

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

Editor

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

I assume it would be because the role is an editor role.

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

The default setting is read-only access to Storage and Service Management, write access to Cloud Monitoring and Cloud Logging, and read/write access to Service Control.

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

I don't think so because it grants one type of access to Storage and Service Management and only one type of access to Cloud Monitoring and Cloud Logging

- What settings are possible for setting the VM's access to the Storage API?

the Storage option you see after selecting "Set access for each API"

- What `time` did the latest earthquake happen?

2025-11-03T00:03:39.760Z

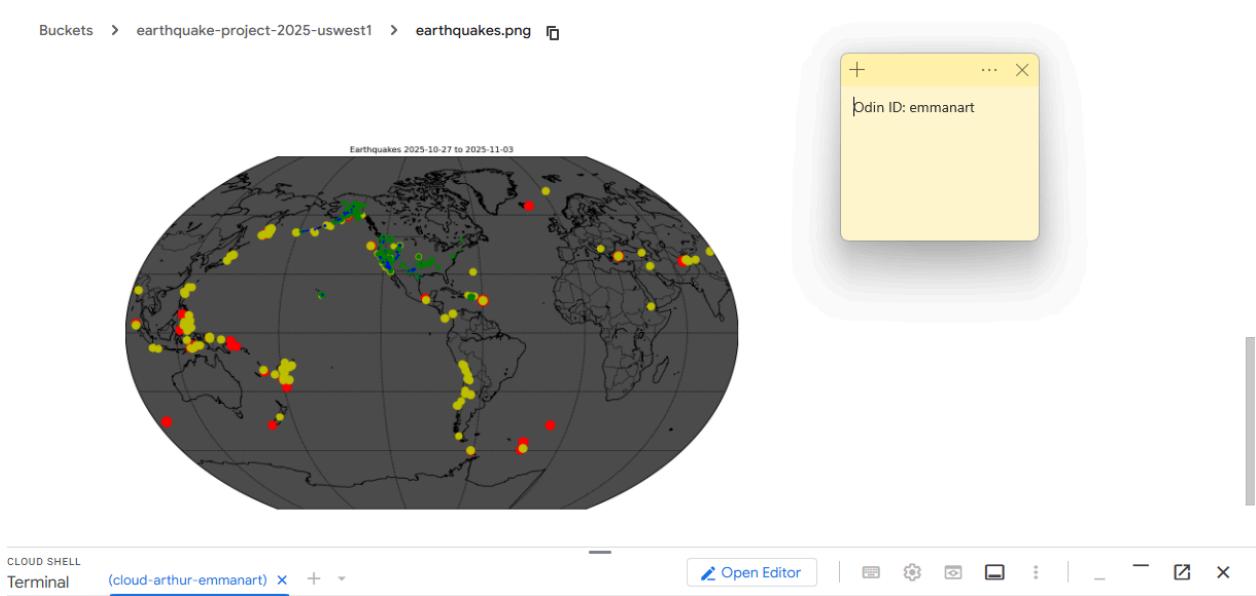
- What was the magnitude (`mag`)?

0.77

- Where was the `place` it happened?

3 km N of Big Bear City, CA

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



- What is the exact error message that is returned?

WARNING: Some requests did not succeed.

- Required 'compute.instances.list' permission for 'projects/cloud-arthur-emmanart'

Listed 0 items.

- 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 resources?

