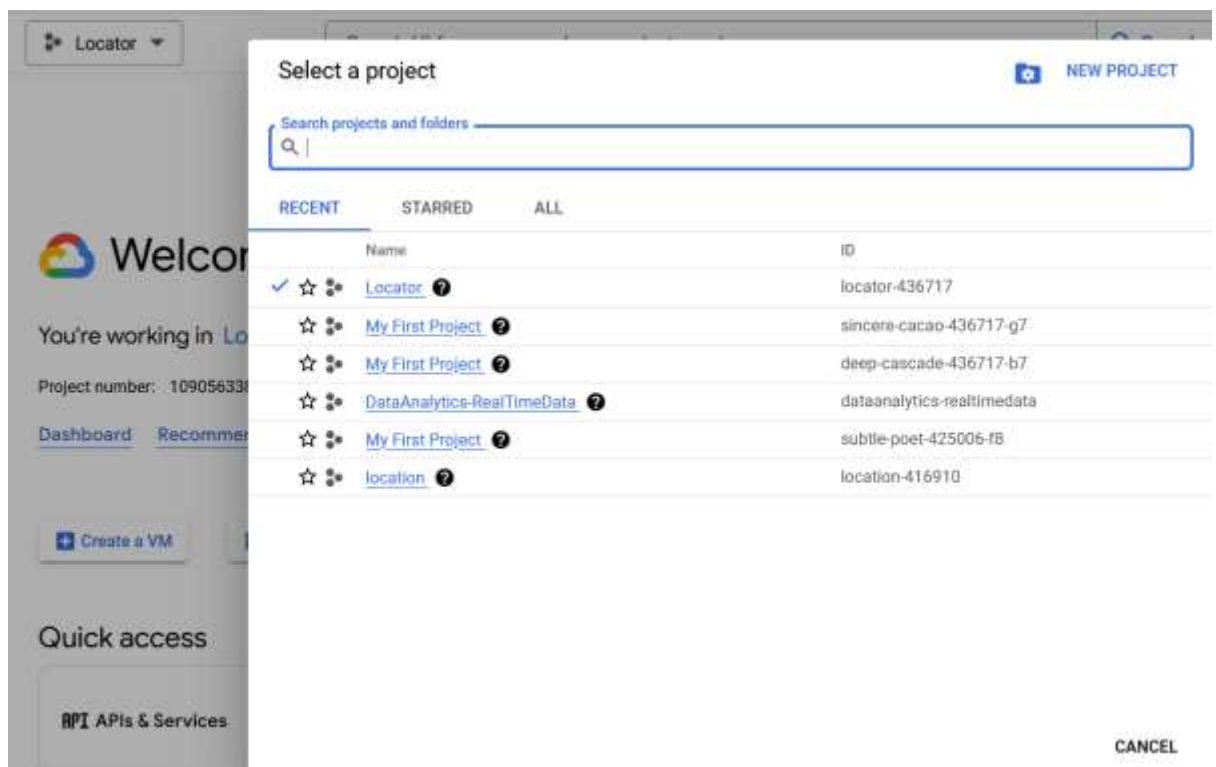


To create a new project in the Google Cloud Console, follow these steps:

1. **Go to the Google Cloud Console:** Visit Google Cloud Console.
2. **Sign in:** If you're not already signed in, log in with your Google account.
3. **Open the Project Selector:**
  - In the top navigation bar, click on the dropdown next to your project name (or it may say "Select a project").
  - This will open the Project Selector dialog.
4. **Create a New Project:**
  - In the Project Selector dialog, you will see a button labeled "**New Project**". Click on it.
  - Fill in the required information:
    - **Project Name:** Enter a name for your project.
    - **Location:** You can leave this as "No organization" if you're not using an organization.
  - Click on the "**Create**" button to create your project.



5. **Select Your Project:** Once created, ensure your new project is selected in the project dropdown.

