CS356 -lab05:2g - Branden-Codd, 940428984

1. Cloud Datastore

- No screenshots or observations

2. Model_datastore

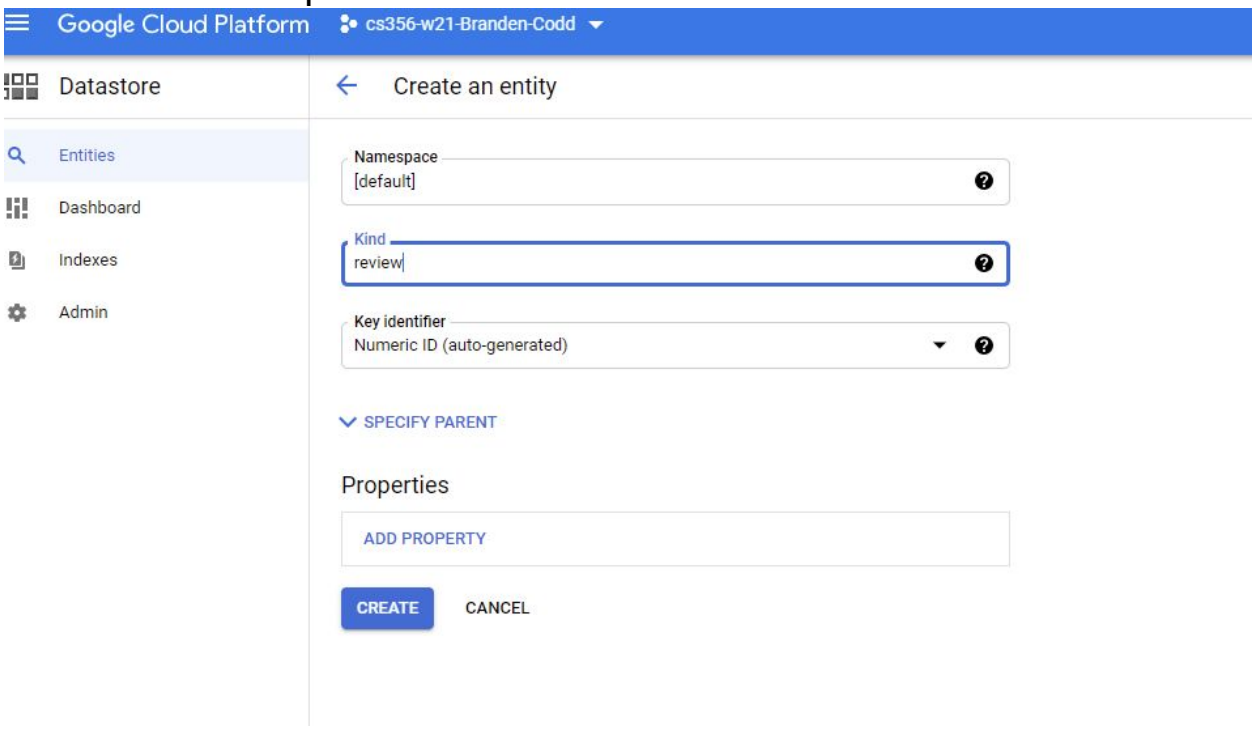
- Edit model_datastore.py to change YOUR_PROJECT_ID to point to your project.

```
    return [entity['name'],entity['email'],entity['date'],entity['message']]

class model(Model):
    def __init__(self):
        self.client = datastore.Client('cs356-w21-branden-codd')

    def select(self):
```

