CS571- Week 11 Homework 2: GenAI - Containerized video transcription and chat app

Name: Feven Belay Araya
ID: 20027

https://hc.labnet.sfbu.edu/~henry/sfbu/course/cloud_computing/genai/slide/exercise_kubernetes.html

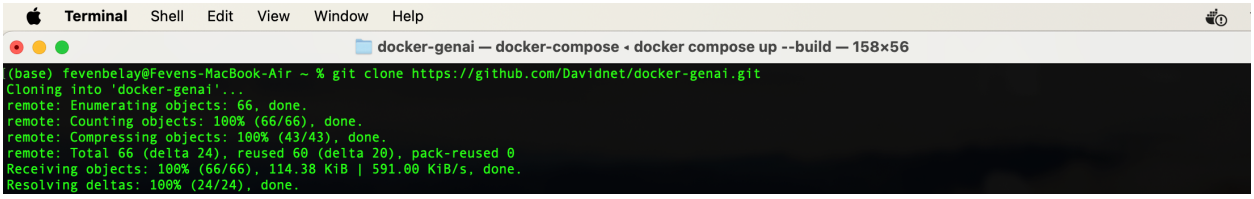
Q6 ===> GenAI - Containerized video transcription and chat app

GenAI - Containerized video transcription and chat app

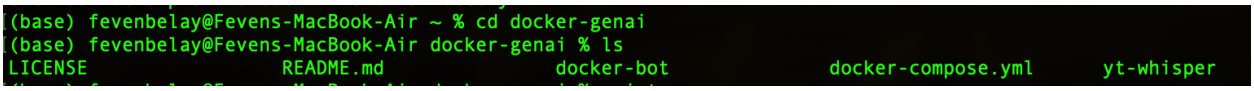
- Step 1: GenAI - Containerize your app
- Step 2: Video transcription and chat
- Step 3: Update your portfolio and publish your doucments on GitHub using this structure
  -
  - Cloud Computing
  - Kubernetes
    Generative AI

1. In a terminal, run the following command to clone the sample application's repository.

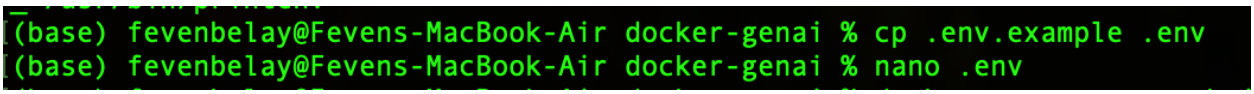
   $ git clone https://github.com/Davidnet/docker-genai.git

