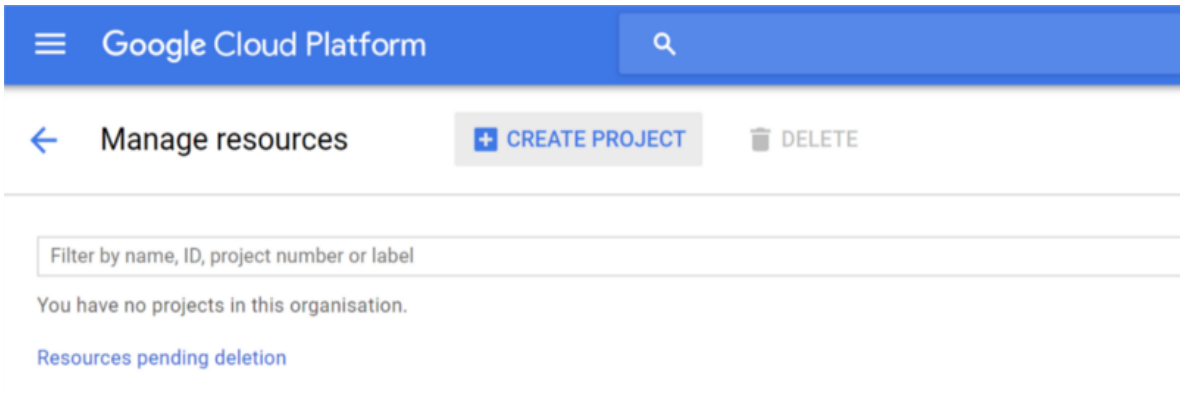
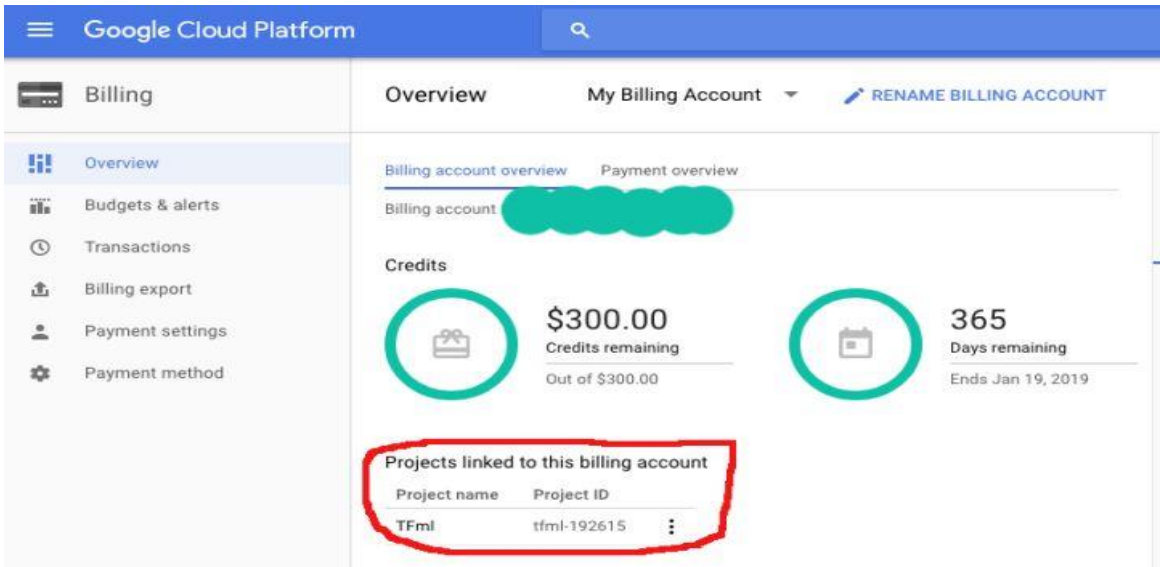
SETUP GOOGLE CLOUD PLATFORM WITH JUPYTER (MALAYSIA)

1. Create a free account in Google Cloud Platform (GCP). Google Cloud will free you 300 credit after you created the account successfully.



