activity_main.xml

```xml
<?xml version="1.0"
encoding="utf-8"?>
<androidx.constraintlayout.w
idget.ConstraintLayout
xmlns:android="http://schema
s.android.com/apk/res/androi
d"

xmlns:app="http://schemas.an
droid.com/apk/res-auto"

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

android:layout_width="match_
parent"

android:layout_height="match
_parent"

tools:context=".MainActivity
">

    <TextView

android:id="@+id/textView"

android:layout_width="match_
parent"

android:layout_height="wrap_
content"

android:layout_marginBottom=
"10dp"

android:paddingStart="20dp"
        android:text="My
MAP"

android:textSize="26dp"

android:textStyle="bold"

app:layout_constraintBottom_
toTopOf="@+id/frame_layout"

app:layout_constraintEnd_toE
ndOf="parent"

app:layout_constraintStart_t
oStartOf="parent"

app:layout_constraintTop_toT
opOf="parent"

tools:ignore="MissingConstra
ints" />

    <FrameLayout

android:id="@+id/frame_layou
t"

android:layout_width="315dp"

android:layout_height="510dp
"

android:layout_marginTop="4d
p"

app:layout_constraintBottom_
toBottomOf="parent"

app:layout_constraintEnd_toE
ndOf="parent"

app:layout_constraintStart_t
oStartOf="parent"

app:layout_constraintTop_toB
ottomOf="@+id/textView">

    </FrameLayout>

</androidx.constraintlayout.
widget.ConstraintLayout>
```

MainActivity.java

```java
package com.example.map;

import
androidx.appcompat.app.AppCo
mpatActivity;
import
androidx.fragment.app.Fragme
nt;
import
androidx.fragment.app.Fragme
ntManager;
import
androidx.fragment.app.Fragme
ntTransaction;

import
android.annotation.SuppressL
int;
import android.os.Bundle;

public class MainActivity
extends AppCompatActivity {


@SuppressLint("CommitTransac
tion")
    @Override
    protected void
onCreate(Bundle
savedInstanceState) {

super.onCreate(savedInstance
State);

setContentView(R.layout.acti
vity_main);
        FragmentManager
fragmentManager =
getSupportFragmentManager();

        // Begin a
transaction to replace the
contents of the FrameLayout
with the fragment
        FragmentTransaction
transaction =
fragmentManager.beginTransac
tion();

        // Replace the
contents of the FrameLayout
with the fragment
        Fragment myFragment
= new Map_Fragment();

transaction.replace(R.id.fra
me_layout, myFragment);

        // Commit the
transaction

transaction.commit();

    }
}
```

fragment_map_.xml

```xml
<?xml version="1.0"
encoding="utf-8"?>
<FrameLayout
xmlns:android="http://schema
s.android.com/apk/res/androi
d"

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

android:layout_width="match_
parent"

android:layout_height="match
_parent"

tools:context=".Map_Fragment
">

    <fragment

android:layout_width="match_
parent"

android:layout_height="match
_parent"

android:id="@+id/map"

android:name="com.google.and
roid.gms.maps.SupportMapFrag
ment"/>

</FrameLayout>
```

