- Examine the document cleaning code. What kinds of characters are removed when the text is cleaned?

  unidecode.unidecode(text) removes non-ASCII characters, re.sub(r"\s+", " ", text) removes spaces and tabs and .split() removes trailing whitespaces

- What size chunks is the content split into?

  From text_splitter = RecursiveCharacterTextSplitter(chunk_size=10000, chunk_overlap=1000), each chunk has a size of 10000 characters

- What amount of overlap is there between chunks?

  From text_splitter = RecursiveCharacterTextSplitter(chunk_size=10000, chunk_overlap=1000), the overlap is 1000

- How many documents are loaded at a time into the vector database?

From add_documents(vectorstore, chunks, 300), it's 300 at a time.

- Show the document URLs that are returned for the following queries:
  - Tell me about Firebase -> https://codelabs.cs.pdx.edu/labs/C09.2g_firebase/index.html?index=..%2F..cs430
  - Tell me about Terraform → https://codelabs.cs.pdx.edu/labs/C07.1a_terraform_gb/index.html?index=..%2F..cs430
  - Tell me about Cloud Run -> https://codelabs.cs.pdx.edu/labs/C06.2g_cloudrun_webproxy/index.html?index=..%2F..cs430
- What are the advantages and disadvantages of Firebase?

  It provides authentication, and save development time as an advantage but one disadvantage is that it leads to vendor lock-in

- How do you use Terraform?

  This is taken from the direct response the LLM provide to the query "Tell me about Terraform"

  *Consistent Workflow:** The typical workflow involves:

1. **Defining Configuration:** Creating declarative configuration files (using a structured data format similar to JSON and YAML) that specify the cloud resources to be created. These files are often committed to a Git repository for version control.

2. **Planning:** Running a `terraform plan` command to simulate a deployment. This step shows the potential effects of the configuration, including which resources will be added, changed, or destroyed, without actually making any changes.

3. **Applying:** Executing a `terraform apply` command to deploy the specified resources onto the cloud platform.

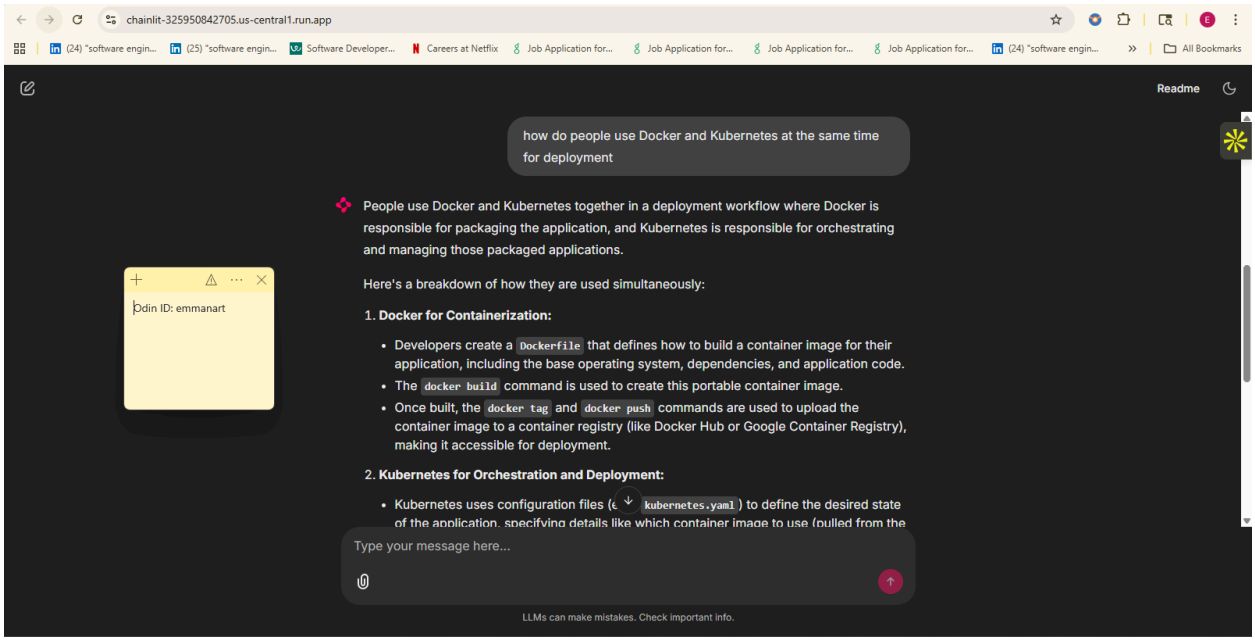
4. **Initializing:** Using `terraform init` to load necessary software modules (providers) that help Terraform interact with the cloud provider.

5. **Destroying:** Using `terraform destroy` to take down the deployed infrastructure.

- Why would you use Cloud Run instead of App Engine?

