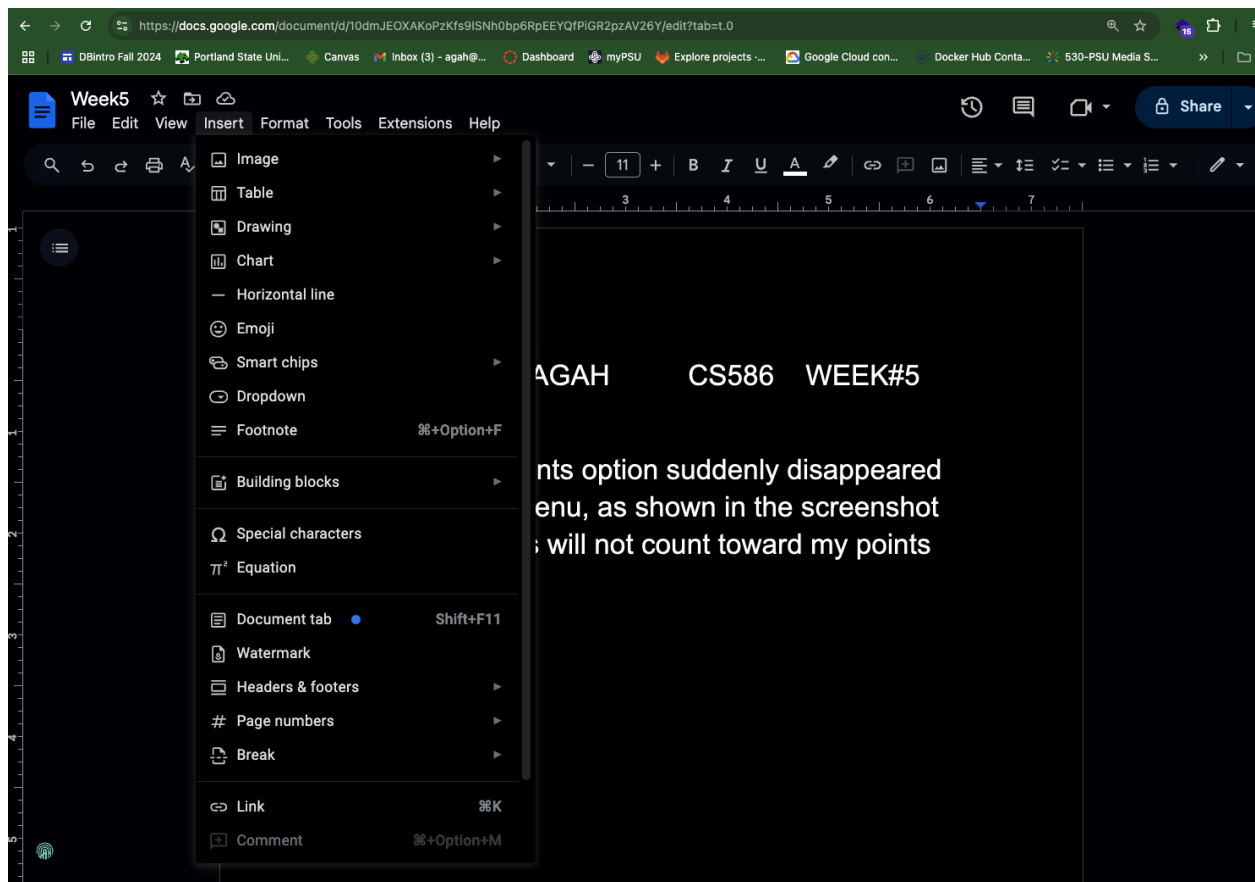


My table of contents option suddenly disappeared from the Insert menu, as shown in the screenshot below. I hope this will not count toward my points deduction.



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.