Compute Viewer role

- Take a screenshot of the output for your notebook.

```

Free trial status: $288.43 credit and 83 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

Google Cloud cloud-Arthur-emmanart Search (/) for resources, docs, products, and more Search Open Editor

CLOUD SHELL Terminal (cloud-arthur-emmanart) + Open Editor

Expanded Security Maintenance for Applications is not enabled.
0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

emmanart@qos-lab-vm:~$ gcloud compute instances list
WARNING: Some requests did not succeed.
- Required 'compute.instances.list' permission for 'projects/cloud-arthur-emmanart'

Listed 0 items.
emmanart@qos-lab-vm:~$ gcloud compute instances list
NAME ZONE MACHINE_TYPE PREEMPTIBLE INTERNAL_IP EXTERNAL_IP STATUS
instance-3 us-central1-a n1-standard-1 192.168.1.2 TERMINATED
instance-4 europe-west1-d n1-standard-1 192.168.5.2 TERMINATED
course-vm us-west1-b e2-medium 10.138.0.2 34.62.34.224 RUNNING
gcs-lab-vm us-west1-b e2-medium 10.138.0.3 136.117.137.240 RUNNING
minikube-vm us-west1-b e2-medium 10.138.0.4 34.187.175.25 RUNNING
storage-vm us-west1-b e2-micro 10.138.0.6 TERMINATED
usgs instance-1 asia-east1-a n1-standard-1 10.140.0.2 136.118.16.108 RUNNING
instance-2 europe-north1-a n1-standard-1 10.166.0.2 TERMINATED
emmanart@qos-lab-vm:~$ []

```

Odin ID: emmanart

- What is the exact error message that is returned?

Copying file://moonquakes.png to gs://earthquake-project-2025-uswest1/moonquakes.png

"ERROR: [gcs-lab@cloud-arthur-emmanart.iam.gserviceaccount.com] does not have permission to access b instance [earthquake-project-2025-uswest1] (or it may not exist):
 gcs-lab@cloud-arthur-emmanart.iam.gserviceaccount.com does not have storage.objects.create access to the Google Cloud Storage object. Permission 'storage.objects.create' denied on resource (or it may not exist). This command is authenticated as gcs-lab@cloud-arthur-emmanart.iam.gserviceaccount.com which is the active account specified by the [core/account] property.

Completed files 0/1 | 0B/303.5kiB

- 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?

Storage Object Creator

- Take a screenshot of the output for your notebook.

