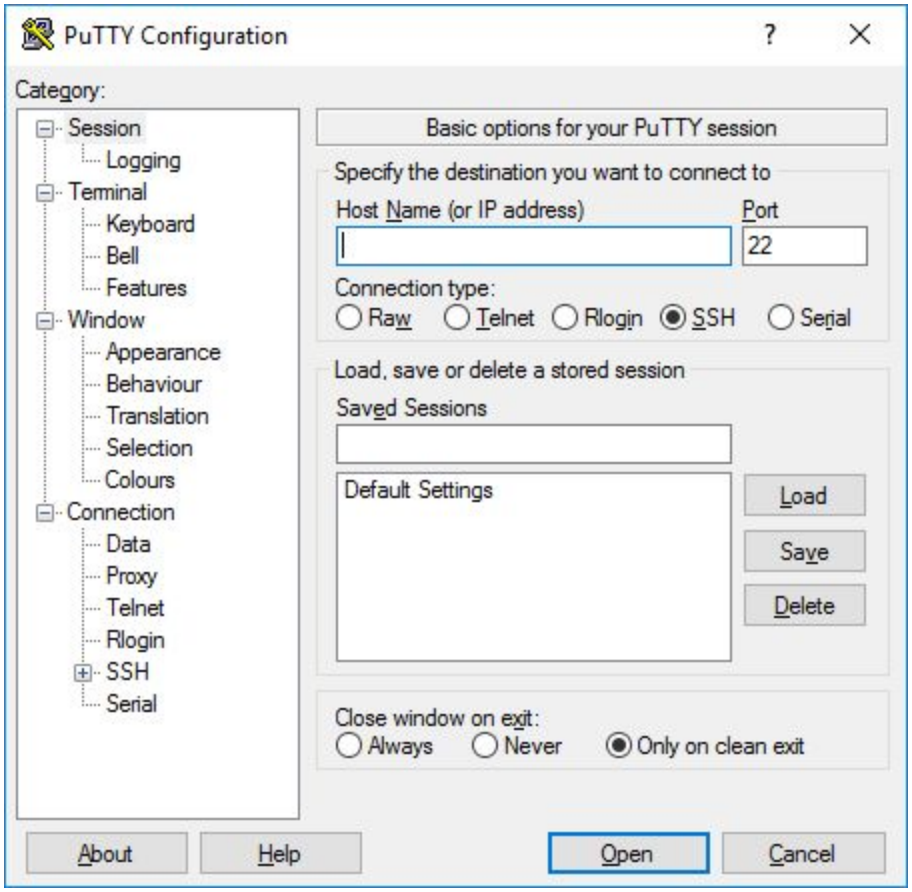
Project Installation:-

Installation of mobile application on the Visual studio:

1. After successful installation of visual studio open the project via the file-> Open project menu. Then browse through the folder and select the sln file.
2. Once the project is open the next step is to install the packages required for the application. For that open the NuGet package manager and then search for the following set of packages and install the same.
    1. OxyPlot.Core
    2. OxyPlot.Xamarin.Forms
    3. CarouselView.FormsPlugin
    4. Syncfusion.Xamarin.SfChart
    5. Xamarin.Forms

Running Raspberry Pi GUI:-

1. Run putty and enter the ip address of raspberry pi and connection type as SSH and hit open.



2. Once the putty raspberry pi is detected the putty will ask for the username and password for the raspberry pi.

Once the raspberry login is successful the raspberry pi terminal will get opened.

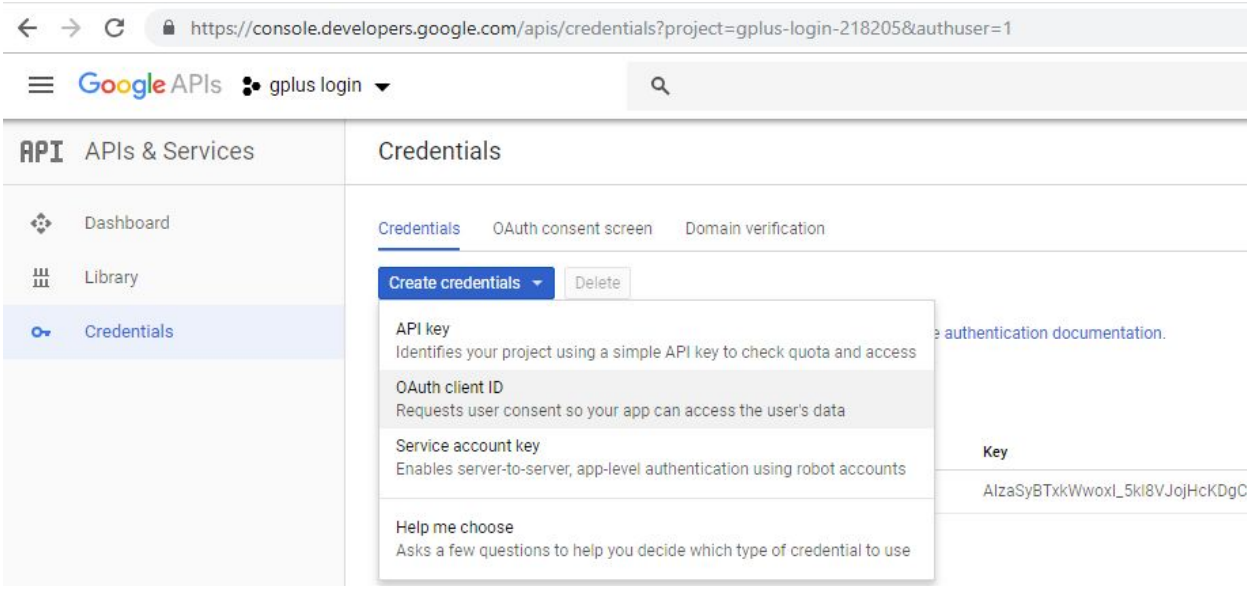
3. Then start the vcn server from the putty terminal by typing the command vncserver. Then vcn server will generate the number for the the raspberry pi.
4. Open the VCN server and select the corresponding raspberry number. Then the user need to fill the username and password and then raspberry pi GUI will get open.