The screenshot shows the Google Cloud Storage console interface. The top navigation bar includes the Google Cloud logo, a dropdown menu for 'cloud-agah-agah', a search bar, and user account information. A banner at the top indicates a free trial status with \$278.62 credit and 63 days remaining. The left sidebar contains navigation links for Overview, Buckets, Monitoring, and Settings. The main content area is titled 'Object details' and shows the path 'Buckets > ahmad-530-5-1-5 > earthquakes.png'. Below the path are tabs for 'LIVE OBJECT' and 'VERSION HISTORY'. Action buttons for 'DOWNLOAD', 'EDIT METADATA', 'EDIT ACCESS', and 'DELETE' are visible. The 'Overview' section displays metadata for the file 'earthquakes.png', including its type (image/png), size (315.3 KB), creation and modification dates (Oct 29, 2024, 12:53:13 PM), storage class (Standard), and various URLs. The 'Permissions' section shows that the object is not public. The 'Protection' section includes version history and retention policies. At the bottom of the console, a preview of the file is shown, which is a world map titled 'Earthquakes 2024-10-22 to 2024-10-29' with colored dots indicating earthquake locations. A yellow sticky note with the name 'ahmad' is placed over the right side of the console.

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

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

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:~$
```

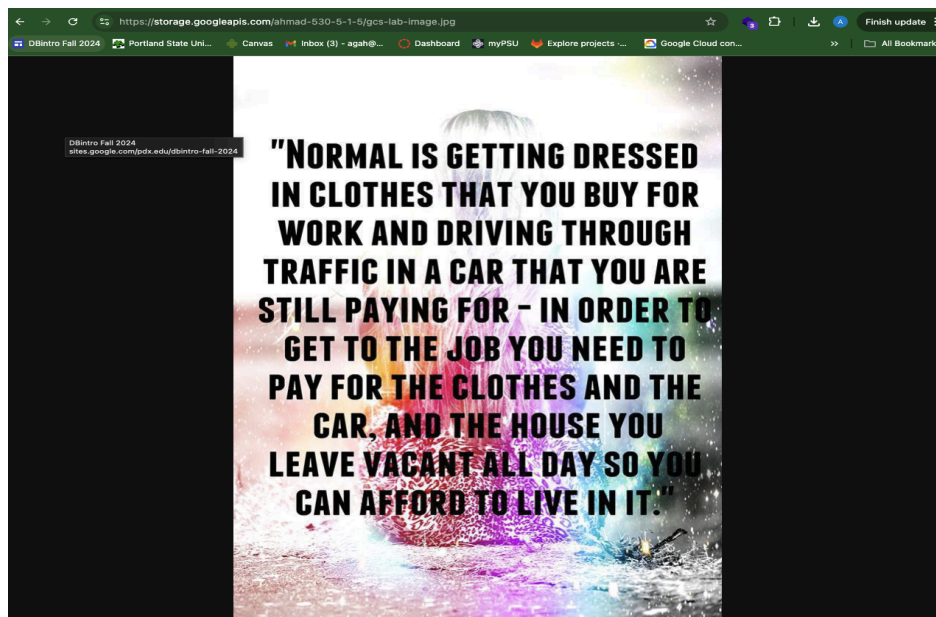
- What role needs to be added to the service account's permissions for the VM to have access to add an object to a storage bucket?