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Dismiss Activate

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

CLOUD SHELL Terminal (cloud-arthur-emmanart) +

```
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

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

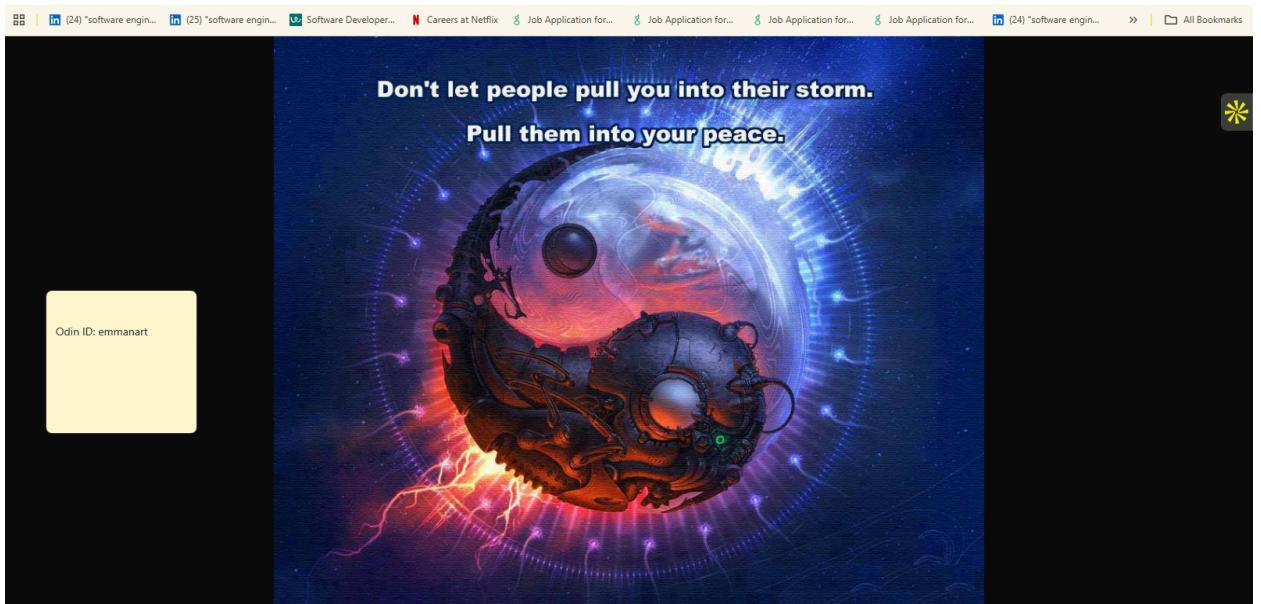
Listed 0 items.
emmanart@gcs-lab-vm:~$ gcloud compute instances list
NAME ZONE MACHINE_TYPE PREEMPTIBLE INTERNAL_IP EXTERNAL_IP STATUS
instance-3 us-central1-d n1-standard-1 192.168.1.2 TERMINATED
instance-4 europe-west1-d n1-standard-1 192.168.1.2 TERMINATED
cos-vm us-central1-b e2-standard 10.138.0.3 34.92.34.224 RUNNING
gcs-lab-vm us-west1-b e2-medium 10.138.0.8 136.117.137.240 RUNNING
nginx-gb us-west1-b e2-medium 10.138.0.4 34.187.173.29 RUNNING
storage-vm us-west1-b e2-micro 10.138.0.6 TERMINATED
usgs us-west1-b e2-medium 10.138.0.7 136.118.16.108 RUNNING
instance-1 asia-east1-n1-standard-1 10.138.0.1 TERMINATED
instance-2 europe-west1-a n1-standard-1 10.166.0.2 TERMINATED
emmanart@gcs-lab-vm:~$ gcloud storage cp gs://earthquake-project-2025-uswest1/earthquakes.png .
Copying gs://earthquake-project-2025-uswest1/earthquakes.png to file:///..//earthquakes.png .
Completed file 0/1 | 303.5KiB/303.5KiB
emmanart@gcs-lab-vm:~$ cp earthquakes.png moonquakes.png
emmanart@gcs-lab-vm:~$ gcloud storage cp gs://earthquake-project-2025-uswest1/moonquakes.png gs://earthquake-project-2025-uswest1/moonquakes.png
Copying file://moonquakes.png to gs://earthquake-project-2025-uswest1/moonquakes.png
ERROR: [gcs-lab@cloud-arthur-emmanart.iam.gserviceaccount.com] does not have permission to access b instance [gserviceaccount.com] does not have storage.objects.create access to the Google Cloud Storage object. Permission henticated as gcs-lab@cloud-arthur-emmanart.iam.gserviceaccount.com which is the active account specified by the
Completed files 0/1 | 0B/303.5KiB
emmanart@gcs-lab-vm:~$ gcloud storage cp moonquakes.png gs://earthquake-project-2025-uswest1/
Copying file://moonquakes.png to gs://earthquake-project-2025-uswest1/moonquakes.png
Completed files 1/1 | 303.5KiB/303.5KiB
emmanart@gcs-lab-vm:~$ 
```

Odin ID: emmanart

swest1] (or it may not exist): gcs-lab@cloud-arthur-emmanart.is ' denied on resource (or it may not exist). This command is aut