Map_Fragment.java

```java
package com.example.map;

import android.os.Bundle;

import androidx.annotation.NonNull;
import androidx.fragment.app.Fragment;

import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;

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 java.util.Objects;

public class Map_Fragment extends Fragment {
    @Override
    public View onCreateView(LayoutInflater inflater, ViewGroup container,
    Bundle savedInstanceState) {
        View view = inflater.inflate(R.layout.fragment_map_, container,
        false);
        SupportMapFragment supportMapFragment =
        (SupportMapFragment)
        getChildFragmentManager().findFragmentById(R.id.map);

        supportMapFragment.getMapAsync(new OnMapReadyCallback()
        {
            @Override
            public void onMapReady(@NonNull GoogleMap googleMap) {

                googleMap.setOnMapClickListener(new
                GoogleMap.OnMapClickListener() {

                    @Override
                    public void onMapClick(@NonNull LatLng latLng) {

                        MarkerOptions markerOptions = new MarkerOptions();

                        markerOptions.position(latLng)

                        .title("Location: " + latLng.latitude + " , " + latLng.longitude)

                        .zIndex(Float.MAX_VALUE);

                        googleMap.clear();

                        googleMap.animateCamera(CameraUpdateFactory.newLatLngZoom(latLng,20));

                        Objects.requireNonNull(googleMap.addMarker(markerOptions)).showInfoWindow();
                    }
                });
            }
        });
        return view;
    }
}
```
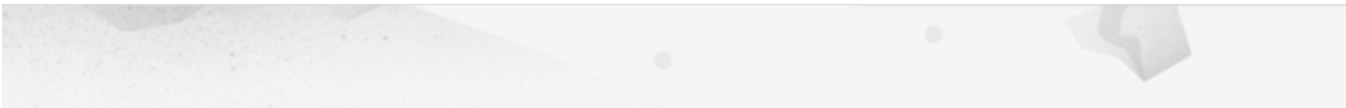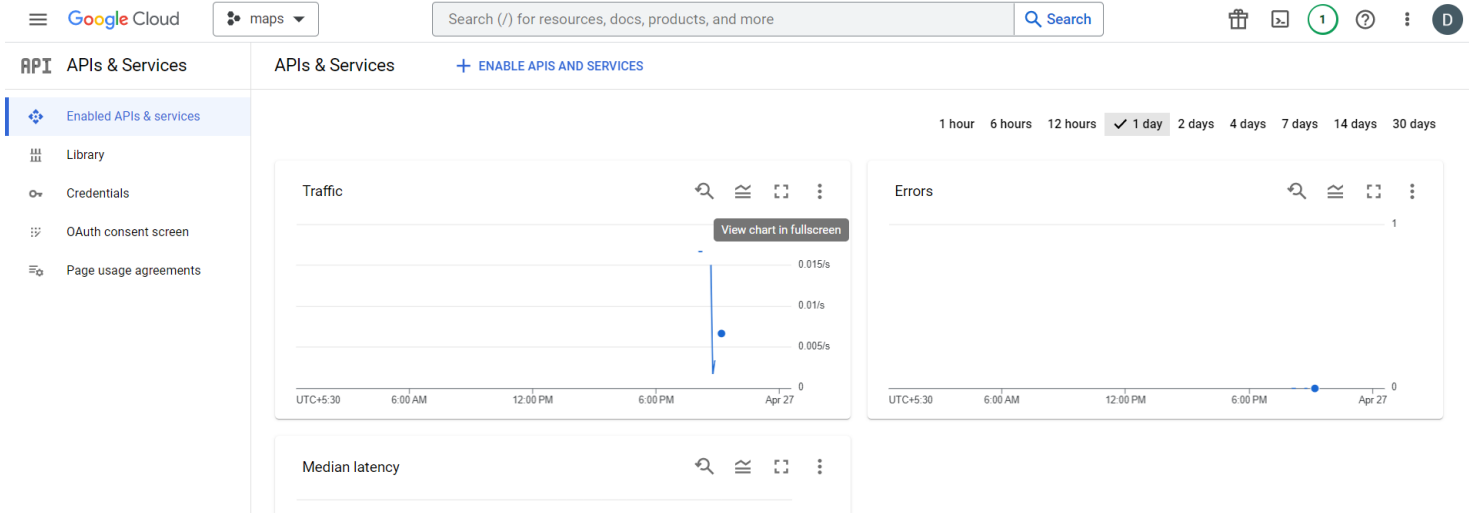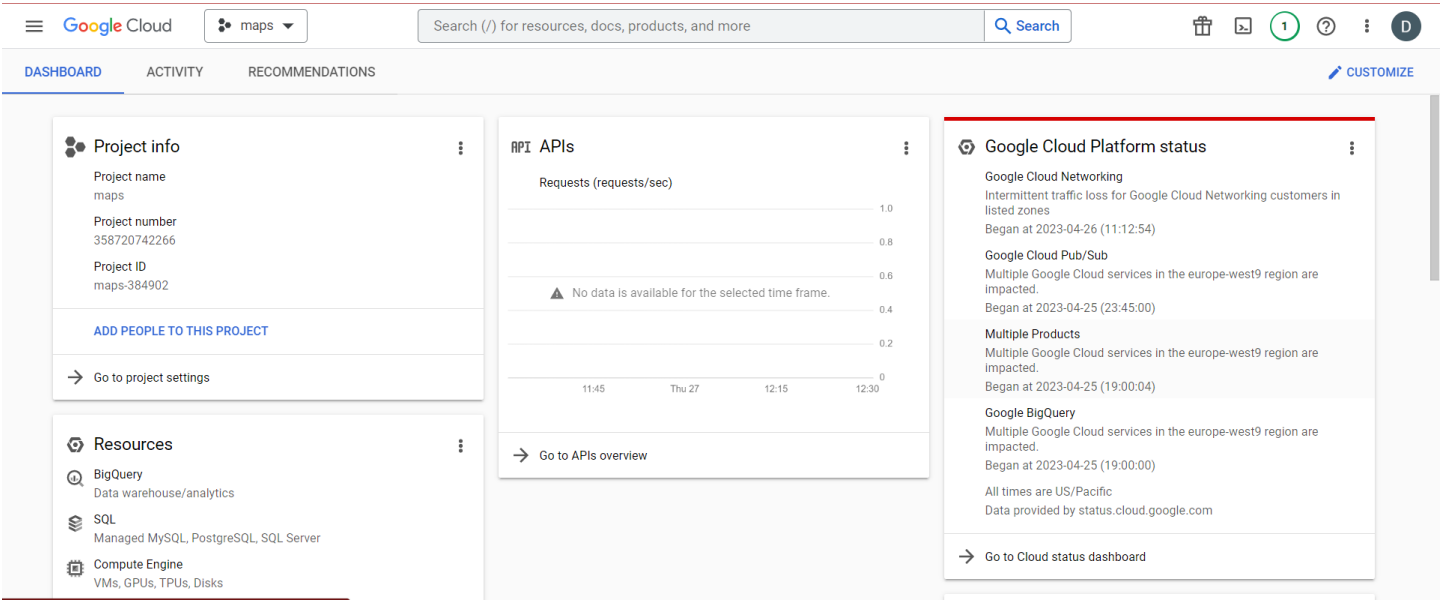
Steps to get API KEY

