EXP NO : **INSTALL GOOGLE APP ENGINE. CREATE HELLO WORLD APP AND**

DATE : **OTHER SIMPLE WEB APPLICATIONS USING PYTHON/JAVA.**

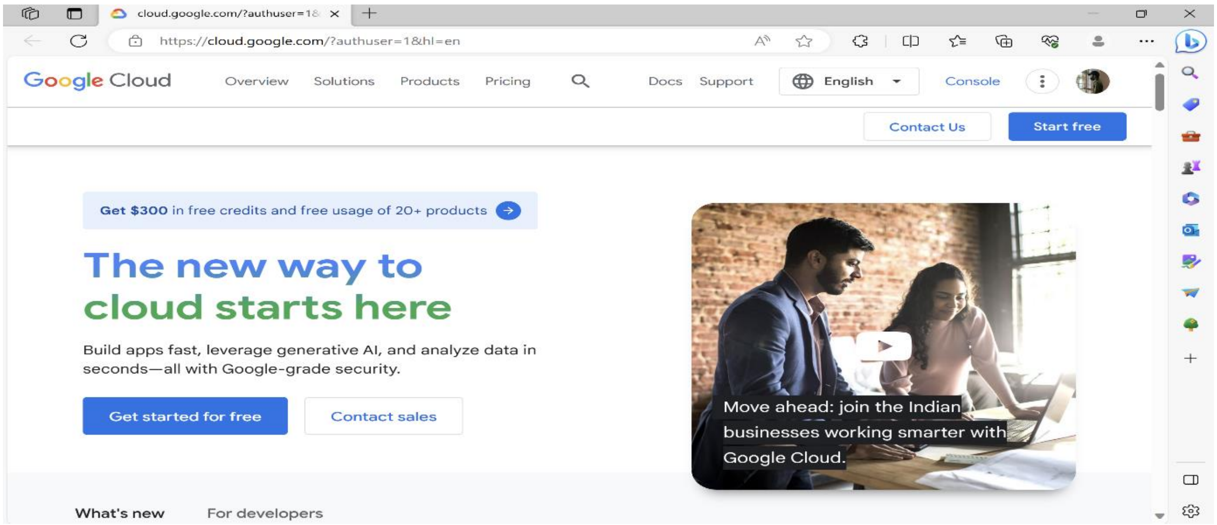
AIM :

To Install Google App Engine. Create hello world app and other simple web applications using python/java.

PROCEDURE :

Step1: Go to the URL https://cloud.google.com

(Before visiting to this page you are logged onto your Gmail account, for IAM / Else click signin option login to Gmail account)



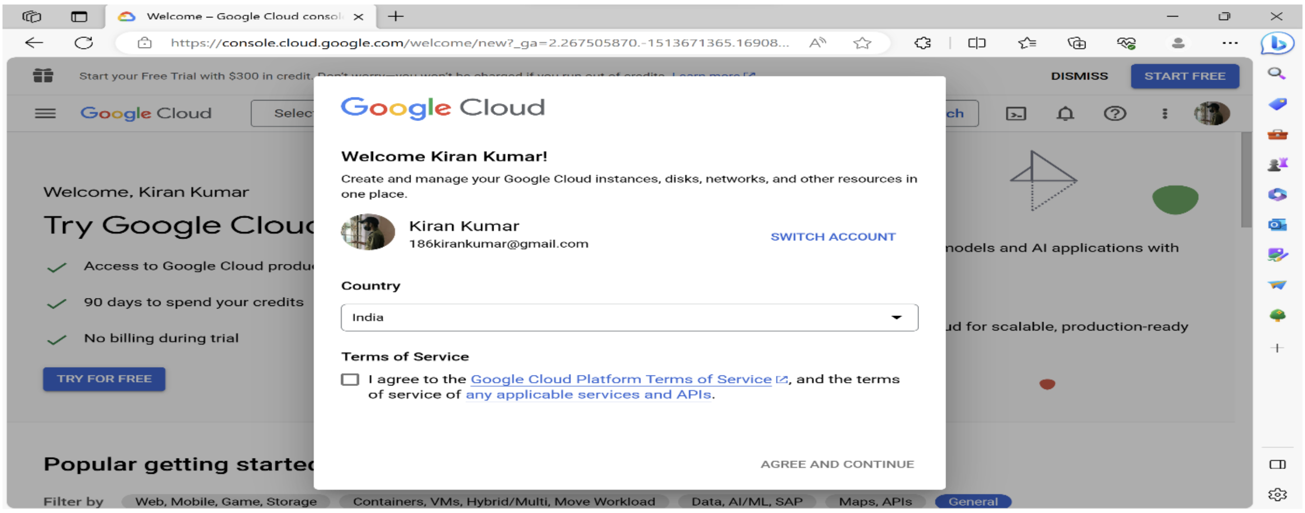
The new way to cloud starts here

Build apps fast, leverage generative AI, and analyze data in seconds—all with Google-grade security.

Move ahead: join the Indian businesses working smarter with Google Cloud.

Step2: Click **Console** on Right Top of page

Step3: Accept term and condition, if you are visited first time to GAE.