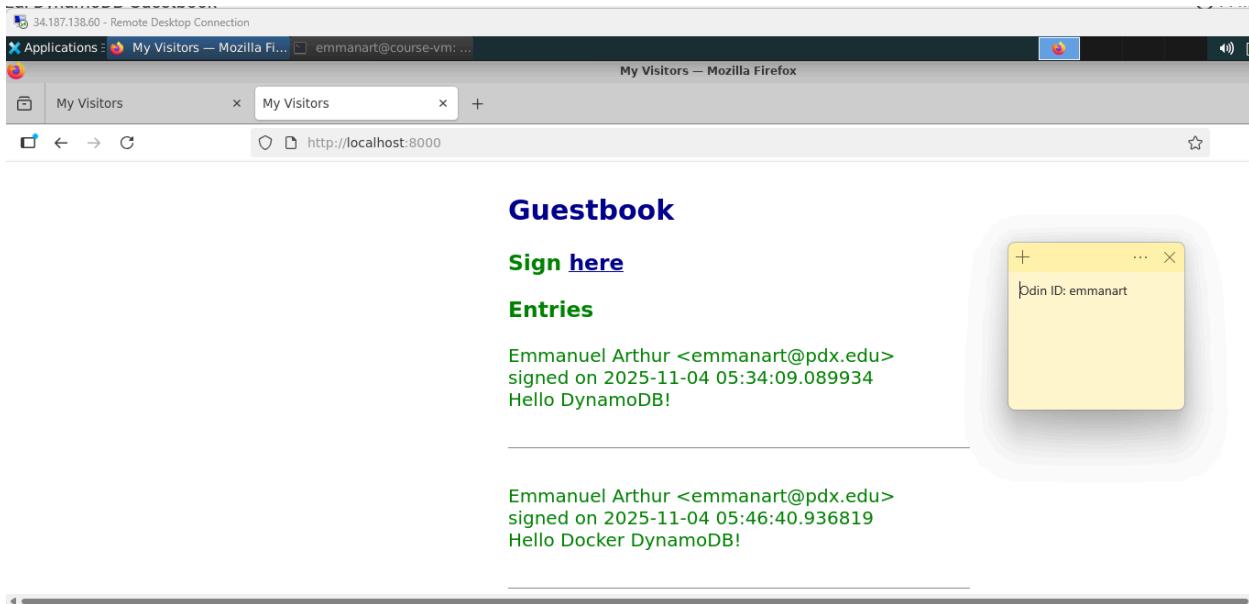
4:50 PM 11/2/2025

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

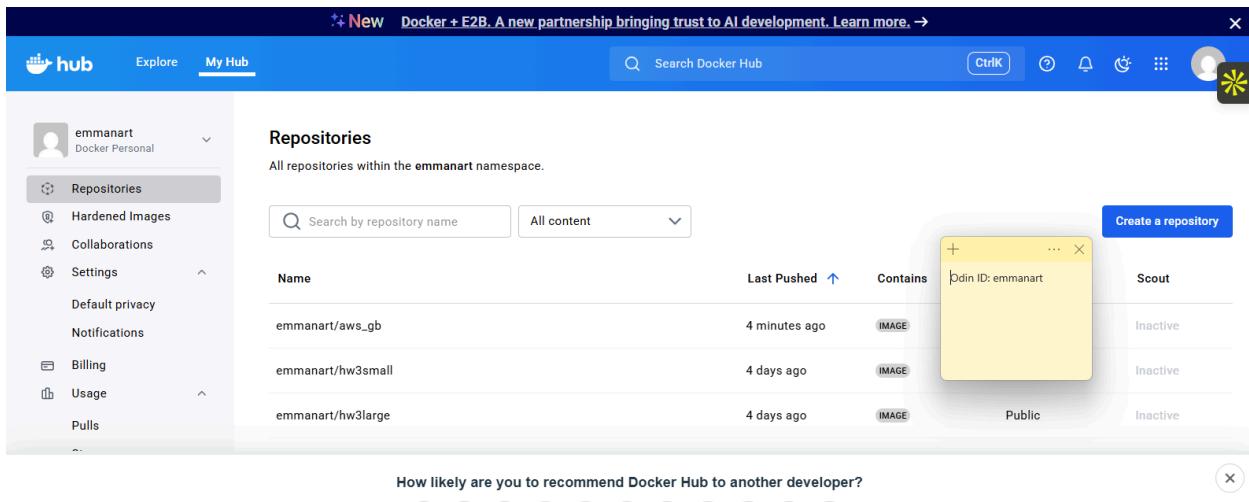


Lab 5.2a

- Take a screenshot of the output for your lab notebook



- Take a screenshot of the container image on DockerHub.