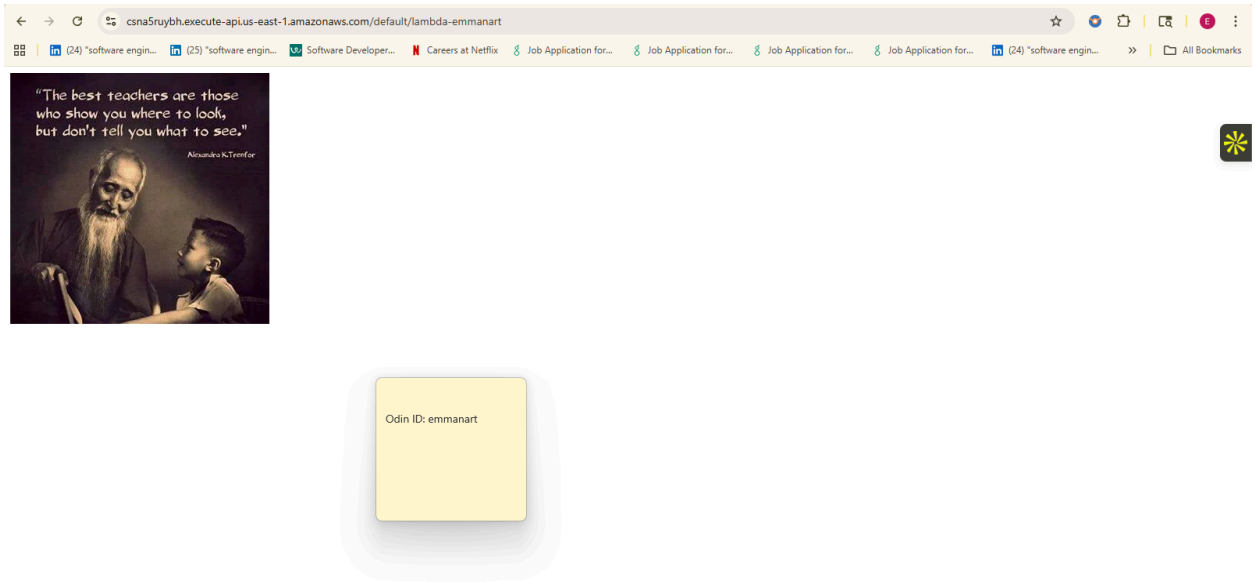
  From the LLM response, Unlike App Engine, which supports a restricted set of environments, Cloud Run offers developers the flexibility to run any environment they can package into a container. This is highly beneficial for those familiar with building containers for their applications.

- Take a screenshot that includes the URL and the results of a successful query

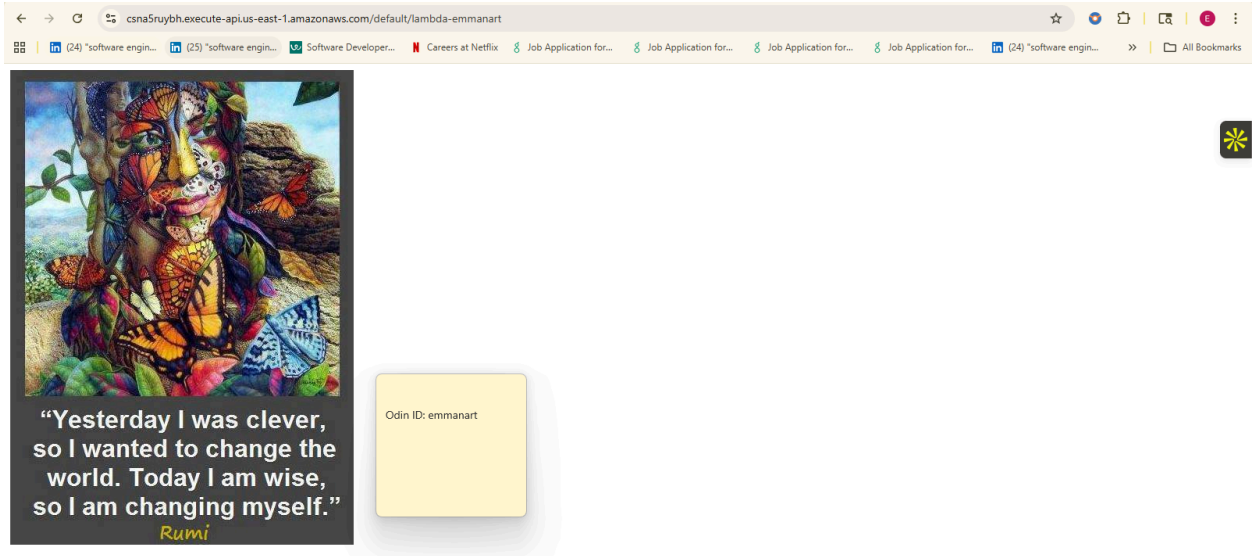


Lab 8.3a

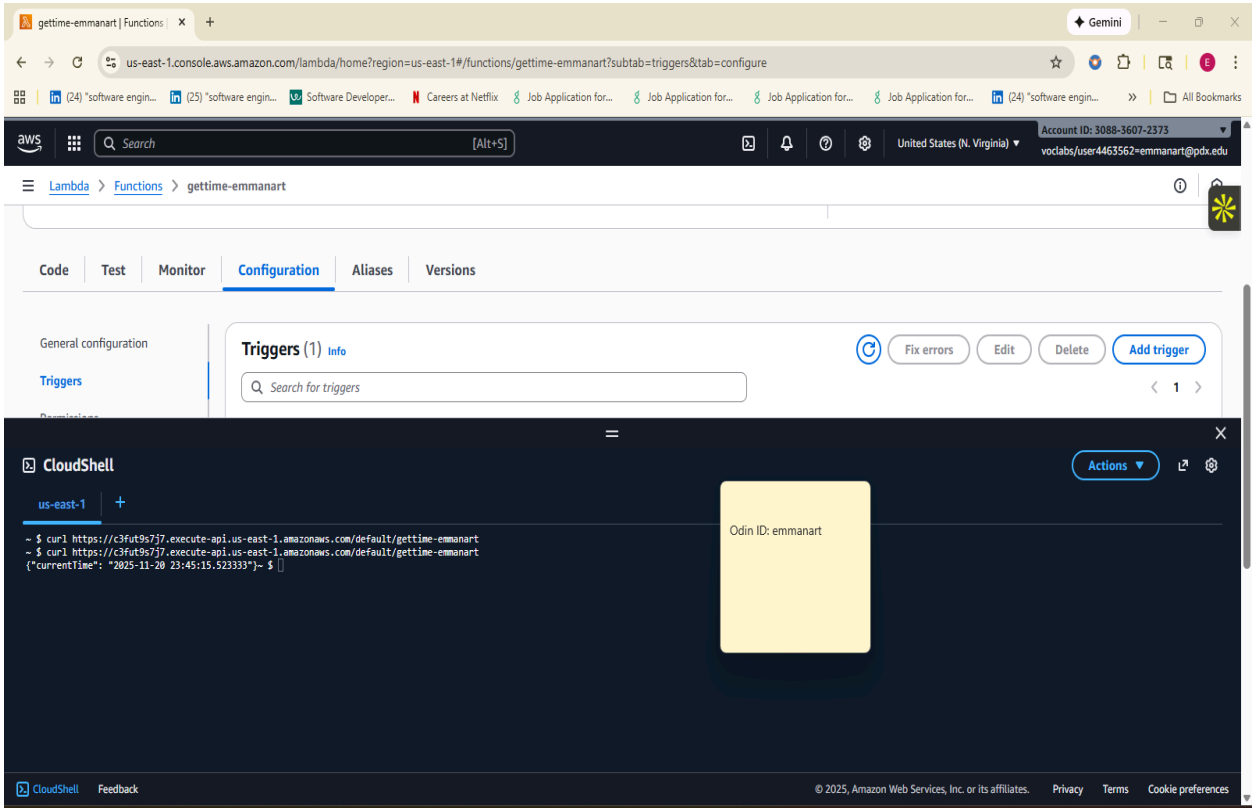
- Take a screenshot of the resulting page including the URL bar



