

Day 1: March 20th, 2024

Agenda Item: Initial Setup

- Action Items:
  - Erkang to review setup instructions and ensure all necessary tools and libraries are installed.
- Tasks:
  - Utilize the source codes provided in the provided drive link.
  - Ensure usage of Python scripts and other essential tools within the Linux environment.
  - Document setup steps and requirements for running scripts in the submission document.
  - Refer to the Readme.md file in the Drive folder for setup instructions, list of libraries, their versions, and installation steps required for Parts 1 and 2 of Lab 6.
  - Use App.py and html.py as a reference for the lab, and employ any tools for creating a GUI for the chatbot, including PHP, Python, JavaScript, HTML, StreamLit, etc.

Day 2: March 21st, 2024

Agenda Item: Domain-Specific Chatbot with Open-Source Resources

- Action Items:
  - Jason to research and experiment with open-source text embedding models to replicate the solution for Part 1.
- Tasks:
  - Replicate the solution for Part 1 using only open-source tools and models.
  - Utilize open-source local embedding models and LLMs to produce similar outputs as OpenAI embeddings.
  - Explore available open-source text embedding models at Hugging Face Models.
  - Additional guidance and information can be found at SBERT, along with a helpful video summary on open-source text embedding models.

Day 3: March 22nd, 2024

## Agenda Item: Web Interface Design

- Action Items:
  - Riten to begin designing the web interface, focusing on user-friendly features and implementing necessary functionalities.
- Tasks:
  - Focus on designing a user-friendly chatbot interface using HTML and CSS.
  - Implement JavaScript for handling user interactions and communicating with the chatbot.
  - Implement a sidebar option for uploading single or multiple PDF documents for analysis.
  - Execute Python script to extract text, create chunks, generate word embeddings, and store in the vector database for PDF analysis.
  - Create a chat window with an input field for users to ask questions based on the PDF and display messages as conversations.
  - Store questions and messages in chat history for future reference.
  - Refer to `html.py` for starter code on displaying user and bot messages.