Requirements

You are expected to build a minimal version of a Chatbot Platform with the following functionality:

- Implement authentication (e.g., JWT/OAuth2) with user registration and login.
- Allow creation of user accounts.
- Allow logging in as a user using email and password
- Allow creation of a project/agent under a user.
- Support storing and associating prompts with a project/agent.
- Implement a chat interface to interact with the agent/project using
  - OpenAI Responses API: https://platform.openai.com/docs/api-reference/responses
  - Or, OpenRouter Completion API:
    https://openrouter.ai/docs/api-reference/overview
  - Or, any other LLM service of choice
- *Good to have:* Allow uploading files into a project using OpenAI Files API:
  https://platform.openai.com/docs/api-reference/files/create

Non-Functional Requirements

While building the solution, please keep in mind the following aspects:

- Scalability: support multiple users and projects concurrently.
- Security: protect user data and authentication flows.
- Extensibility: design should allow future additions (e.g., analytics, integrations).
- Performance: ensure low-latency chat responses.
- Reliability: handle errors gracefully and ensure stability.

Deliverables

- Source code in a GitHub repository (or similar).
- Instructions to run the application (README).
- Brief architecture/design explanation (Markdown or PDF).
- Publicly hosted Working demo
- Demo recording