Welcome – Google Cloud consol
https://console.cloud.google.com/welcome/new?_ga=2.267505870.-1513671365.16908...
Start your Free Trial with $300 in credit. Don't worry—you won't be charged if you run out of credits. Learn more
DISMISS
START FREE
Google Cloud
Selec
Welcome, Kiran Kumar
Try Google Clouc
Access to Google Cloud produ
90 days to spend your credits
No billing during trial
TRY FOR FREE
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ud for scalable, production-ready
Popular getting startec
Filter by
Web, Mobile, Game, Storage
Containers, VMs, Hybrid/Multi, Move Workload
Data, AI/ML, SAP
Maps, APIs
General

Google Cloud

Welcome Kiran Kumar!

Create and manage your Google Cloud instances, disks, networks, and other resources in one place.

Kiran Kumar
186kirankumar@gmail.com

SWITCH ACCOUNT

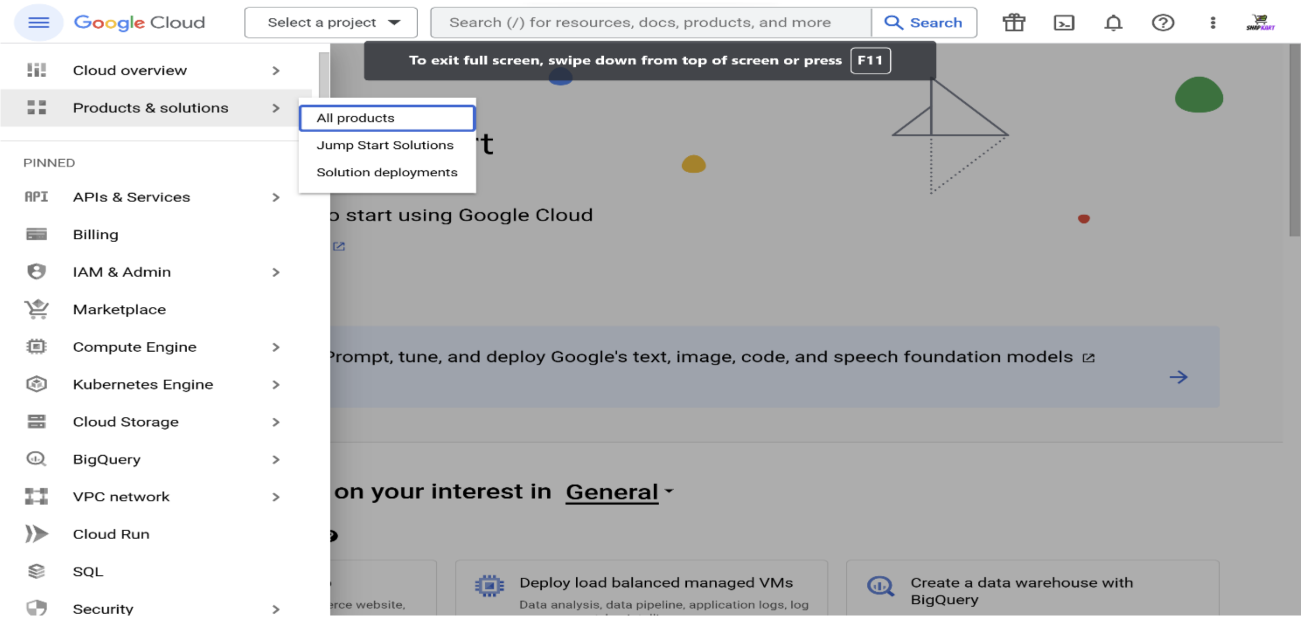
Country: India

Terms of Service

☐ I agree to the Google Cloud Platform Terms of Service, and the terms of service of any applicable services and APIs.

