

## **5.1g**

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

**The default service account has the role of editor.**

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

**Yes, in general the editor not only has all the viewer permissions but can also create and delete resources for most Google Cloud services. This will allow the default service account to create buckets and read/write objects. According to the docs, there are 7997 assigned permissions to the editor.**

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

**Read-only access to Storage and Service, write access to Stackdriver Logging and Monitoring, 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)?

**No, because we are only given read-only access to Storage and Service which would not allow us to create buckets and read/write objects in them.**

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

**There are 5 possible settings: None, Read-only, Write-only, Read/Write, Full**

What time did the latest earthquake happen?

**2024-02-09 at 23:23:17.800Z**

What was the magnitude (mag)?

**0.74**

Where was the place it happened?

**Latitude: 38.8224983**

**Longitude: -122.8001633**

**Name: Cloverdale, CA 95425, US**

In the web console, bring up Cloud Storage, navigate to the bucket you have created, and click on the earthquake.png file.

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

The screenshot shows the Google Cloud Storage console interface. The left sidebar contains navigation links for 'Cloud Storage', 'Buckets', 'Monitoring', and 'Settings'. The main content area is titled 'Object details' and shows the path 'Buckets > lab5pdx > earthquake.png'. Below this, there are tabs for 'LIVE OBJECT' and 'VERSION HISTORY'. A row of action buttons includes 'DOWNLOAD', 'EDIT METADATA', 'EDIT ACCESS', and 'DELETE'. The 'Overview' section lists file properties: Type (image/png), Size (314.5 KB), Created (Feb 9, 2024, 3:52:21 PM), Last modified (Feb 9, 2024, 3:52:21 PM), Storage class (Standard), Custom time (—), Public URL (Not applicable), Authenticated URL (https://storage.cloud.google.com/lab5pdx/earthquake.png), and gsutil URI (gs://lab5pdx/earthquake.png). The 'Permissions' section shows 'Public access' as 'Not public'. The 'Protection' section includes 'Version history' (—), 'Retention expiration time' (None), 'Object retention retain until time' (None), 'Bucket retention retain until time' (None), 'Hold status' (None), and 'Encryption type' (Google-managed). At the bottom, a world map visualization shows earthquake locations with colored dots. A dark overlay with text 'Open', '10din id: jtn7', and 'Text Tab Width: 8' is positioned over the map.

Attempt the following command on the VM: 'gcloud compute instances list'

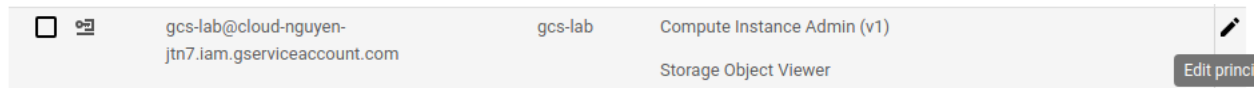
What is the exact error message that is returned?

**ERROR: (gcloud.compute.instances.list) Some requests did not succeed:**

**- Required 'compute.instances.list' permission for 'projects/cloud-nguyen-jtn7'**

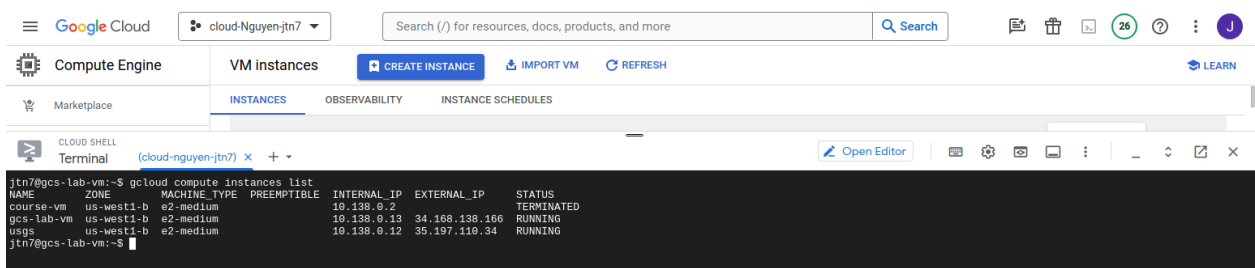
What role needs to be added to the service account's permissions for the VM to have access to list the project's Compute Engine resources?

### Compute Instance Admin(v1)



Add the role and save the changes. Go back to the VM and repeat the command until it succeeds.

Take a screenshot of the output for your notebook.



