AI BUZZ NOTEBOOK

Deployment of Machine Learning Model to Google Cloud Platform

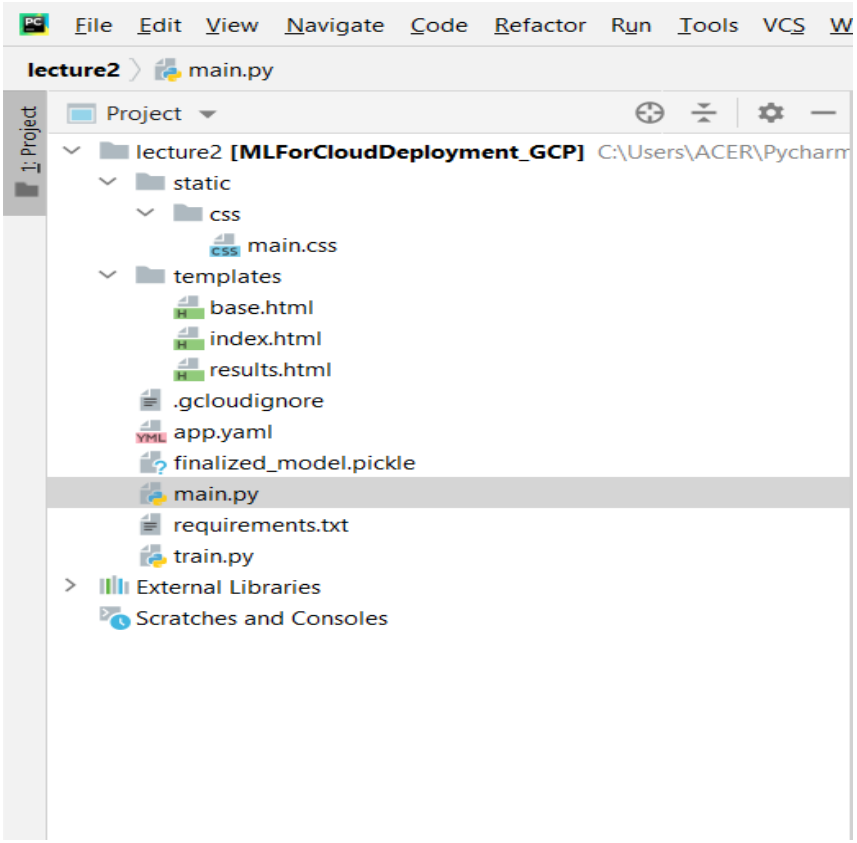
Pre-requisites:

- Basic knowledge of flask framework.
- Any Python IDE installed(we are using PyCharm).
- A Google Cloud Platform account.
- Basic understanding of HTML.

Flask App:

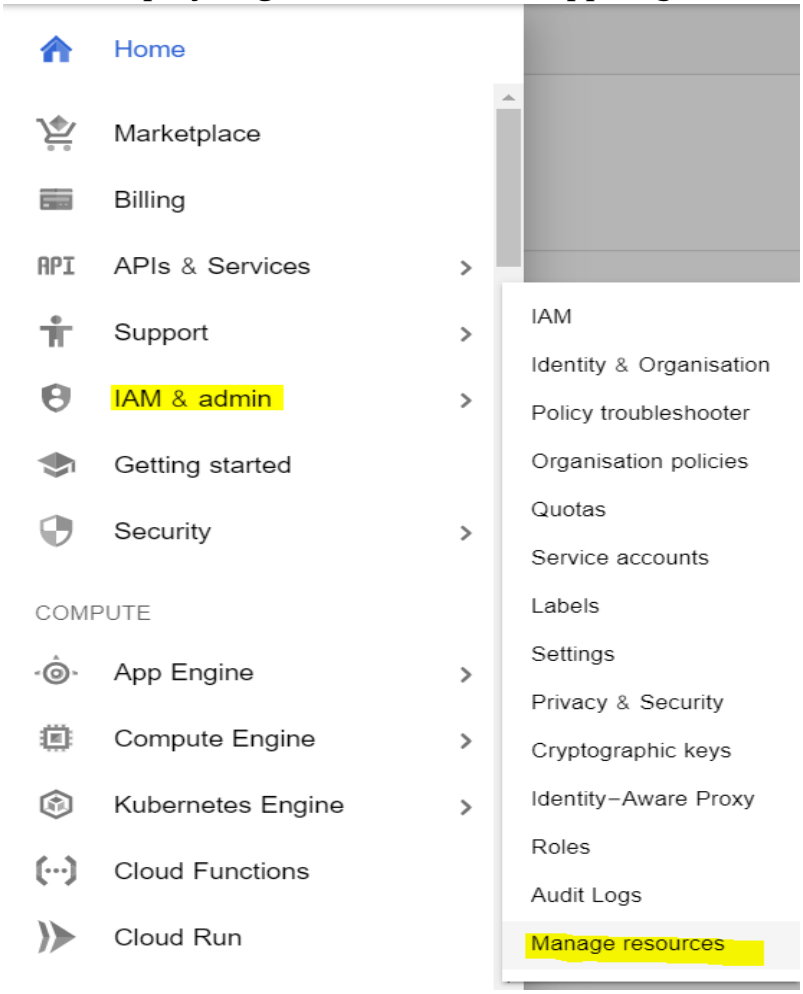
As we'll expose the created model as a web API to be consumed by the client/client APIs, we'd do it using the flask framework.
The flow of our flask app will be