AGREE AND CONTINUE

Step4: Click the Navigation menu on Left top Web Page, Choose App Engine

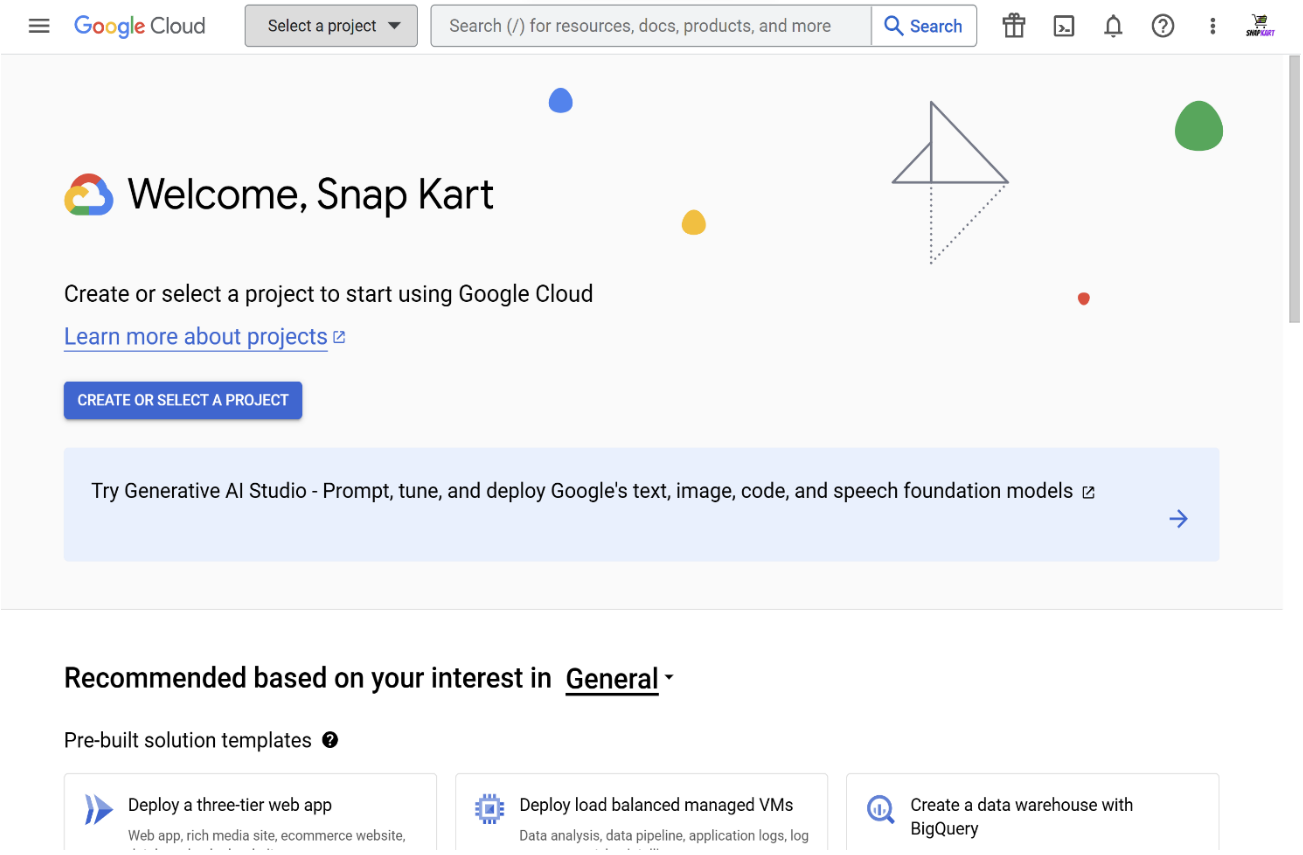


To exit full screen, swipe down from top of screen or press F11

Google Cloud
Select a project
Search (/) for resources, docs, products, and more
Search
Cloud overview
Products & solutions
All products
Jump Start Solutions
Solution deployments
PINNED
APIs & Services
Billing
IAM & Admin
Marketplace
Compute Engine
Kubernetes Engine
Cloud Storage
BigQuery
VPC network
Cloud Run
SQL
Security
o start using Google Cloud
Prompt, tune, and deploy Google's text, image, code, and speech foundation models
on your interest in General
rce website,
Deploy load balanced managed VMs
Data analysis, data pipeline, application logs, log
Create a data warehouse with BigQuery

Step5: Choose Dashboard.

Step6: Select Create Project, on Right Top.



Welcome, Snap Kart

Create or select a project to start using Google Cloud

Learn more about projects

Try Generative AI Studio - Prompt, tune, and deploy Google's text, image, code, and speech foundation models

Recommended based on your interest in General

Pre-built solution templates

Deploy a three-tier web app

Web app, rich media site, ecommerce website,

Deploy load balanced managed VMs

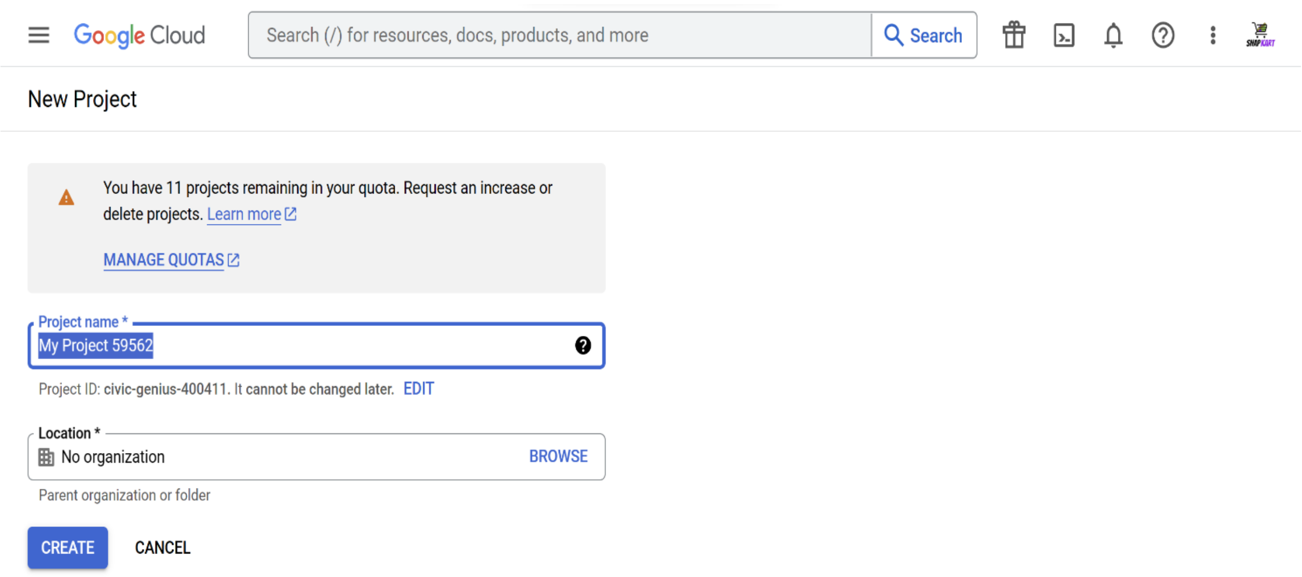
Data analysis, data pipeline, application logs, log

Create a data warehouse with BigQuery

Google Cloud
Select a project
Search (/) for resources, docs, products, and more
Search
CREATE OR SELECT A PROJECT

Step7 : Select the Project Name, Location are by default(note the default ProjectName, ID) and Click Create Button.