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



Guestbook

[Sign here](#)

Entries

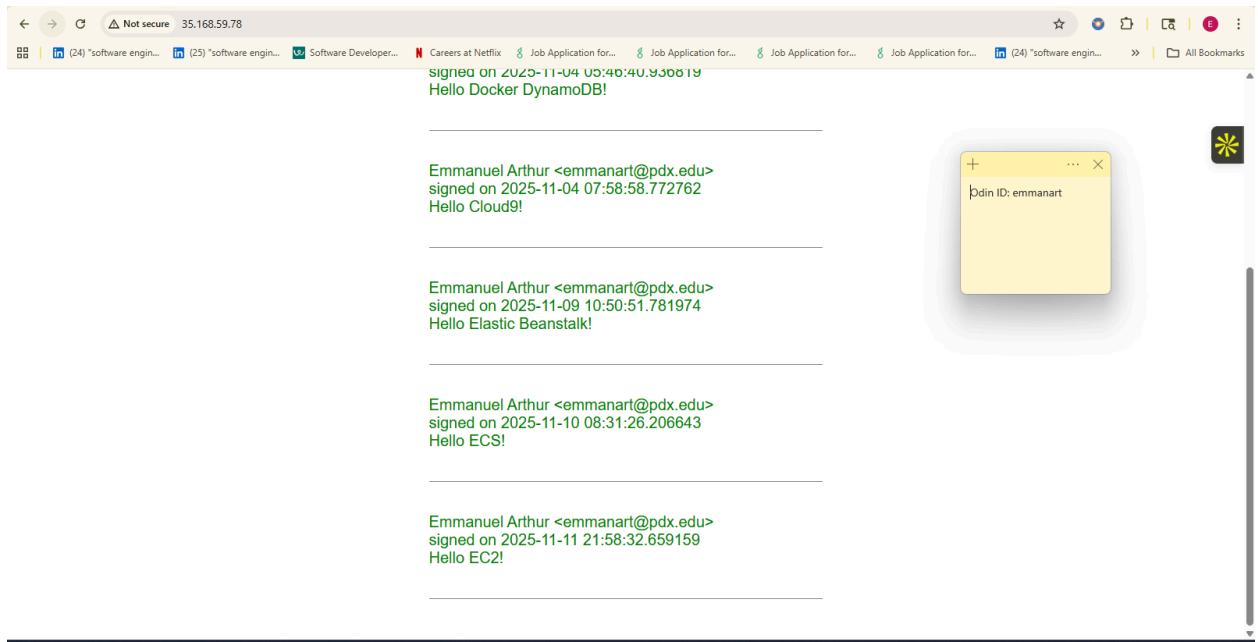
Emmanuel Arthur <emmanart@pdx.edu>
signed on 2025-11-04 05:34:09.089934
Hello DynamoDB!

Odin ID: emmanart

Emmanuel Arthur <emmanart@pdx.edu>
signed on 2025-11-04 05:46:40.936819
Hello Docker DynamoDB!

Emmanuel Arthur <emmanart@pdx.edu>
signed on 2025-11-04 07:58:58.772762
Hello Cloud9!

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



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

The screenshot shows the Amazon DynamoDB console interface. At the top, there is a feedback survey overlay with the message: "Share your feedback on Amazon DynamoDB. Your feedback is an important part of helping us provide a better customer experience. Take this short survey to let us know how we're doing." A yellow callout box highlights the text "Odin ID: emmanart". Below the survey, the main dashboard shows a table named "guestbook". The table has one item listed:

Name	Status	Partition key	Sort key	Indexes	Replication Regions	Deletion protection	Favorite	Read capacity mode
guestbook	Active	email (\$)	date (\$)	0	0	Off		Provisioned (1)

The left sidebar includes sections for Dashboard, Tables (selected), Explore items, PartQL editor, Backups, Exports to S3, Imports from S3, Integrations, Reserved capacity, and Settings. A DAX section is also present. At the bottom, there are links for CloudShell, Feedback, Privacy, Terms, and Cookie preferences.

