

AHMAD ZAFAR AGAH CS586 WEEK#5

05.1g: Storage, IAM

5.1.2. GCP Cloud Storage #1 (USGS)

- What role is attached to the Compute Engine default service account?
- Would it be sufficient for the VM to perform its functions (i.e. creating buckets and reading/writing objects in them)?
- What permissions are given by the default access scope to Cloud Storage?
- Would they be sufficient for the VM to perform its functions (i.e. creating buckets and reading/writing objects in them)?
- What settings are possible for setting the VM's access to the Storage API?

5.1.4. USGS data and setup

- What time did the latest earthquake happen?
- What was the magnitude (mag)?
- Where was the place it happened?

5.1.5. Python plotting code

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

5.1.9. Service account roles (Compute)

- 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 a storage bucket?
- Take a screenshot the shows the entire URL and the image that has been retrieved

05.2a: DynamoDB Guestbook

5.2.5. Run the application

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

5.2.7. Run the application

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

5.2.8. Push the container image

- Take a screenshot of the container image on DockerHub.

5.2.11. Run the application

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

5.2.15. Visit the application

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

5.2.16. View the database

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

05.2g: Cloud Datastore Guestbook

5.2.7. Run the application

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5.2.16. View the database

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

05.1g: Storage, IAM

5.1.2. GCP Cloud Storage #1 (USGS)

- What role is attached to the Compute Engine default service account?

Editor: This is a broad role that grants read and write permissions for most Google Cloud resources within the project. It includes permissions for creating, updating, and deleting resources, but it doesn't cover all advanced permissions.

Storage Object Admin: This role specifically allows full access to Google Cloud Storage objects, enabling the service account to create, read, update, and delete objects in buckets.

- Would it be sufficient for the VM to perform its functions (i.e. creating buckets and reading/writing objects in them)?

Yes, these roles should be sufficient for the VM to perform tasks such as:

- Creating Buckets: The Editor role includes permissions to create, delete, and manage storage buckets within the project.
- Reading and Writing Objects: The Storage Object Admin role allows full access to objects within the buckets, including reading, writing, updating, and deleting objects.

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

the Cloud Storage access scope is set to Read Only.

- Would they be sufficient for the VM to perform its functions (i.e. creating buckets and reading/writing objects in them)?

No, the Read Only scope is not sufficient if the VM needs to perform actions such as:

- Creating buckets in Cloud Storage.

- Writing new objects or modifying/deleting existing objects in Cloud Storage.
- What settings are possible for setting the VM's access to the Storage API?

Storage Read Only: if we need to read data.

Storage Read/Write: if we need to read and write data but don't need to manage buckets.

Storage Full: if we need the VM to have full control over both objects and bucket management.

5.1.4. USGS data and setup

- What time did the latest earthquake happen?

Time: 2024-10-29T19:22:42.440Z

- What was the magnitude (mag)?

Magnitude (mag): 1.64

- Where was the place it happened?

Place: "21 km SSW of La Quinta, CA"

]

5.1.5. Python plotting code

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

Google Cloud cloud-agah-agah Search (/) for resources, docs, products, and more Search

Free trial status: \$278.62 credit and 63 days remaining. Activate your full account to get unlimited access to all of Google Cloud—use any remaining credits, then pay only for what you use. DISMISS ACTIVATE

Cloud Storage Object details

Buckets > ahmad-530-5-1-5 > earthquakes.png

LIVE OBJECT VERSION HISTORY

DOWNLOAD EDIT METADATA EDIT ACCESS DELETE

Overview

Type	image/png
Size	315.3 KB
Created	Oct 29, 2024, 12:53:13 PM
Last modified	Oct 29, 2024, 12:53:13 PM
Storage class	Standard
Custom time	—
Public URL	Not applicable
Authenticated URL	https://storage.cloud.google.com/ahmad-530-5-1-5/earthquakes.png
gsutil URI	gs://ahmad-530-5-1-5/earthquakes.png

Permissions

Public access	Not public
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Protection

Version history	—
Retention expiration time	None
Object retention retain until time	None
Bucket retention retain until time	None
Hold status	None
Encryption type	Google-managed

ahmad

Earthquakes 2024-10-22 to 2024-10-29

5.1.9. Service account roles (Compute)

- What is the exact error message that is returned?

```
ahmadagah@gcs-lab-vm:~$ gcloud compute instances list
WARNING: Some requests did not succeed.
- Required 'compute.instances.list' permission for 'projects/cloud-agah-agah'

Listed 0 items.
ahmadagah@gcs-lab-vm:~$
```