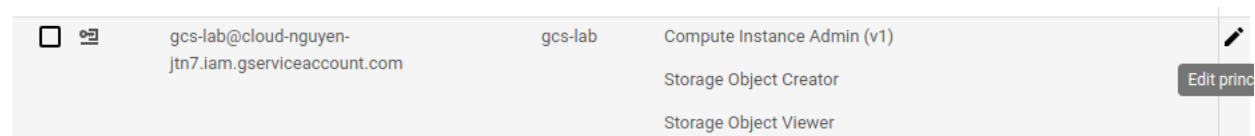
Rename the file to a different name and then attempt to copy it back into the bucket.

What is the exact error message that is returned?

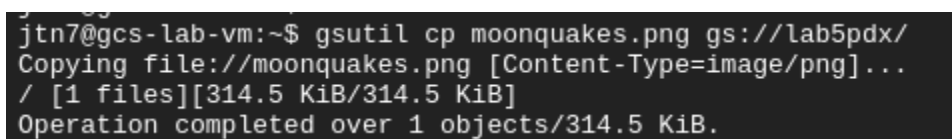
**AccessDeniedException: 403 gcs-lab@cloud-nguyen-jtn7.iam.gserviceaccount.com does not have storage.objects.create access to the Google Cloud Storage object. Permission 'storage.objects.create' denied on resource (or it may not exist).**

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?

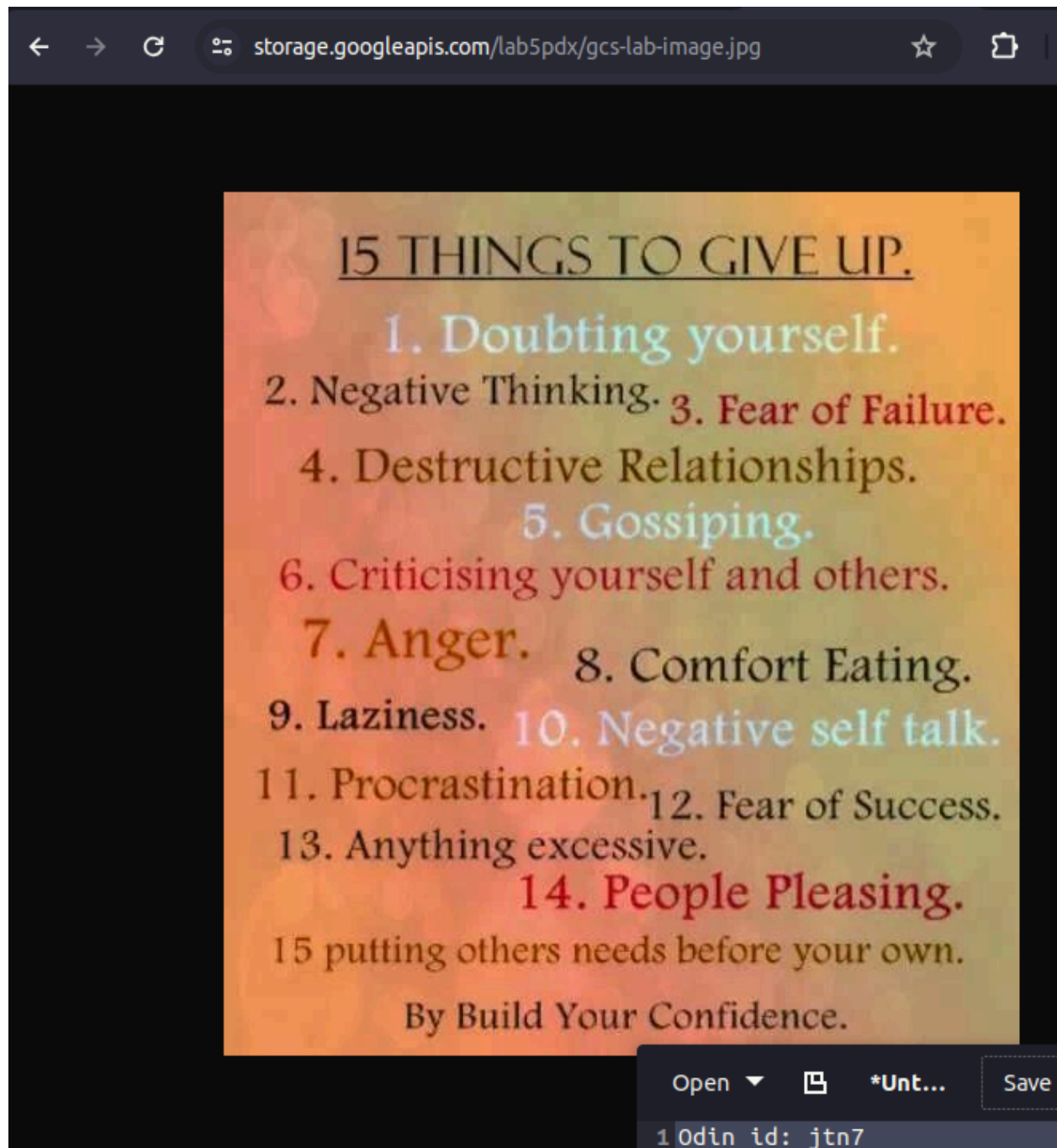
### Storage Object Creator



Add the role and save the changes. Go back to the VM and repeat the gsutil command until it succeeds. Take a screenshot of the output for your notebook.