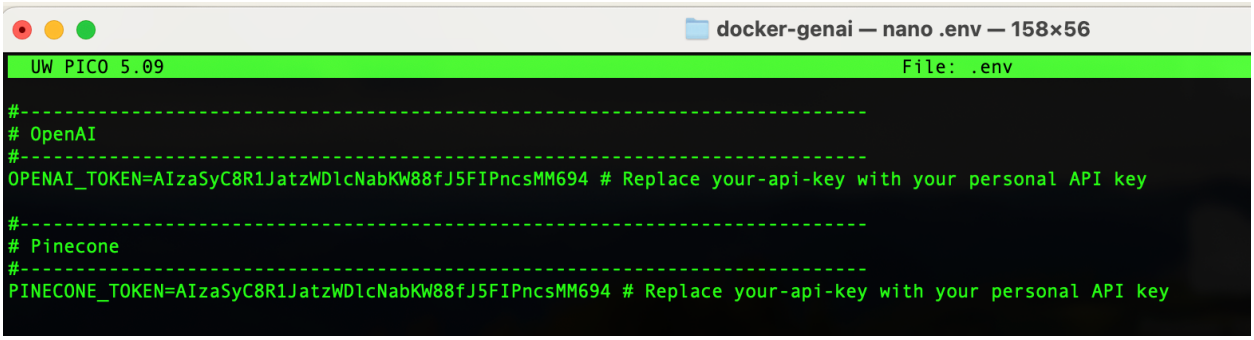


2. Go to the docker-genai directory.



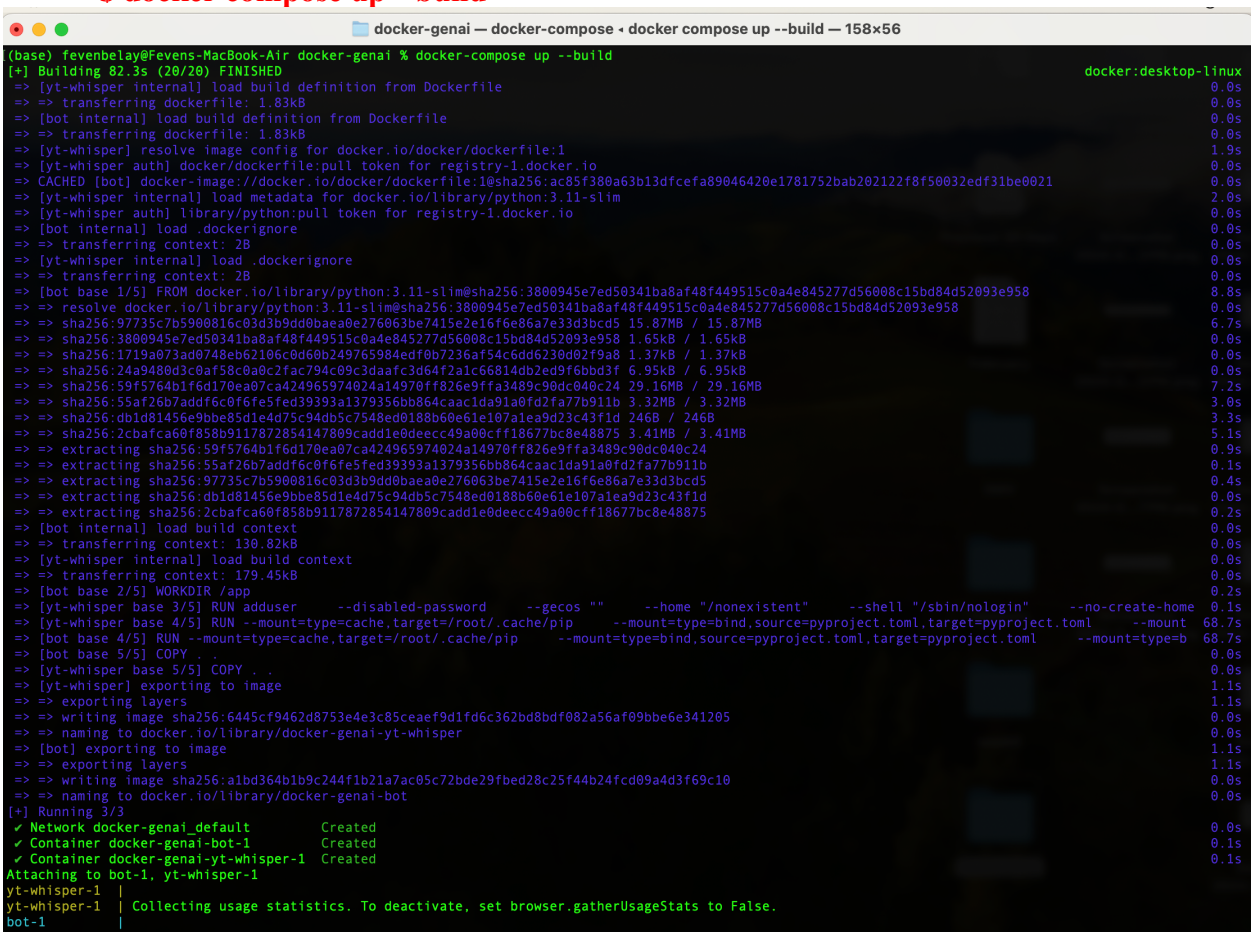
3. Specify your API keys. In the docker-genai directory, create a text file called .env and specify your API keys inside





4. Build and run the application. In a terminal, change directory to your docker-genai directory and run the following command.

