PHARMACEUTICAL CHATBOT USING GEN AI

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AGENDA

- Problem statement
- Project Overview
- End Users
- Our Solution and Proposition
- Key Features
- Modelling Approach
- Results and Evaluation

PROBLEM STATEMENT

➤ Develop a conversational chatbot using the Hugging Face library, for the pharmaceutical industry. The chatbot will handle general inquiries effectively and exhibit expertise in pharmaceutical compliances, particularly ICH9.

PROJECT OVERVIEW

➢ Develop a conversational chatbot tailored to the pharmaceutical industry.

➢ Enable effective handling of general inquiries related to the pharmaceutical domain.

➢ Exhibit expertise in pharmaceutical compliances, particularly ICH9 guidelines.

➢ Assist users in understanding and complying with ICH9 standards.

➢ Utilize natural language processing for accurate understanding and generation of responses.

➢ Maintain a conversational tone to enhance user engagement and satisfaction.

END USERS

➢End users, such as pharmaceutical professionals, can use the ICH9 chatbot in several ways to enhance their understanding and application of statistical principles in clinical trials and drug development process.

PROJECT OVERVIEW

➢ Pharma chat box is a conversational system designed to provide an intelligent response to the user's queries compliances. chat.ggmlv3.q4_0.bin conversational AI model from hugging face.

➢ By focusing in the developing of LLM model, we have chosen llama-2-7bchat.ggmlv3.q4_0.bin conversational AI model from hugging face.

➢ The main aim of this project is to suggest the researchers and pharmaceutical industry people that safety and also avoid unnecessary clinical trials on humans and animal testing.

➢ The model has high accuracy in performance. By fine tuning the model, we can customize it to align with ICH9 nuance

MODEL
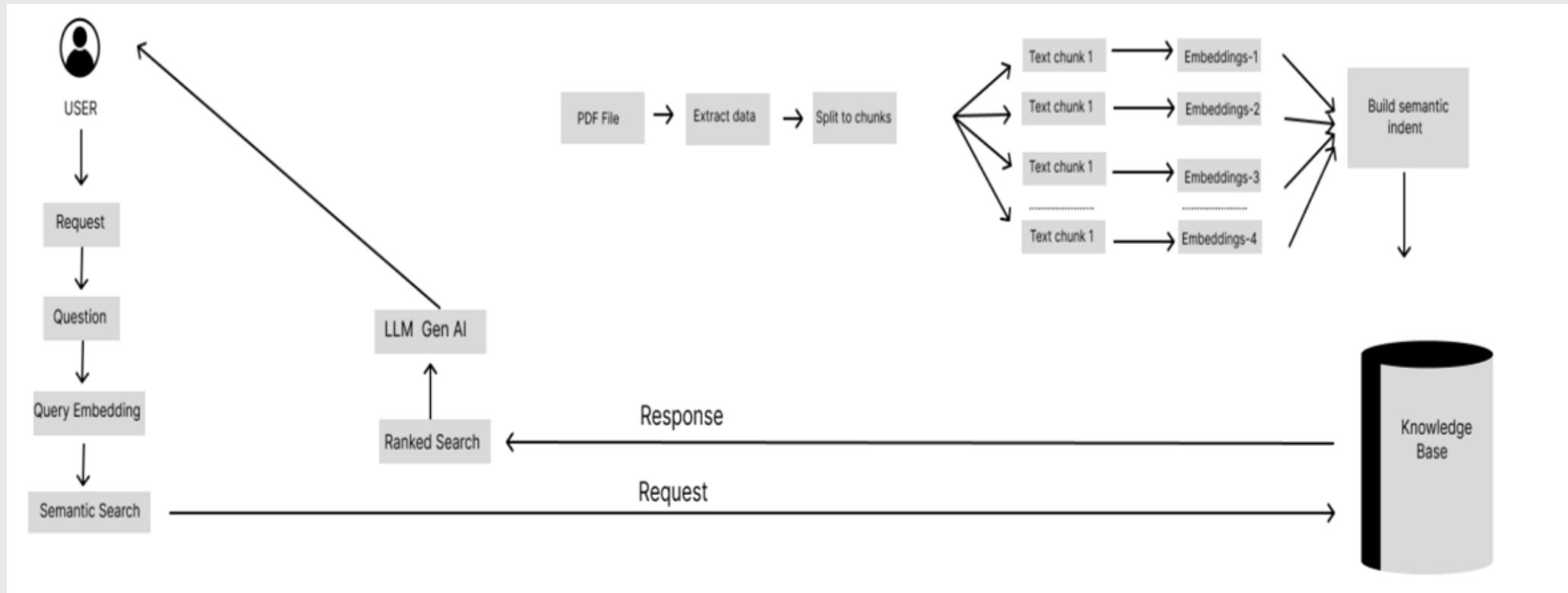
RESULT

➢ The project successfully demonstrates the integration of various natural language processing (NLP) components to create an interactive and responsive pharmaceutical chatbot. The use of pre-trained embeddings from Hugging Face, a vector store (FAISS) for efficient similarity searches, and a conversational retrieval chain enhances the chatbot's ability to understand and respond to user queries. Overall, the project lays a foundation for building and extending conversational AI applications in the pharmaceutical domain, showcasing the potential of combining powerful NLP tools with user-friendly interfaces.