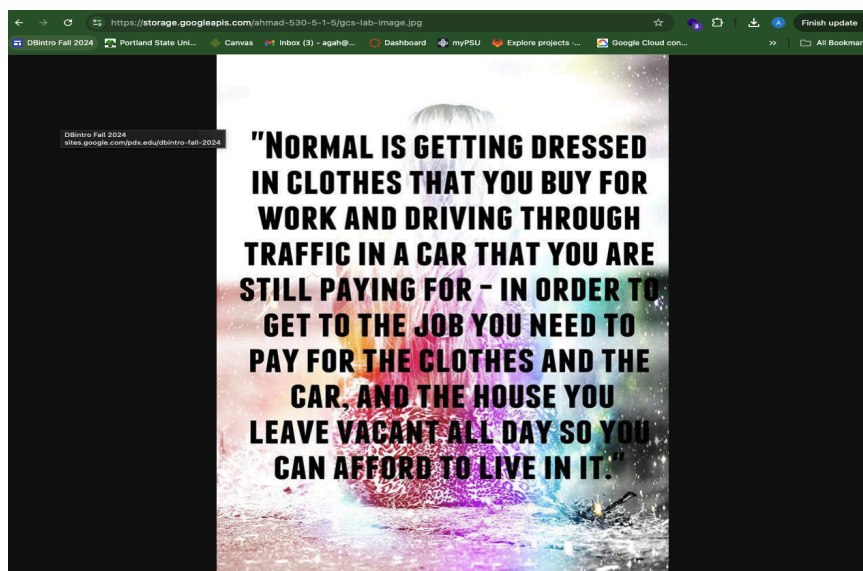
- What role needs to be added to the service account's permissions for the VM to have access to add an object to a storage bucket?

```
ahmadagah@gcs-lab-vm:~$ gcloud compute instances list
WARNING: Some requests did not succeed.
- Required 'compute.instances.list' permission for 'projects/cloud-agah-agah'

Listed 0 items.
ahmadagah@gcs-lab-vm:~$ gcloud compute instances list
NAME          ZONE      MACHINE_TYPE  PREEMPTIBLE  INTERNAL_IP  EXTERNAL_IP  STATUS
course-vm     us-west1-b  e2-medium          10.138.0.2    34.169.84.137  RUNNING
gcs-lab-vm    us-west1-b  e2-medium          10.138.0.18   35.233.201.128  RUNNING
ahmadagah@gcs-lab-vm:~$
```

5.1.13. View object

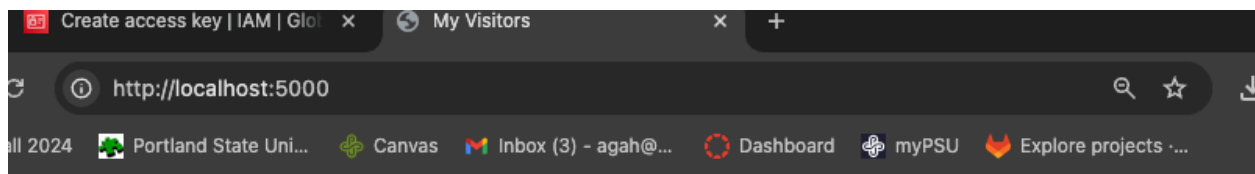
- Take a screenshot the shows the entire URL and the image that has been retrieved