```
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

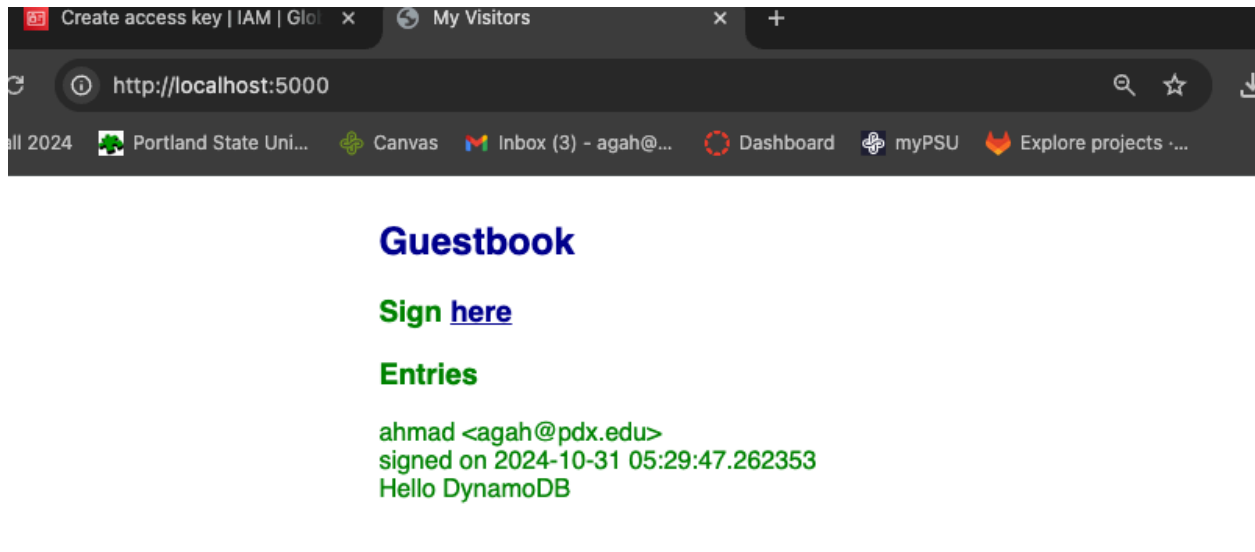
- Take a screenshot the shows the entire URL and the image that has been retrieved