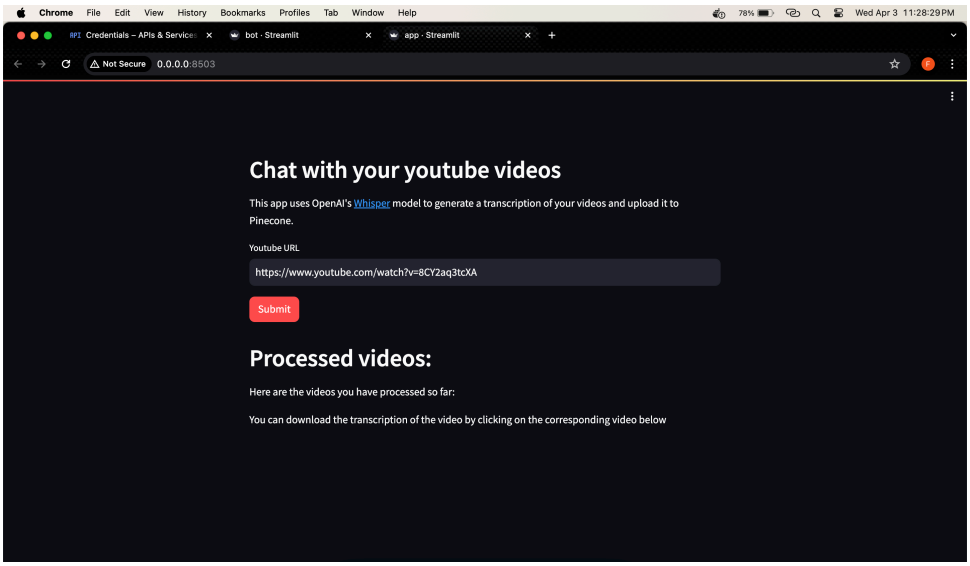
$ docker compose up --build



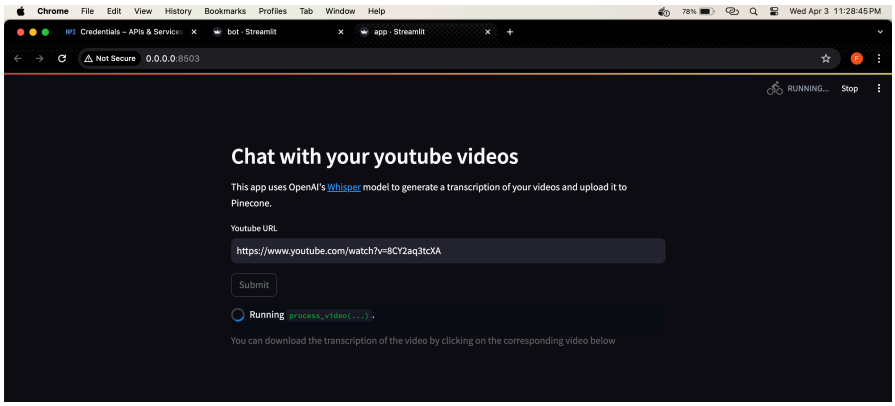
```
[+] Running 3/3
 ✔ Network docker-genai_default         Created
 ✔ Container docker-genai-bot-1         Created
 ✔ Container docker-genai-yt-whisper-1  Created
Attaching to bot-1, yt-whisper-1
yt-whisper-1  |
yt-whisper-1  | Collecting usage statistics. To deactivate, set browser.gatherUsageStats to False.
bot-1         |
bot-1         | Collecting usage statistics. To deactivate, set browser.gatherUsageStats to False.
bot-1         |
yt-whisper-1  |
yt-whisper-1  |
yt-whisper-1  |   You can now view your Streamlit app in your browser.
bot-1         |
bot-1         |   You can now view your Streamlit app in your browser.
bot-1         |
yt-whisper-1  |
yt-whisper-1  |   URL: http://0.0.0.0:8503
yt-whisper-1  |
bot-1         |   URL: http://0.0.0.0:8504
bot-1         |
yt-whisper-1  | 2024-04-04 06:21:04.683 Processing video: https://youtube.com/watch?v=yaQZFhrW0fU
yt-whisper-1  | 2024-04-04 06:21:14.045 File size(bytes): 6940500
```