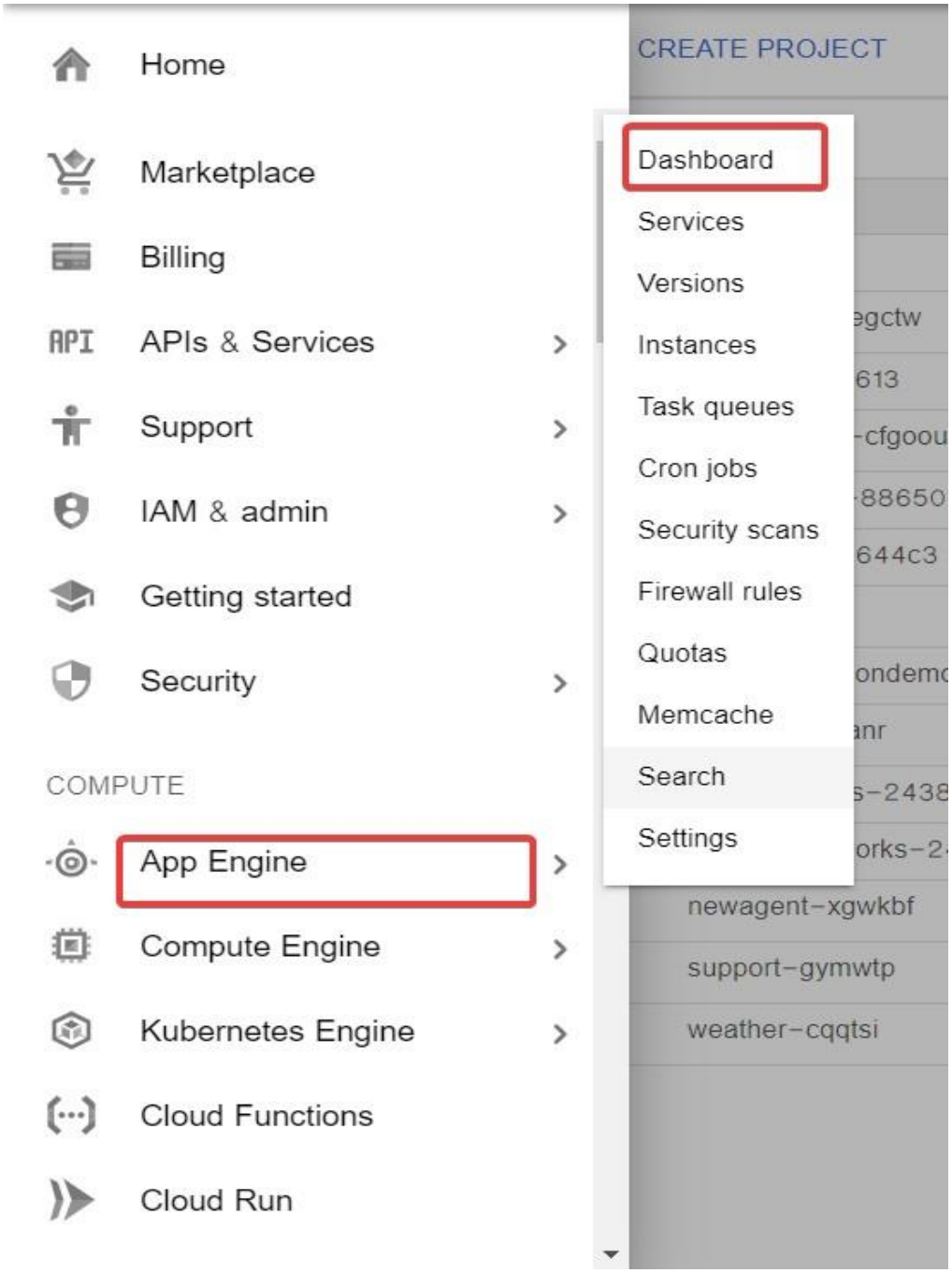
Create the project structure, as shown below:



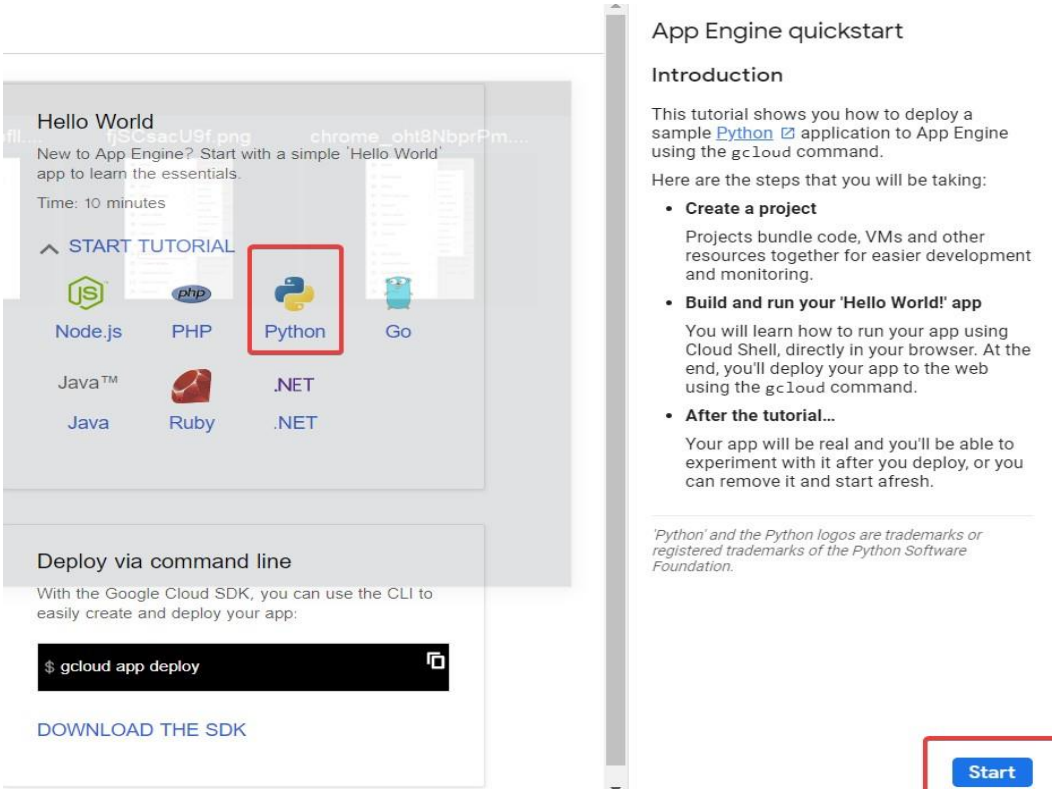
Deployment to G-cloud:

- *Go to https://cloud.google.com/ and create an account if already haven't created one.*
- *Then go to the console of your account.*
- Go to *IAM and admin*(highlighted) and click *manage resources*.