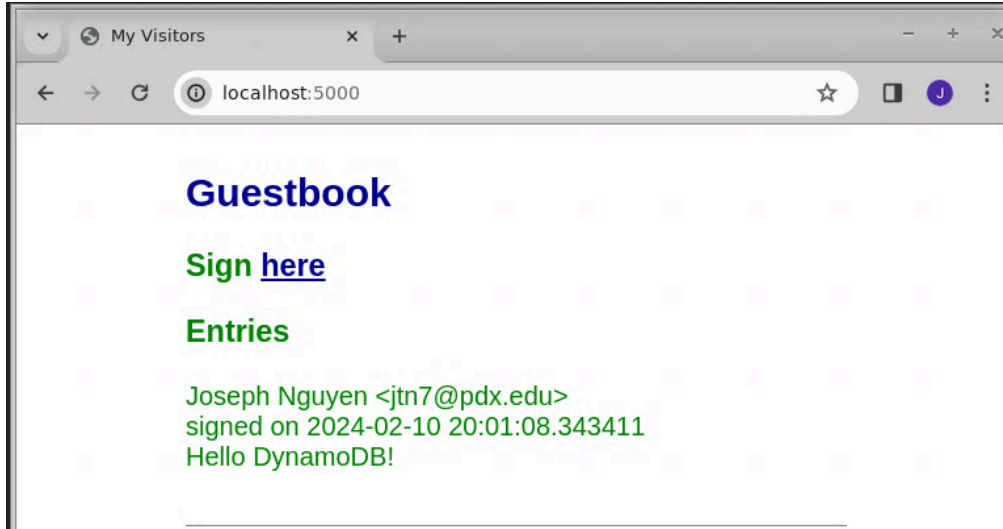
Take a screenshot the shows the entire URL and the image that has been retrieved:



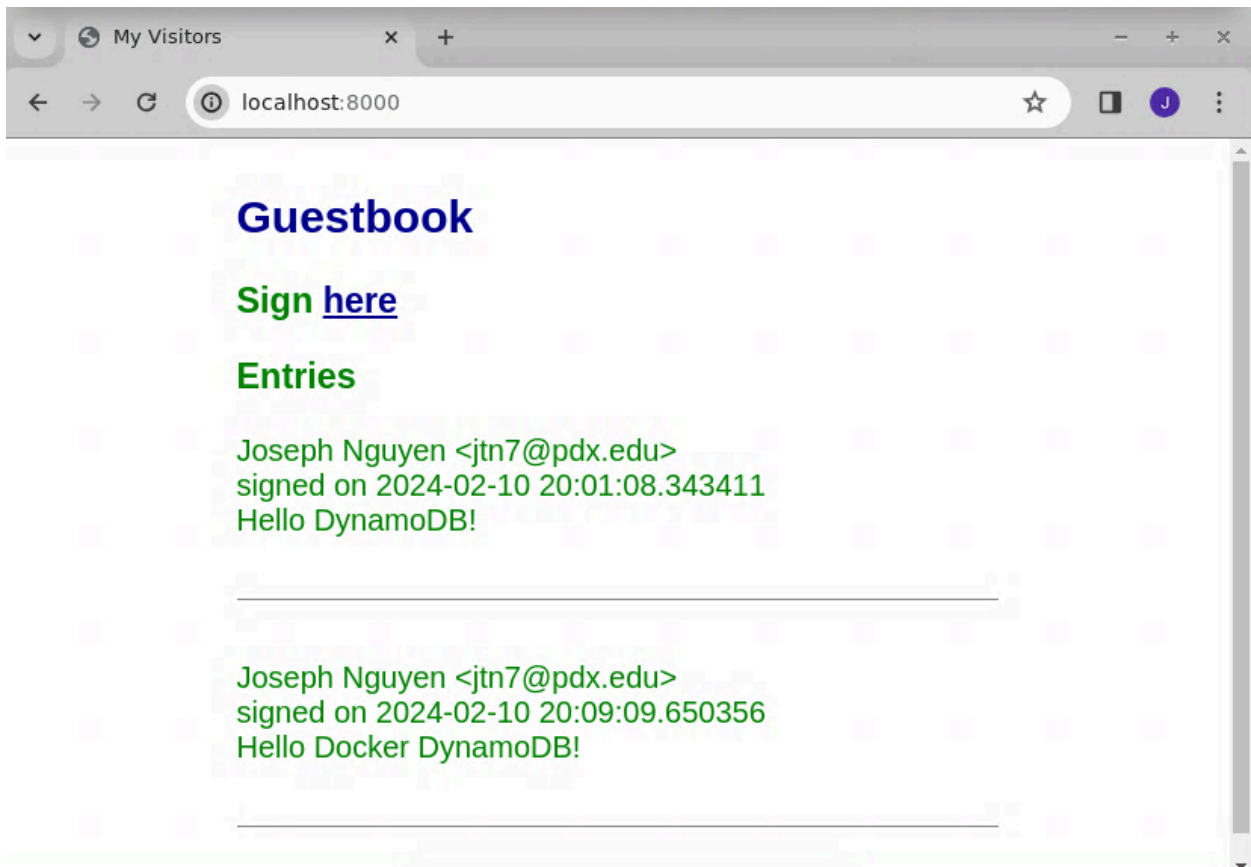
## 5.2a

Screenshots for:

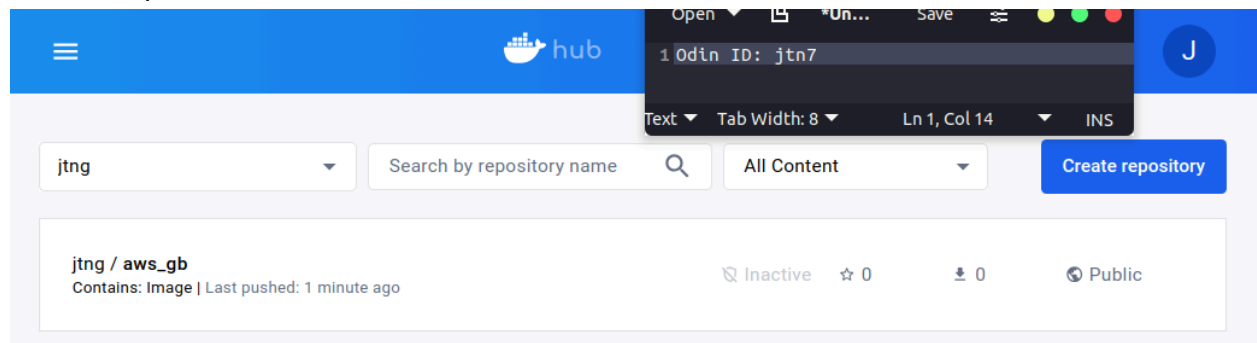
Ubuntu VM Python



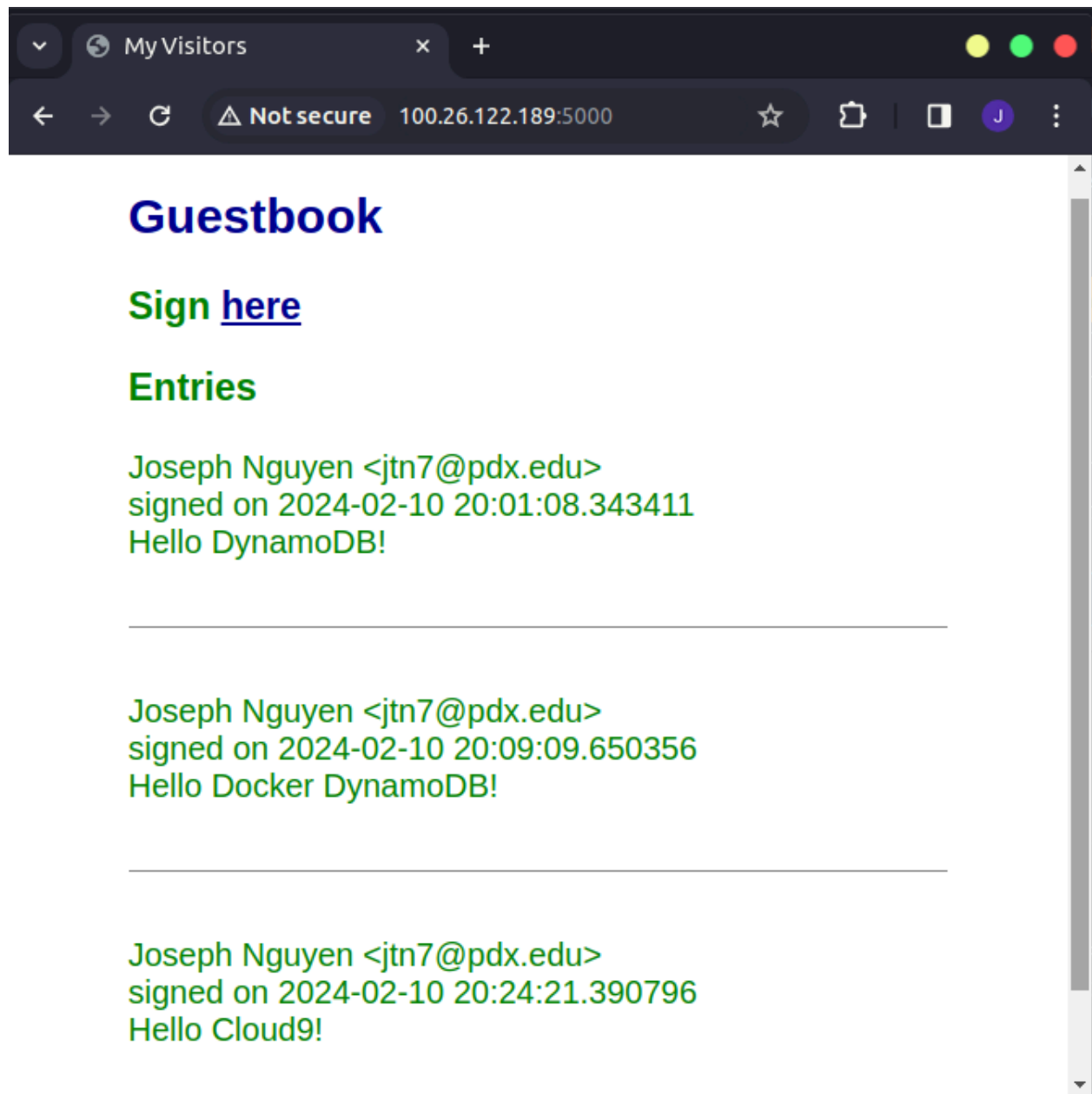
Ubuntu VM Docker



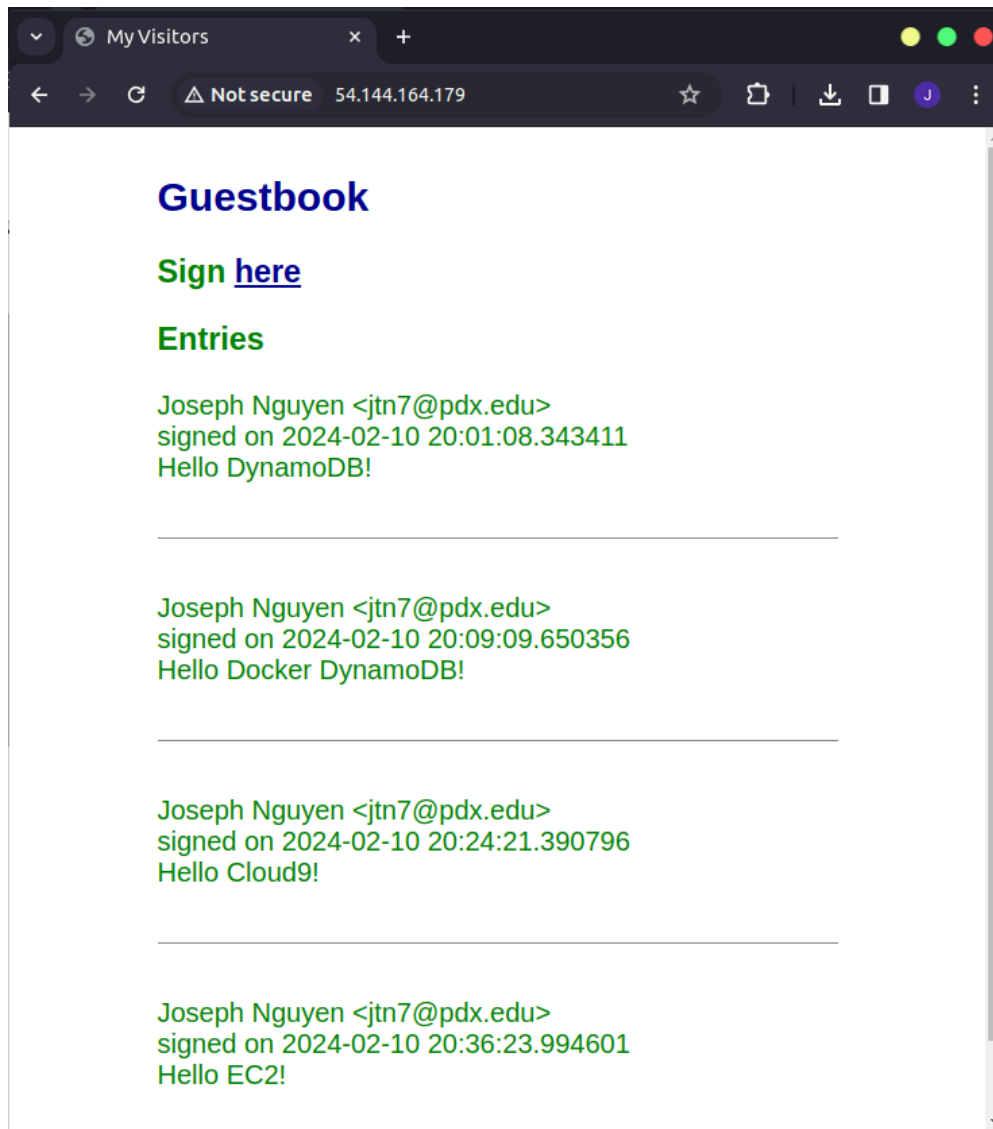
## Docker Repo



## AWS Cloud9



## AWS EC2



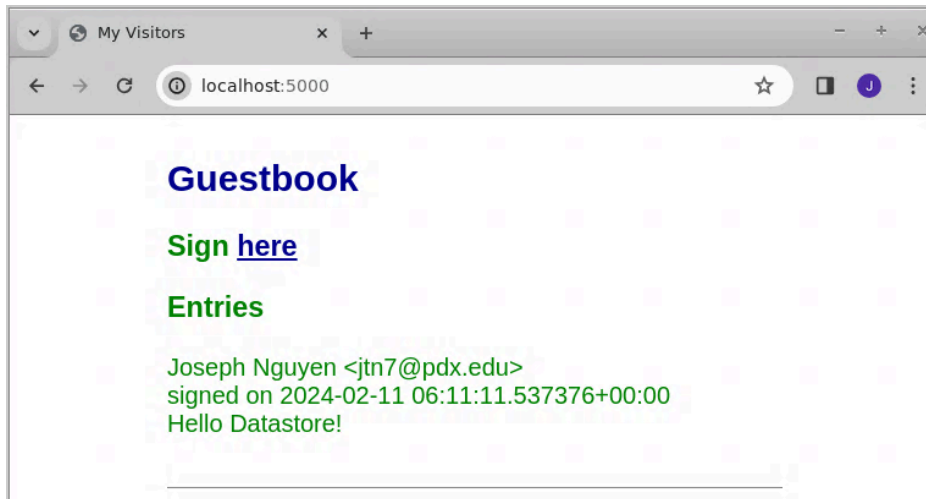
## Database Items

Items returned (4)					Actions	Create item
					< 1 > ⚙️	
<input type="checkbox"/>	email (String)	date (String)	message	name		
<input type="checkbox"/>	<a href="mailto:jtn7@pdx.edu">jtn7@pdx.edu</a>	2024-02-10 20:01:08....	Hello Dyna...	Joseph Nguyen		
<input type="checkbox"/>	<a href="mailto:jtn7@pdx.edu">jtn7@pdx.edu</a>	2024-02-10 20:09:09....	Hello Docke...	Joseph Nguyen		
<input type="checkbox"/>	<a href="mailto:jtn7@pdx.edu">jtn7@pdx.edu</a>	2024-02-10 20:24:21....	Hello Cloud9!	Joseph Nguyen		
<input type="checkbox"/>	<a href="mailto:jtn7@pdx.edu">jtn7@pdx.edu</a>	2024-02-10 20:36:23....	Hello EC2!	Joseph Nguyen		