Lab 5.2g

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

The screenshot shows a Mozilla Firefox browser window with multiple tabs open. The active tab is titled "My Visitors" and displays a "Guestbook" application. The page content includes:

Guestbook

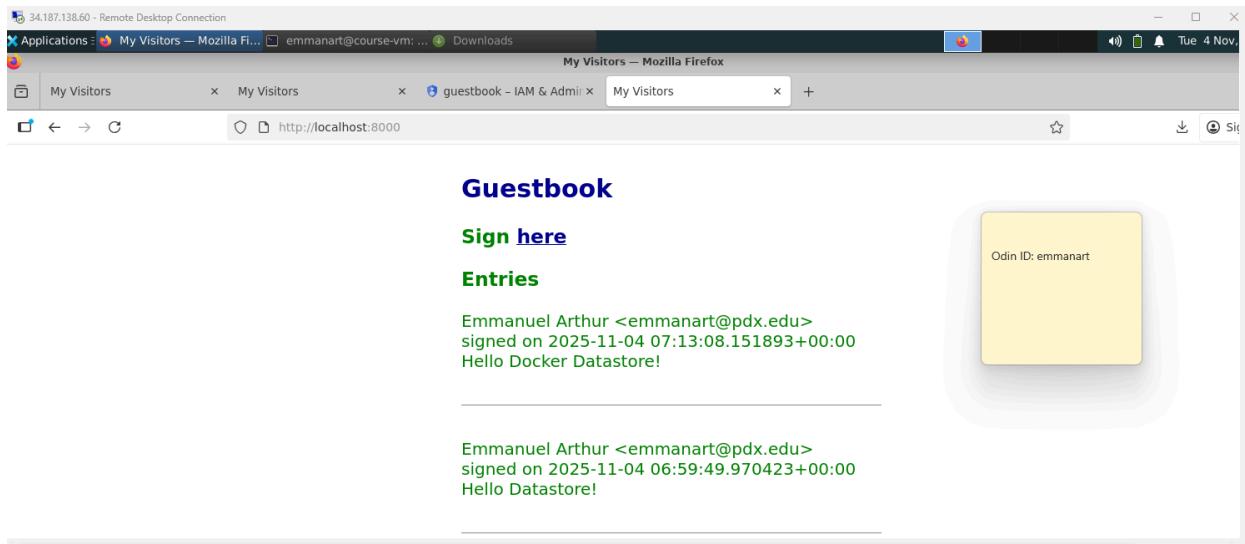
Sign here

Entries

Emmanuel Arthur <emmanart@pdx.edu>
signed on 2025-11-04 06:59:49.970423+00:00
Hello Datastore!

A yellow callout box highlights the text "Odin ID: emmanart". The browser's address bar shows the URL <http://localhost:5000>. The taskbar at the bottom of the screen shows icons for various applications.

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



- Take a screenshot of the container image on DockerHub.

Repositories

All repositories within the **emmanart** namespace.