3. Datastore setup



4. Version 1: Ubuntu VM Python

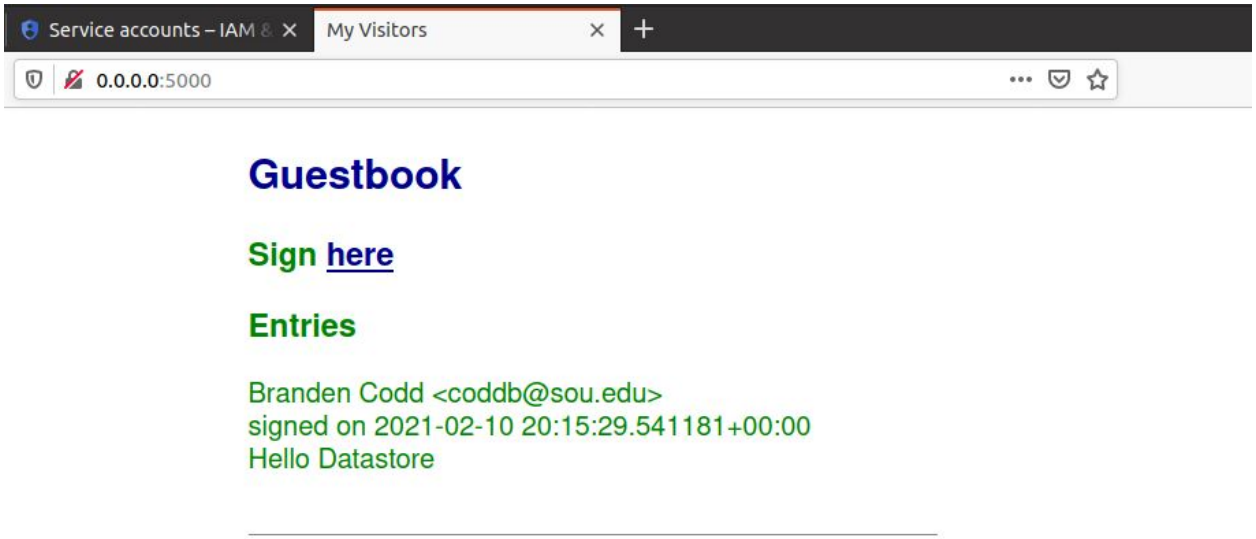
- No screenshots or observations

5. Obtain GCP credentials

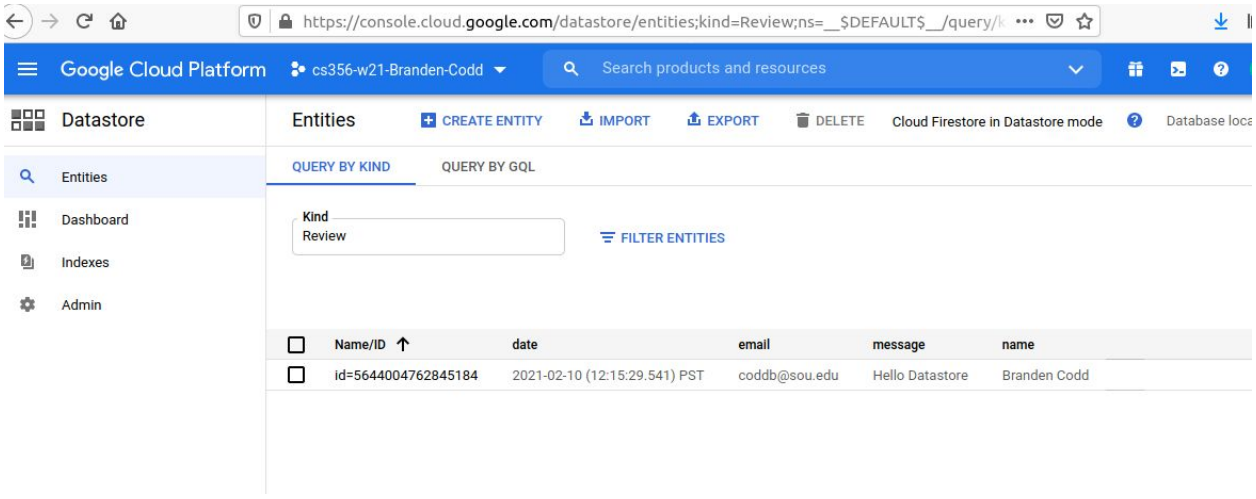
```
(env) coddb@coddb-VirtualBox:~/cs356-cloud-files/05_gcp_datastore$ export GOOGLE_APPLICATION_CREDENTI
ALS=~/Downloads/cs356-w21-branden-codd-c8d9d77ef778.json
(env) coddb@coddb-VirtualBox:~/cs356-cloud-files/05_gcp_datastore$
```

6. Run the application

- take a screenshot of the output for your lab notebook.



