

Google Cloud Platform project

Deploy your first Flask App on Google Cloud (App Engine)



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by Norah Altwijri

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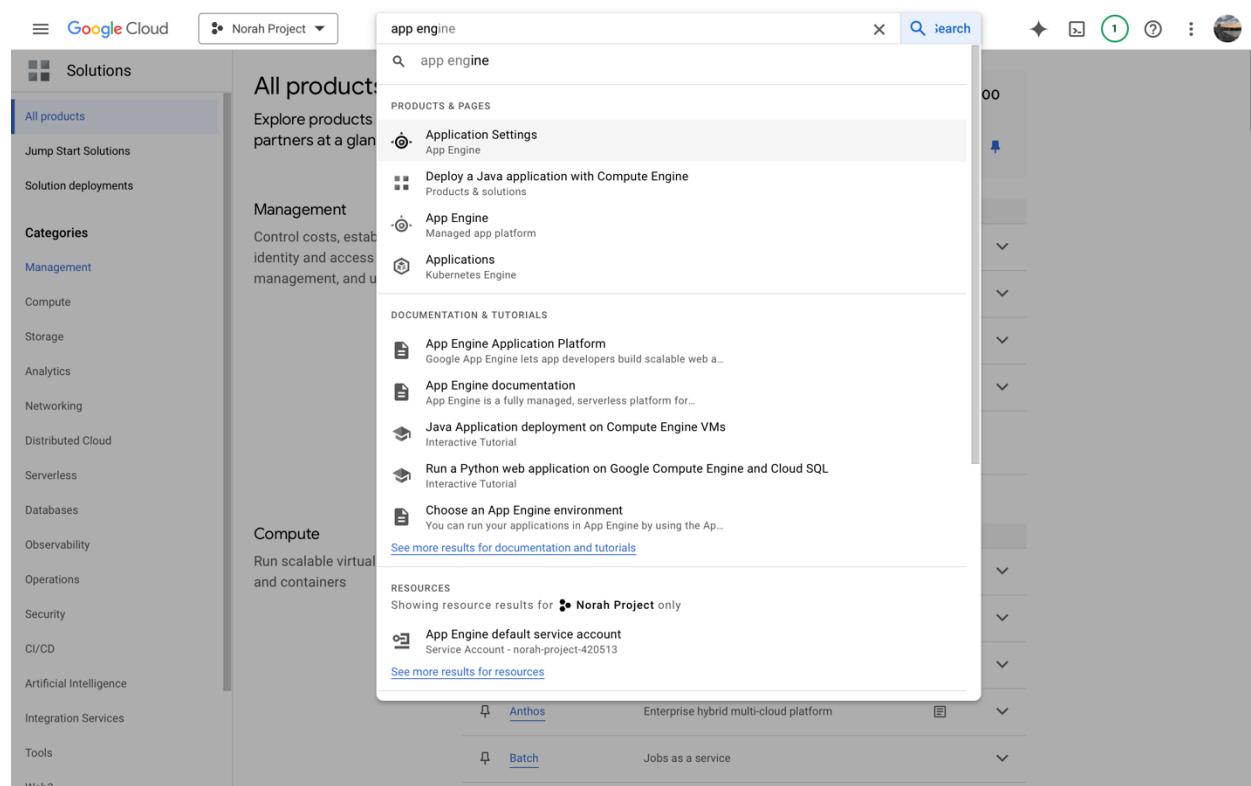
Guidelines:

- First make your own GCP account.
- second after you make your account go to app engine and create your application
- third deploying your Flask app

Hands-on-deck:

App Engine settings:
here you make your first application.

Find app engine



Open Dashboard and Click on Create

The screenshot shows the Google Cloud App Engine Dashboard. On the left, there is a sidebar with various options: Services, Versions, Instances, Task queues, Cron jobs, Security scans, Firewall rules, Quotas, Memcache, Search, and Settings. Below these are Release Notes and a back arrow. The main area is titled "Welcome to App Engine" with the sub-instruction "Build scalable apps in any language on Google's infrastructure". A prominent blue button labeled "CREATE APPLICATION" is centered. Two blue arrows point to this button: one from the top-left of the sidebar and another from the bottom-right of the main panel.

The screenshot shows the "Create app" configuration page. The sidebar on the left is identical to the dashboard. The main area starts with a step indicator "1 Configure application — 2 Get started". Below this is a "Region" section with the instruction "Select a region for your App Engine application. Please remember, once selected the region is permanently tied to the project." It features a world map with regions marked in green and orange. A dropdown menu below the map says "Select a region * us-central". The next section is "Identity and API access", which includes a dropdown for "Select a service account" and a note: "If no service account is selected the default App Engine service account will be used." At the bottom is a blue "NEXT" button.

Choose the API access

Google Cloud Norah Project Search (/) for resources, docs, products, and more Search

App Engine Create app

Dashboard Services Versions Instances Task queues Cron jobs Security scans Firewall rules Quotas Memcache Search Settings Release Notes

① Configure application — ② Get started

Region
Select a region for your App Engine application. Please remember, once selected the region is permanently tied to the project.

If no service account is selected the default App Engine service account will be used.

App Engine default service account
Compute Engine default service account
941003803469-compute@developer.gserviceaccount.com

NEW SERVICE ACCOUNT REFRESH LIST

NEXT

Google Cloud Norah Project Search (/) for resources, docs, products, and more Search

App Engine Create app

Dashboard Services Versions Instances Task queues Cron jobs Security scans Firewall rules Quotas Memcache Search Settings Release Notes

① Configure application — ② Get started

Region
Select a region for your App Engine application. Please remember, once selected the region is permanently tied to the project.

