

MEETING NOTES : LAB 6

Team Details:

Team Name: **Infinity & Beyond**

Name	USC ID
Ishita Katiyar	5786162985
Tushar Kaushik	3739756887
Dattateja Reddy Anakala	2843797849

Meeting Notes for Day 1: 14th October 2024

Agenda:

- Initial project setup and task allocation.
- Reviewing requirements for the “Talk to PDF” project.
- Discussing the usage of Llama-2 and FAISS for embedding and retrieval.

Minutes:

- Ishita set up the environment and dependencies, including Streamlit, FAISS, and Hugging Face.
- Datta shared insights on handling PDF text extraction using PyPDF2.
- Tushar researched LlamaCpp setup and confirmed the feasibility of running the llama-2-7b-chat.Q3_K_S.gguf model locally.

Action Items:

- Ishita will work on the text chunking and embedding logic.
- Datta will start working on the UI for PDF upload and display.
- Tushar will focus on Llama-2 integration and setting up the conversational retrieval chain.

Meeting Notes for Day 2: 15th October 2024

Agenda:

- Progress review on text chunking and embeddings.
- Setting up Llama-2 for conversational retrieval.

Minutes:

- Ishita completed the implementation of text chunking using CharacterTextSplitter.
- Datta started working on the UI for uploading PDFs and displaying the document.
- Tushar successfully set up the local environment for Llama-2 and began testing the integration with llamacpp.

Action Items:

- Ishita will implement the FAISS vector store.
- Datta will finalize the PDF upload UI.
- Tushar will continue working on the conversational chain logic using FAISS as the retriever.

Meeting Notes for Day 3: 16th October 2024

Agenda:

- Reviewing the FAISS implementation.
- Finalizing the conversational retrieval chain.

Minutes:

- Ishita completed FAISS vector store implementation and tested embedding storage.
- Datta completed the PDF upload UI and linked it to the text processing backend.
- Tushar worked on the conversational chain using Llama-2 and successfully integrated FAISS as the retriever.

Action Items:

- Ishita will test the retrieval process and optimize chunk size if necessary.
- Datta will refine the UI for better interaction.
- Tushar will work on handling multi-turn conversations in the app.

Meeting Notes for Day 4: 17th October 2024

Agenda:

- Testing and refining the chatbot responses.
- Handling user input and memory management for conversation.

Minutes:

- Ishita ran tests on retrieval quality and made adjustments to the chunk overlap for better accuracy.
- Datta refined the UI for better user interaction, adding error handling for invalid file uploads.
- Tushar focused on improving memory management for the conversation chain, ensuring multi-turn conversations work as expected.

Action Items:

- Ishita will continue refining the FAISS retrieval.
- Datta will finalize UI enhancements.
- Tushar will focus on chatbot response accuracy and optimizing model performance.

Meeting Notes for Day 5: 18th October 2024

Agenda:

- Final testing and review.
- Preparing for project delivery.

Minutes:

- Ishita confirmed that FAISS is working efficiently for the document embeddings and retrieval.
- Datta finalized the UI and ensured the app's flow is smooth.
- Tushar tested the Llama-2 model for conversation and retrieval, improving response handling and resolving minor bugs.

Action Items:

- Ishita, Datta, and Tushar will prepare the final documentation and ensure all parts are integrated smoothly.
- The team will conduct a final review and testing session before project submission.