**HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY**

**DEPARTMENT OF TELECOMMUNICATIONS ENGINEERING**

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**DIGITAL COMMUNICATIONS**

**GPS DETECTER PROJECT**

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I/ Abstract:

In this report we describe how to build a system to locate a phone run on android operating system. Our system include an android app and a website include Google API. First, by using the basic library in and the GPS chip in android device, we can take longitude and latitude from where it stand, then put its location into JSON Object and send it to our local web. In our server, Google map API requires longitude and latitude to return device’s location.

II/ Install Framework:

1/ Visual studio code insider:

1.1/ What is visual studio code insider?

Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go) and runtimes (such as .NET and Unity). It is a free framework provided by Microsoft.

1.2/ How to download and install Visual studio code insiders?

First, go to this link:

<https://code.visualstudio.com/insiders/>



Choose the biggest purple rectangle which has text “Download for Windows” for download the “.exe” file.

After finish, run the download file and install normally.

2/Create Google map API account:

2.1/ What is Google map API? Why Google map API? What for?

\_ Google maps is an free application provided by Google company through the URL “map.google.com” or mobile app. People can easily take their location and find the best road in every hours.

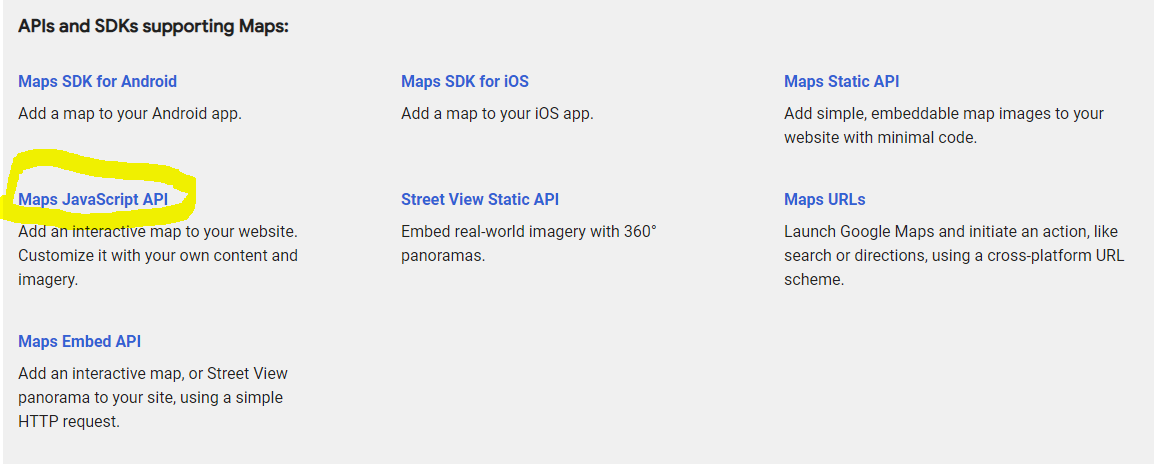
\_ Google maps API is an application programming interface with Google map and approach the giant data of Google in order to create a third app for economic or research.

\_ Google maps have data of more than 200 countries and cover 99% earth area. Over 25 millions location’s updates from collaborators and Google Local Guide teams around the world everyday. About one billion users each month.

\_ Google API support for web, app and webservice developer.

2.2/ How to create Google Maps API Keys:

First, go to the URL: <https://developers.google.com/maps/documentation/>



Choose Maps JavaScript API