

05.1g: Storage, IAM

2. GCP Cloud Storage #1 (USGS)

What roles are attached to the Compute Engine default service account?

Would they be sufficient for the VM to perform its functions?

What permissions are given by the default access scope to Cloud Storage?

Would they be sufficient for the VM to perform its functions?

4. USGS data and setup

What time did the latest earthquake happen?

What was the magnitude (mag)?

Where was the place it happened?

6. Create and distribute earthquake image

Take a screenshot of the image that has been created for your lab notebook.

10. Service account roles (Compute)

What is the exact error message that is returned?

Take a screenshot of the output for your notebook.

What role needs to be added to the service account's permissions for the VM to have access to list the project's Compute Engine instances?

What is the exact error message that is returned?

What role needs to be added to the service account's permissions for the VM to have access to add an object to the storage bucket?

14. View object

Take a screenshot the shows the entire URL and the image that has been retrieved:

05.2a: DynamoDB Guestbook

5. Run the application

8. Push the container image

11. Run the application

05.1g: Storage, IAM

2. GCP Cloud Storage #1 (USGS)

- What roles are attached to the Compute Engine default service account?

Editor
Owner

- Would they be sufficient for the VM to perform its functions?

Yes

- What permissions are given by the default access scope to Cloud Storage?

logging.logEntries.create
runtimeconfig.variables.create

- Would they be sufficient for the VM to perform its functions?

No

4. USGS data and setup

- What `time` did the latest earthquake happen?

```
2021-11-01T01:52:36.260Z
```

- What was the magnitude (`mag`)?

```
1.82000005
```

- Where was the `place` it happened?

```
"5 km S of Pāhala, Hawaii"
```

6. Create and distribute earthquake image

- Take a screenshot of the image that has been created for your lab notebook.

Google Cloud Platform cloud-f21-Mazin-Ashfaq-ashfaq

Search products and resources

Cloud Storage

Browser

Monitoring

Settings

Object details

Buckets > earthquakelab21 > earthquakes.png

Public URL

Authenticated URL

gsutil URI gs://earthquakelab21/earthquakes.png

Permissions

Public access	Not public
---------------	------------

Protection

Hold status	None
Version history	—
Retention policy	None
Encryption type	Google-managed key

Earthquakes 2021-10-25 to 2021-11-01

10. Service account roles (Compute)

- What is the exact error message that is returned?

```
Command 'gcloud' not found, did you mean:  
command 'icloud' from deb python3-pyicloud  
command 'cgcloud' from deb python-cgcloud-core  
Try: apt install <deb name>
```

- Take a screenshot of the output for your notebook.

```
ashfaq@instance-2:~$ gcloud compute instances list
NAME          ZONE          MACHINE_TYPE  PREEMPTIBLE  INTERNAL_IP  EXTERNAL_IP  STATUS
instance-1    us-west1-b    f1-micro      ☐      10.138.0.10   34.83.250.68  RUNNING
instance-2    us-west1-b    f1-micro      ☐      10.138.0.11   34.82.201.12  RUNNING
ashfaq@instance-2:~$
```

- What role needs to be added to the service account's permissions for the VM to have access to list the project's Compute Engine instances?

Compute Network Viewer

- What is the exact error message that is returned?

```
Copying file://moonquakes.png [Content-Type=image/png]...
```

```
AccessDeniedException: 403
```

```
gcs-lab@cloud-f21-mazin-ashfaq-ashfaq.iam.gserviceaccount.com does not
have storage.objects.create access to the Google Cloud Storage object.
```