(Note: 12 projects is permitted by Google vendor for free Cloud services)



New Project

You have 11 projects remaining in your quota. Request an increase or delete projects. Learn more

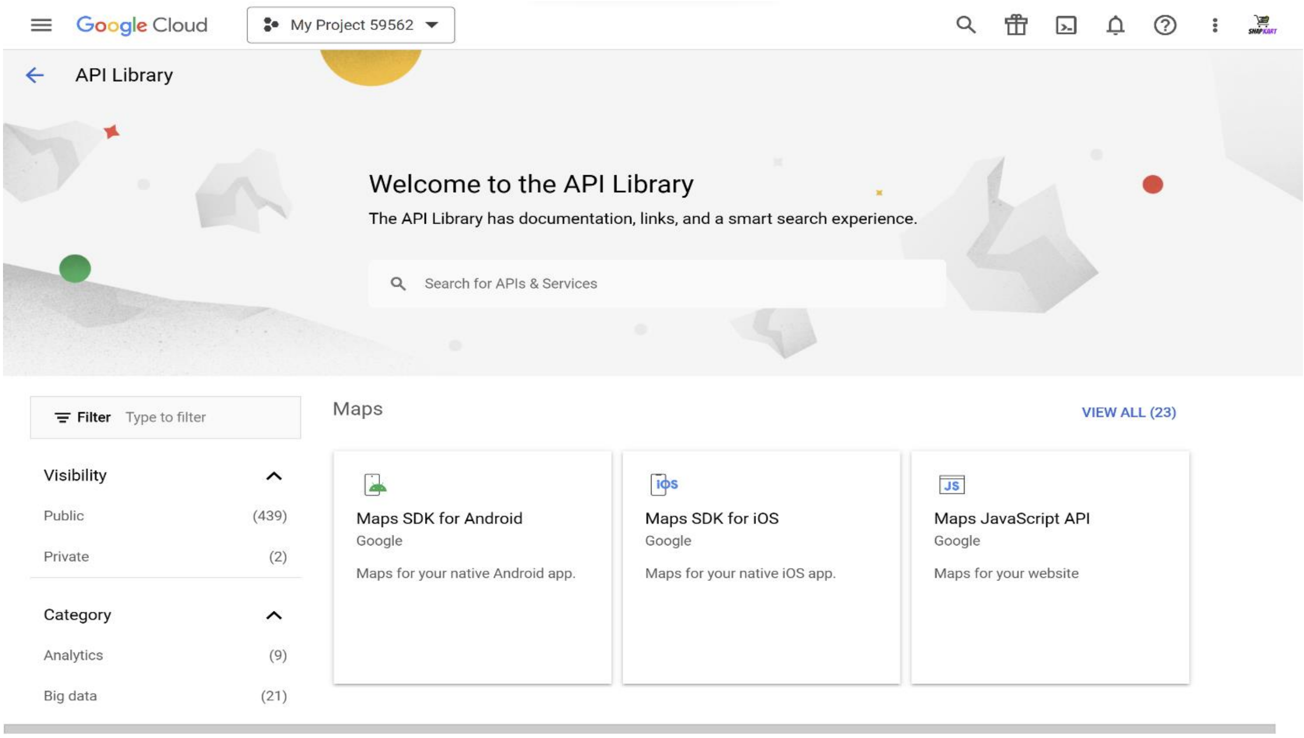
Project name *
My Project 59562

Project ID: civic-genius-400411. It cannot be changed later. EDIT

Location *
No organization

Parent organization or folder

Step 8 : Go to API Library and Search for appengine



Welcome to the API Library

The API Library has documentation, links, and a smart search experience.

Visibility	
Public	(439)
Private	(2)
Category	
Analytics	(9)
Big data	(21)