Select a region * us-central

Identity and API access
Select a service account App Engine default service account

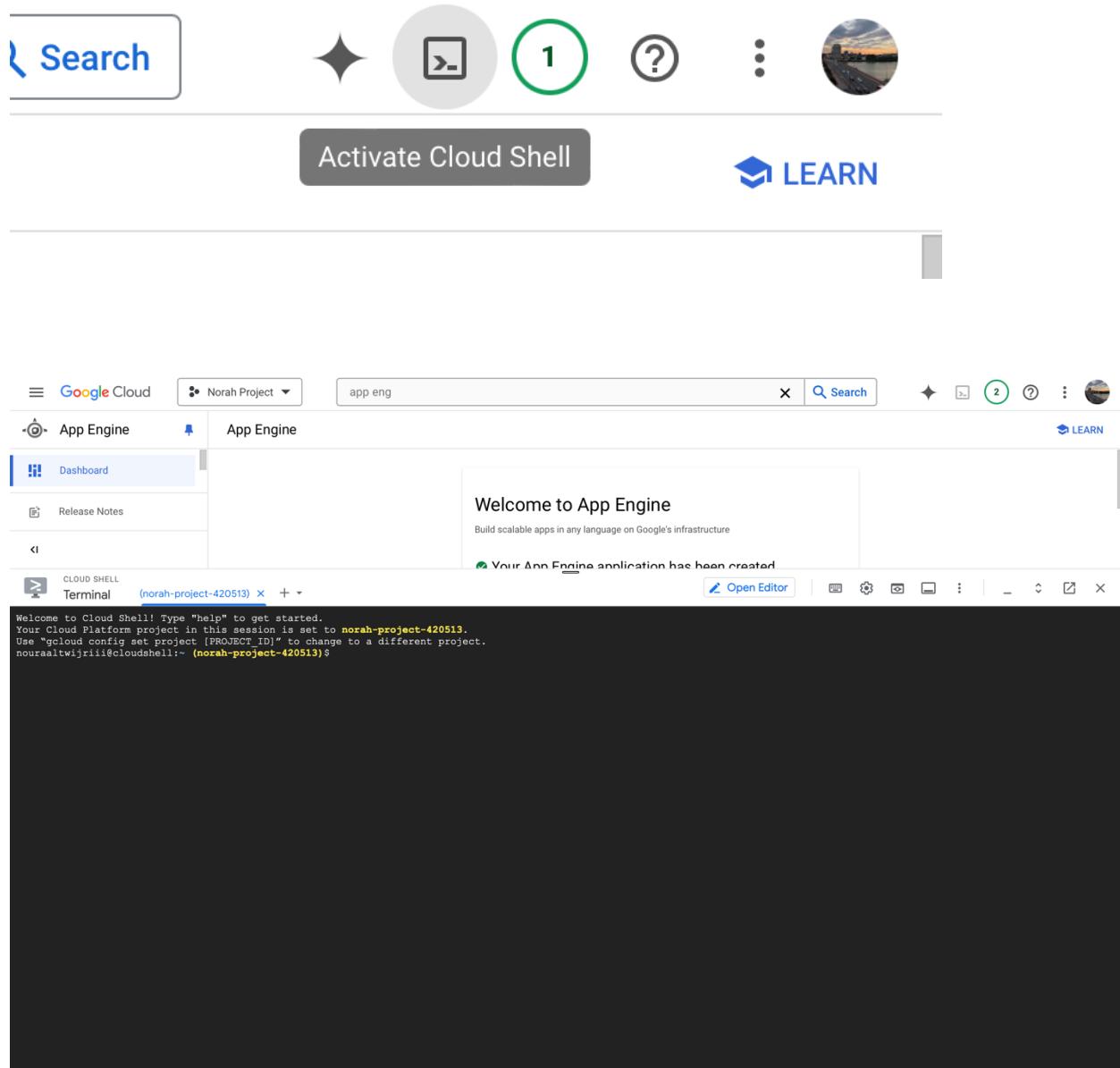
If no service account is selected the default App Engine service account will be used.

NEXT

The screenshot shows the Google Cloud App Engine dashboard. On the left, there's a sidebar with various navigation links like Dashboard, Services, Versions, Instances, Task queues, Cron jobs, Security scans, Firewall rules, Quotas, Memcache, Search, and Settings. Below these are Release Notes and a back arrow. The main content area has tabs for 'Get started' and 'Deploy with Google Cloud SDK'. Under 'Get started', there are sections for 'Resources' (Language: Python, Environment: Standard) and links to documentation and code samples. A button labeled 'I'll do this later' with an arrow pointing to it is visible. Under 'Deploy with Google Cloud SDK', there are buttons for 'DOWNLOAD THE CLOUD SDK' and 'Initialize your SDK' with the command '\$ gcloud init'. Another section shows 'Deploy to App Engine' with the command '\$ gcloud app deploy'.

