-** A **Date of Performance:** 28/03/2024

**activity\_main.xml**

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

<RelativeLayout 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="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity" >

<fragment

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

android:id="@+id/GoogleMap"

android:name="com.google.android.gms.maps.SupportMapFragment"

/>

</RelativeLayout

**MainActivity.java**

package com.example.india;

import androidx.annotation.NonNull;

import androidx.appcompat.app.AppCompatActivity;

import androidx.core.app.ActivityCompat;

import android.content.pm.PackageManager;

import android.health.connect.datatypes.ExerciseRoute;

import android.location.\*;

import android.os.Bundle;

import com.google.android.gms.location.\*;

import com.google.android.gms.maps.\*;

import com.google.android.gms.tasks.OnSuccessListener;

import com.google.android.gms.tasks.Task;

import java.io.IOException;

import java.util.List;

public class MainActivity extends AppCompatActivity {

SupportMapFragment smf;

FusedLocationProviderClient cli;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

smf = (SupportMapFragment) getSupportFragmentManager().findFragmentById(R.id.GoogleMap);

cli = LocationServices.getFusedLocationProviderClient(this);

try {

getmyLocation();

} catch (IOException e) {

throw new RuntimeException(e);

} }

private void getmyLocation() throws IOException {

if (ActivityCompat.checkSelfPermission(this, android.Manifest.permission.ACCESS\_FINE\_LOCATION) != PackageManager.PERMISSION\_GRANTED && ActivityCompat.checkSelfPermission(this, android.Manifest.permission.ACCESS\_COARSE\_LOCATION) != PackageManager.PERMISSION\_GRANTED) {

return;

}

Task<Location> task = cli.getLastLocation();

task.addOnSuccessListener(new OnSuccessListener<Location>() {

@Override

public void onSuccess(Location location) {

smf.getMapAsync(new OnMapReadyCallback() {

@Override

public void onMapReady(@NonNull GoogleMap googleMap) {

LatLng currentLatLng = new LatLng(location.getLatitude(),location.getLongitude());

MarkerOptions markerOpons = new MarkerOptions().position(currentLatLng).title("Current LocaƟon");

googleMap.addMarker(markerOpons);

googleMap.moveCamera(CameraUpdateFactory.newLatLngZoom(currentLatLng, 15));

}

});

}

});

}

}

**Manifest.xml**

<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="AIzaSyDtMPqsfun-zAnMugmdB45W1ayJkB\*\*\*\*" />