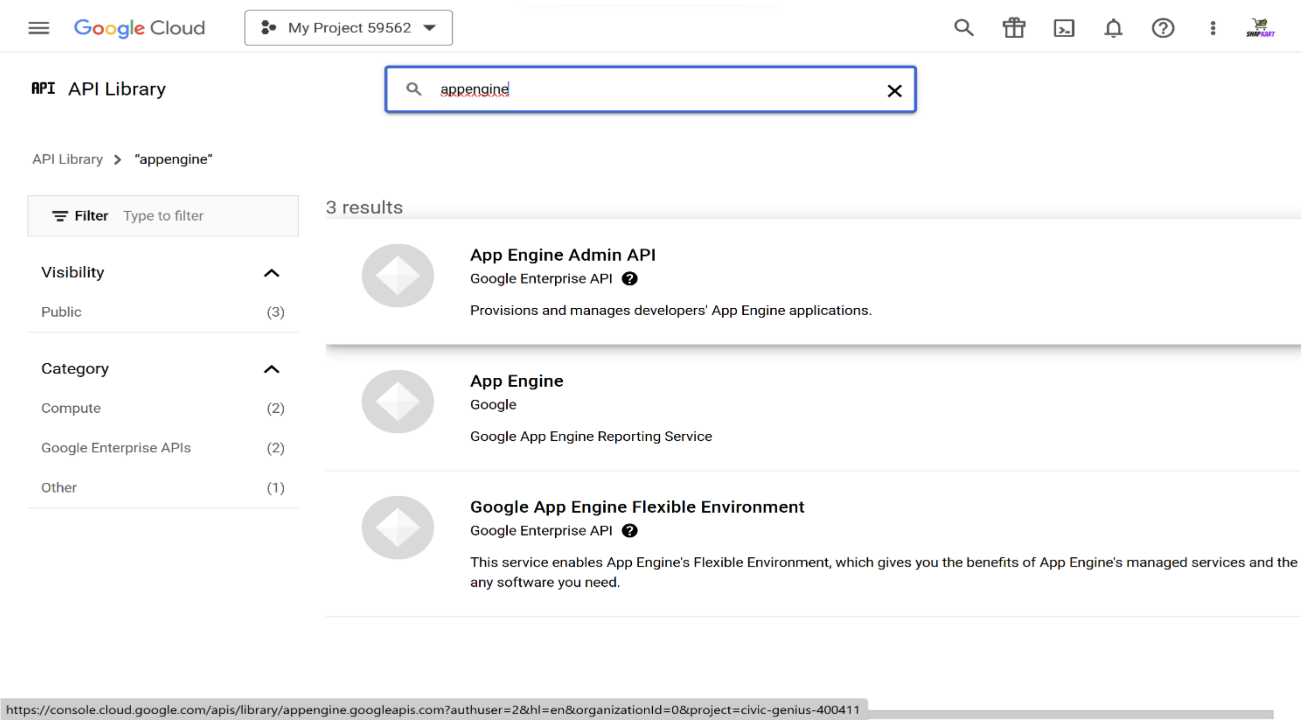
Maps

Maps SDK for Android
Google
Maps for your native Android app.

Maps SDK for iOS
Google
Maps for your native iOS app.

Maps JavaScript API
Google
Maps for your website

Step 9: Select App Engine Admin API



Google Cloud | My Project 59562

API Library

appengine

API Library > "appengine"

Filter Type to filter

Visibility	
Public	(3)
Category	
Compute	(2)
Google Enterprise APIs	(2)
Other	(1)

3 results

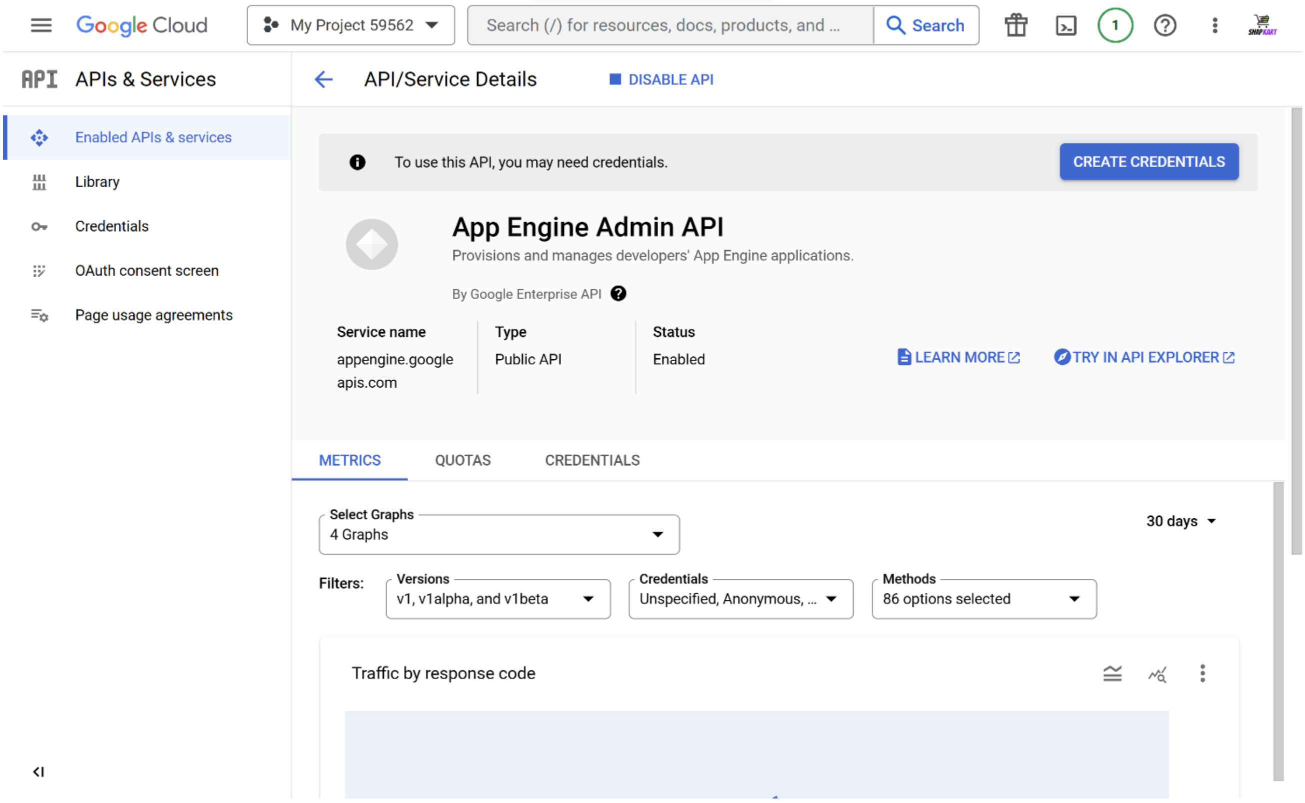
App Engine Admin API
Google Enterprise API
Provisions and manages developers' App Engine applications.

