5.1

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

The default service account has the Editor role.

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

I'm not sure how to tell, but with the thousands of roles allowed, it should be sufficient.

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

"Default: read-only access to Storage and Service Management, 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)?

I don't think so. If creating/writing to buckets is part of storage management, then the VM only has read-only access.

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

Read only, Write only, Read write, and Full.

4. What time did the latest earthquake happen?

October 24th, 2023.

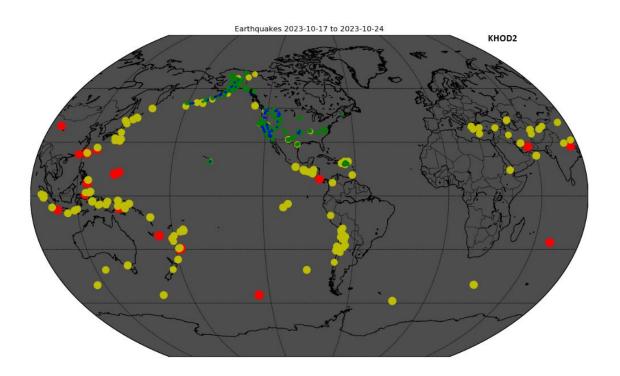
What was the magnitude (mag)?

0.9.

Where was the place it happened?

Southern Alaska.

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



9. 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-khodakovskiy-khod2'

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?

Since nothing came up when I filtered by "list compute instances", the closest role I could find that had minimal permissions was "Compute Instance Admin (Beta)".

Take a screenshot of the output for your notebook.

```
khod2@gcs-lab-vm:~$ gcloud compute instances list
                        MACHINE TYPE PREEMPTIBLE INTERNAL IP EXTERNAL IP
NAME
            ZONE
                                                                              STATUS
course-vm-us us-west1-b e2-medium
                                                  10.138.0.8
                                                                              TERMINATED
course-vm asia-east1-b e2-medium
                                                  10.140.0.4
                                                                              TERMINATED
gcs-lab-vm us-west4-c e2-medium
                                                   10.182.0.3
                                                               34.125.217.163 RUNNING
           us-west4-c e2-medium
                                                   10.182.0.2
                                                                              TERMINATED
khod2@gcs-lab-vm:~$
```

10. What is the exact error message that is returned?

AccessDeniedException: 403 gcs-lab@cloud-khodakovskiy-khod2.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?

It should be Storage Object Creator.

Take a screenshot of the output for your notebook.

```
Copying file://moonquakes.png [Content-Type=image/png]...
/ [1 files][315.3 KiB/315.3 KiB]
Operation completed over 1 objects/315.3 KiB.
khod2@gcs-lab-vm:~$
```

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



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

Guestbook

Sign <u>here</u>

Entries

Sam <khod2@pdx.edu> signed on 2023-10-25 18:04:46.304495 Hello DynamoDB!

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

Sign here

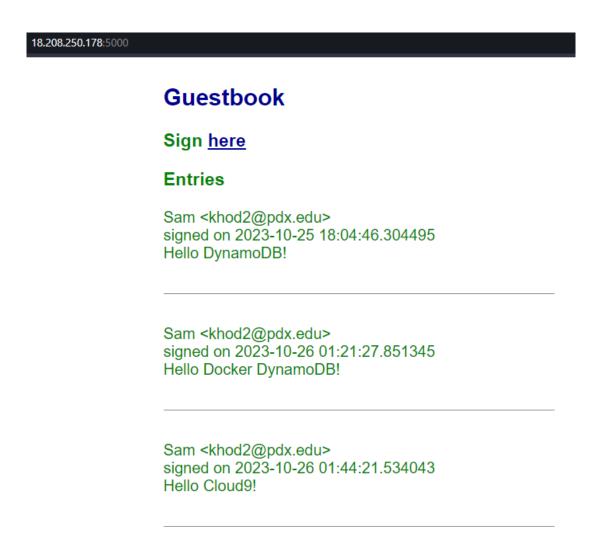
Entries

Sam <khod2@pdx.edu> signed on 2023-10-25 18:04:46.304495 Hello DynamoDB!

Sam <khod2@pdx.edu> signed on 2023-10-26 01:21:27.851345 Hello Docker DynamoDB! 8. Take a screenshot of the container image on DockerHub.