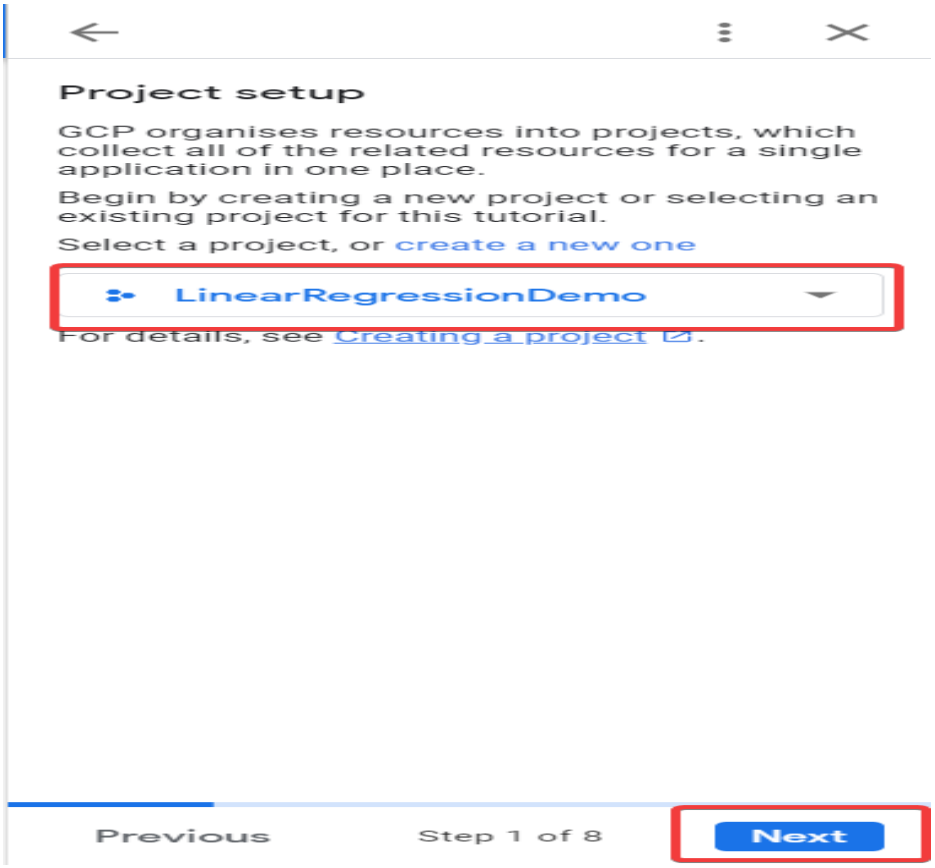
- Click *CREATE PROJECT* to create a new project for deployment.
- Once the project gets created, select *App Engine* and select *Dashboard.*
- 



- *Go to https://dl.google.com/dl/cloudsdk/channels/rapid/GoogleCloudSDKInstaller.exe to download the google cloud SDK to your machine.*
- Click *Start Tutorial* on the screen and select Python app and click start.



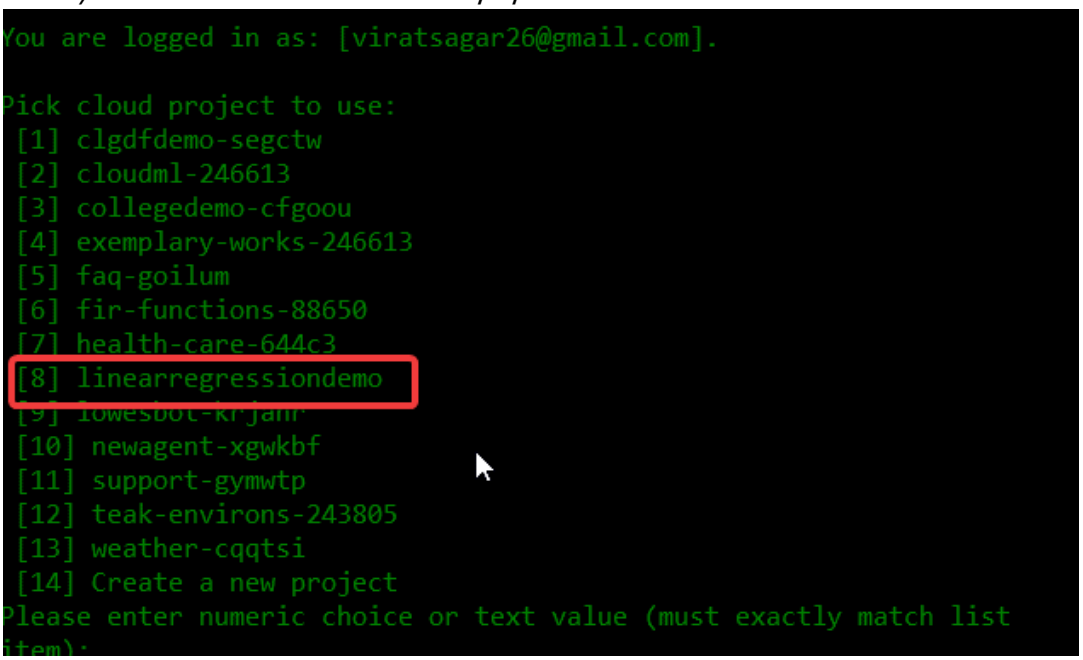
- *Check whether the correct project name is displayed and then click next.*