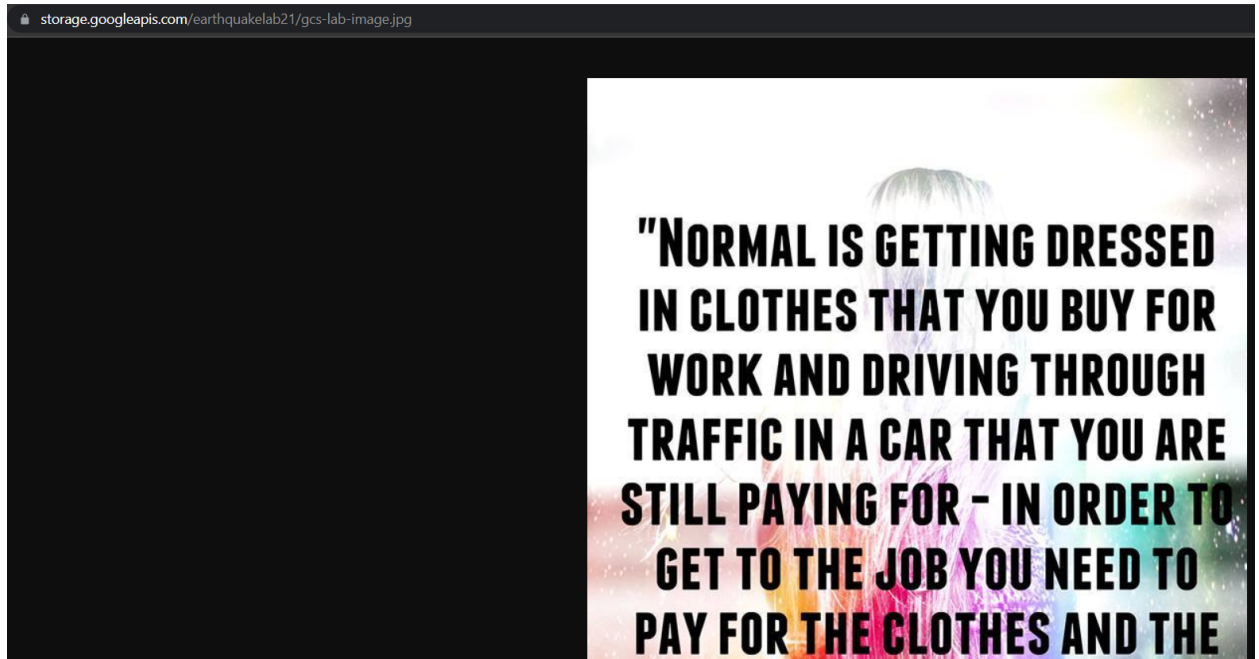
- What role needs to be added to the service account's permissions for the VM to have access to add an object to the storage bucket?

Storage Object Creator

```
bucket = storage_client.get_bucket('earthquakelab21')
```

14. View object

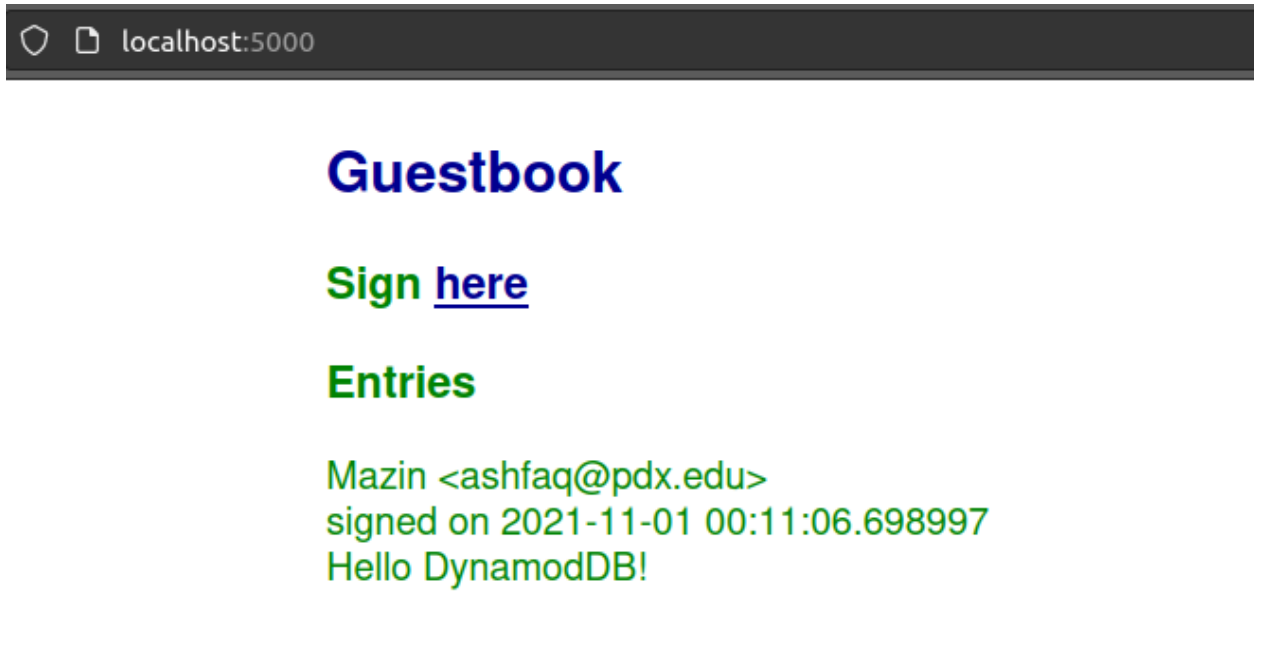
- Take a screenshot the shows the entire URL and the image that has been retrieved:



05.2a: DynamoDB Guestbook

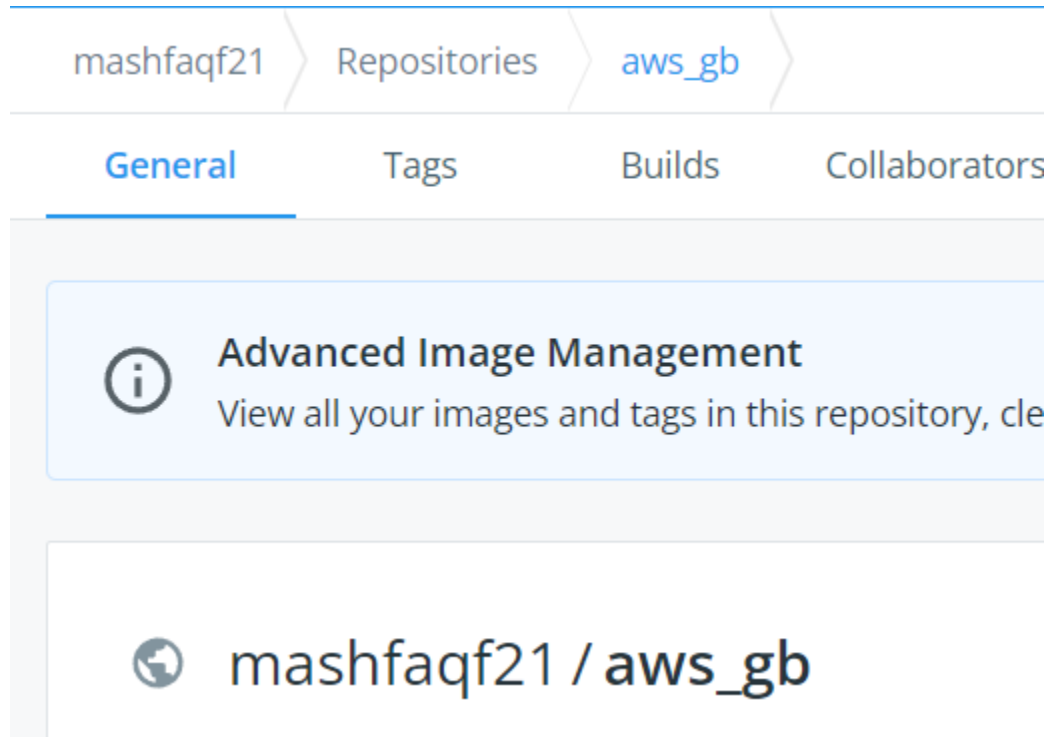
5. Run the application

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



8. Push the container image

- Take a screenshot of the container image on DockerHub.



11. Run the application

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

18.204.215.137:5000

Guestbook

Sign [here](#)