## Next Steps

After creating your project, follow these steps to enable the Maps SDK and obtain your API key:

1. **Enable Maps SDK for Android:**
  - In the left sidebar, navigate to **"APIs & Services" > "Library"**.
  - In the library, search for **"Maps SDK for Android"**.
  - Click on it, then click on the **"Enable"** button.
2. **Create Credentials:**
  - After enabling the Maps SDK, navigate to **"APIs & Services" > "Credentials"** in the left sidebar.
  - Click on the **"Create Credentials"** button at the top and select **"API key"**.
  - Copy the generated API key.

## MainActivity.kt

```
package com.example.locator

import android.Manifest
import android.content.pm.PackageManager
import android.location.Geocoder
import android.location.Location
import android.os.Bundle
import android.widget.Toast
import androidx.appcompat.app.AppCompatActivity
import androidx.core.app.ActivityCompat
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

class MainActivity : AppCompatActivity(), OnMapReadyCallback {

    private lateinit var mMap: GoogleMap
    private lateinit var fusedLocationClient: FusedLocationProviderClient

    override fun onCreate(savedInstanceState: Bundle?) {
        super.onCreate(savedInstanceState)
        setContentView(R.layout.activity_main)

        // Initialize the FusedLocationProviderClient
        fusedLocationClient =
            LocationServices.getFusedLocationProviderClient(this)
```

```

        // Obtain the SupportMapFragment and get notified when the map is
        ready to be used.
        val mapFragment = supportFragmentManager
            .findFragmentById(R.id.map) as SupportMapFragment
        mapFragment.getMapAsync(this)
    }

    override fun onMapReady(googleMap: GoogleMap) {
        mMap = googleMap

        // Check for location permissions
        if (ActivityCompat.checkSelfPermission(
            this,
            Manifest.permission.ACCESS_FINE_LOCATION
        ) != PackageManager.PERMISSION_GRANTED &&
        ActivityCompat.checkSelfPermission(
            this,
            Manifest.permission.ACCESS_COARSE_LOCATION
        ) != PackageManager.PERMISSION_GRANTED
        ) {
            // Request location permissions
            ActivityCompat.requestPermissions(
                this,
                arrayOf(Manifest.permission.ACCESS_FINE_LOCATION,
                    Manifest.permission.ACCESS_COARSE_LOCATION),
                LOCATION_PERMISSION_REQUEST_CODE
            )
            return
        }

        // Enable MyLocation layer if permissions are granted
        mMap.isMyLocationEnabled = true

        // Get current location
        getCurrentLocation()
    }

    companion object {
        private const val LOCATION_PERMISSION_REQUEST_CODE = 1
    }

    override fun onRequestPermissionsResult(
        requestCode: Int,
        permissions: Array<String>,
        grantResults: IntArray
    ) {
        super.onRequestPermissionsResult(requestCode, permissions,
            grantResults)

        if (requestCode == LOCATION_PERMISSION_REQUEST_CODE) {
            if ((grantResults.isNotEmpty() && grantResults[0] ==
                PackageManager.PERMISSION_GRANTED)) {
                // Permission was granted
                if (ActivityCompat.checkSelfPermission(
                    this,
                    Manifest.permission.ACCESS_FINE_LOCATION
                ) == PackageManager.PERMISSION_GRANTED ||
                ActivityCompat.checkSelfPermission(
                    this,
                    Manifest.permission.ACCESS_COARSE_LOCATION

```

```

        ) == PackageManager.PERMISSION_GRANTED
    ) {
        mMap.isMyLocationEnabled = true
        getCurrentLocation()
    }
    } else {
        // Permission denied
        Toast.makeText(this, "Location permission denied",
Toast.LENGTH_SHORT).show()
    }
}

private fun getCurrentLocation() {
    if (ActivityCompat.checkSelfPermission(
        this,
        Manifest.permission.ACCESS_FINE_LOCATION
    ) != PackageManager.PERMISSION_GRANTED &&
    ActivityCompat.checkSelfPermission(
        this,
        Manifest.permission.ACCESS_COARSE_LOCATION
    ) != PackageManager.PERMISSION_GRANTED
    ) {
        // If permission is not granted, return
        return
    }

    fusedLocationClient.lastLocation.addOnSuccessListener { location:
Location? ->
        if (location != null) {
            val currentLatLng = LatLng(location.latitude,
location.longitude)

            mMap.addMarker(MarkerOptions().position(currentLatLng).title("Current
Location"))

            mMap.moveCamera(CameraUpdateFactory.newLatLngZoom(currentLatLng, 15f))
        } else {
            Toast.makeText(this, "Unable to get current location",
Toast.LENGTH_SHORT).show()
        }
    }
}
}