05.2a: DynamoDB Guestbook

5.2.5. Run the application

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



Guestbook

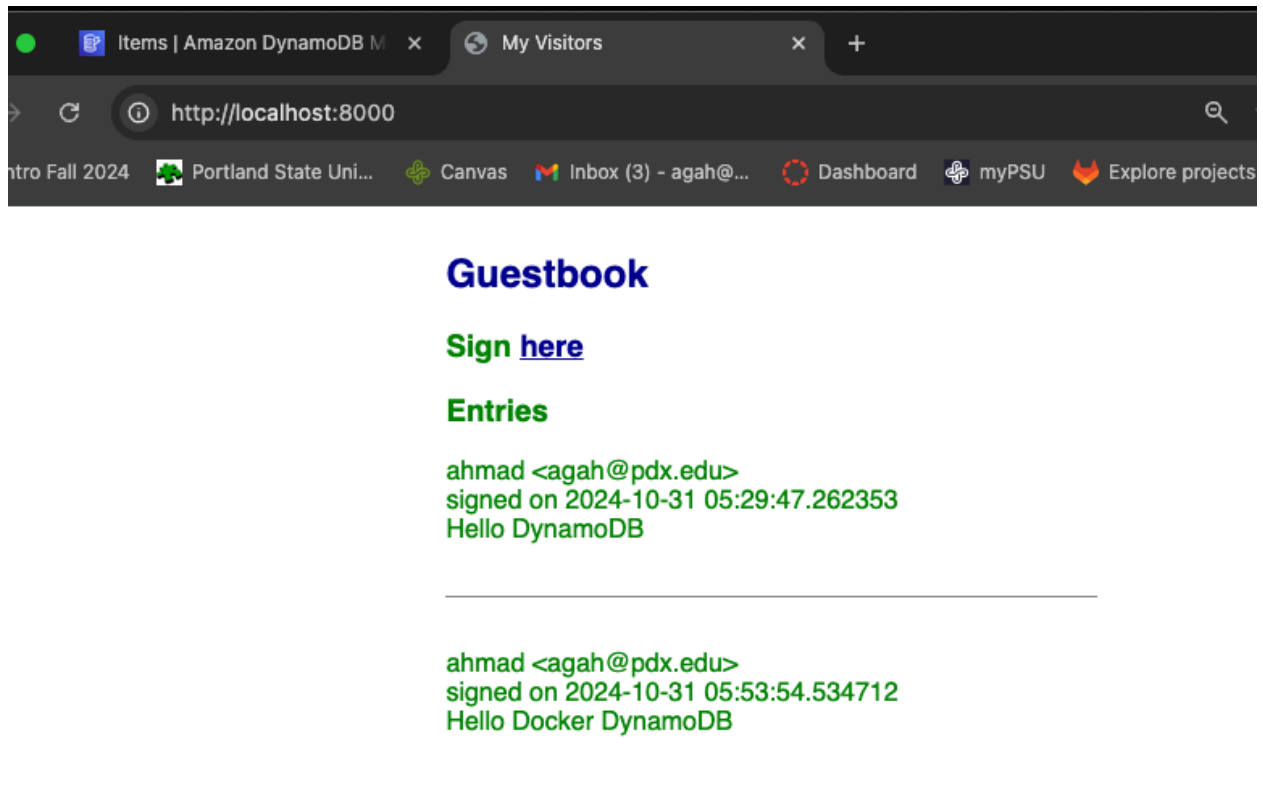
[Sign here](#)

Entries

ahmad <agah@pdx.edu>
signed on 2024-10-31 05:29:47.262353
Hello DynamoDB

5.2.7. Run the application

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



5.2.8. Push the container image

- Take a screenshot of the container image on DockerHub.

The screenshot shows the DockerHub interface for the repository `ahmadpsu/aws_gb`. The page is titled "ahmadpsu/aws_gb" and indicates it was last pushed 2 minutes ago. It shows that the repository does not have a description or category. The "Tags" section lists one tag, `latest`, which is an image type pushed 2 minutes ago. The "Automated Builds" section explains how to connect GitHub or Bitbucket for automated builds. The "Repository overview" section is currently incomplete and provides instructions on how to add an overview.

ahmadpsu / [Repositories](#) / [aws_gb](#) / [General](#) Using 0 of 1 private repositories.

General Tags Builds Collaborators Webhooks Settings

ahmadpsu/aws_gb

Last pushed 2 minutes ago

This repository does not have a description INCOMPLETE

This repository does not have a category INCOMPLETE

Docker commands [Public View](#)

To push a new tag to this repository:

```
docker push ahmadpsu/aws_gb:tagname
```

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
latest		Image	2 minutes ago	2 minutes ago

[See all](#)

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions. [Read more about automated builds](#) .

[Upgrade](#)