Cloud Shell: After we create our first application

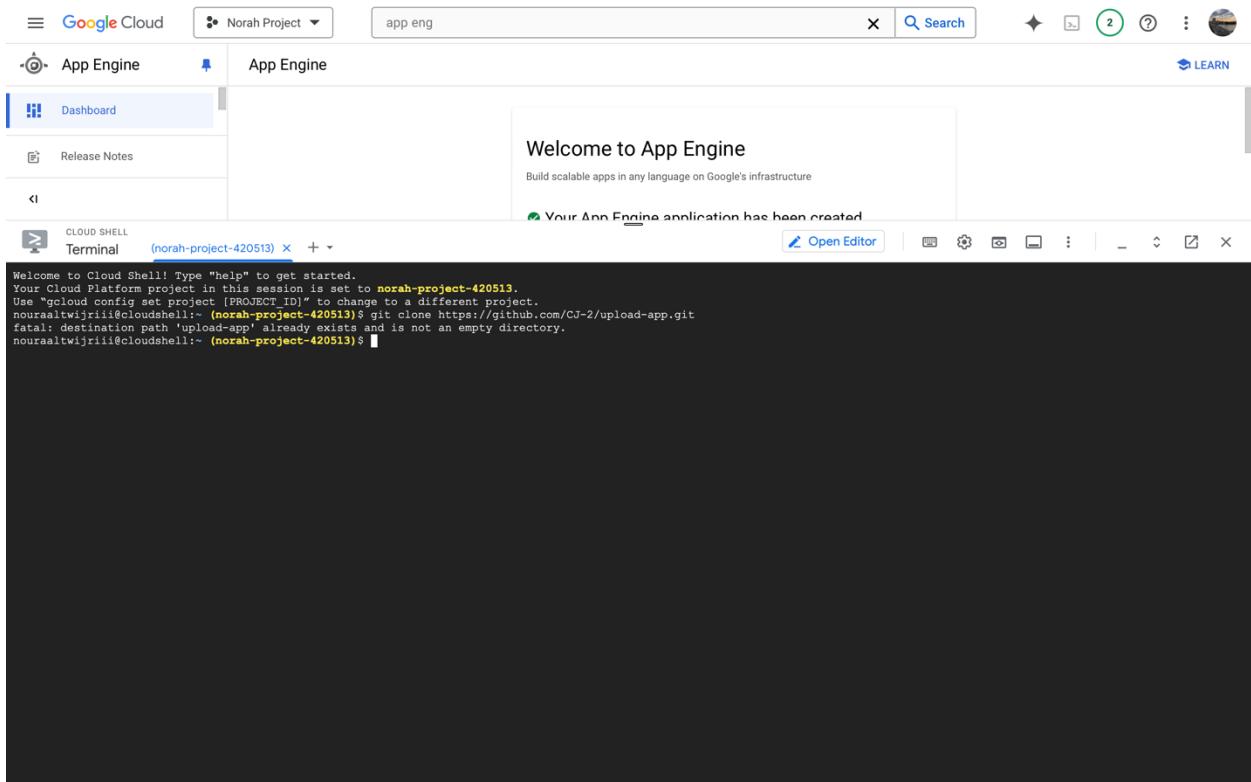
The screenshot shows the Google Cloud App Engine dashboard after creating an application. The sidebar and overall layout are identical to the previous screenshot. The main content area now displays a 'Welcome to App Engine' message with the heading 'Welcome to App Engine' and subtext 'Build scalable apps in any language on Google's infrastructure'. It also includes a message 'Your App Engine application has been created' with a green checkmark, a note about deploying by pointing to resources, and a 'GET STARTED' button.



After we open the shell cmd:

```
git clone https://github.com/CJ-2/upload-app.git
```

*mine has already been cloned but you'll get a confirmation message

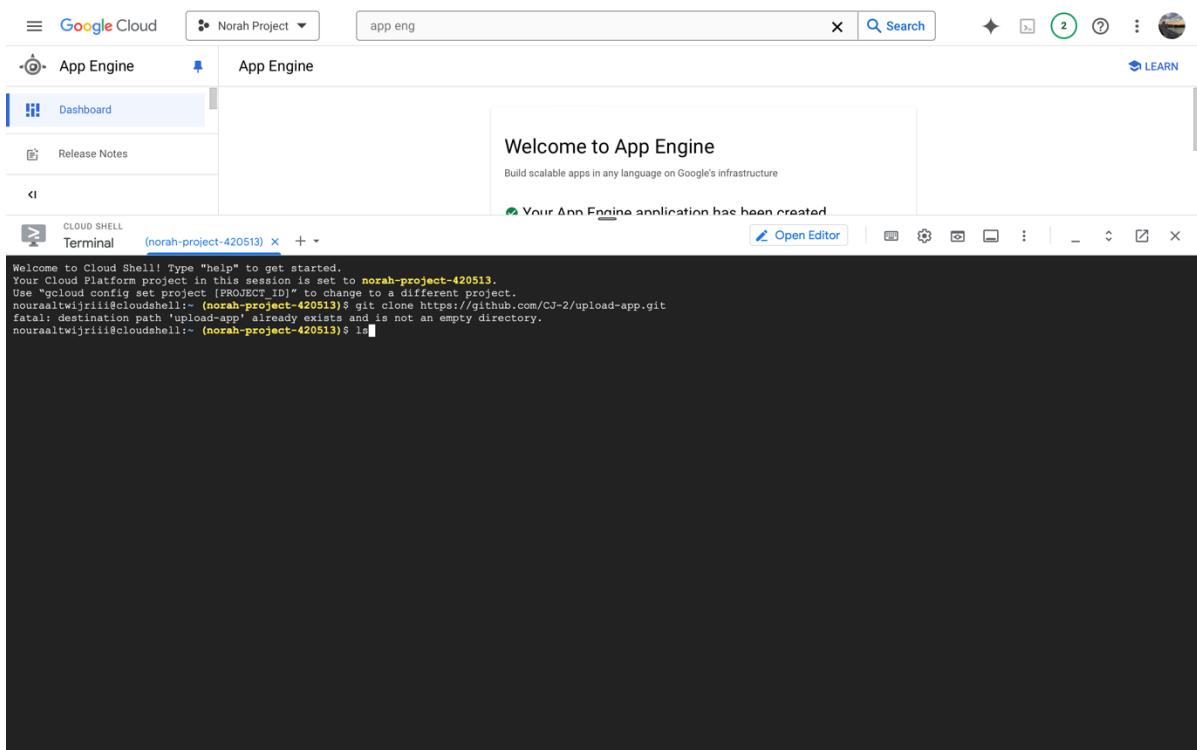


Welcome to App Engine

Your App Engine application has been created.

```
Welcome to Cloud Shell! Type "help" to get started.  
Your Cloud Platform project in this session is set to norah-project-420513.  
Use "gcloud config set project [PROJECT_ID]" to change to a different project.  
nouraaltwijrill@cloudshell:~ (norah-project-420513)$ git clone https://github.com/CJ-2/upload-app.git  
fatal: destination path 'upload-app' already exists and is not an empty directory.  
nouraaltwijrill@cloudshell:~ (norah-project-420513)$ ls
```

cmd: ls



Welcome to App Engine

Your App Engine application has been created.

```
Welcome to Cloud Shell! Type "help" to get started.  
Your Cloud Platform project in this session is set to norah-project-420513.  
Use "gcloud config set project [PROJECT_ID]" to change to a different project.  
nouraaltwijrill@cloudshell:~ (norah-project-420513)$ git clone https://github.com/CJ-2/upload-app.git  
fatal: destination path 'upload-app' already exists and is not an empty directory.  
nouraaltwijrill@cloudshell:~ (norah-project-420513)$ ls
```