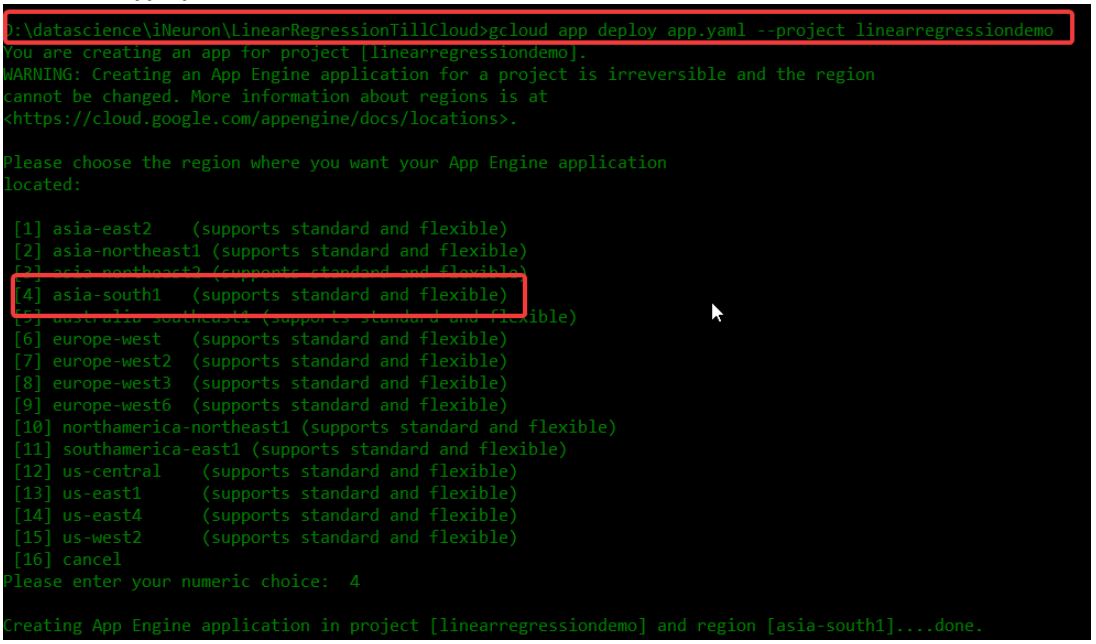
- *Create a file ‘app.yaml’ and put ‘runtime: python37’ in that file.*

- *Create a 'requirements.txt' file by opening the command prompt/anaconda prompt, navigate to the project folder and enter the command 'pip freeze > requirements.txt'. It is recommended to use separate environments for different projects.*
- *Your python application file should be called 'main.py'. It is a GCP specific requirement.*
- *Open command prompt window, navigate to the project folder and enter the command*
  gcloud init to initialise the gcloud context.