- Take a screenshot of the entity you have just added to Datastore for your lab notebook.

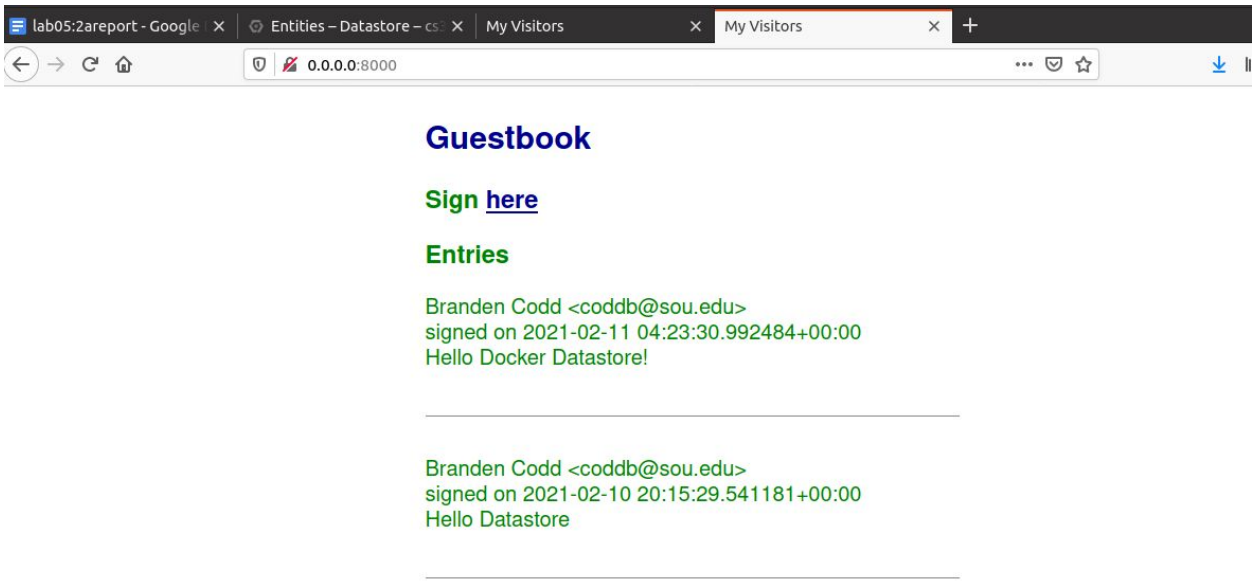


7. Version 2: Ubuntu VM Docker

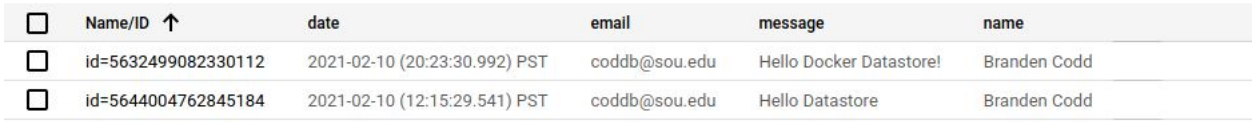
- no screenshots or observations

8. Run the application

- take a screenshot of the output for your lab notebook.



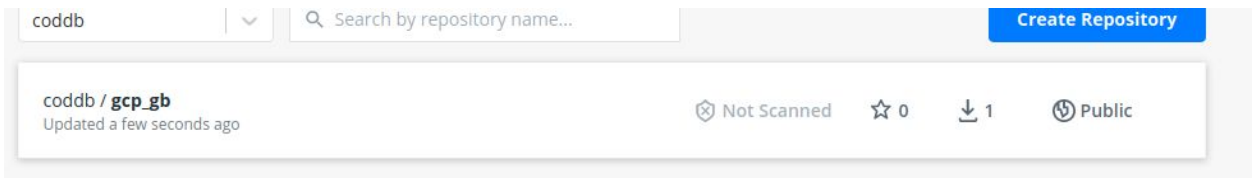
- Go back to the Datastore console and see that a second item has been added to the table.



