Knowledge Search Assistant

As we've completed most of our AI sessions, it's time for your **final assessment project**, which will also serve as the basis for your **completion certificates**.

Objective

Build a **question-answering assistant** that retrieves relevant information from a **custom dataset** using **LangChain + Qdrant**.

Project Details

- The **dataset (a PDF document)** is shared with you for this project.
- Generate **embeddings** from the document and store them in **Qdrant**.
- Query Qdrant to fetch relevant chunks and use an **LLM** to generate context-aware responses.
- You may use the **Gemini API** (or any other LLM API of your choice).
- You can implement the solution in **Node.js** or **Python**.
- **Bonus:** Add a simple **web interface** or **API** for user interaction.

Key Learning

Hands-on implementation of a **Retrieval-Augmented Generation (RAG)** pipeline using vector search and LLM integration.

Submission Requirements

- **GitHub repository link**
- **A 10-minute demo** will be arranged upon receiving github link to understand your approach, architecture, and results
- **Deadline:** *Tuesday, November 18th*

Outcome

This project is designed to demonstrate your **practical understanding** of:

- LangChain
- Qdrant (or any other)
- LLM APIs (Gemini, OpenAI, etc.)

We're excited to see your innovative implementations and how you bring everything together!