

Lab 1

Build a Streamlit Document 'Q&A' app

The goal of this lab is to give you practice using Streamlit Community Cloud and github codespaces

Creating a github account

1. If you have not already done so, create a github account (go to www.github.com, then 'sign-up')

Creating the app

2. Go to Streamlit Community Cloud website (<https://share.streamlit.io>)
→ **sign in using your github account** (not google or any other way)
3. Create a New app from an existing template.
→ Choose the Document QA template.
4. Deploy the app and open the code in github codespace.
5. Run and test the application
 - a. This app will allow users to upload an OpenAI API key.
 - b. If you have not already done so, get an account with OpenAI and save your API key somewhere safe (for gpt-4o-mini)
 - c. When a key is entered, a file uploader is displayed and an input box where users can ask questions about the file.
6. Make following changes to the application:
 - a. Validate the key as soon as it is entered rather than validating after the question is asked.
 - b. Change the application to use the LLM (model) "gpt-4o-mini".
7. Commit and push changes to github.
8. Validate that the public URL runs as expected

What to submit:

- The link to your web application
- Your python code