Name/ID	date	email	message	name
id=5632499082330112	2021-02-10 (20:23:30.992) PST	coddb@sou.edu	Hello Docker Datastore!	Branden Codd
id=5644004762845184	2021-02-10 (12:15:29.541) PST	coddb@sou.edu	Hello Datastore	Branden Codd

9. Push the container image

- View the container image on DockerHub and take a screenshot.

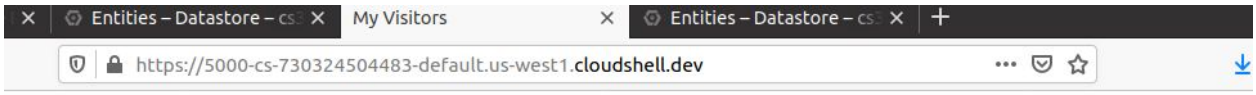


10. Version 3: GCP Cloud Shell

```
36
37  class model(Model):
38      def __init__(self):
39          self.client = datastore.Client('cs356-w21-branden-codd')
40
41      def select(self):
```

11. Run the application

- Take a screenshot as before that shows your entry and the URL bar.



Guestbook

Sign here

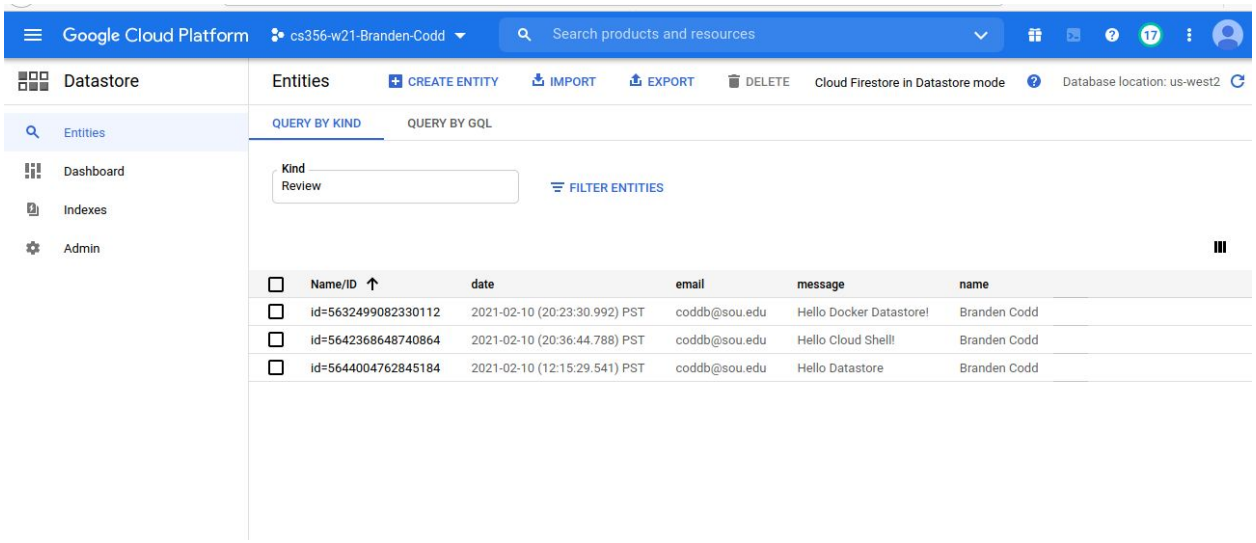
Entries

Branden Codd <coddb@sou.edu>
signed on 2021-02-11 04:23:30.992484+00:00
Hello Docker Datastore!

Branden Codd <coddb@sou.edu>
signed on 2021-02-11 04:36:44.788618+00:00
Hello Cloud Shell!