cmd: cd upload-app

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to **norah-project-420513**.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ git clone https://github.com/CJ-2/upload-app.git
fatal: destination path 'upload-app' already exists and is not an empty directory.
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ ls
README-cloudshell.txt upload-app
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ cd upload-app
nouraaltwijrriii@cloudshell:~/upload-app (norah-project-420513)\$

cmd: ls

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to **norah-project-420513**.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ git clone https://github.com/CJ-2/upload-app.git
fatal: destination path 'upload-app' already exists and is not an empty directory.
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ ls
README.md storage
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$

cmd: cd storage

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to **norah-project-420513**.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ git clone https://github.com/CJ-2/upload-app.git
fatal: destination path 'upload-app' already exists and is not an empty directory.
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ ls
README-cloudshell.txt upload-app
nouraaltwijrriii@cloudshell:~ (norah-project-420513)\$ cd upload-app
nouraaltwijrriii@cloudshell:~/upload-app (norah-project-420513)\$ ls
README.md storage
nouraaltwijrriii@cloudshell:~/upload-app (norah-project-420513)\$ cd storage

cmd: ls

Welcome to App Engine
Build scalable apps in any language on Google's infrastructure
Your App Engine application has been created.

```
Welcome to Cloud Shell! Type "help" to get started.  
Your Cloud Platform project in this session is set to norah-project-420513.  
Use "gcloud config set project [PROJECT_ID]" to change to a different project.  
noraaaltwijriiii@cloudshell:~ (norah-project-420513)$ git clone https://github.com/CJ-2/upload-app.git  
fatal: destination path 'upload-app' already exists and is not an empty directory.  
noraaaltwijriiii@cloudshell:~ (norah-project-420513)$ ls  
README-cloudshell.txt upload-app  
noraaaltwijriiii@cloudshell:~ (norah-project-420513)$ cd upload-app  
noraaaltwijriiii@cloudshell:~/upload-app (norah-project-420513)$ ls  
README.md storage  
noraaaltwijriiii@cloudshell:~/upload-app (norah-project-420513)$ cd storage  
noraaaltwijriiii@cloudshell:~/upload-app/storage (norah-project-420513)$ ls
```

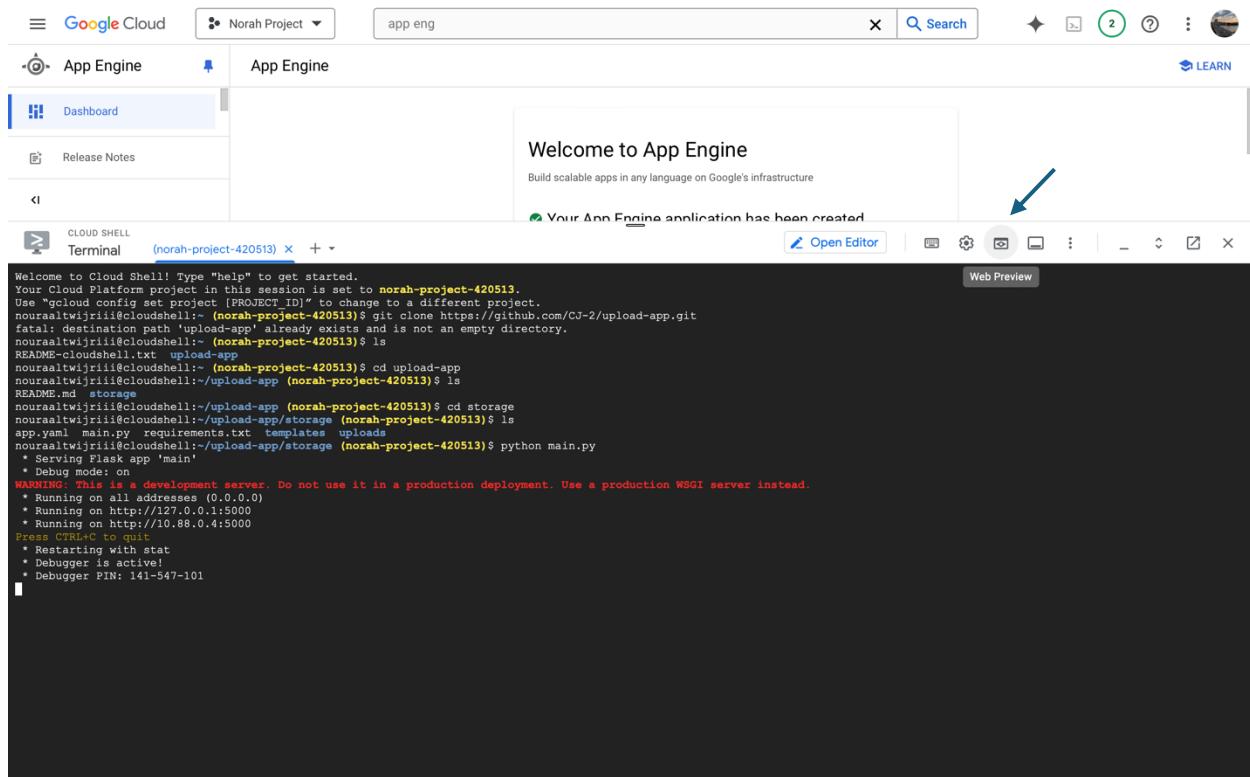
cmd: python main.py

Welcome to App Engine
Build scalable apps in any language on Google's infrastructure
Your App Engine application has been created.