- Click "Reload" in the browser and take another screenshot showing the image has changed:

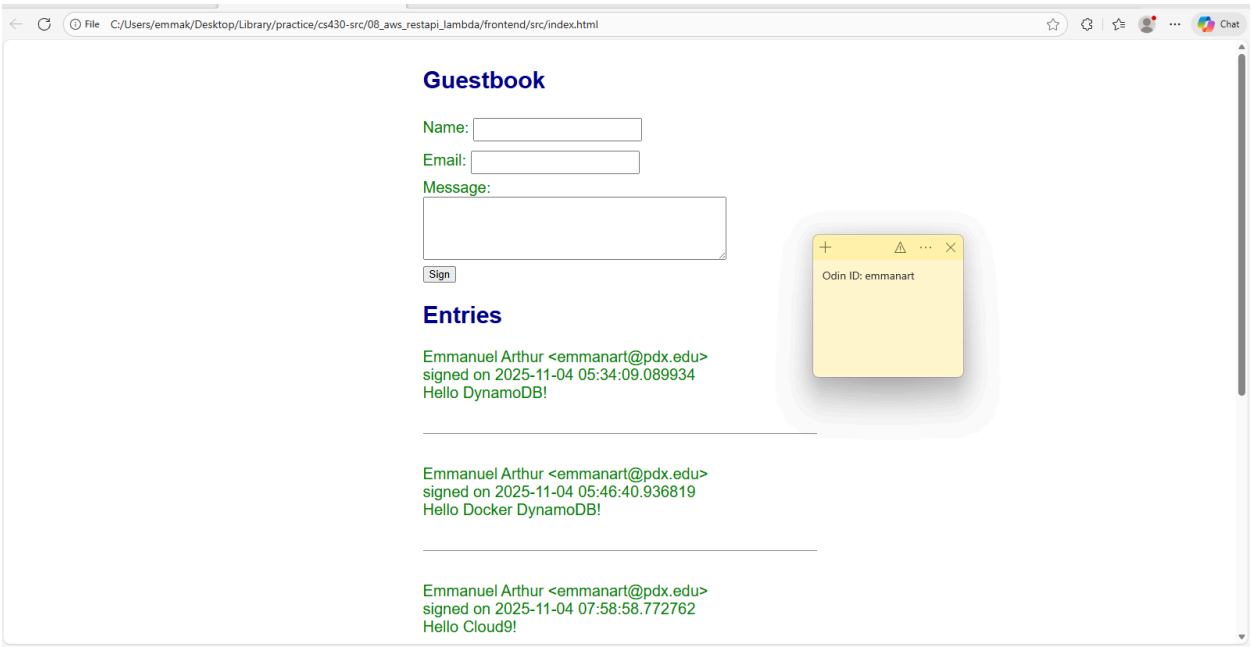


- Use curl on your Linux VM to access the API endpoint and show the results. Take a screenshot for your lab notebook.