Entries

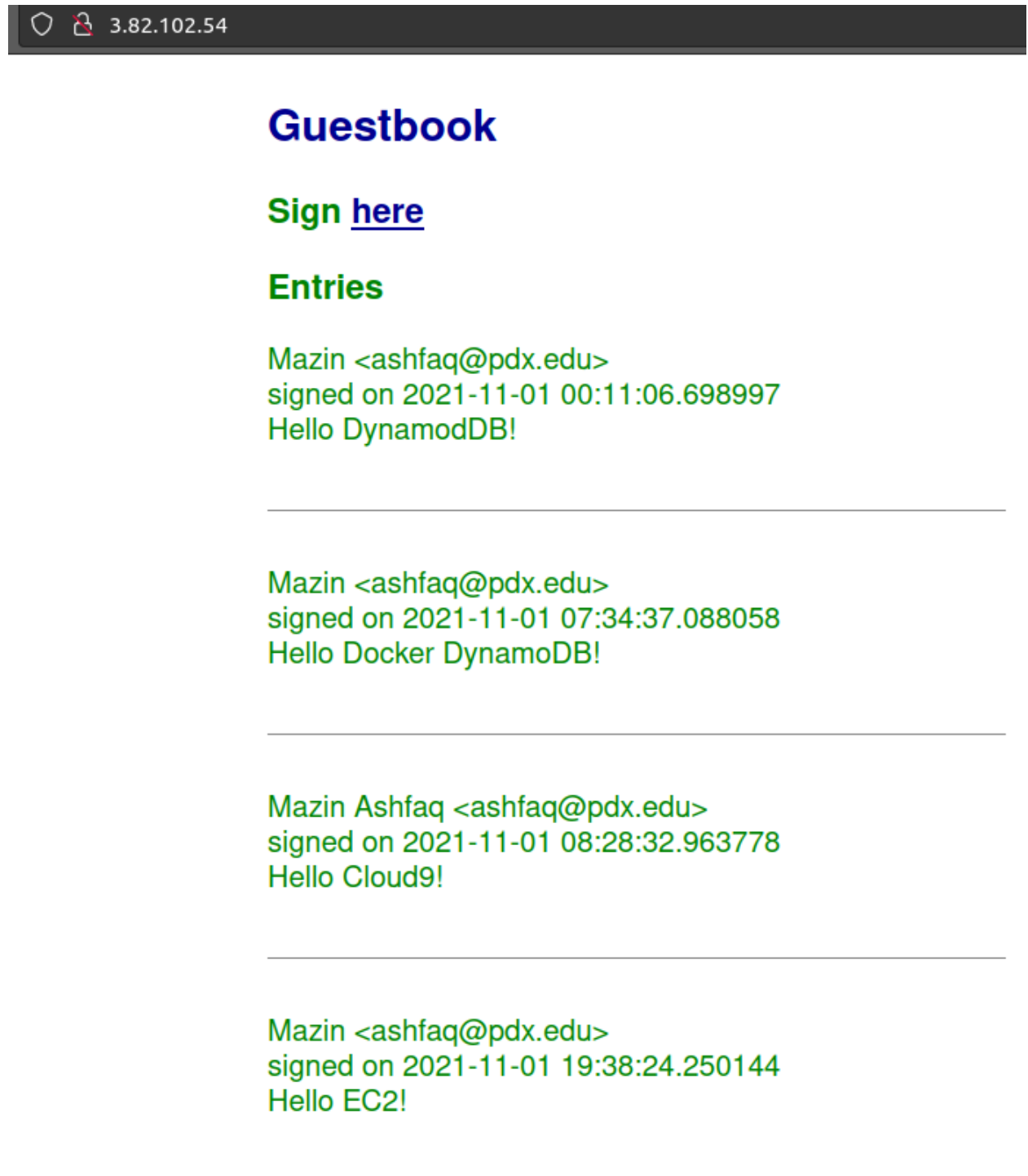
Mazin <ashfaq@pdx.edu>
signed on 2021-11-01 00:11:06.698997
Hello DynamodDB!

Mazin <ashfaq@pdx.edu>
signed on 2021-11-01 07:34:37.088058
Hello Docker DynamoDB!

Mazin Ashfaq <ashfaq@pdx.edu>
signed on 2021-11-01 08:28:32.963778
Hello Cloud9!

15. Visit the application

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



16. View the database

- Take a screenshot that shows all of the guestbook entries that you added to the DynamoDB table including their timestamps.

✔ **Completed** Read capacity units consumed: 0.5

Items returned (4)

<input type="checkbox"/>	email ▾	date ▾	message ▾	name
<input type="checkbox"/>	ashfaq@pd...	2021-11-01 00:11:06.698997	Hello Dyna...	Mazin
<input type="checkbox"/>	ashfaq@pd...	2021-11-01 07:34:37.088058	Hello Docke...	Mazin
<input type="checkbox"/>	ashfaq@pd...	2021-11-01 08:28:32.963778	Hello Cloud9!	Mazin Ashfaq
<input type="checkbox"/>	ashfaq@pd...	2021-11-01 19:38:24.250144	Hello EC2!	Mazin