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Welcome to Cloud Shell! Type "help" to get started.  
Your Cloud Platform project in this session is set to norah-project-420513.  
Use "gcloud config set project [PROJECT_ID]" to change to a different project.  
noraaaltwijriiii@cloudshell:~ (norah-project-420513)$ git clone https://github.com/CJ-2/upload-app.git  
fatal: destination path 'upload-app' already exists and is not an empty directory.  
noraaaltwijriiii@cloudshell:~ (norah-project-420513)$ ls  
README-cloudshell.txt upload-app  
noraaaltwijriiii@cloudshell:~ (norah-project-420513)$ cd upload-app  
noraaaltwijriiii@cloudshell:~/upload-app (norah-project-420513)$ ls  
README.md storage  
noraaaltwijriiii@cloudshell:~/upload-app (norah-project-420513)$ cd storage  
noraaaltwijriiii@cloudshell:~/upload-app/storage (norah-project-420513)$ ls  
app.yaml main.py requirements.txt templates uploads  
noraaaltwijriiii@cloudshell:~/upload-app/storage (norah-project-420513)$ python main.py
```

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to **norah-project-420513**.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
nouraaltwijiiji@cloudshell:~ (norah-project-420513)\$ git clone https://github.com/CJ-2/upload-app.git
fatal: destination path 'upload-app' already exists and is not an empty directory.
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README-cloudshell.txt upload-app
nouraaltwijiiji@cloudshell:~ (norah-project-420513)\$ cd upload-app
nouraaltwijiiji@cloudshell:~/upload-app (norah-project-420513)\$ ls
README.md storage
nouraaltwijiiji@cloudshell:~/upload-app (norah-project-420513)\$ cd storage
nouraaltwijiiji@cloudshell:~/upload-app/storage (norah-project-420513)\$ ls
app.yaml main.py requirements.txt templates uploads
nouraaltwijiiji@cloudshell:~/upload-app/storage (norah-project-420513)\$ 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 all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://10.88.0.4:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 141-547-101

Click on web preview and follow the steps.



Google Cloud Norah Project app eng Search

App Engine App Engine

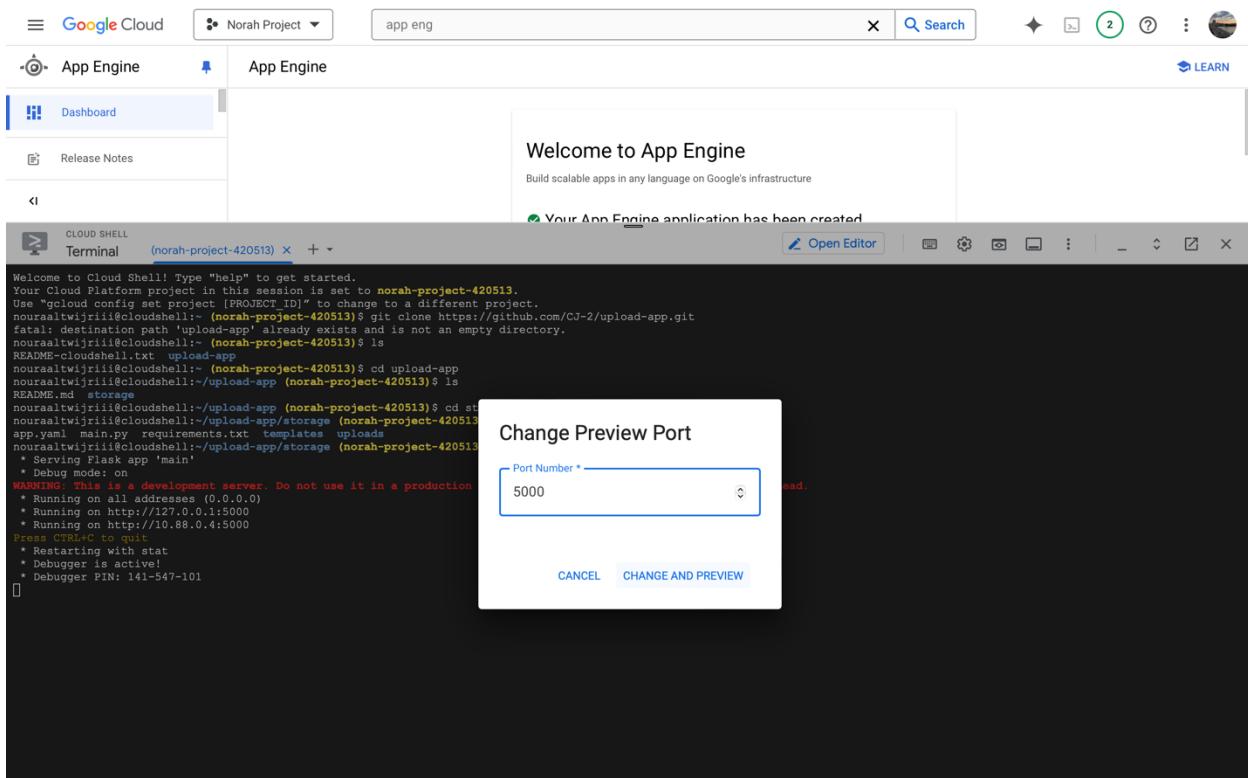
Dashboard Release Notes

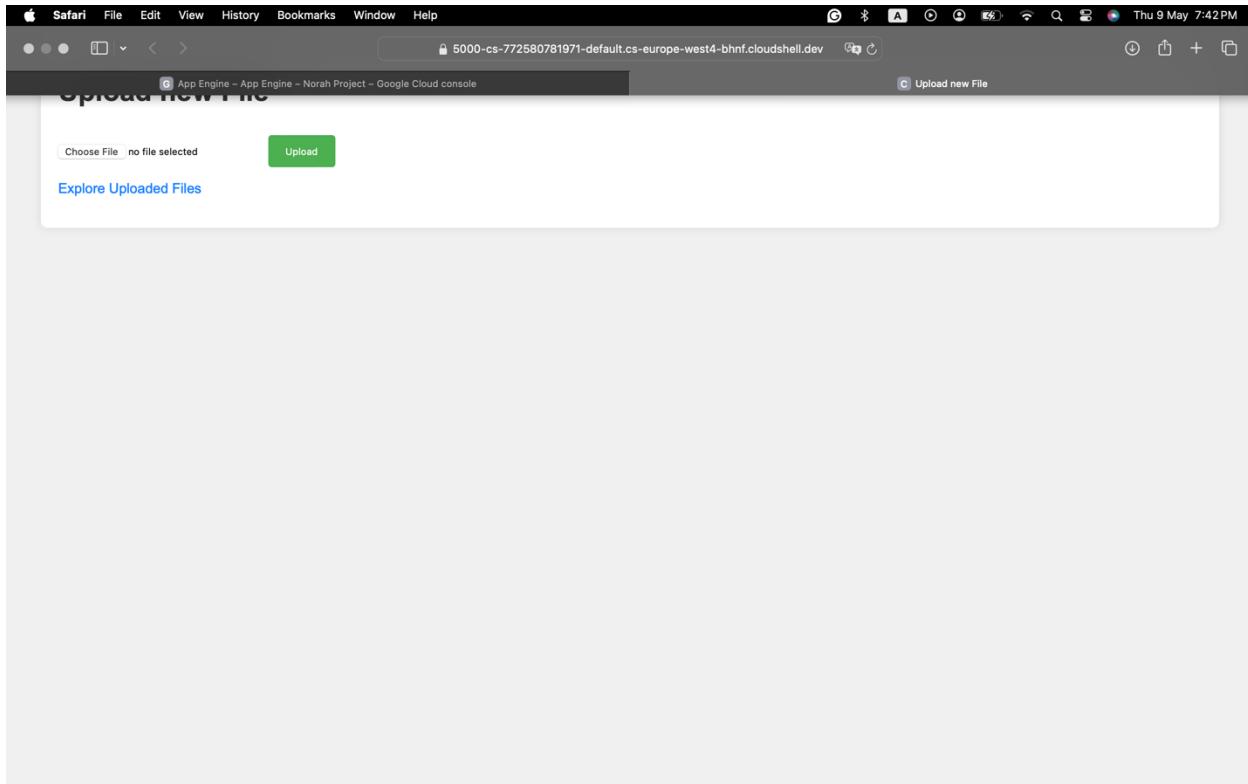
Welcome to App Engine

Your App Engine application has been created.

CLOUD SHELL Terminal (norah-project-420513) +