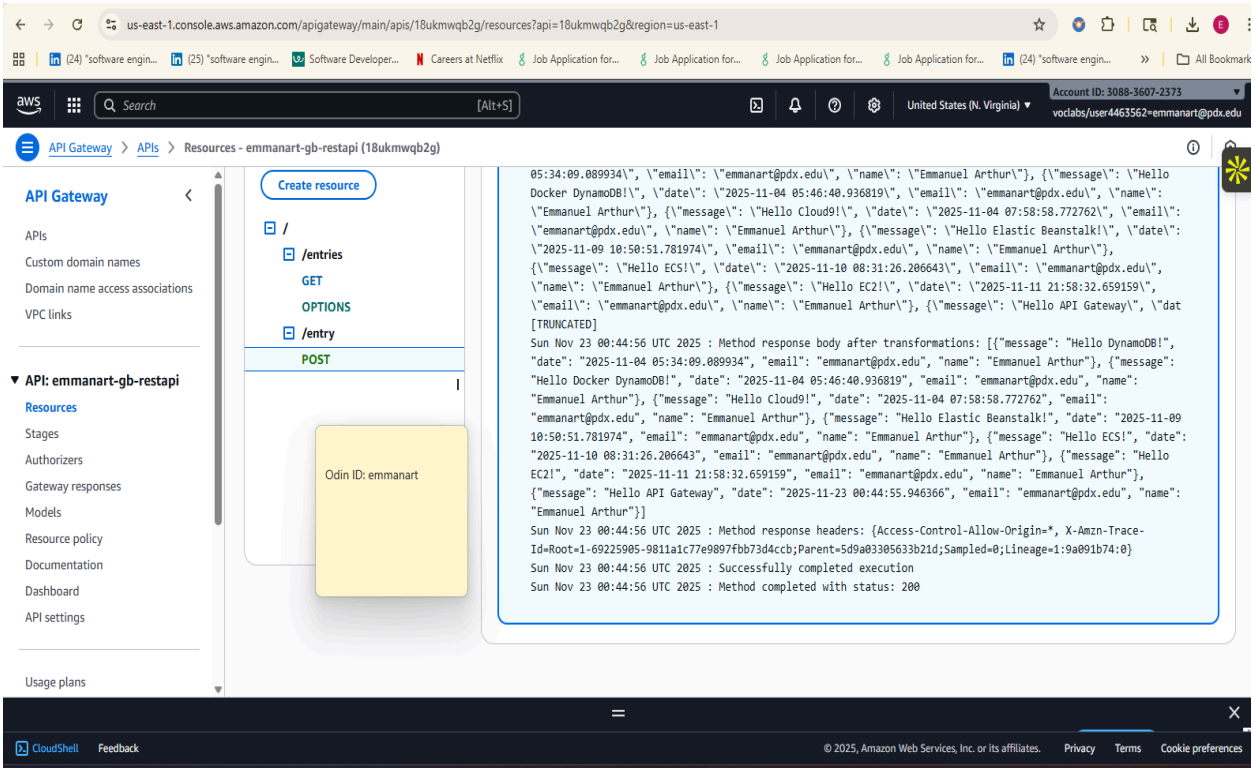


Lab 8.4a

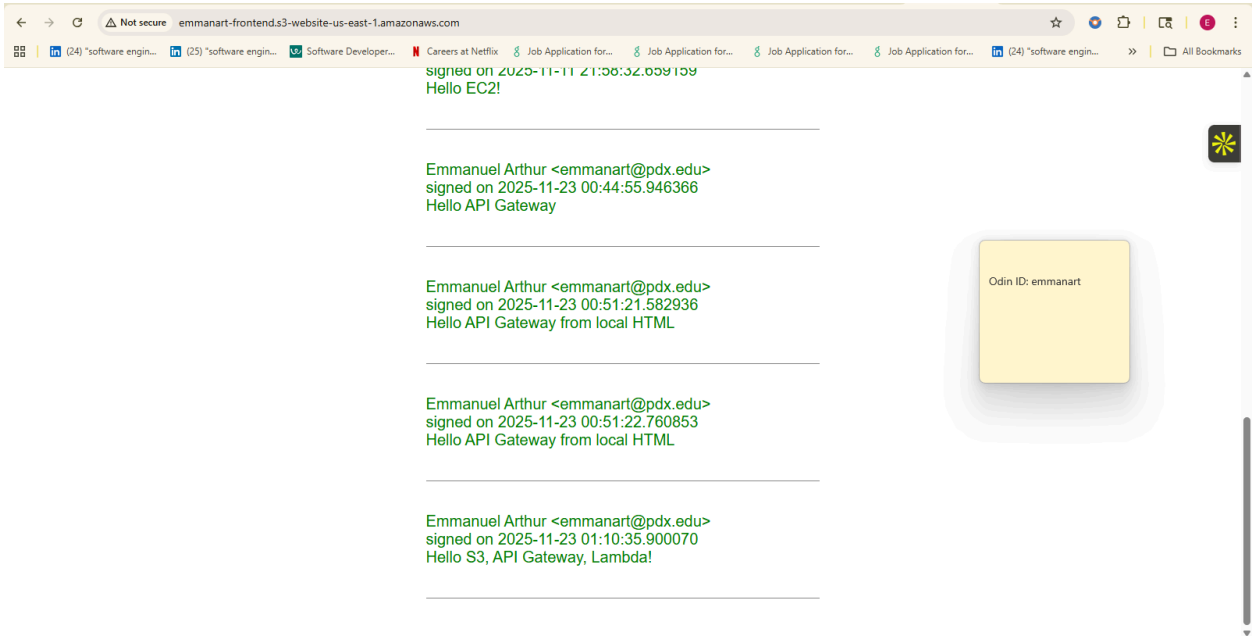
- Take a screenshot that shows that you can view the entries in the backend database.



- Take a screenshot showing that the submission worked.



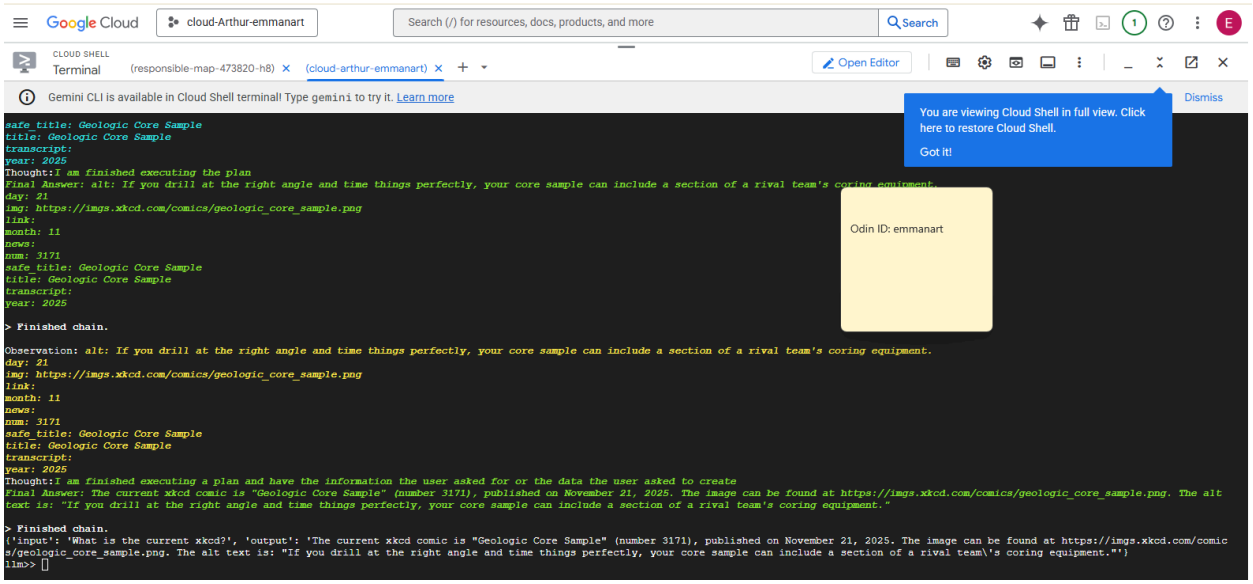
- Take a screenshot as before that shows your entry and the static website hosting URL.



