AI Data Agent - SDE Hiring Assignment

Assignment

Build a conversational interface platform where users can upload any Excel file and ask complex business questions about their data in natural language. The system should analyze the uploaded data and provide answers with relevant charts and tables.

We highly appreciate using GenAI. But the final product should be excellent.

Requirements

● **Stack**: React frontend, Python backend, SQL database ● **Core Feature**: File upload system that accepts Excel files and converts them for analysis ● **AI Agent**: Natural language query processing that understands user questions about their uploaded data

Key Challenge

Develop a platform that can handle:
● Any Excel file format and structure
● Bad/inconsistent data formatting
● Unnamed columns/sheets
● Dirty or incomplete data
● Vague natural language questions from users

Please send the link to the webapp and github repo to vikas@bulba.app

Create a solution that demonstrates exceptional analytical capabilities for any user-uploaded dataset, not just basic query translation.