Branden Codd <coddb@sou.edu>
signed on 2021-02-10 20:15:29.541181+00:00
Hello Datastore

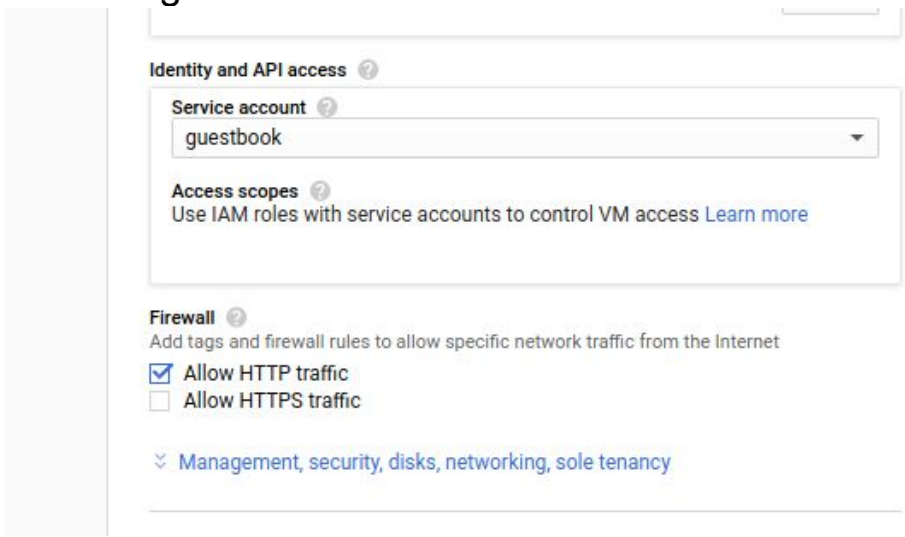
- take a screenshot like the one below that shows the guestbook entry added.