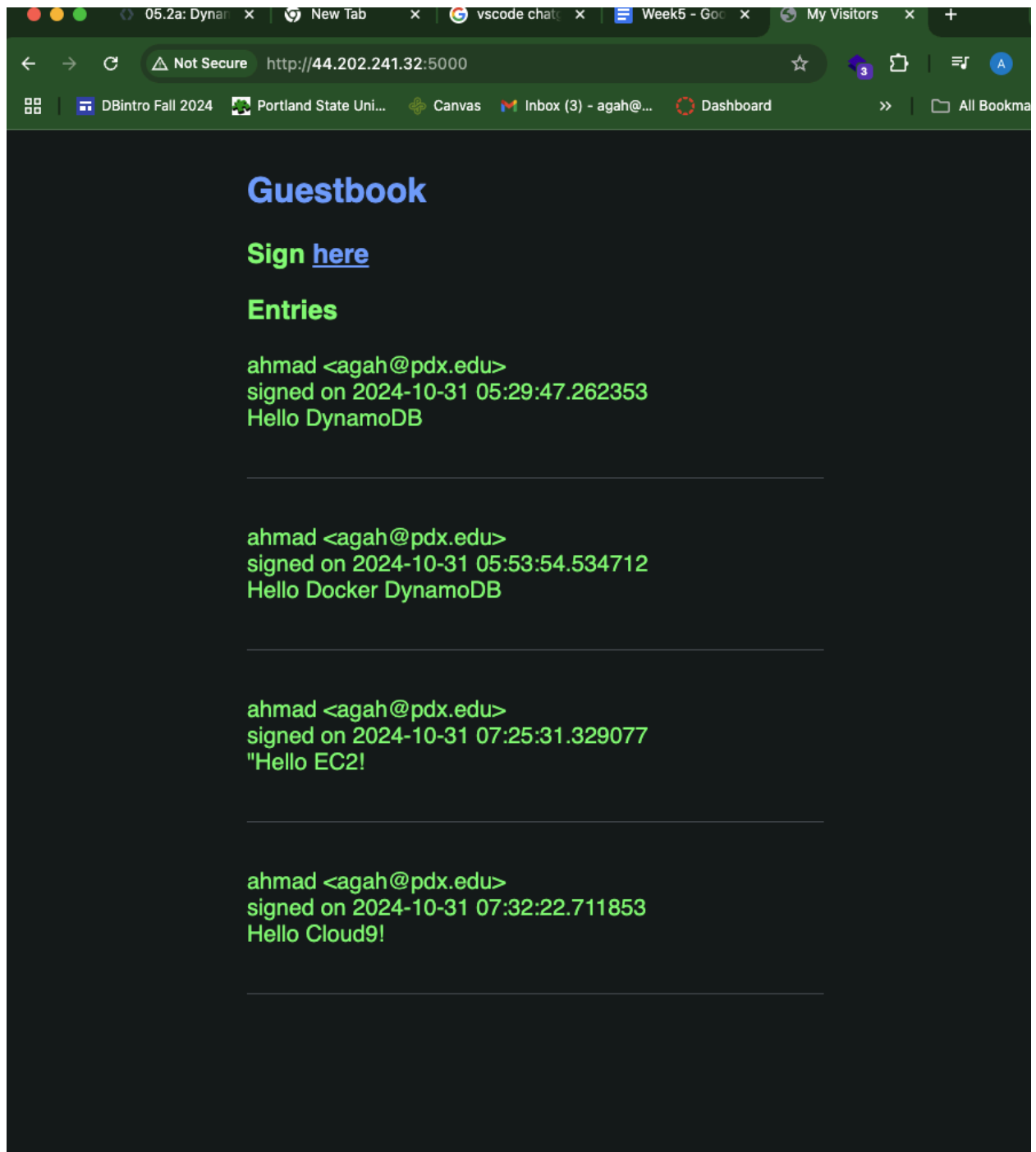
Repository overview INCOMPLETE

An overview describes what your image does and how to run it. It displays in [the public view of your repository](#) once you have pushed some content.

[Add overview](#)

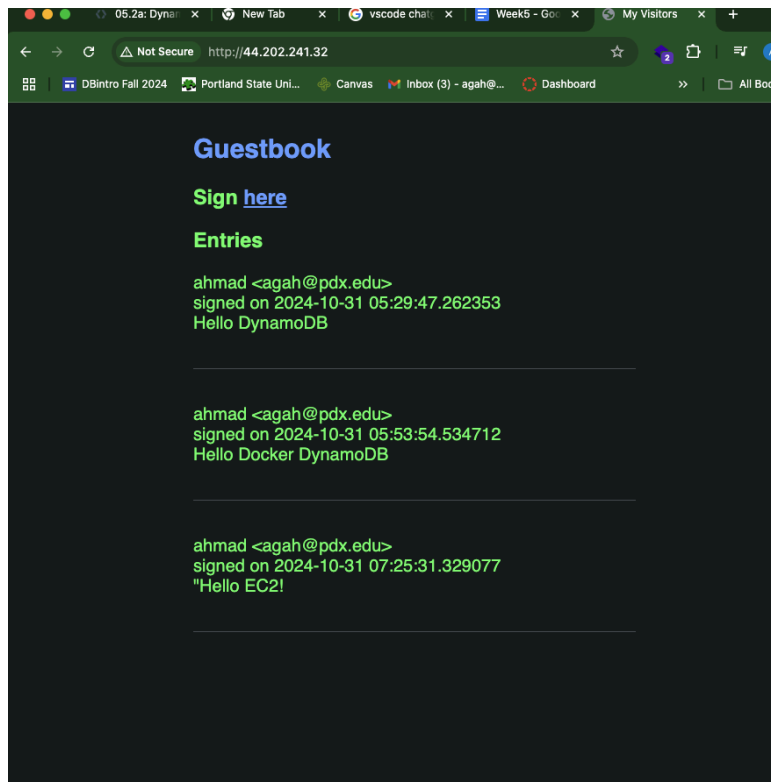
5.2.11. Run the application

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



5.2.15. Visit the application

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



5.2.16. View the database

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

► Filters

Run Reset

✔ Completed. Read capacity units consumed: 0.5

Items returned (4)