```

## Activity\_main.xml

```

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent">

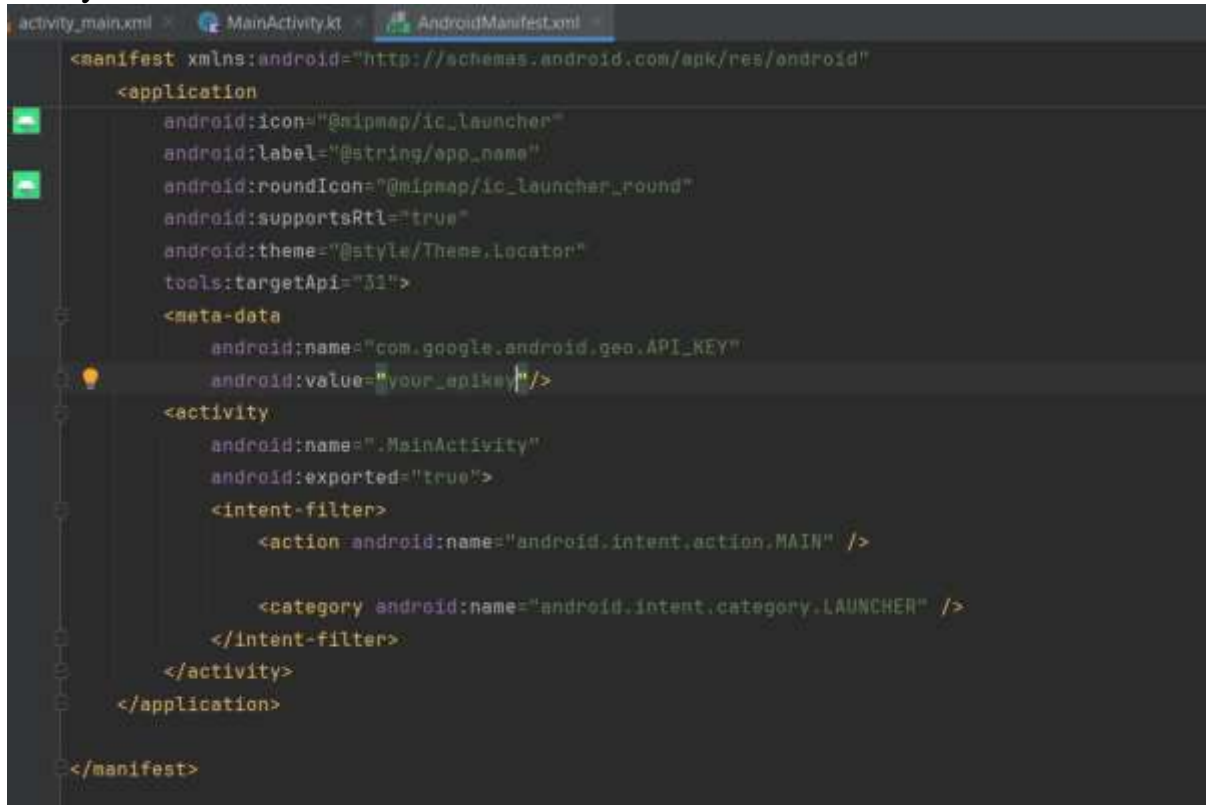
    <fragment
        android:id="@+id/map"
        android:name="com.google.android.gms.maps.SupportMapFragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent" />

</RelativeLayout>

```

## Open Your AndroidManifest File

Add your API there



```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    <application
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Locator"
        tools:targetApi="31">
        <meta-data
            android:name="com.google.android.geo.API_KEY"
            android:value="your_apikey"/>
        <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>
```