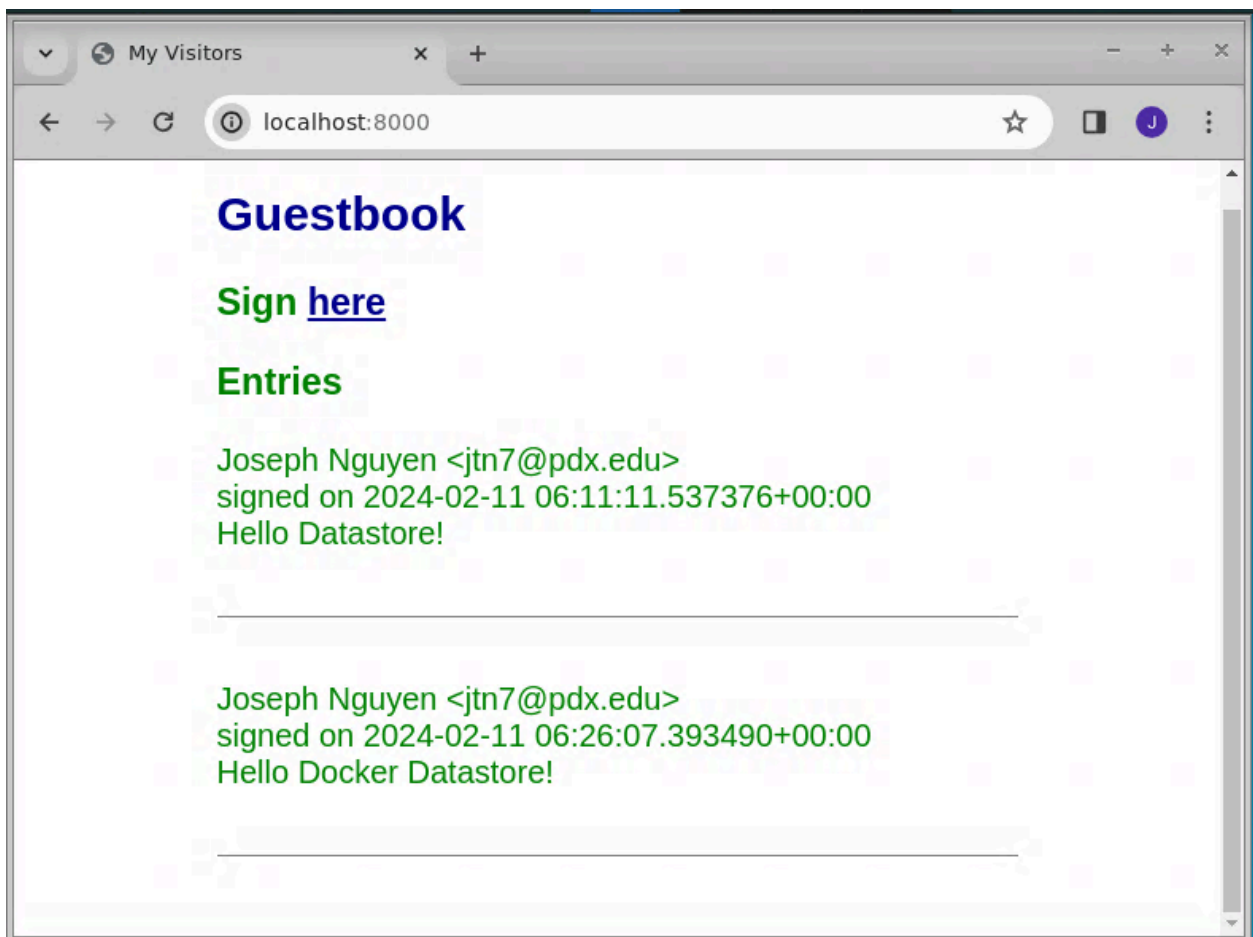
## 5.2g

Screenshots for:

Ubuntu VM Python

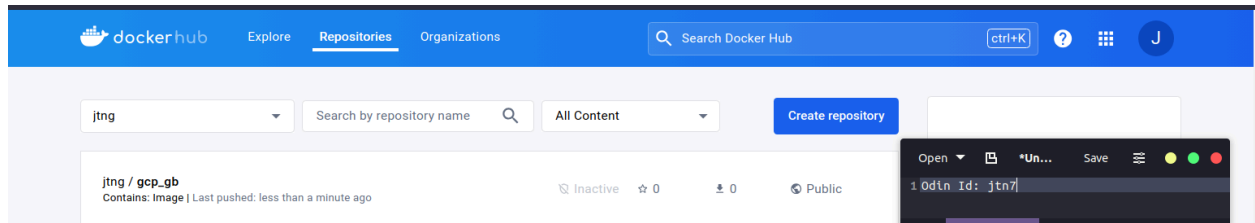


Ubuntu VM Docker

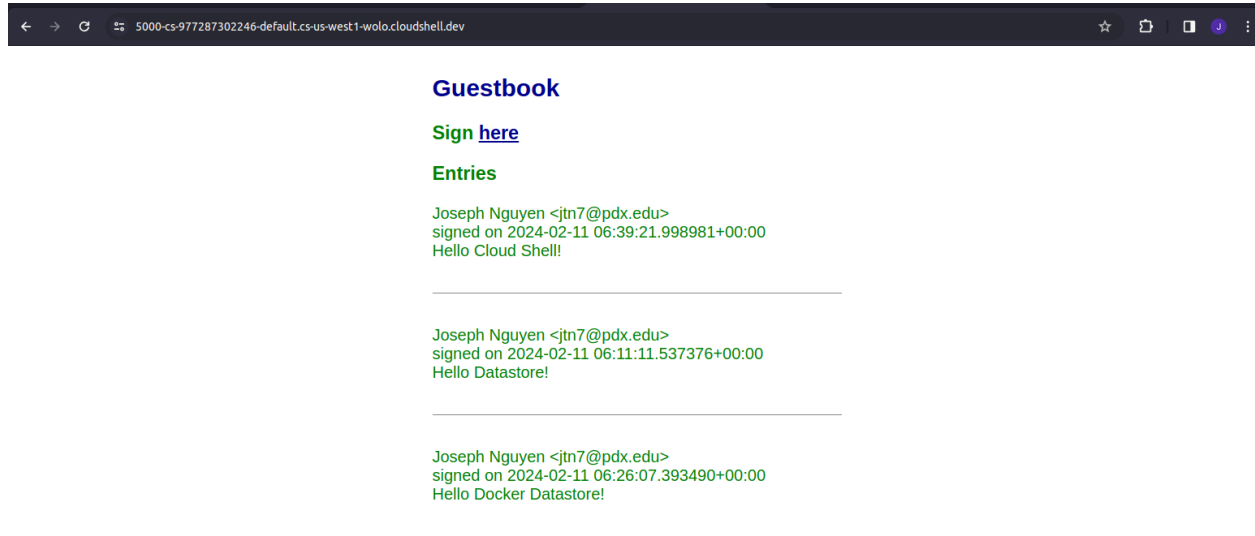




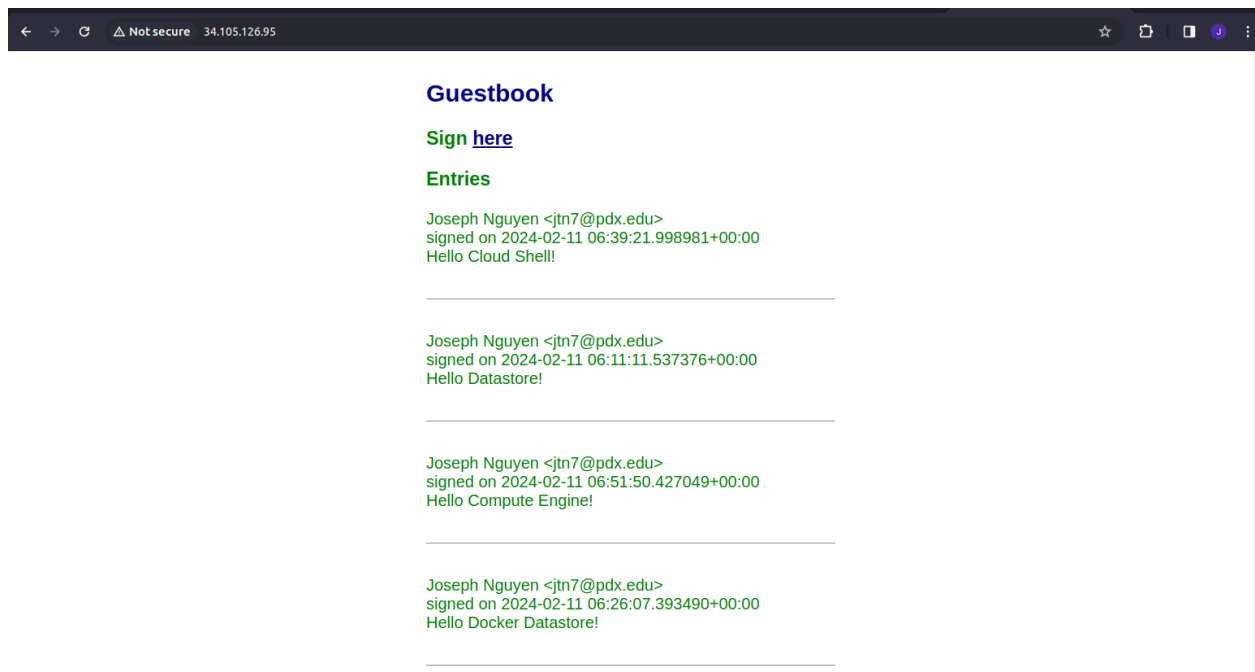
## Docker



## GCP Cloud Shell



## GCP Compute Engine



# Datastore

Datastore Studio [+ CREATE ENTITY](#) [🗑 DELETE](#) [🔄](#)

QUERY BY KIND    QUERY BY GQL

Kind

Review

Query results

<input type="checkbox"/>	Name/ID ↑	date	email	message	name
<input type="checkbox"/>	<a href="#">id=5632499082330112</a>	February 10, 2024 at 10:39:21.998 PM UTC-8	jtn7@pdx.edu	Hello Cloud Shell!	Joseph Nguyen
<input type="checkbox"/>	<a href="#">id=5634161670881280</a>	February 10, 2024 at 10:11:11.537 PM UTC-8	jtn7@pdx.edu	Hello Datastore!	Joseph Nguyen
<input type="checkbox"/>	<a href="#">id=5642368648740864</a>	February 10, 2024 at 10:51:50.427 PM UTC-8	jtn7@pdx.edu	Hello Compute Engine!	Joseph Nguyen
<input type="checkbox"/>	<a href="#">id=5644004762845184</a>	February 10, 2024 at 10:26:07.393 PM UTC-8	jtn7@pdx.edu	Hello Docker Datastore!	Joseph Nguyen