```
Welcome to Cloud Shell! Type "help" to get started.  
Your Cloud Platform project in this session is set to norah-project-420513.  
Use "gcloud config set project [PROJECT_ID]" to change to a different project.  
nouraaltwijrjiii@cloudshell:~ (norah-project-420513)$ git clone https://github.com/CJ-2/upload-app.git  
fatal: destination path 'upload-app' already exists and is not an empty directory.  
nouraaltwijrjiii@cloudshell:~ (norah-project-420513)$ ls  
README.md storage  
nouraaltwijrjiii@cloudshell:~/upload-app (norah-project-420513)$ cd storage  
nouraaltwijrjiii@cloudshell:~/upload-app/storage (norah-project-420513)$ ls  
app.yaml main.py requirements.txt templates uploads  
nouraaltwijrjiii@cloudshell:~/upload-app/storage (norah-project-420513)$ 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 all addresses (0.0.0.0)  
* Running on http://127.0.0.1:5000  
* Running on http://10.88.0.4:5000  
Press CTRL+C to quit  
* Restarting with stat  
* Debugger is active!  
* Debugger PIN: 141-547-101
```





Return to shell

cmd: **CTRL+C**

```
nouraaltwijrrii@cloudshell:~/upload-app/storage$ 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 all addresses (0.0.0.0)
* Running on http://127.0.0.1:5000
* Running on http://10.88.0.4:5000
Press CTRL+C to quit
* Restarting with stat
* Debugger is active!
* Debugger PIN: 526-025-738
127.0.0.1 - - [18/Apr/2024 14:49:11] "GET /?authuser=0&redirectedPreviously=true HTTP/1.1" 200 -
127.0.0.1 - - [18/Apr/2024 14:49:11] "GET /favicon.ico HTTP/1.1" 404 -
127.0.0.1 - - [18/Apr/2024 14:50:11] "POST /upload HTTP/1.1" 302 -
127.0.0.1 - - [18/Apr/2024 14:50:11] "GET /uploads/2-Exercises.pdf HTTP/1.1" 200 -
127.0.0.1 - - [18/Apr/2024 14:50:12] "GET /uploads/2-Exercises.pdf HTTP/1.1" 206 -
^nouraaltwijrrii@cloudshell:~/upload-app/storage$ ls
app.yaml main.py requirements.txt templates uploads
nouraaltwijrrii@cloudshell:~/upload-app/storage$
```

cmd: **clear**

The screenshot shows the Google Cloud Platform App Engine dashboard. The top navigation bar includes 'Google Cloud' (with a dropdown for 'Norah Project'), 'Search', and various icons. The main content area has a sidebar with 'Dashboard' and 'Release Notes' options. The main panel displays the 'Welcome to App Engine' message: 'Build scalable apps in any language on Google's infrastructure' and 'Your App Engine application has been created.' At the bottom, there is a 'CLOUD SHELL Terminal' window with the command 'clear' entered.

