Intern Full-Stack Task: GenAI Q&A; App

Objective

Build a small full-stack application (React frontend + Node.js backend) that uses a Generative AI API (OpenAI / Hugging Face / any LLM) to answer user questions based on uploaded documents. Deploy it so we can test live.

Requirements — Frontend (React)

1. Create a simple UI with:
• A file upload option (PDF or TXT).
• An input box for user questions.
• A results area to display AI answers.
2. Show a loading state while waiting for the answer.
3. Style it cleanly (no need for fancy design, just functional).

Requirements — Backend (Node.js + Express)

1. Expose APIs:
• POST /upload → accept document, extract text (you may use pdf-parse or any library).
• POST /ask → take user's question, query an LLM API, and return the response.
2. Store uploaded docs in memory (no database required for now).
3. Use embeddings or direct LLM calls (your choice, but explain in README).

AI Integration

• Use OpenAI's API (or Hugging Face model) for answering questions.
• Bonus: Implement a simple Retrieval-Augmented Generation (RAG) flow (vector embeddings + similarity search).

Deployment

• Frontend → Deploy on Vercel / Netlify.
• Backend → Deploy on Render / Railway / Heroku.
• Connect them so the app works end-to-end online.

Deliverables

• GitHub repo with:
• React frontend code
• Node.js backend code
• README with setup + deployment instructions
• Live URL of the deployed app
• Example screenshot of a working query
• Provide a PDF of the assignment (this file).