

Lab 2

PDF Summarizer

The goal:

Create a multi-page application using Streamlit and the OpenAI API to summarize a PDF file. The application should feature two drop down menus on the sidebar:

A dropdown menu for language selection on the sidebar.

A dropdown menu showing the type of summary requested.

Lab2a: Create Multi Page app for all labs

Going forward, all labs will be different pages within one 'Lab' application (all HWs will be different pages within a 'HW' application).

So, you need to create a multi page application for all the labs.

1. Use ***st.navigation*** to create a navigation for the pages.
2. Each lab should be a separate page in the Multi page Labs app.
3. For each lab, create a new labX python file (where the 'X' is the number of the lab)
 - a. For now, copy the code from streamlit_app.py into your lab1.py and lab2.py
4. You should still have a main streamlit_app.py (a main lab streamlit page)
 - a. Update streamlit_app.py to just create the two pages (one for each lab) and run the page
 - b. Have the default page be Lab2.py (which is currently the same as Lab1.py)
 - c. Update the title in Lab2.py, so you know you are looking at the second lab
5. Test to make sure you can view the Lab1 as well as Lab2 on two different pages
6. Note: session state variables are shared across pages
 - a. You might (in future labs) need to make sure the session state variables are not shared amongst individual pages.

Lab 2b: Update the application to use 'secrets' or '.env'

7. Remove the text input for the user to supply the LLM key.
8. Rather, update the application so that the application gets the key via Streamlit 'secrets'
9. Deploy the app and test to make sure everything works

Lab 2c: Provide different types of summaries with 4o and 4o mini

10. Provide the user with three different options for generating a summary of the document (the options should be on sidebar):
 - Summarize the document in 100 words
 - Summarize the document in 2 connecting paragraphs
 - Summarize the document in 5 bullet points.
11. Let user select between 4o and 4o mini
 - a. Have a checkbox (“Use Advanced Model”) – when checked, use 4o

Hint: the type of summary should be part of the instructions to the LLM

Hint: The user no longer types in a question. The app should directly show the desired summary for the selected document.

Deploy the app

- Deploy the application on the web.
- Use secrets.toml