05.2a: DynamoDB Guestbook

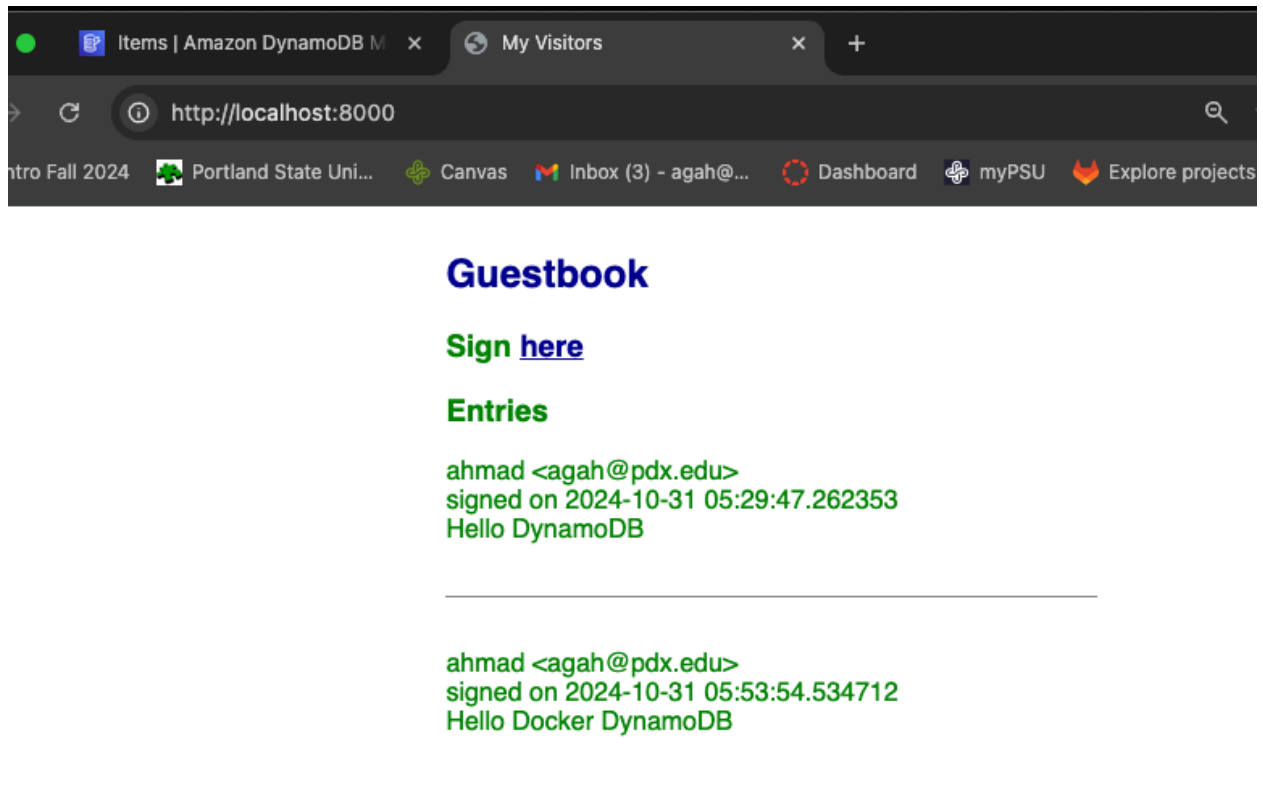
5.2.5. Run the application

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



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 INCOMPLETE

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

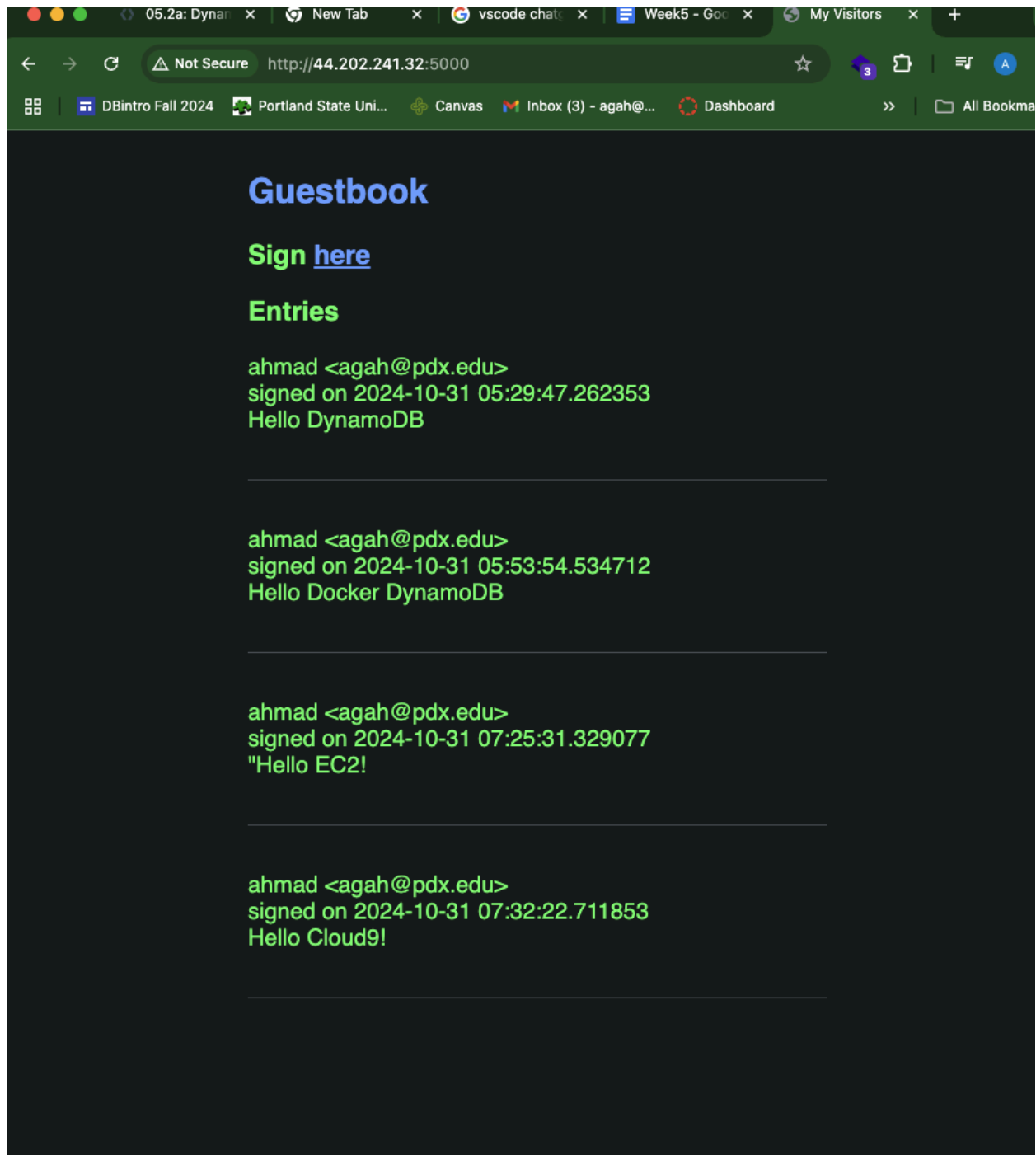
Repository overview INCOMPLETE

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

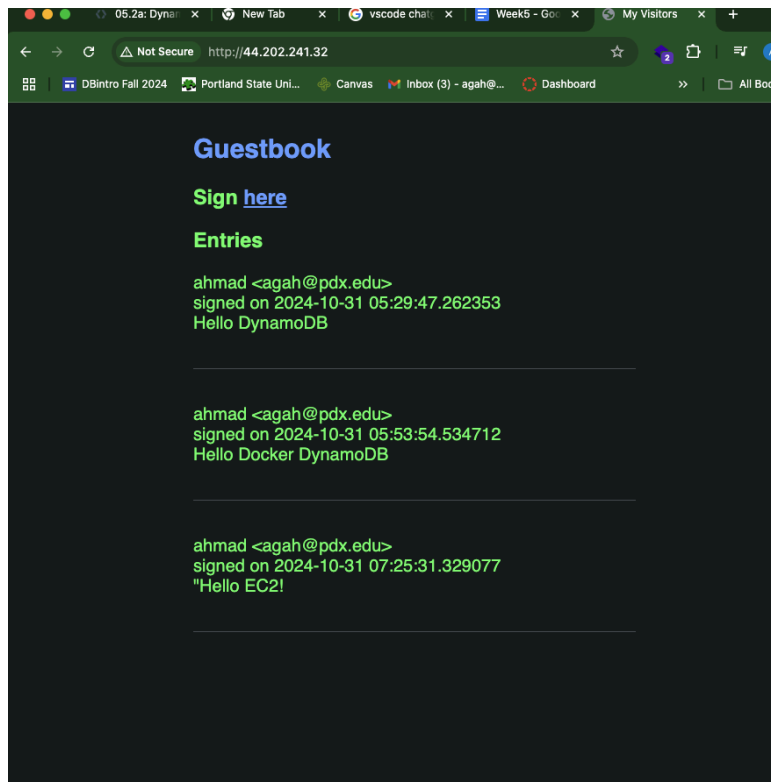
11. Run the application

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