App Engine
Google
Google App Engine Reporting Service

Google App Engine Flexible Environment
Google Enterprise API
This service enables App Engine's Flexible Environment, which gives you the benefits of App Engine's managed services and the any software you need.

https://console.cloud.google.com/apis/library/appengine.googleapis.com?authuser=2&hl=en&organizationId=0&project=civic-genius-400411

Step 10: Click enable on App Engine Admin API



Google Cloud | My Project 59562 | Search (/) for resources, docs, products, and ... | Search

APIs & Services

- Enabled APIs & services
- Library
- Credentials
- OAuth consent screen
- Page usage agreements

API/Service Details | DISABLE API

To use this API, you may need credentials. CREATE CREDENTIALS

App Engine Admin API
Provisions and manages developers' App Engine applications.
By Google Enterprise API

Service name	Type	Status
appengine.googleapis.com	Public API	Enabled

LEARN MORE | TRY IN API EXPLORER

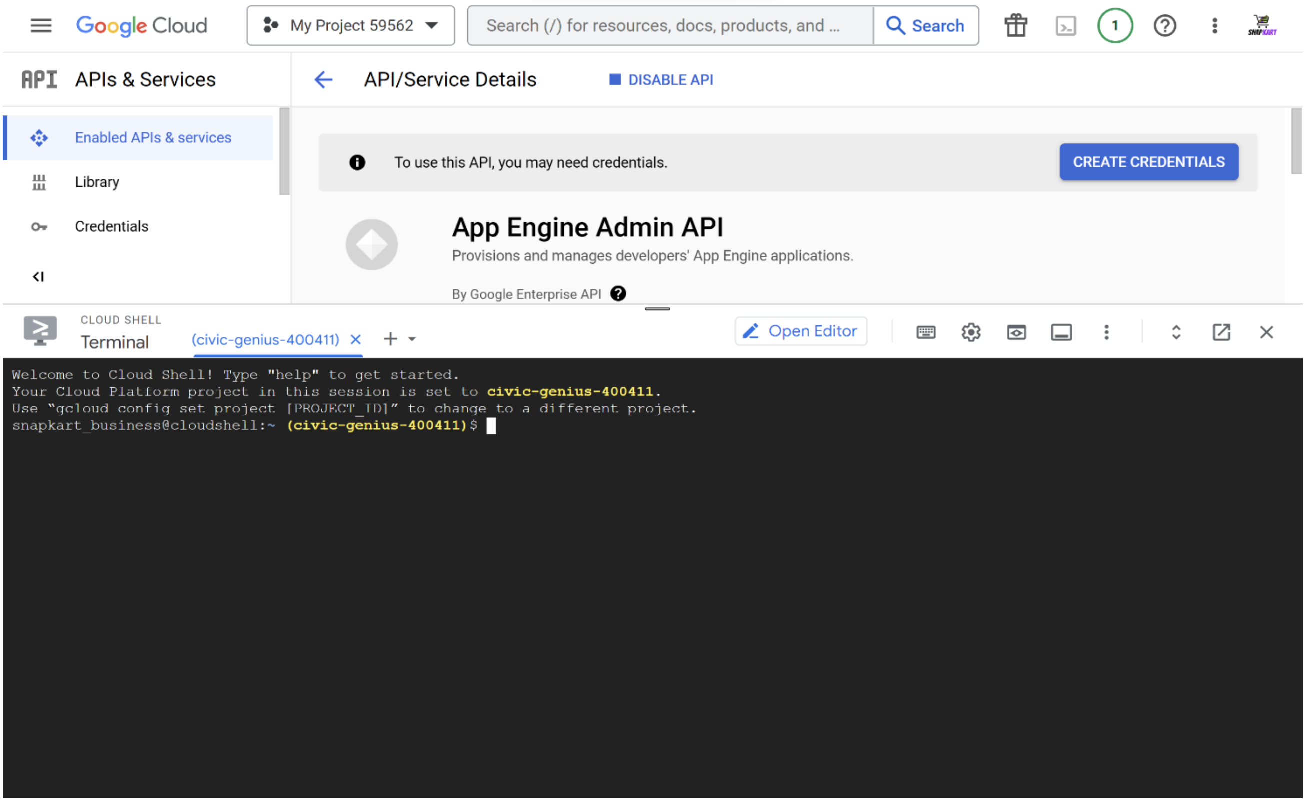
METRICS | QUOTAS | CREDENTIALS

Select Graphs: 4 Graphs | 30 days

Filters: Versions: v1, v1alpha, and v1beta | Credentials: Unspecified, Anonymous, ... | Methods: 86 options selected

Traffic by response code

Step 11: After enabling App Engine Admin API, go to Activate Cloud Shell



To use this API, you may need credentials.