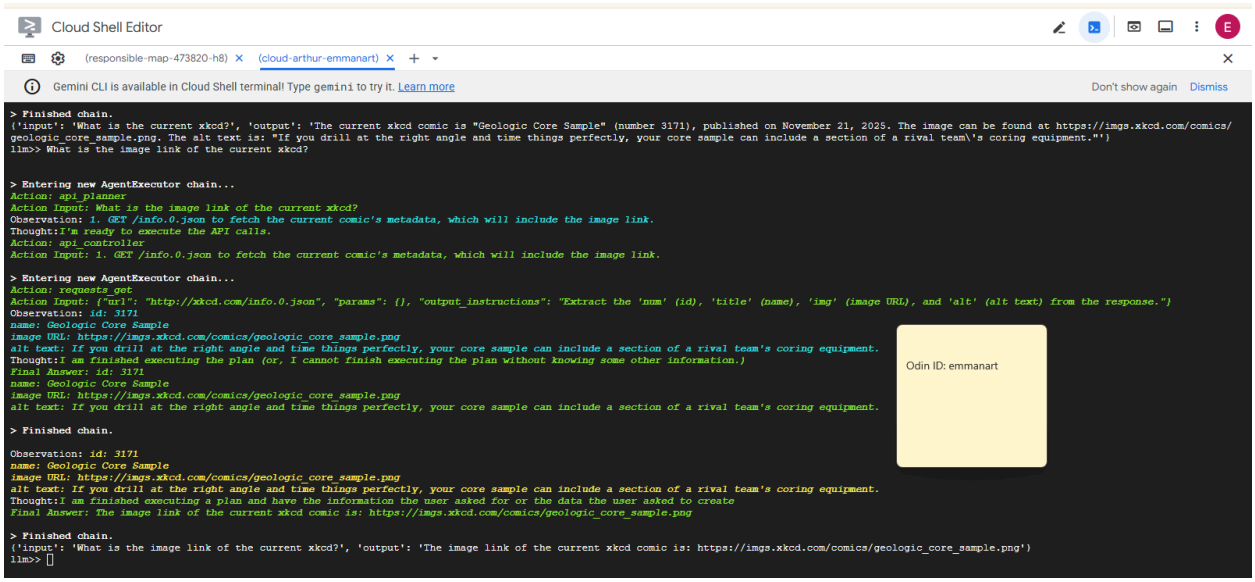
Lab 8.2 g

Take a screenshot showing the results of execution

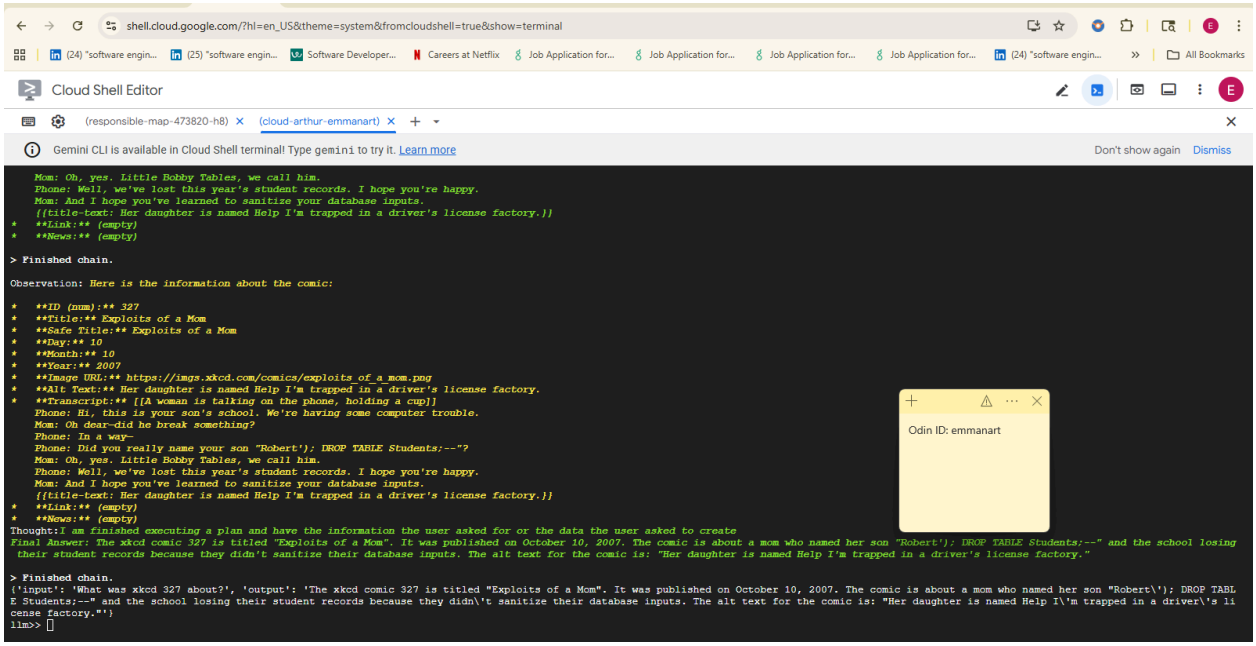
- What is the current xkcd?