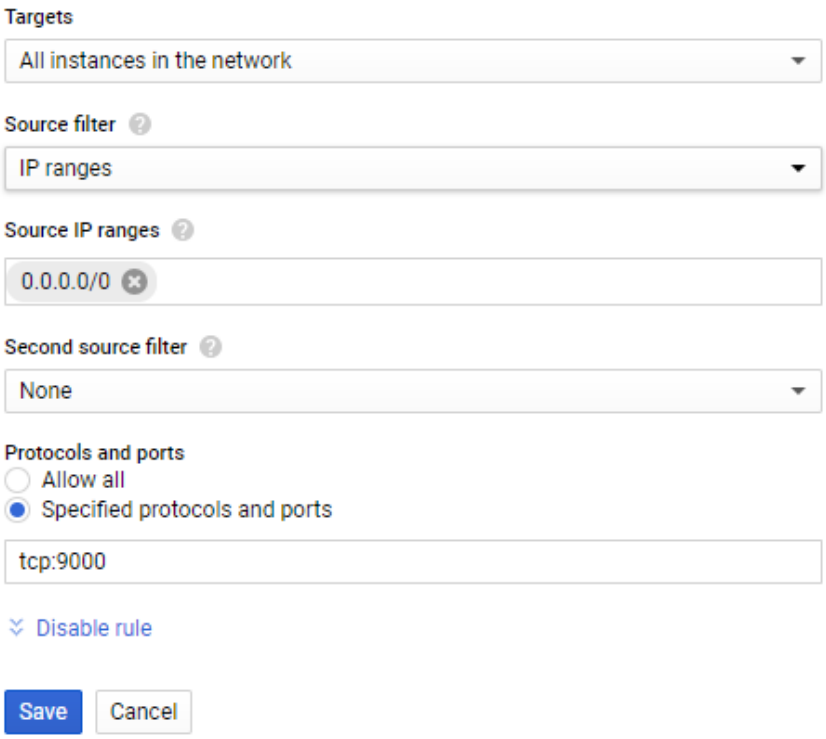
**Note that GCP is accepting debit card and credit card.

2. Create a new project, note that the project is linked to your google account is linked to your google account, so it is recommended to always remove your unused project.

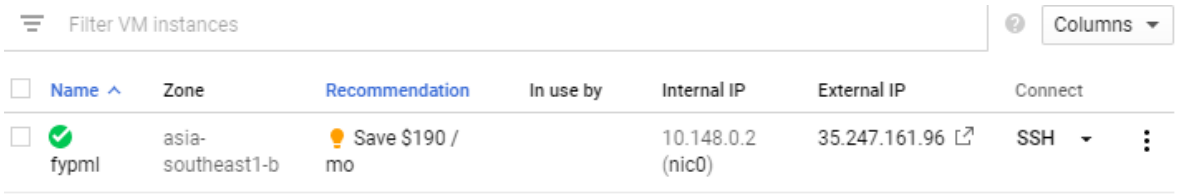


3. Setting up the compute engine and create a VM instance.
   i. Create new instance
   ii. Name your instance
   iii. Select region as “asia-southeast1 (Singapore)” and zone as “asia-southeast1-b”
   iv. Machine type as “8 vCPUs” and 30GB memory, CPU platform as “automatic” and 1 NVIDIA Tesla P4 GPU
   v. Select boot disk as “ubuntu 16.04 LTS” and boot disk type as “10 GB SSD persistent disk”, the default boot disk type is HDD, but the price actually doesn’t change much, so just choose a SSD.
   vi. Tick both “http” and “https” under firewall options.

4. To access the Jupyter network, we need to make the external IP address static. By default, the IP address is dynamic, and we need to make it to static to make our life easier. Click on the three horizontal lines on top left and then under networking, click on VPC network and then external IP address.



5. Start the VM instance and click “SSH” to open the command window.



6. In your SSH terminal:
   i. wget http://repo.continuum.io/archive/Anaconda3-4.0.0-Linux-x86_64.sh
   ii. bash Anaconda3-4.0.0-Linux-x86_64.sh
   iii. ***Do you wish the installer to prepend the Anaconda3 install location to PATH in your /home/haroldsoh/.bashrc?*** yes
   iv. source ~/.bashrc
   v. pip install tensorflow
   vi. pip install keras

7. Setup the VM server:
   i. Check if you have a Jupyter configuration file by "ls ~/.jupyter/jupyter_notebook_config.py" and if it does not exist, create one by "jupyter notebook --generate-config"
   ii. Add few lines to the Jupyter configuration file:

```
#------------------------------------------------------------------------------
# Configurable configuration
#------------------------------------------------------------------------------
c = get_config()
c.NotebookApp.ip = '*'
c.NotebookApp.open_browser = False
c.NotebookApp.port = 9000
#------------------------------------------------------------------------------
# LoggingConfigurable configuration
#------------------------------------------------------------------------------
```

8. To launch Jupyter Notebook, type the command "jupyter-notebook --no-browser --port=9000" in SSH window.

```
chinhw2015@fypml:~$ jupyter-notebook --no-browser --port=9000
[I 05:49:58.963 NotebookApp] Writing notebook server cookie secret to /run/user/1001/jupyter/notebook_cookie_secret
[W 05:49:59.029 NotebookApp] WARNING: The notebook server is listening on all IP addresses and not using encryption. This is not recommended.
[W 05:49:59.029 NotebookApp] WARNING: The notebook server is listening on all IP addresses and not using authentication. This is highly insecure and not recommended.
[I 05:49:59.044 NotebookApp] Serving notebooks from local directory: /home/chinhw2015
[I 05:49:59.044 NotebookApp] 0 active kernels
[I 05:49:59.044 NotebookApp] The Jupyter Notebook is running at: http://[all ip addresses on your system]:9000/
[I 05:49:59.044 NotebookApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
```

Then type the following in your browser,

http://35.247.161.96:9000/