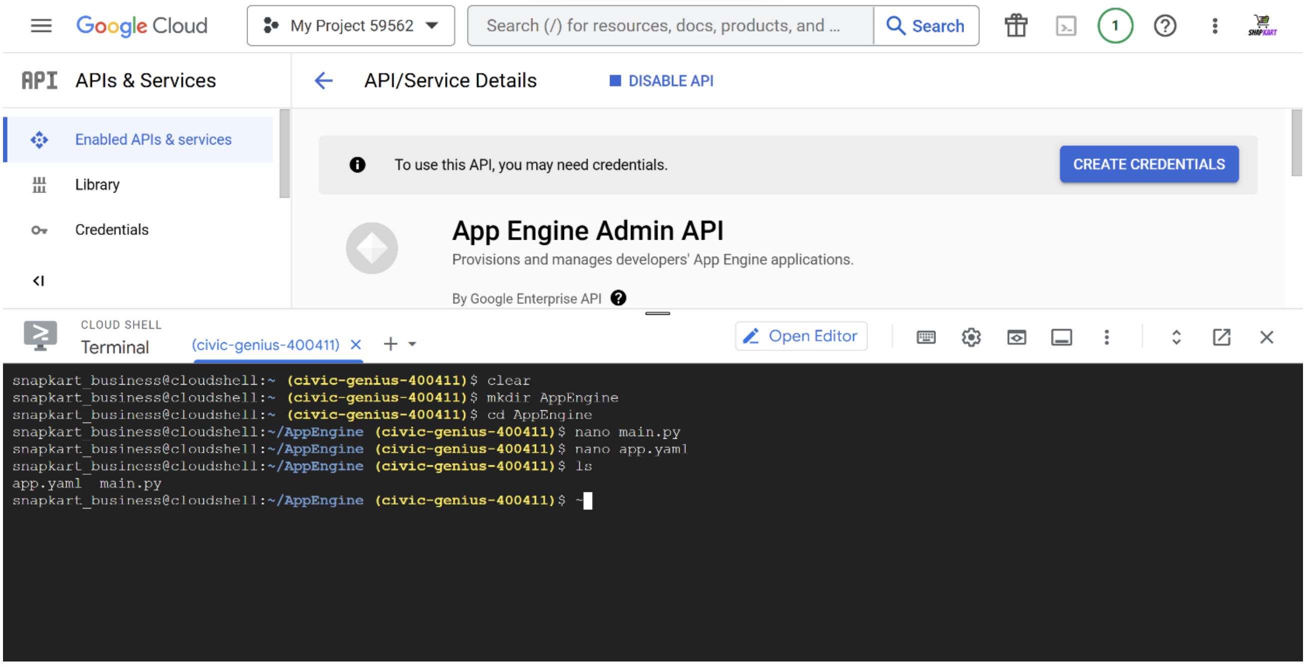
App Engine Admin API

Provisions and manages developers' App Engine applications.

By Google Enterprise API

```
Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to civic-genius-400411.
Use “gcloud config set project [PROJECT_ID]” to change to a different project.
snapkart_business@cloudshell:~ (civic-genius-400411)$
```

Step 12: Create a directory and inside that create main.py(Python File) and app.yaml(Configuration) file.



To use this API, you may need credentials.

App Engine Admin API

Provisions and manages developers' App Engine applications.

By Google Enterprise API

```
snapkart_business@cloudshell:~ (civic-genius-400411)$ clear
snapkart_business@cloudshell:~ (civic-genius-400411)$ mkdir AppEngine
snapkart_business@cloudshell:~ (civic-genius-400411)$ cd AppEngine
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ nano main.py
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ nano app.yaml
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ ls
app.yaml  main.py
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ ~
```

Step 13: Code for main.py and app.yaml

main.py:

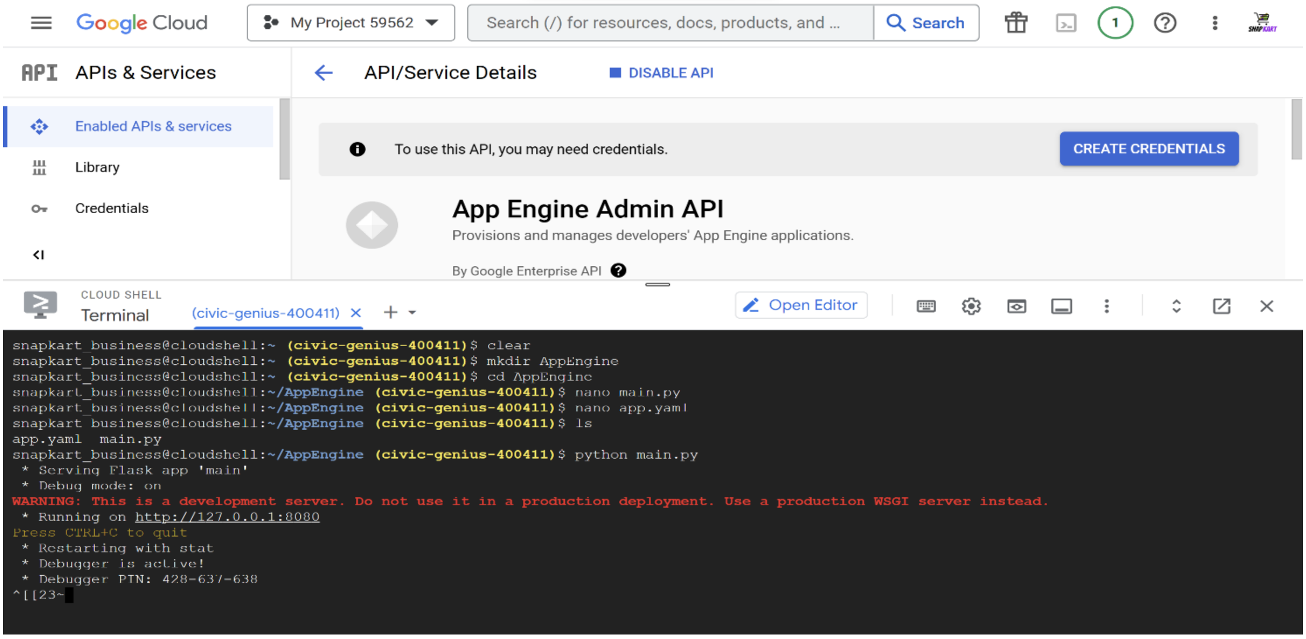
```
from flask import Flask

app = Flask(__name__)

@app.route("/")


def hello():

    return "Hello World!"

if __name__ == "__main__":

    app.run(host="127.0.0.1", port=8080, debug=True)
```