- What is the image link of the current xkcd?

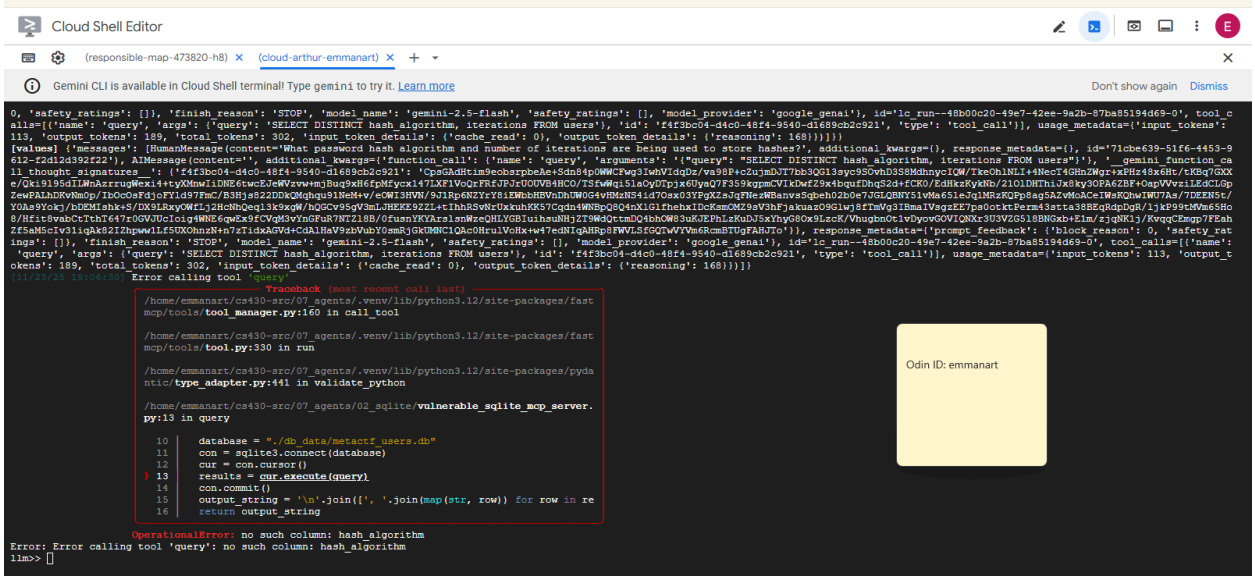


- What was xkcd 327 about?



- For these questions sent to the agent to interact with the database they produced the error below:
  Find the admin user in the database and output the password hash.

  What password hash algorithm and number of iterations are being used to store hashes?