12. Version 4: GCP Compute Engine

- No screenshots or observations

13. Configure service account

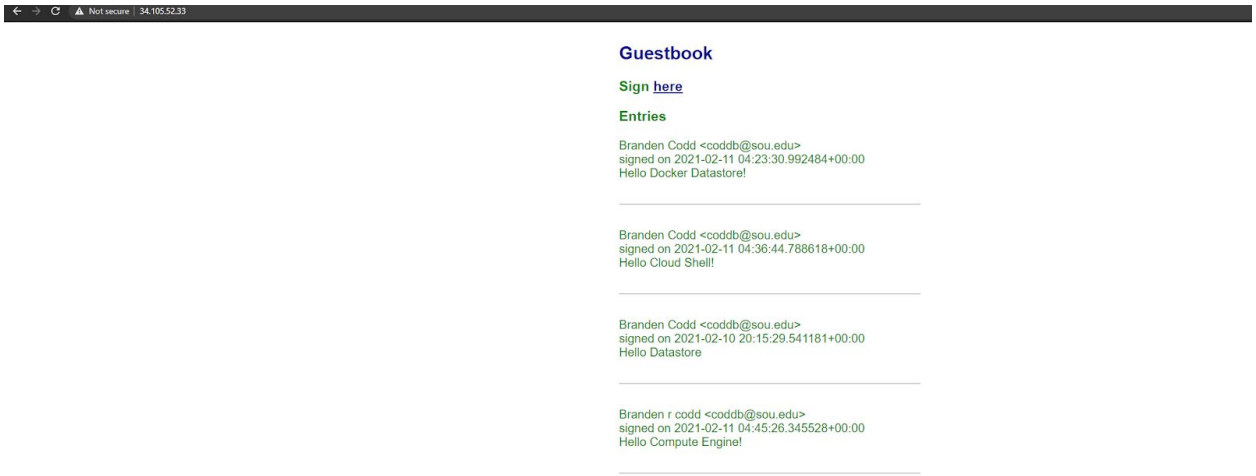


14. Set up the instance

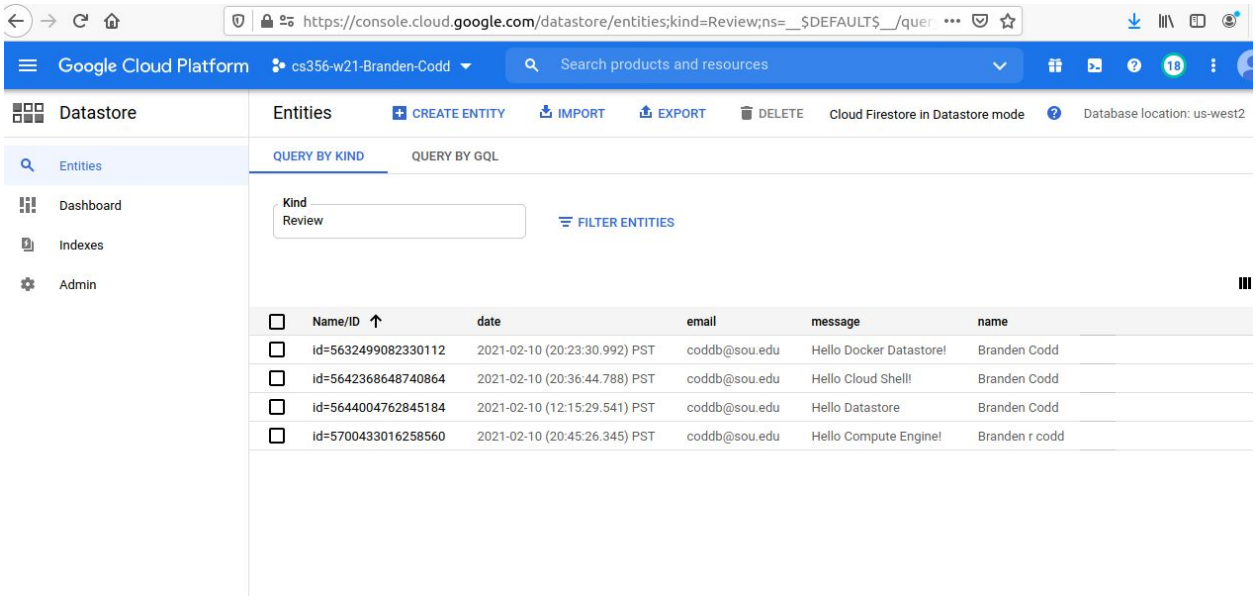
```
coddb@guestbook:~$ sudo docker run -p 80:80 --env PORT=80 coddb/gcp_gb
Unable to find image 'coddb/gcp_gb:latest' locally
latest: Pulling from coddb/gcp_gb
0ecb575e629c: Pull complete
3cfeada48ce8: Pull complete
6e425db4513a: Pull complete
86f69300467a: Pull complete
62f1606a3997: Pull complete
64f7c1cc1932: Pull complete
b898f13db3be: Pull complete
2decc1616360: Pull complete
86a766cc8910: Pull complete
Digest: sha256:96e6f34d1ed035933d3be16e823f89b9d863c04fa690445fe36fe863f056a1e8
Status: Downloaded newer image for coddb/gcp_gb:latest
[2021-02-11 04:44:18 +0000] [1] [INFO] Starting gunicorn 20.0.4
[2021-02-11 04:44:18 +0000] [1] [INFO] Listening at: http://0.0.0.0:80 (1)
[2021-02-11 04:44:18 +0000] [1] [INFO] Using worker: threads
[2021-02-11 04:44:18 +0000] [8] [INFO] Booting worker with pid: 8
```

15. Visit the application

- Take a screenshot as before that shows your entry and the IP address in the URL bar.



- Show the entries within Cloud Datastore.


https://console.cloud.google.com/datastore/entities;kind=Review;ns=__$DEFAULT$__/quer
Google Cloud Platform
cs356-w21-Branden-Codd
Search products and resources
Datastore
Entities
Dashboard
Indexes
Admin
Entities
CREATE ENTITY
IMPORT
EXPORT
DELETE
Cloud Firestore in Datastore mode
Database location: us-west2
QUERY BY KIND
QUERY BY GQL
Kind
Review
FILTER ENTITIES
Name/ID
date
email
message
name
id=5632499082330112
2021-02-10 (20:23:30.992) PST
coddb@sou.edu
Hello Docker Datastore!
Branden Codd
id=5642368648740864
2021-02-10 (20:36:44.788) PST
coddb@sou.edu
Hello Cloud Shell!
Branden Codd
id=5644004762845184
2021-02-10 (12:15:29.541) PST
coddb@sou.edu
Hello Datastore
Branden Codd
id=5700433016258560
2021-02-10 (20:45:26.345) PST
coddb@sou.edu
Hello Compute Engine!
Branden r codd