

Data Collection/ Processing/ Storage

Required package:

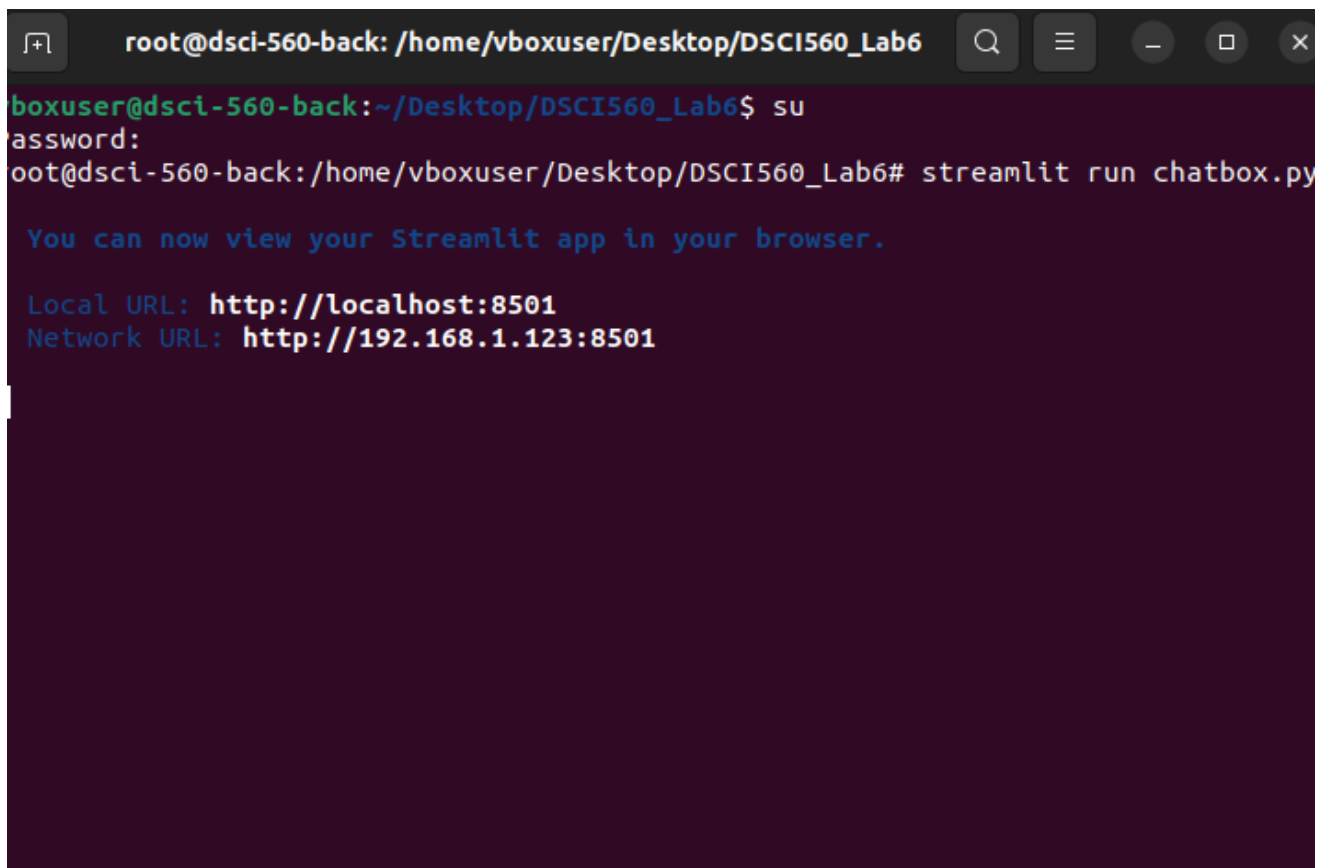
langchain 0.0.319 PyPDF 3.0.1 streamlit 1.27.2 sentence-transformers 2.2.2 faiss-cpu 1.7.4

Workflow

To run the chatbox, please enter the code below:

```
streamlit run chatbox.py
```