Using the yt-whisper service

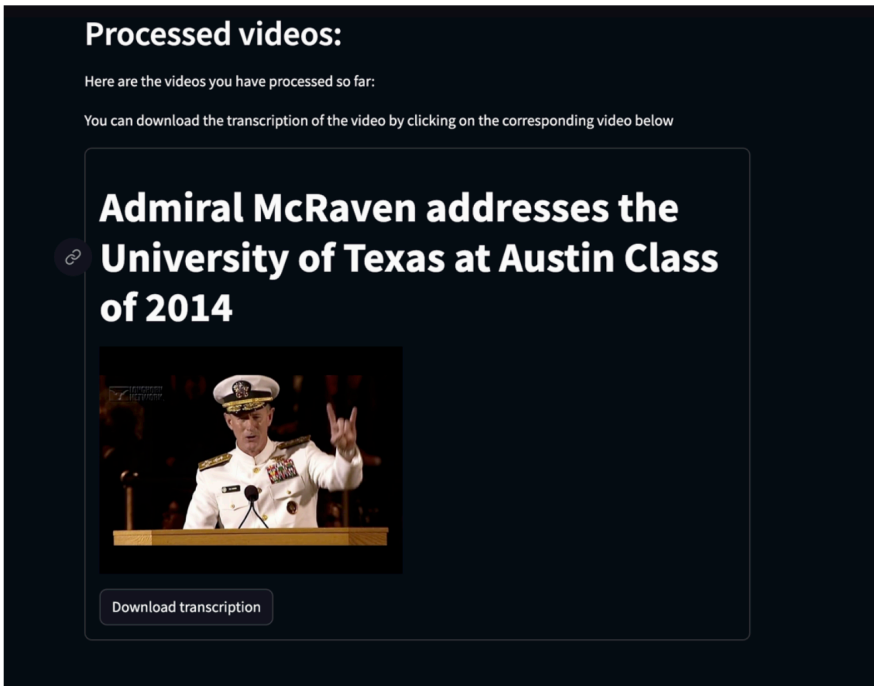
5. Open a browser and access the yt-whisper service at.
   `http://localhost:8503`



6. Once the application appears, in the Youtube URL field specify a Youtube video URL and select Submit.

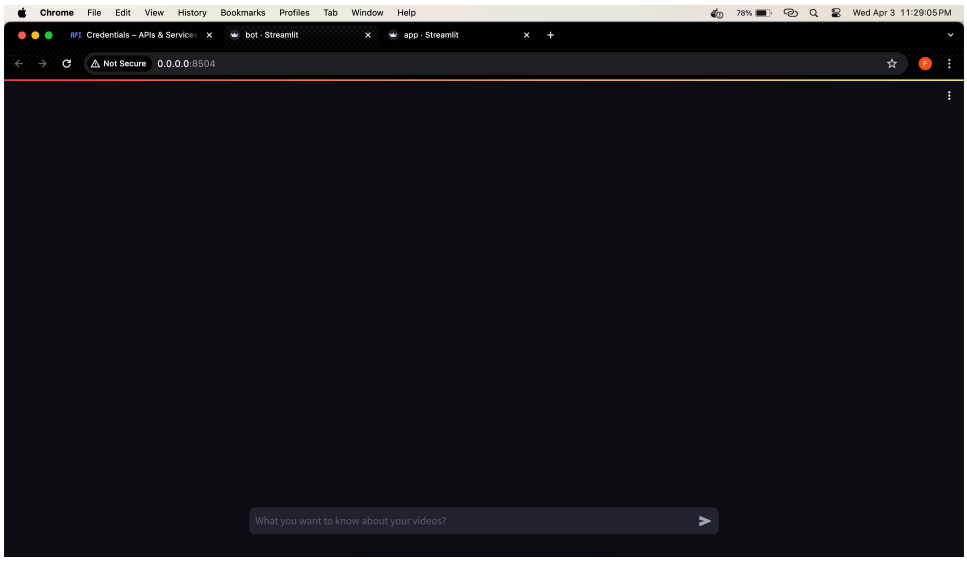


7. After processing the video, a video list appears in the web app that informs you which videos have been indexed in Pinecone. It also provides a button to download the transcript.