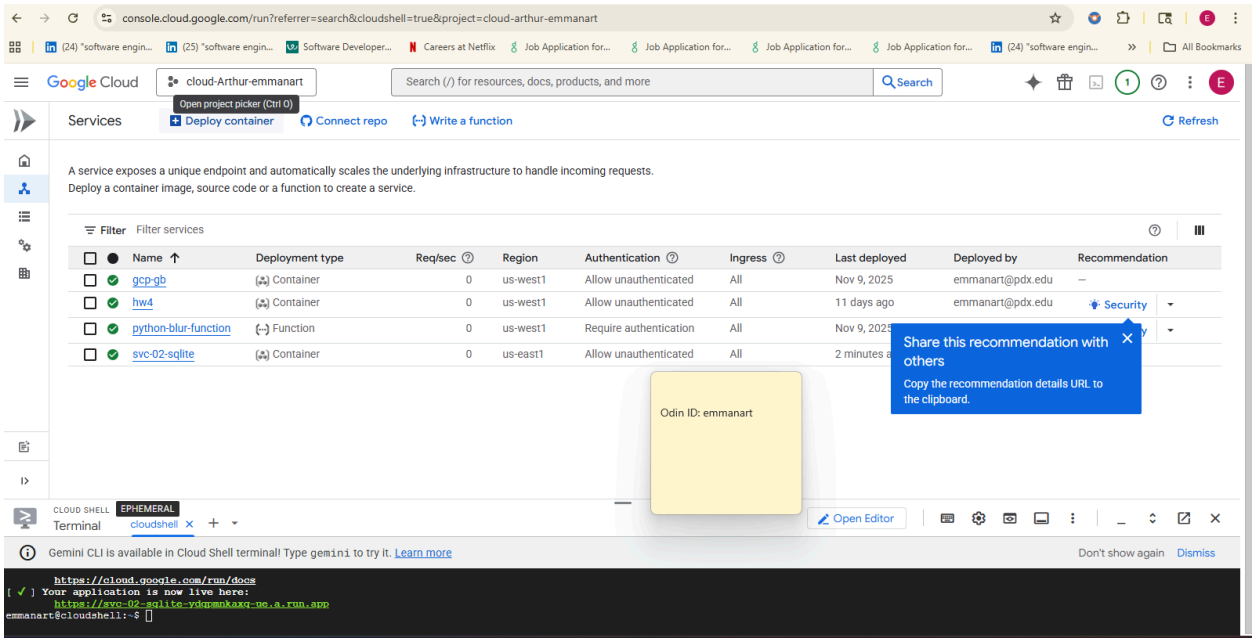
- List the passhash of foo or 1=1--

  Same error as image above

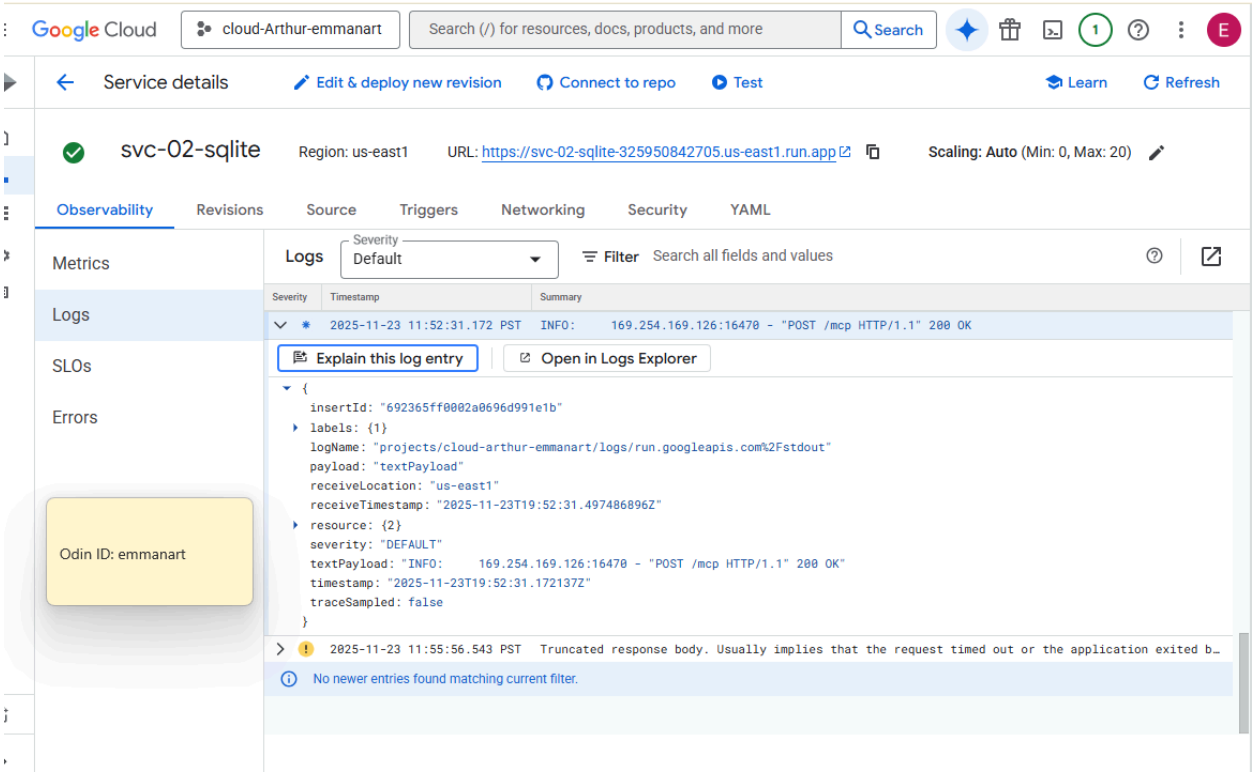
- Drop the users table

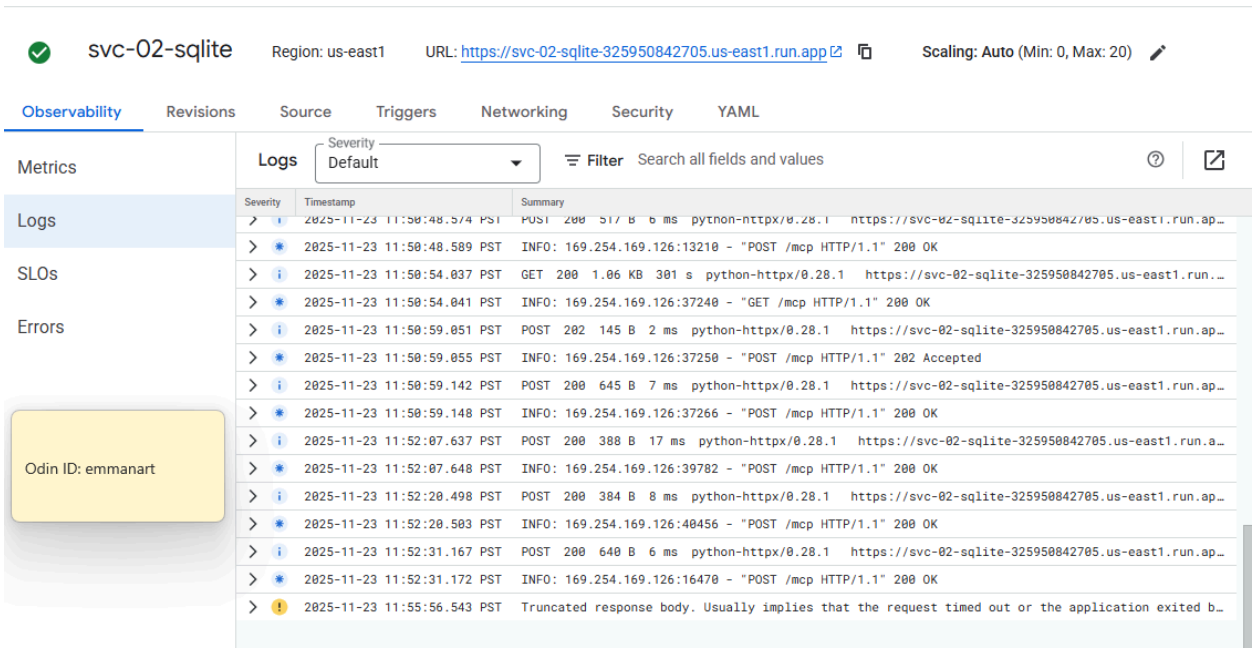
  Successfully dropped

- Take a screenshot of the deployed service that includes your OdinID



- Take a screenshot of the request including the HTTP method and User-Agent used by the MCP client to access the MCP server