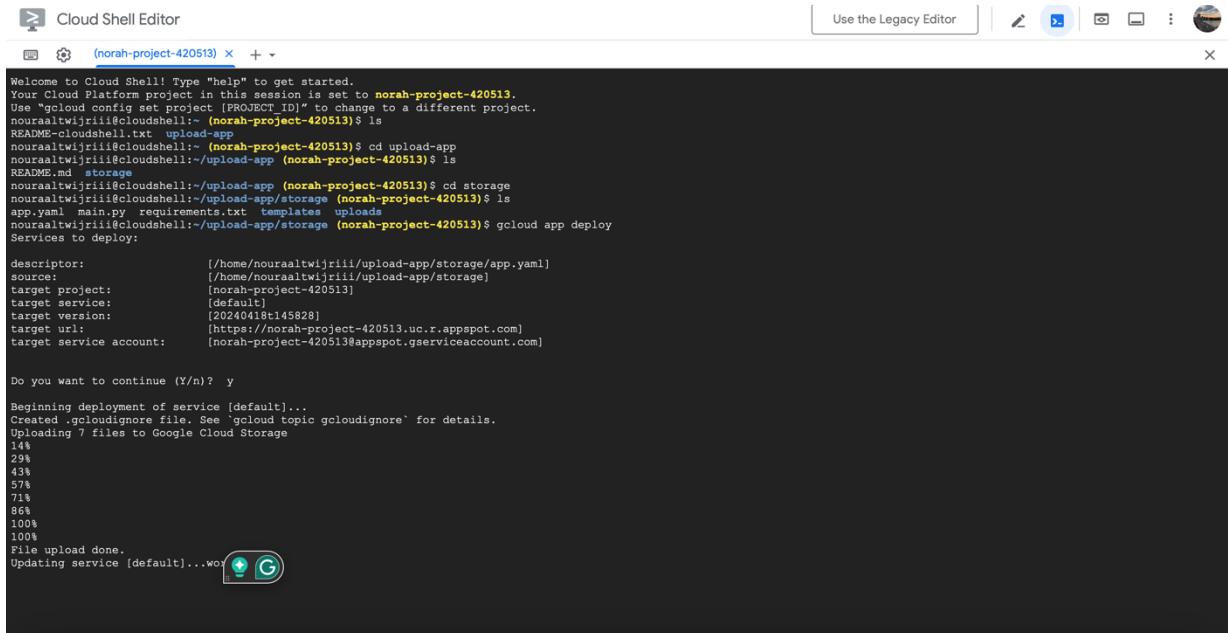
cmd: ls

The screenshot shows the Google Cloud Platform interface for an App Engine project named 'Norah Project'. The main area displays a 'Welcome to App Engine' message with the sub-instruction 'Build scalable apps in any language on Google's infrastructure'. Below this, a notification states 'Your App Engine application has been created'. At the bottom, a terminal window titled 'CLOUD SHELL Terminal' shows the command 'ls' being run, with the output listing files: 'app.yaml', 'main.py', 'requirements.txt', 'templates', and 'uploads'.

cmd: gcloud app deploy

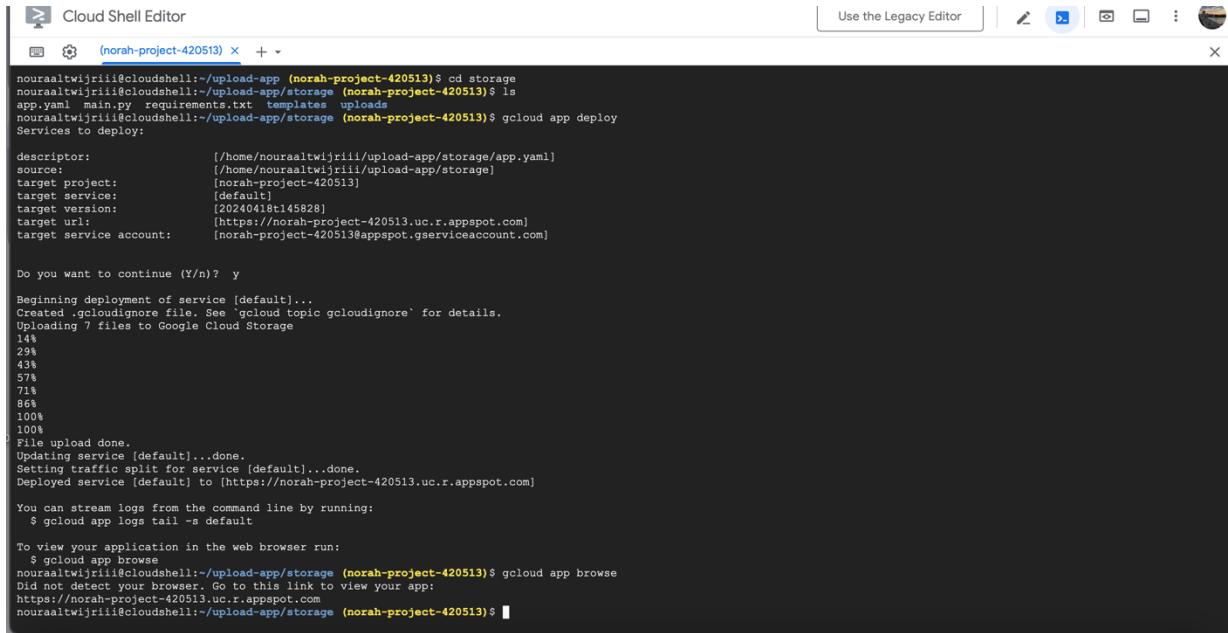
This screenshot is identical to the one above, showing the Google Cloud Platform App Engine dashboard and a terminal window. The terminal window now shows the command 'gcloud app deploy' being run, indicating the deployment process is underway.

cmd: enter y



```
Welcome to Cloud Shell! Type "help" to get started.  
Your Cloud Platform project in this session is set to norah-project-420513.  
Use "gcloud config set project [PROJECT ID]" to change to a different project.  
nouraaltwirjrii@cloudshell:~ (norah-project-420513)$ ls  
README-ME-cloudshell.txt upload-app  
nouraaltwirjrii@cloudshell:~ (norah-project-420513)$ cd upload-app  
nouraaltwirjrii@cloudshell:~/upload-app (norah-project-420513)$ ls  
README.md storage  
nouraaltwirjrii@cloudshell:~/upload-app (norah-project-420513)$ cd storage  
nouraaltwirjrii@cloudshell:~/upload-app/storage (norah-project-420513)$ ls  
app.yaml main.py requirements.txt templates uploads  
nouraaltwirjrii@cloudshell:~/upload-app/storage (norah-project-420513)$ gcloud app deploy  
Services to deploy:  
  
descriptor:      [/home/nouraaltwirjrii/upload-app/storage/app.yaml]  
source:          [/home/nouraaltwirjrii/upload-app/storage]  
target project: [norah-project-420513]  
target service:  [default]  
target version:  [20240418t145828]  
target url:     [https://norah-project-420513.uc.r.appspot.com]  
target service account: [norah-project-420513@appspot.gserviceaccount.com]  
  