↻ Actions ▼ Create item

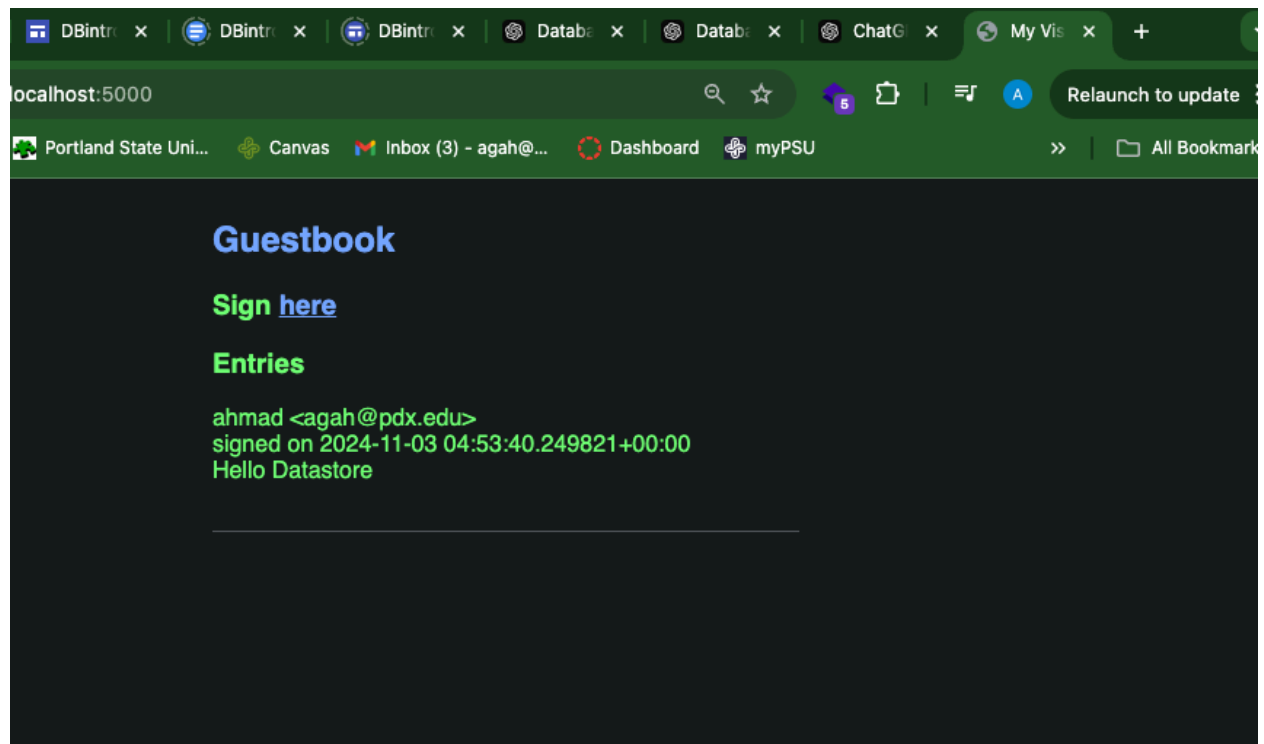
< 1 > ⚙️ 🔍

<input type="checkbox"/>	email (String) ▼	date (String) ▼	message ▼	name
<input type="checkbox"/>	agah@pdx.edu	2024-10-31 05:29:47.262353	Hello DynamoDB	ahmad
<input type="checkbox"/>	agah@pdx.edu	2024-10-31 05:53:54.534712	Hello Docker DynamoDB	ahmad
<input type="checkbox"/>	agah@pdx.edu	2024-10-31 07:25:31.329077	"Hello EC2!	ahmad
<input type="checkbox"/>	agah@pdx.edu	2024-10-31 07:32:22.711853	Hello Cloud9!	ahmad