- *It asks you to select from the list of available projects.*

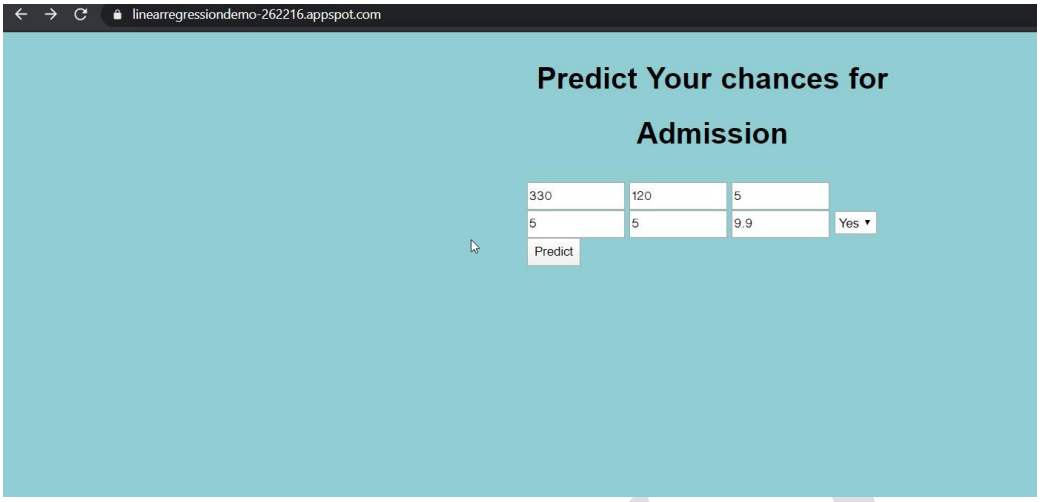


- *Once the project name is selected, enter the command gcloud app deploy app.yaml --project <project name>.*
- *After executing the above command, GCP will ask you to enter the region for your application. Choose the appropriate one.*

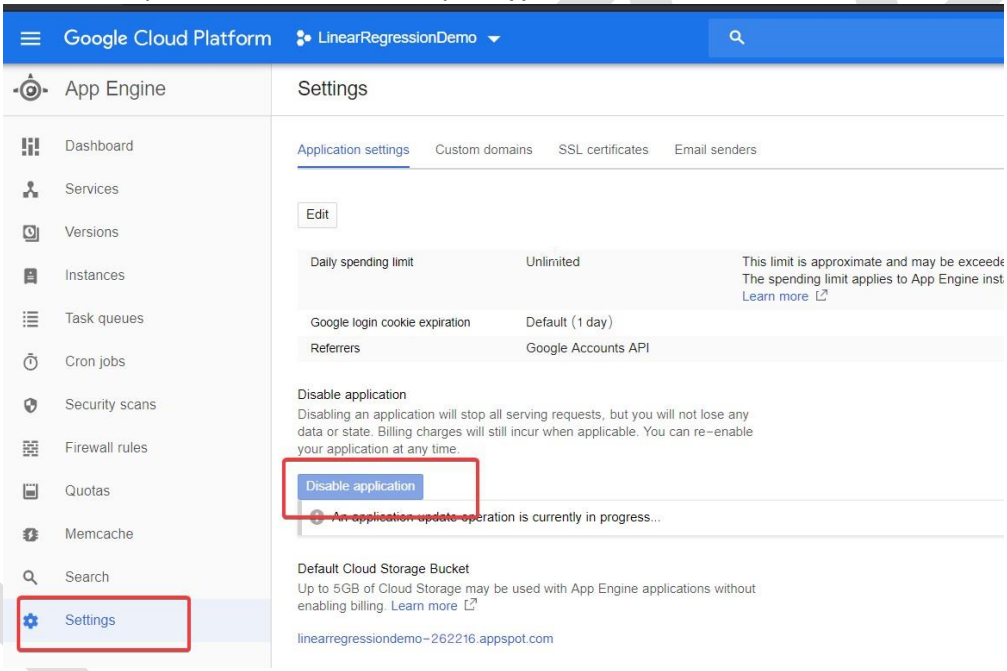


- *GCP will ask for the services to be deployed. Enter 'y' to deploy the services.*

- *And then it will give you the link for your app, and the deployed app looks like:*



- *To save money, go to settings and disable your app.*



Thank You!