Quoc Cao

EE104

Lab8

**Documentation**

\*\*\*Github: <https://github.com/Quoccao1/Lab8.git>

\*\*\*Video link for the File Q&A: <https://youtu.be/oDd15J1Gc8o>

\*\*\*Video link for the Web Crawl: <https://youtu.be/TUKnGke_d2w>

\*\*\* Video link for the Simple Traffic Controller: <https://www.youtube.com/watch?v=NNaq_yKlJrs>

1. **File Q&A:** We will establish a web server and host the ChatGTP service to answer inquiries about files we uploaded to the web server.

* Install Python with a version in between version 7 to version 10.
* DOWNLOAD THE SOURCE CODE: <https://github.com/openai/openai-cookbook>
* Get APT keys

YOUR OPENAI ORG KEY (from the left panel, click on Settings)

OPENAI\_API\_KEY (from your picture on the top right of the browser, click on your organization, then click on View API keys)

* Create a new account and index here: <https://www.pinecone.io/>

PINECONE\_API\_KEY="YOUR\_PINECONE\_API\_KEY"

PINECONE\_ENVIRONMENT="Your\_environment"

index\_name="ee104"

* Install npm from <https://nodejs.org/en/download>
* Create a ".env" file using NotePad++ or any text editor including

OPEN\_API\_KEY = "YOUR\_API\_KEY"

YOUR OPENAI ORG KEY = "YOUR\_OPENAI\_ORG\_KEY"

PINECONE\_API\_KEY="YOUR\_PINECONE\_API\_KEY"

PINECONE\_ENVIRONMENT="Your\_environment"

* Open 2 separate PowerShell windows and do both Server and Client setup in parallel to save time.
* Fill out the config.yaml file with your Pinecone API key, index name and environment.
* In your PowerShell window, run all the command in the file Q&A instruction to install all the requirement and set up the web servers.
* BROWSE the app.
  + Open http://localhost:3000 with your browser to see the app.
  + Upload a file
  + Search for a content within that file. You should be able to get a good result.

1. **Web Crawl**

* Get the API keys.
* Create a folder call C:\web-crawl-q-and-a
* Create a ".env" file using NotePad++ or any text editor
  + OPEN\_API\_KEY = "YOUR\_API\_KEY"
* DOWNLOAD THE CODE: <https://github.com/openai/openai-cookbook/tree/main/apps/web-crawl-q-and-a>
* Follow step by step carefully in the WebCrawlQ&A to set up the environment and build the Web Crawler
* Open to edit the file web-qa.py as the instructions.
* In the PowerShell run this command:
  + (env) PS C:\web-crawl-q-and-a> python web-qa.py
* Also execute the file web-qa.py within Anaconda.
* Ask questions related to the website and see the results.

1. **Simple Traffic Controller: Part 2, Hardware**

* Set up the code JupyterLab
* Build the circuit.
* Connect the circuit to the KRIA board.
* Run the code in the JupyterLab and see the results.