Do you want to continue (Y/n)? y  
  
Beginning deployment of service [default]...  
Created .gcloudignore file. See 'gcloud topic gcloudignore' for details.  
Uploading 7 files to Google Cloud Storage  
14%  
29%  
43%  
57%  
71%  
86%  
100%  
100%  
File upload done.  
Updating service [default]...wo [G]
```

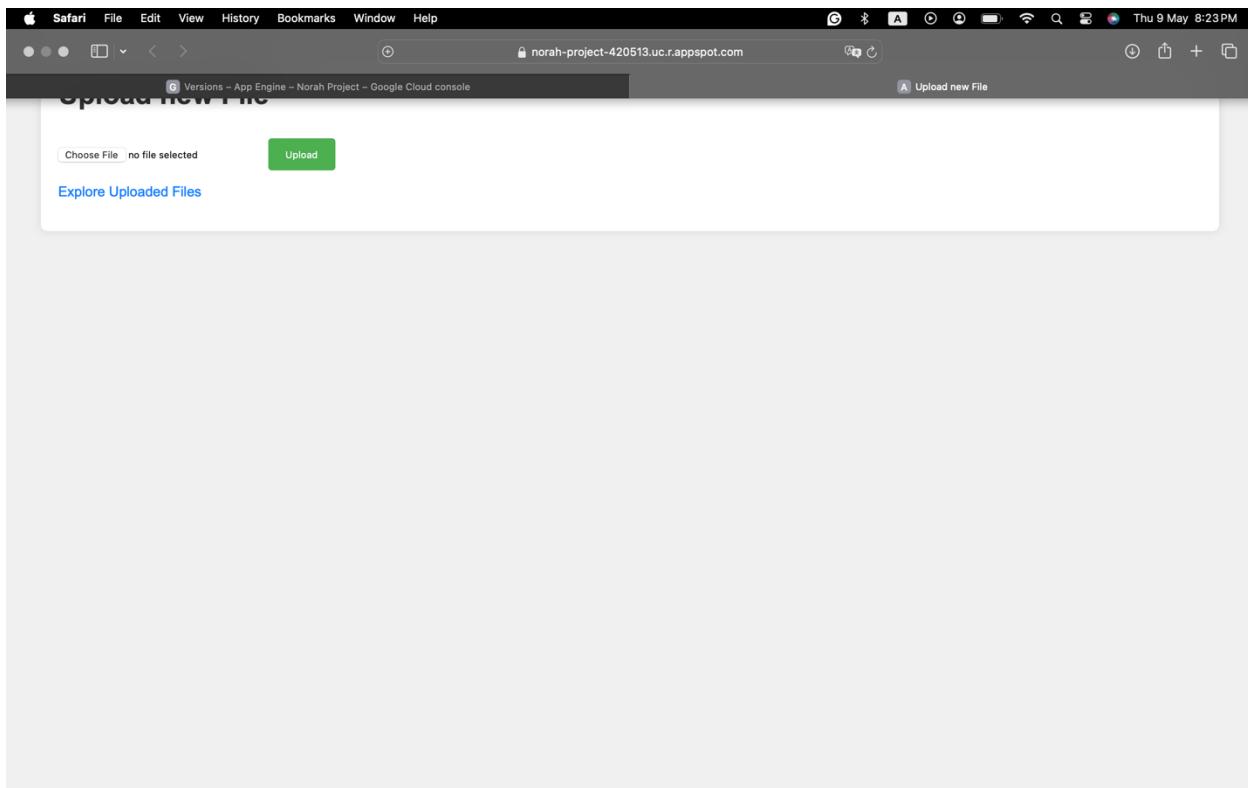
cmd: gcloud app browse



```
nouraaltwirjrii@cloudshell:~/upload-app (norah-project-420513)$ cd storage  
nouraaltwirjrii@cloudshell:~/upload-app/storage (norah-project-420513)$ ls  
app.yaml main.py requirements.txt templates uploads  
nouraaltwirjrii@cloudshell:~/upload-app/storage (norah-project-420513)$ gcloud app deploy  
Services to deploy:  
  
descriptor:      [/home/nouraaltwirjrii/upload-app/storage/app.yaml]  
source:          [/home/nouraaltwirjrii/upload-app/storage]  
target project: [norah-project-420513]  
target service:  [default]  
target version:  [20240418t145828]  
target url:     [https://norah-project-420513.uc.r.appspot.com]  
target service account: [norah-project-420513@appspot.gserviceaccount.com]  
  
Do you want to continue (Y/n)? y  
  
Beginning deployment of service [default]...  
Created .gcloudignore file. See 'gcloud topic gcloudignore' for details.  
Uploading 7 files to Google Cloud Storage  
14%  
29%  
43%  
57%  
71%  
86%  
100%  
100%  
File upload done.  
Updating service [default]...done.  
Setting traffic split for service [default]...done.  
Deployed service [default] to [https://norah-project-420513.uc.r.appspot.com]  
  
You can stream logs from the command line by running:  
$ gcloud app logs tail -s default  
  
To view your application in the web browser run:  
$ gcloud app browse  
nouraaltwirjrii@cloudshell:~/upload-app/storage (norah-project-420513)$ gcloud app browse  
Did not detect your browser. Go to this link to view your app:  
https://norah-project-420513.uc.r.appspot.com  
nouraaltwirjrii@cloudshell:~/upload-app/storage (norah-project-420513)$ ■
```

After that click on the link.

And now your app is deployed!



To find your version, go back to the dashboard and select Versions

A screenshot of the Google Cloud App Engine "Versions" dashboard. On the left, there's a sidebar with links like Dashboard, Services, Versions (which is selected and highlighted in blue), Instances, Task queues, Cron jobs, Security scans, Firewall rules, Quotas, Memcache, Search, and Settings. An arrow points from the text above to the "Versions" link in the sidebar. The main area shows a table of versions. The table has columns for Version, Status, Traffic Allocation, Instances, Runtime, Environment, Size, and Service Account. One row is highlighted with a blue border, showing the details: Version 20240418t145828, Status Serving, Traffic Allocation 100%, Instances 0, Runtime python39, Environment Standard, Size 7.4 MB, and Service Account norah-project-420513@appspot.gserviceaccount.com.