

ASSIGNMENT - 04: ANDROID.

PROBLEM DEFINITION

Design a mobile app using Google map & GPS to track the location.

OBJECTIVE

To implement a mobile app to track location using GPS.

OUTCOME :-

One will be able to trace his/her location on google maps using Android studio.

THEORY :-

Google maps is a web based service that provides detailed information about geographical location & sites around the world.

It also offers aerial & satellite view of places. In some cases it also shows street view.

The scope of google maps ranges from 1 to 20 World View to Apartment View.

Provides a very user friendly GUI such that anyone can track their location and get directions.

To generate a google maps application using android studio, one can use the Google maps template

Additionally, you must generate an API key from the Google console website

This key is used in the Android Manifest XML file

To get access to user's location, we must request for permission, namely 03 types

INTERNET

ACCESS_FINE_LOCATION

ACCESS_COARSE_LOCATION.

The maps can be customized using the following methods.

1. Adding marker - `addMarker()`
2. Change map type - `GoogleMap.setMapType`
3. Zoom control - `googleMap.getVisibleRegion()`
`setZoomGesturesEnabled()`
4. Get current location - `getMyLocation()`
5. Zoom to particular area - `map.moveCamera()`

CONCLUSION -

Thus we were able to get our location through Google maps API in Android Studio.