05.2g: Cloud Datastore Guestbook

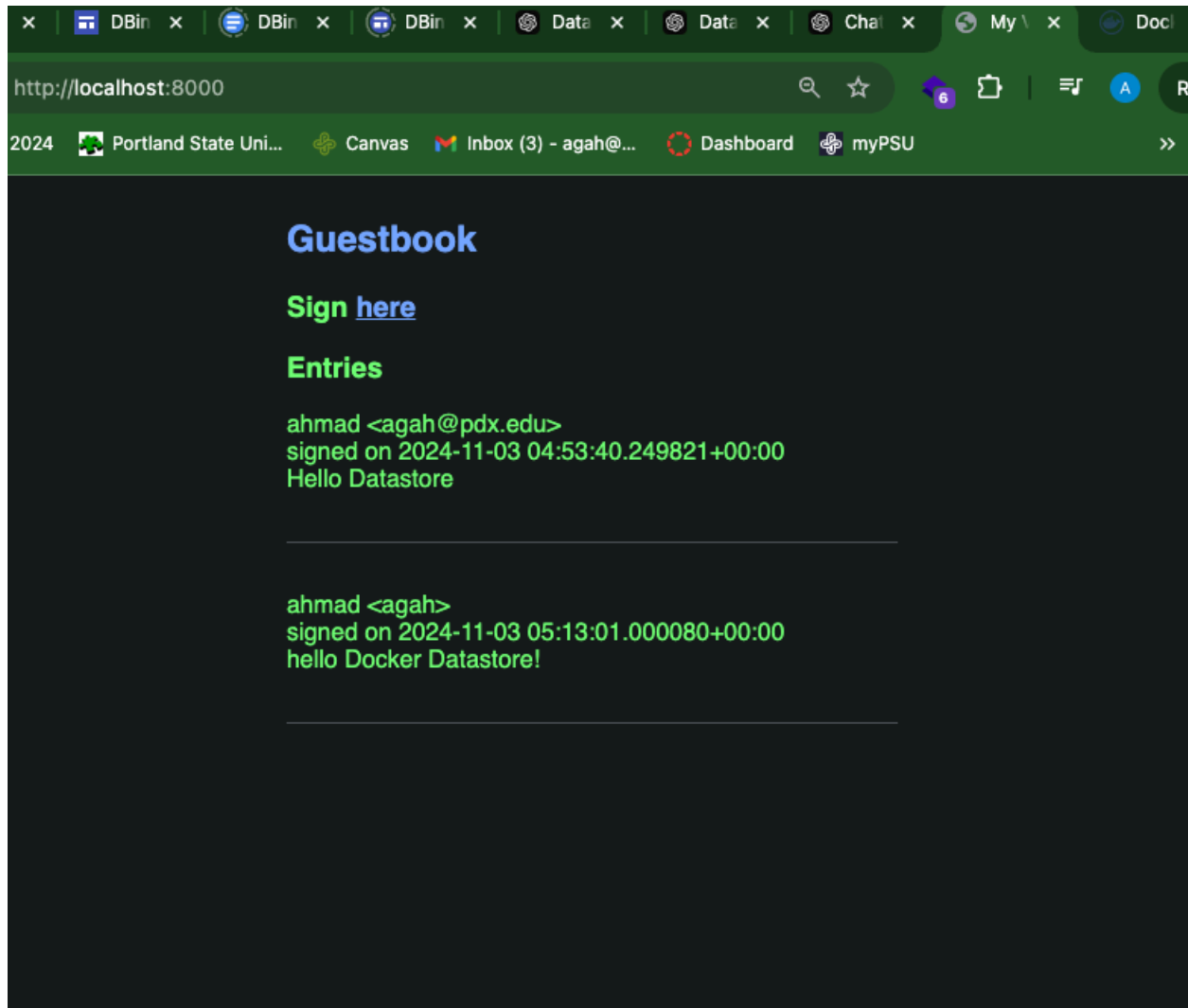
5.2.7. Run the application

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



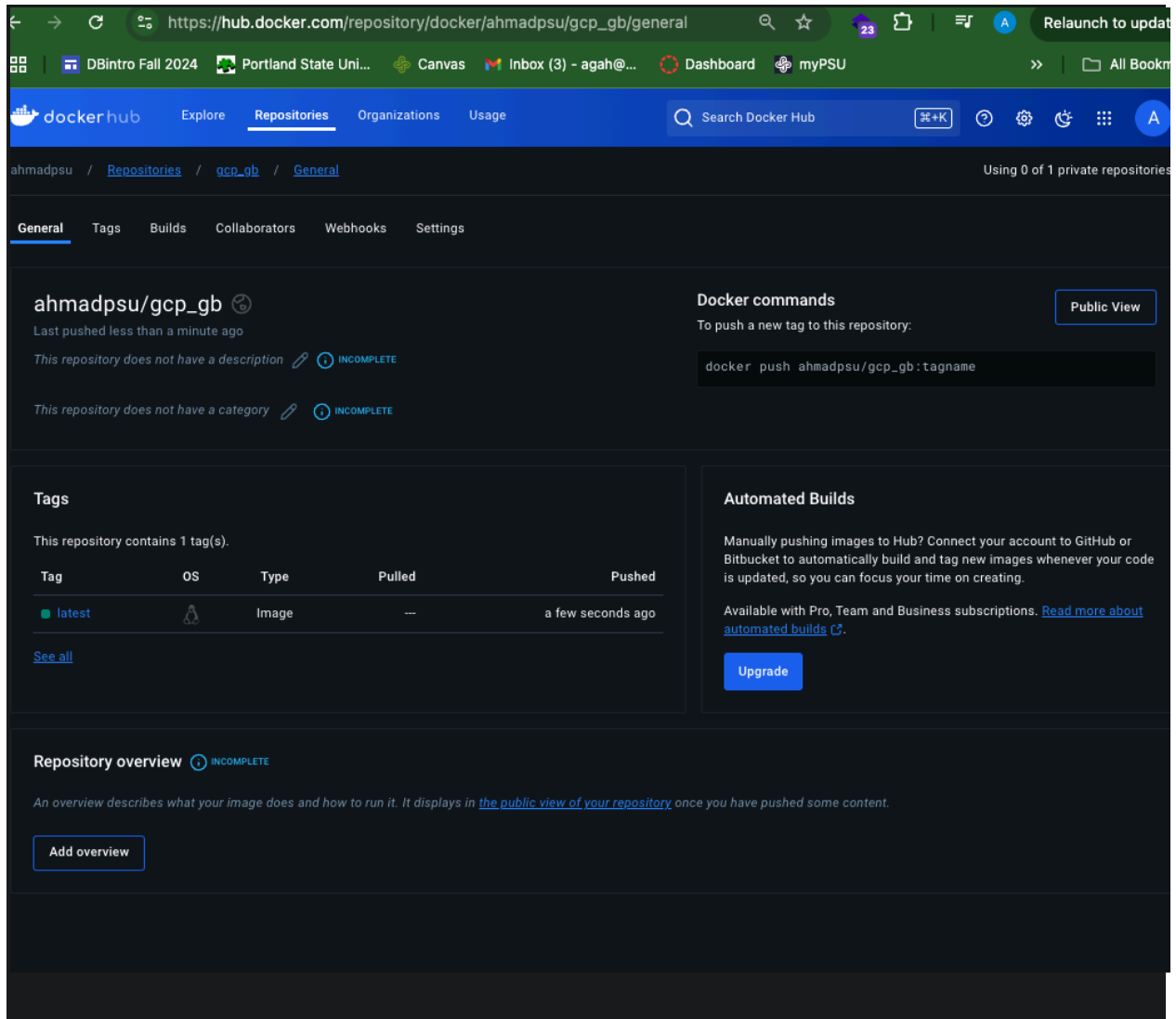
5.2.9. Run the application

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



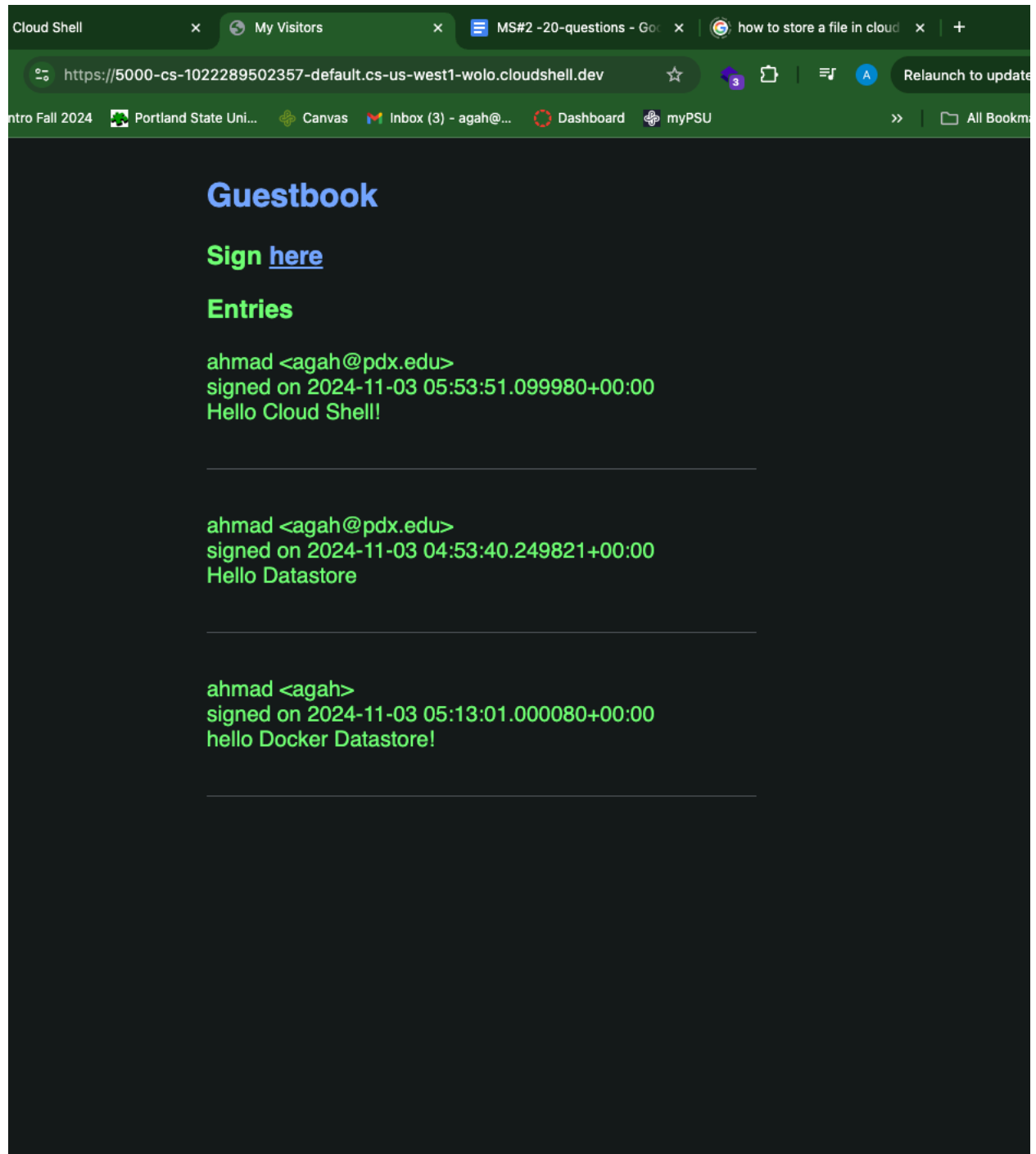
5.2.10. Push the container image

- Take a screenshot of the container image on DockerHub.



5.2.12. Run the application

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



5.2.15. Visit the application

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

05.2g: Cloud Datastore Gu... x

VM instances – Compute E... x