app.yaml :

```
runtime: python39
```

Step 14: Finally, run your app in Cloud Shell using the Flask development server.

➔ python main.py



To use this API, you may need credentials.

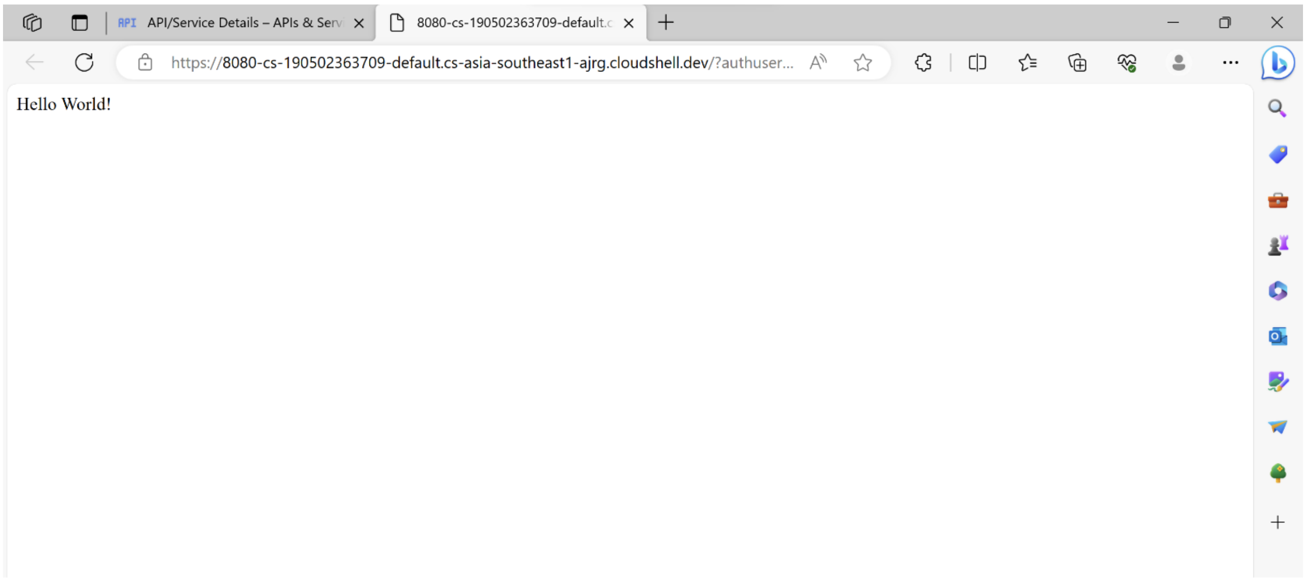
App Engine Admin API

Provisions and manages developers' App Engine applications.

By Google Enterprise API

```
snapkart_business@cloudshell:~ (civic-genius-400411)$ clear
snapkart_business@cloudshell:~ (civic-genius-400411)$ mkdir AppEngine
snapkart_business@cloudshell:~ (civic-genius-400411)$ cd AppEngine
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ nano main.py
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ nano app.yaml
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ ls
app.yaml  main.py
snapkart_business@cloudshell:~/AppEngine (civic-genius-400411)$ python main.py
 * Serving Flask app 'main'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:8080
Press CTRL+C to quit
 * Restarting with stat
 * Debugger is active!
 * Debugger PIN: 428-637-638
^[[23~
```

Step 15: Preview your app with "Web preview".(Preview on port 8080)



API/Service Details – APIs & Serv
8080-cs-190502363709-default.c
https://8080-cs-190502363709-default.cs-asia-southeast1-ajrg.cloudshell.dev/?authuser...

Hello World!

Step 16: Stop the procedure by Ctrl + C.

Note:

Further, step are Deploy the application & Deleting the application. (if required)

Deploying to App Engine

Disable your application

RESULT:

Thus the GAE is installed and executed the hello world application.