← Product details

Maps SDK for Android

Google

Maps for your native Android app.

MANAGE   ✓ API Enabled

OVERVIEW   DOCUMENTATION   SUPPORT   RELATED PRODUCTS

☰ **Google** Cloud   maps ▼   Search (/) for resources, docs, products, and more   🔍 Search   🎁 ⊡ ① ⦾ ⋮ D

API APIs & Services

Credentials   **+ CREATE CREDENTIALS**   🗑 DELETE   ↶ RESTORE DELETED CREDENTIALS

◈ Enabled APIs & services

▥ Library

⊶ Credentials

⇗ OAuth consent screen

≡ Page usage agreements

Create credentials to access your enabled APIs. Learn more ⧉

⚠ Remember to configure the OAuth consent screen with information about your application.   **CONFIGURE CONSENT SCREEN**

API Keys

	Name	Creation date ↓	Restrictions	Actions
☐	⚠ API key 1	Apr 26, 2023	None	SHOW KEY ⋮

OAuth 2.0 Client IDs

	Name	Creation date ↓	Type	Client ID	Actions
☐	Name				
No OAuth clients to display					

Service Accounts

Manage service accounts

	Email	Name ↑	Actions
☐			
No service accounts to display			

API key 1

Use this key in your application by passing it with the `key=API_KEY` parameter.

Your API key

AIzaSyCeydXYu4HFGhyEU6GgdrqiWC69O5xH1cE   🗐

⚠ This key is unrestricted. To prevent unauthorized use, we recommend restricting where and for which APIs it can be used. Edit API key to add restrictions. Learn more ⧉

CLOSE

OUTPUT

My MAP

My MAP

Location: 19.063150628972522 , 72.845579199...

Government
Polytechnic Mumbai