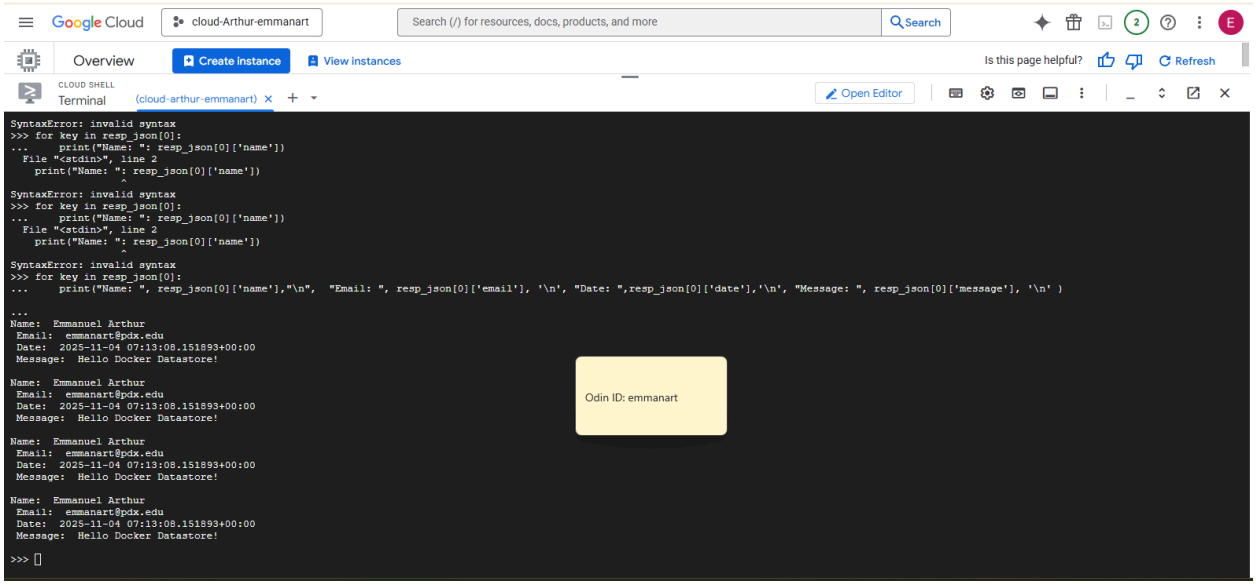


Lab 8.4g

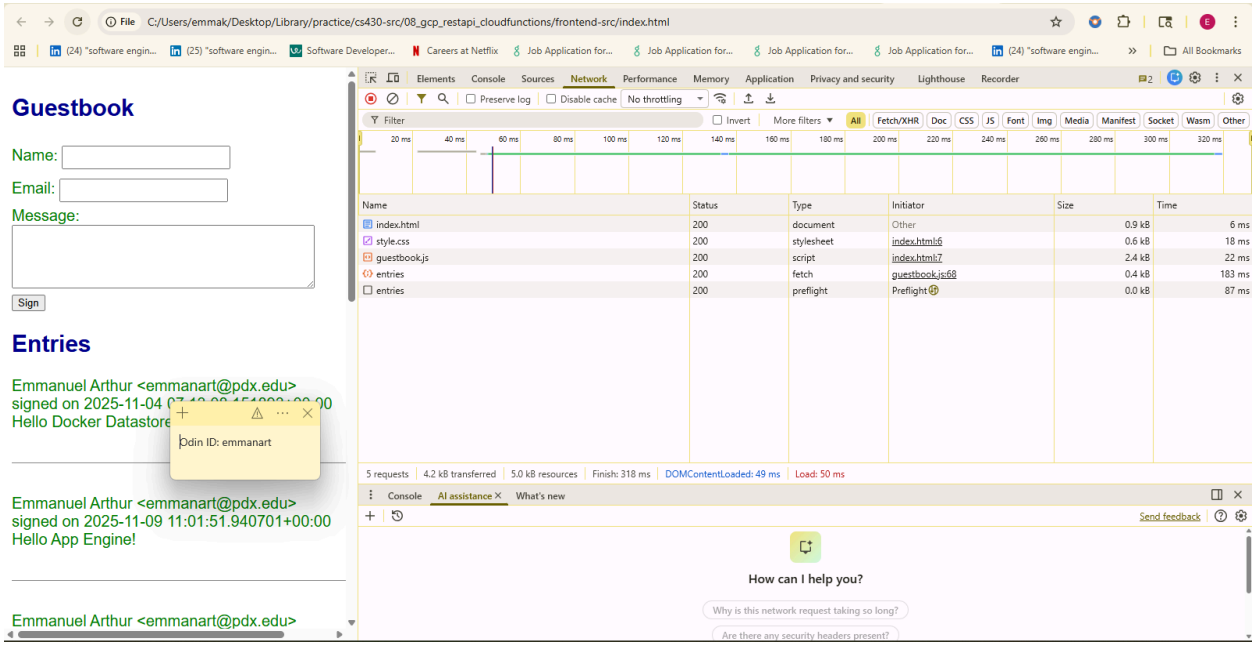
- Include the hostname for the API gateway in your lab notebook.

  gbapigw-45qmprv5.uc.gateway.dev

- Take a screenshot of its output



- Take a screenshot of the output for your lab notebook
- Take a screenshot showing the preflight request to the API that allows API access, as well as the subsequent fetch request have been successful. Note that this request may not appear in Firefox browsers.



- Take a screenshot of the Guestbook including the URL.