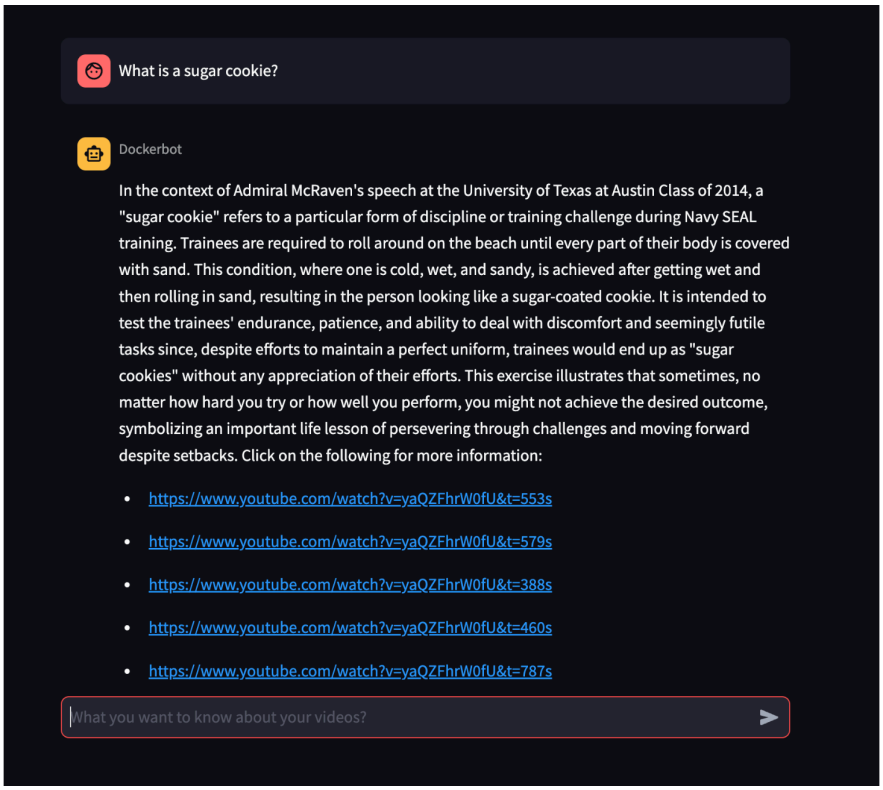


Using the dockerbot service

8. Open a browser and access the service at. `http://localhost:8504`



9. The following example asks the question, "What is a sugar cookie?".



10. Docker Compose is a tool for defining and running multi-container applications.

- Compose makes it easy to run this application with a single command. **docker compose up.**

```
(base) fevenbelay@Fevens-MacBook-Air docker-genai % docker compose up
[+] Running 2/0
 ✔ Container docker-genai-bot-1         Created
 ✔ Container docker-genai-yt-whisper-1  Created
Attaching to bot-1, yt-whisper-1
bot-1         |
bot-1         | Collecting usage statistics. To deactivate, set browser.gatherUsageStats to False.
yt-whisper-1  |
yt-whisper-1  | Collecting usage statistics. To deactivate, set browser.gatherUsageStats to False.
yt-whisper-1  |
bot-1         |
yt-whisper-1  |
yt-whisper-1  |   You can now view your Streamlit app in your browser.
bot-1         |
bot-1         |   You can now view your Streamlit app in your browser.
bot-1         |
yt-whisper-1  |
yt-whisper-1  |   URL: http://0.0.0.0:8503
yt-whisper-1  |
bot-1         |   URL: http://0.0.0.0:8504
bot-1         |
```