Home Assignment – AI & ML

Develop a QA bot for PDF files to extract text, generate embeddings, and store them in a vector database. Users can query the system, which retrieves relevant text chunks based on similarity scores. The system integrates with a GPT model for refining user queries.

Important things to consider:

1. Extract text from PDFs, segment it into chunks, and generate embeddings.
2. Utilize a vector database for efficient storage and retrieval of embeddings.
3. Integrate a GPT model to refine user queries and improve search accuracy.
4. Ensure scalability, performance, and security of the system.
5. Document system architecture, implementation details, and deployment instructions.

Deliverables: High level Architecture (basic diagram), Source code, readme with deployment instructions or execution instructions, and performance evaluation results also Video of running application demonstrating. Use a zipped file with all the content to upload.

Maintaining User Context: Preserve user question context for up to 5 consecutive questions.