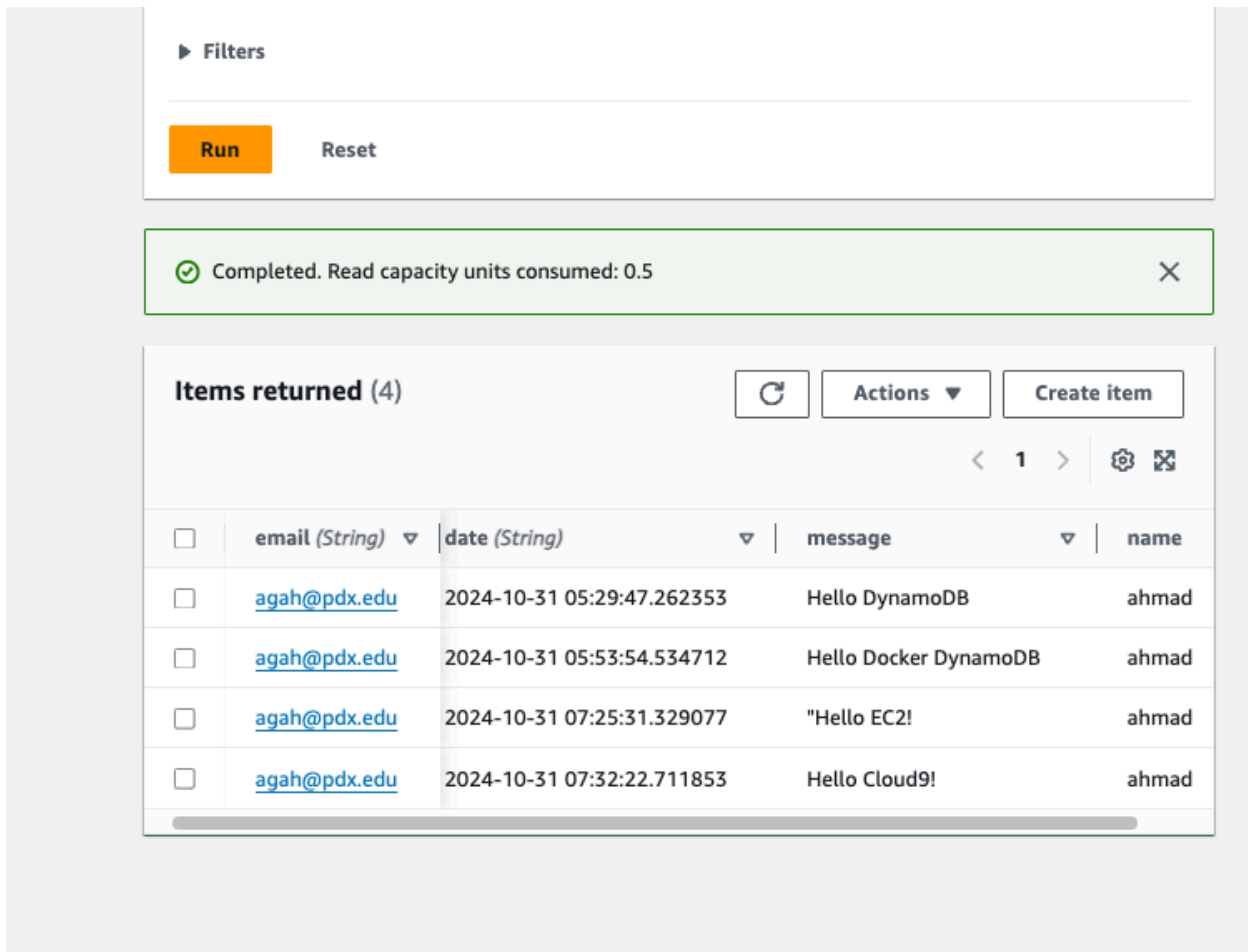
5.2.15. Visit the application

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



16. View the database

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



The screenshot displays the AWS DynamoDB console interface. At the top, there is a 'Filters' section with a 'Run' button (highlighted in orange) and a 'Reset' button. Below this, a green status bar indicates 'Completed. Read capacity units consumed: 0.5'. The main section is titled 'Items returned (4)' and includes a refresh button, an 'Actions' dropdown, and a 'Create item' button. A pagination bar shows '< 1 >' and icons for settings and full screen. The data is presented in a table with four columns: email (String), date (String), message, and name. Each row represents a guestbook entry, all with the email 'agah@pdx.edu' and the name 'ahmad'. The messages are 'Hello DynamoDB', 'Hello Docker DynamoDB', '"Hello EC2!', and 'Hello Cloud9!'. The dates are timestamps from 2024-10-31.

<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