05.2g: Cloud Datastore Guestbook

6. Run the application

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

localhost:5000

Guestbook

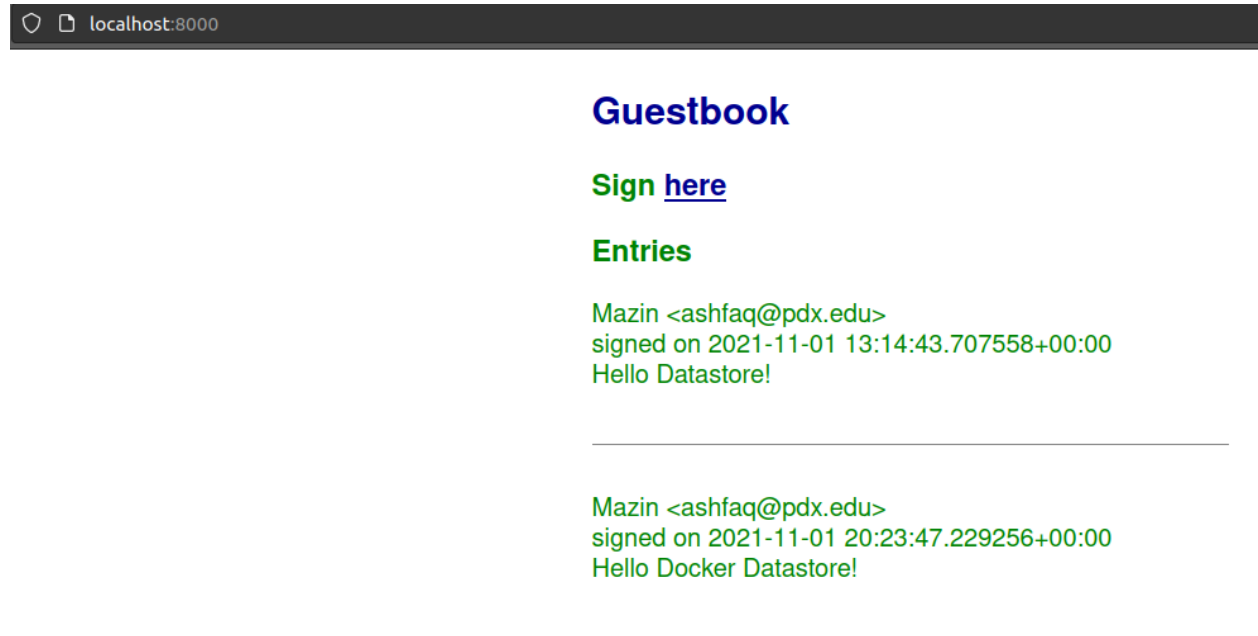
[Sign here](#)

Entries

Mazin <ashfaq@pdx.edu>
signed on 2021-11-01 13:14:43.707558+00:00
Hello Datastore!

8. Run the application

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



11. Run the application

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

5000-cs-775515843963-default.cs-us-west1-ijlt.cloudshell.dev

Guestbook

Sign [here](#)

Entries

Mazin <ashfaq@pdx.edu>
signed on 2021-11-01 13:14:43.707558+00:00
Hello Datastore!

Mazin <ashfaq@pdx.edu>
signed on 2021-11-01 20:23:47.229256+00:00
Hello Docker Datastore!

Mazin Ashfaq <ashfaq@pdx.edu>
signed on 2021-11-01 20:29:24.099548+00:00
Hello Cloud Shell!

15. Visit the application

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

34.127.84.134

Guestbook

[Sign here](#)

Entries

Mazin Ashfaq <ashfaq@pdx.edu>
signed on 2021-11-01 20:40:03.003588+00:00
Hello Compute Engine!

Mazin <ashfaq@pdx.edu>
signed on 2021-11-01 13:14:43.707558+00:00
Hello Datastore!

Mazin <ashfaq@pdx.edu>
signed on 2021-11-01 20:23:47.229256+00:00
Hello Docker Datastore!

Mazin Ashfaq <ashfaq@pdx.edu>
signed on 2021-11-01 20:29:24.099548+00:00
Hello Cloud Shell!

16. View the database

- Take a screenshot of all of the entries that have been added including their timestamps for your lab notebook.

<input type="checkbox"/>	Name/ID ↑	date	email	message	name
<input type="checkbox"/>	id=5071211717459968	2021-11-01 (13:40:03.003) PDT	ashfaq@pdx.edu	Hello Compute Engine!	Mazin Ashfaq
<input type="checkbox"/>	id=5081054809423872	2021-11-01 (06:14:43.707) PDT	ashfaq@pdx.edu	Hello Datastore!	Mazin
<input type="checkbox"/>	id=5632499082330112	2021-11-01 (13:23:47.229) PDT	ashfaq@pdx.edu	Hello Docker Datastore!	Mazin
<input type="checkbox"/>	id=5642368648740864	2021-11-01 (13:29:24.099) PDT	ashfaq@pdx.edu	Hello Cloud Shell!	Mazin Ashfaq