Name	Last Pushed	Contains	Visibility	Scout
emmanart/gcp_gb	less than a minute ago		Public	Inactive
emmanart/aws_gb	about 1 hour ago		Public	Inactive
emmanart/hw3small	4 days ago		Public	Inactive
emmanart/hw3large	4 days ago		Public	Inactive
emmanart/helloalpine	9 days ago		Public	Inactive
emmanart/helloubuntu	9 days ago		Public	Inactive

Odin ID: emmanart

Create a repository

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



Guestbook

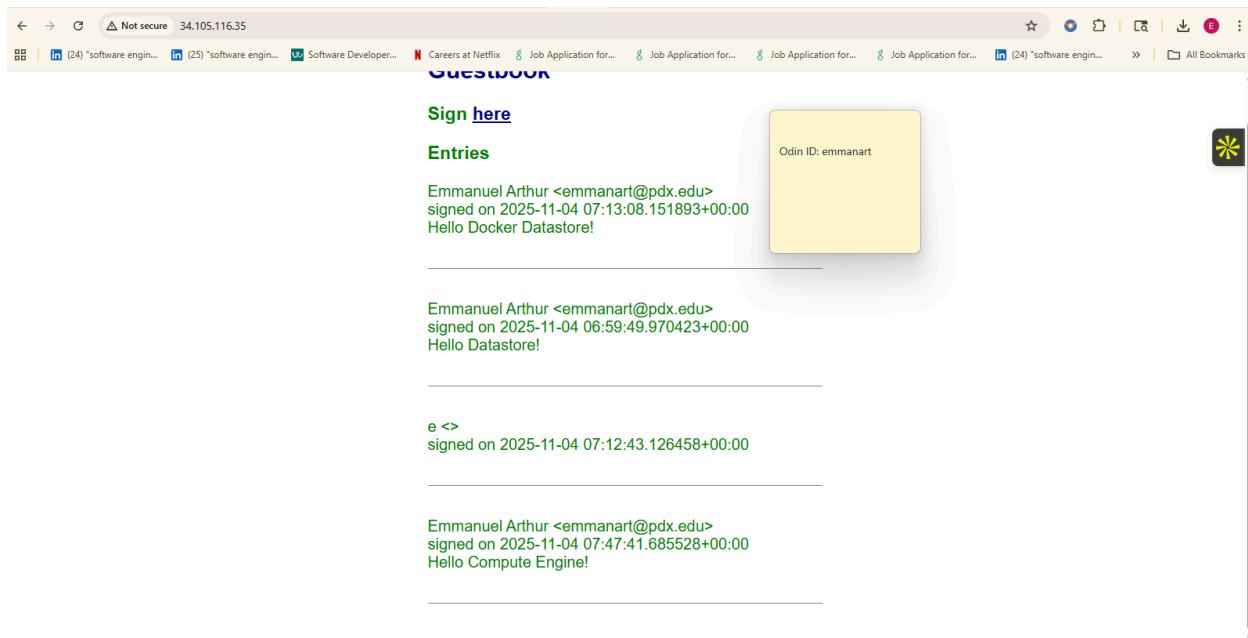
[Sign here](#)

Entries

Emmanuel Arthur <emmanart@pdx.edu>
signed on 2025-11-04 07:13:08.151893+00:00
Hello Docker Datastore!

Emmanuel Arthur <emmanart@pdx.edu>
signed on 2025-11-04 06:59:49.970423+00:00
Hello Datastore!

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



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

Panel view [Query builder](#)

[Run](#) [Clear](#) [Documentation](#)

Query scope: Collection: /Review
Limit: 100

Add to query

Odin ID: emmanart

Results Analysis

Query results

Document ID	date	email	message	name
id5081054809423872	November 3, 2025 at 11:13:08 PM UTC-8	"emmanart@pdx.edu"	"Hello Docker Datastore!"	"Emmanuel Arthur"
id5634161670881280	November 3, 2025 at 10:59:49 PM UTC-8	"emmanart@pdx.edu"	"Hello Datastore!"	"Emmanuel Arthur"
id5644004762845184	November 3, 2025 at 11:12:43 PM UTC-8	"	"	"e"
id6206954716266496	November 3, 2025 at 11:47:41 PM UTC-8	"emmanart@pdx.edu"	"Hello Compute Engine!"	"Emmanuel Arthur"

Rows per page: 50 ▾ 1 – 4 of 4 < >