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



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

▲ Not secure | 3.90.37.1

Guestbook

Sign here

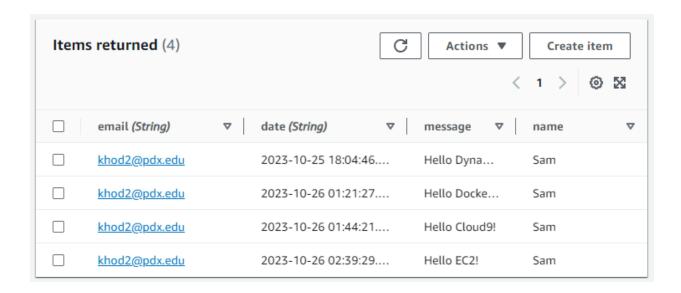
Entries

Sam <khod2@pdx.edu> signed on 2023-10-25 18:04:46.304495 Hello DynamoDB!

Sam <khod2@pdx.edu> signed on 2023-10-26 01:21:27.851345 Hello Docker DynamoDB!

Sam <khod2@pdx.edu> signed on 2023-10-26 01:44:21.534043 Hello Cloud9!

Sam <khod2@pdx.edu> signed on 2023-10-26 02:39:29.710922 Hello EC2! 16. Take a screenshot that shows all the guestbook entries that you added to the DynamoDB table including their timestamps.



5.2g

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

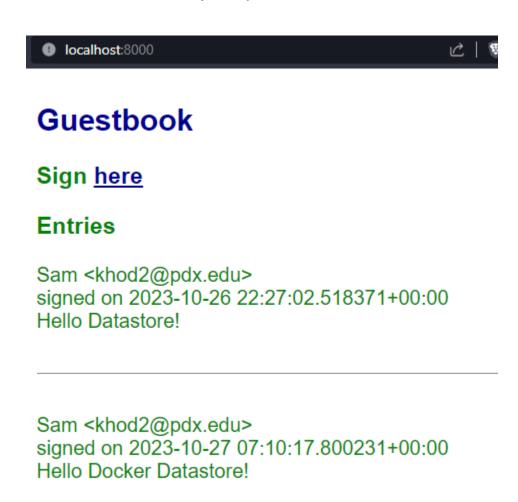


Guestbook

Sign <u>here</u>

Entries

Sam <khod2@pdx.edu> signed on 2023-10-26 22:27:02.518371+00:00 Hello Datastore! 9. Take a screenshot of the output for your lab notebook.



10. Take a screenshot of the container image on DockerHub.

khod2 / gcp_gb Contains: Image | Last pushed: a minute ago

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

5000-cs-705086905022-default.cs-us-west1-ijlt.cloudshell.dev

Guestbook

Sign here

Entries

Sam <khod2@pdx.edu> signed on 2023-10-26 22:27:02.518371+00:00 Hello Datastore!

Sam <khod2@pdx.edu> signed on 2023-10-27 07:10:17.800231+00:00 Hello Docker Datastore!

Sam <khod2@pdx.edu> signed on 2023-10-27 07:35:45.303855+00:00 Hello Cloud Shell! 15. Take a screenshot as before that shows your entry and the IP address in the URL bar.

▲ Not secure 34.145.18.224	
	Guestbook
	Sign <u>here</u>
	Entries
	Sam <khod2@pdx.edu> signed on 2023-10-27 07:47:32.579962+00:00 Hello Compute Engine!</khod2@pdx.edu>
	Sam <khod2@pdx.edu> signed on 2023-10-26 22:27:02.518371+00:00 Hello Datastore!</khod2@pdx.edu>
	Sam <khod2@pdx.edu> signed on 2023-10-27 07:10:17.800231+00:00 Hello Docker Datastore!</khod2@pdx.edu>
	Sam <khod2@pdx.edu> signed on 2023-10-27 07:35:45.303855+00:00 Hello Cloud Shell!</khod2@pdx.edu>

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

Query results					
	Name/ID ↑	date	email	message	name
	id=5632499082330112	October 27, 2023 at 12:47:32.579 AM UTC-7	khod2@pdx.edu	Hello Compute Engine!	Sam
	id=5634161670881280	October 26, 2023 at 3:27:02.518 PM UTC-7	khod2@pdx.edu	Hello Datastore!	Sam
	id=5644004762845184	October 27, 2023 at 12:10:17.800 AM UTC-7	khod2@pdx.edu	Hello Docker Datastore!	Sam
	id=5710353417633792	October 27, 2023 at 12:35:45.303 AM UTC-7	khod2@pdx.edu	Hello Cloud Shell!	Sam