My Visitors x +

Not Secure

http://34.168.39.191

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2

A

Relaunch to update

Fall 2024

Portland State Uni...

Canvas

Inbox (3) - agah@...

Dashboard

>>

All Bookma

Guestbook

[Sign here](#)

Entries

ahmad <agah@pdx.edu>
signed on 2024-11-03 06:29:50.502619+00:00
Hello Compute Engine!!!

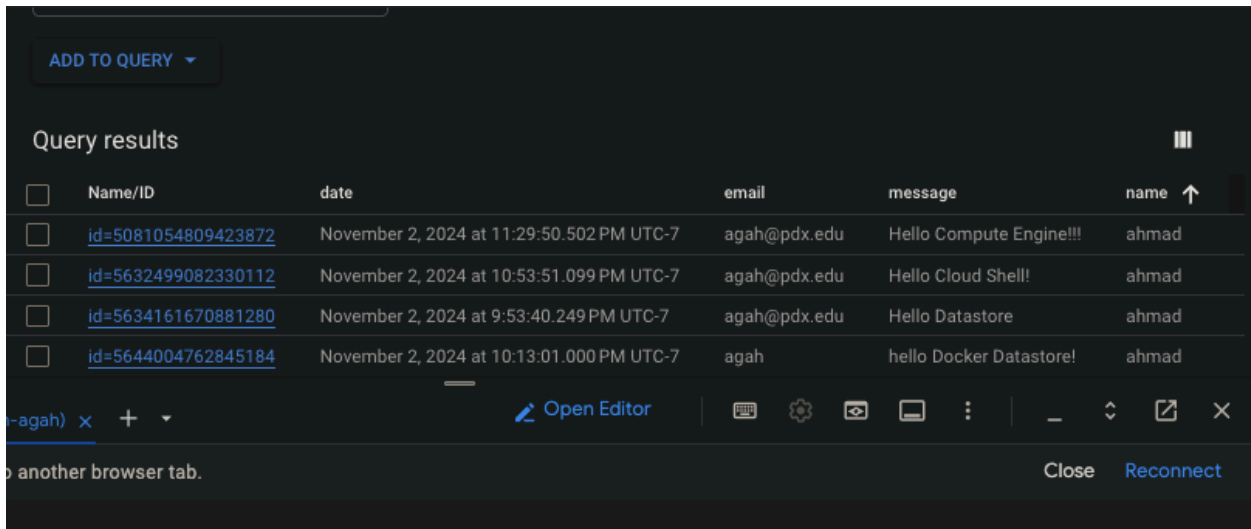
ahmad <agah@pdx.edu>
signed on 2024-11-03 05:53:51.099980+00:00
Hello Cloud Shell!

ahmad <agah@pdx.edu>
signed on 2024-11-03 04:53:40.249821+00:00
Hello Datastore

ahmad <agah>
signed on 2024-11-03 05:13:01.000080+00:00
hello Docker Datastore!

5.2.16. View the database

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



ADD TO QUERY ▾

Query results

<input type="checkbox"/>	Name/ID	date	email	message	name ↑
<input type="checkbox"/>	id=5081054809423872	November 2, 2024 at 11:29:50.502 PM UTC-7	agah@pdx.edu	Hello Compute Engine!!!	ahmad
<input type="checkbox"/>	id=5632499082330112	November 2, 2024 at 10:53:51.099 PM UTC-7	agah@pdx.edu	Hello Cloud Shell!	ahmad
<input type="checkbox"/>	id=5634161670881280	November 2, 2024 at 9:53:40.249 PM UTC-7	agah@pdx.edu	Hello Datastore	ahmad
<input type="checkbox"/>	id=5644004762845184	November 2, 2024 at 10:13:01.000 PM UTC-7	agah	hello Docker Datastore!	ahmad

Open Editor

Close Reconnect