Flask Server Set Up:-

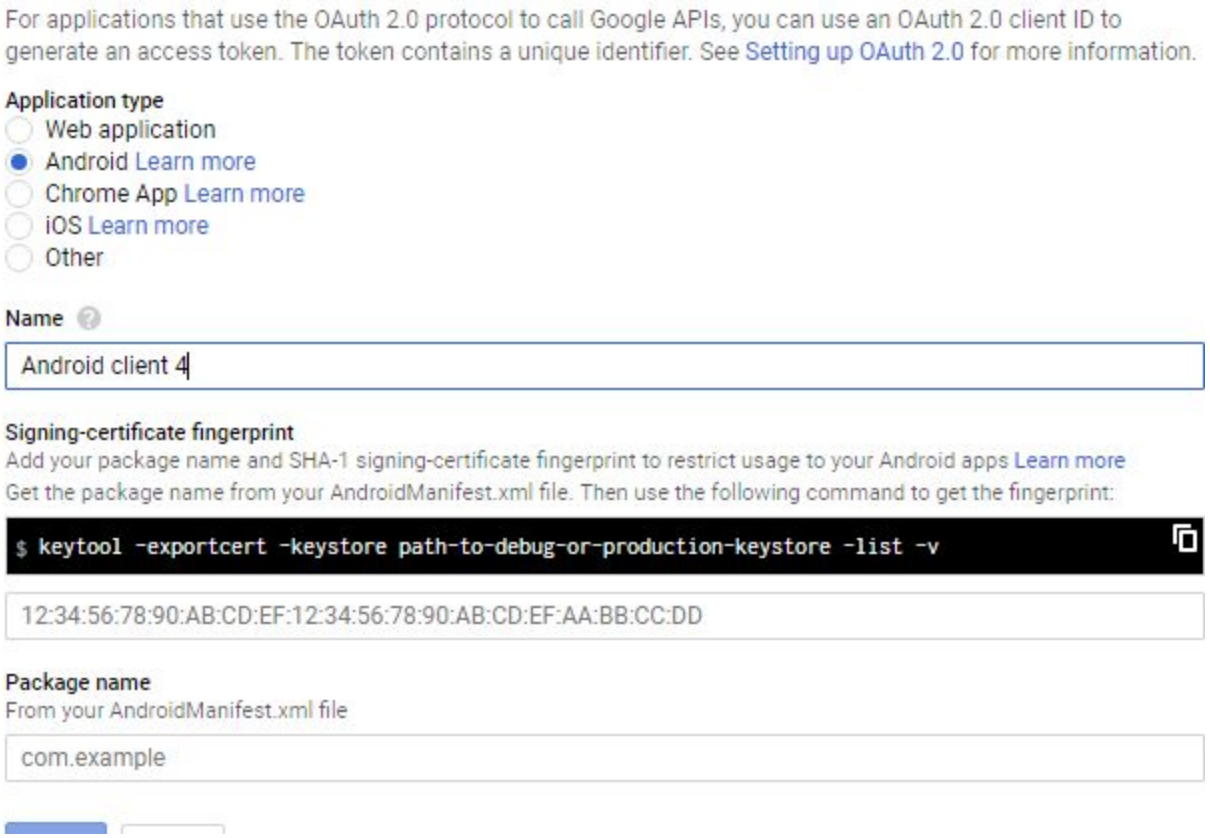
To install flask the prerequisites are to have python installed on the computer. The flask can be installed the terminal using the pip installer using the command:-
pip install Flask

Google+ login:

- The mobile application requires the google sign in. When the mobile application requests the google api for google credential google need to authenticate that the request is coming from authenticated user and then only permission will be granted.
- So in order to access the google sign in api:
- Go to https://console.developers.google.com ->Create a new project->In that project click on Enable Api and services from dashboard-> Enable Google+ api
- Go to credentials-> Create Credentials-> OAuth client ID



- Select Android and then create a new OAuth Client ID by entering SHA-1 key of your visual studio and package name of our project.



- For SHA-1 key refer this video https://www.youtube.com/watch?v=A59Oy_2yFIQ