Then you will see the Local URL

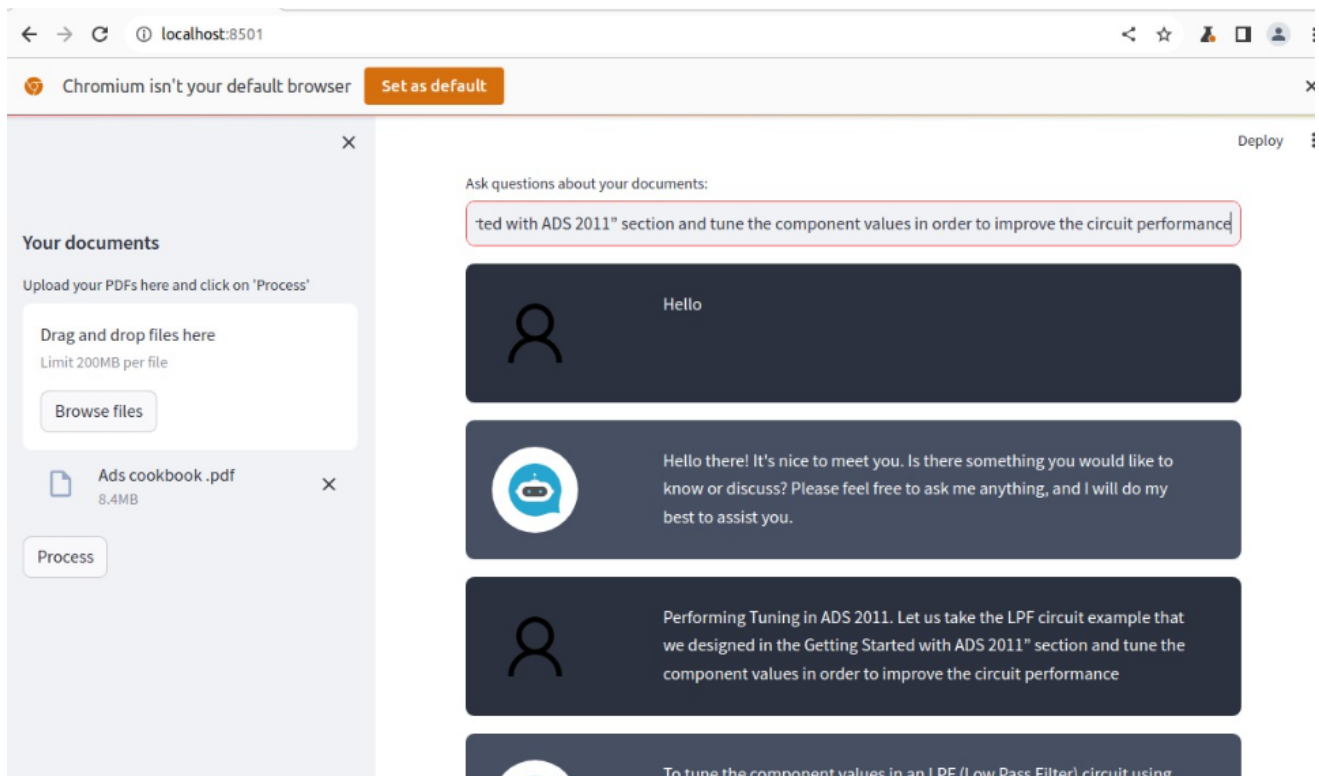
A terminal window screenshot with a dark background. The title bar shows 'root@dsci-560-back: /home/vboxuser/Desktop/DSCI560_Lab6'. The terminal text shows a user switching to root and running 'streamlit run chatbox.py'. The output displays the local and network URLs for the Streamlit app.

```
root@dsci-560-back: /home/vboxuser/Desktop/DSCI560_Lab6
boxuser@dsci-560-back: ~/Desktop/DSCI560_Lab6$ su
assword:
oot@dsci-560-back: /home/vboxuser/Desktop/DSCI560_Lab6# streamlit run chatbox.py

You can now view your Streamlit app in your browser.

Local URL: http://localhost:8501
Network URL: http://192.168.1.123:8501
```

Open the URL in your browser. Now you can upload the reference PDF and ask question to AI.



Left panel is a section for user upload reference PDF. And right panel is a section that chat with AI.

It include four step: PDF extraction, Text chunks, Vectorizing, Conversation Chain

The terminal will also show some tips:

```
Local URL: http://localhost:8501
Network URL: http://192.168.1.123:8501

Splited Completed
```

In this part, for chatting model. We use llama2 to instead OpenAI. And for embedding model, we choose BAAI. Now we don't need OPENAI_API_KEY because we change all model to open-source model.