Personal Agentic AI Chatbot

GenAI Application
(Production Ready)

LangGraph | FastAPI | Streamlit | OpenAI

Groq | Meta Llama | Mistral

PROJECT LAYOUT

Phase1–Create AI Agent

1. Setup API Keys for Groq and Tavily
2. Setup LLM & Tools
3. Setup AI Agent with Search tool functionality

Phase2–Setup Backend (With FastAPI)

1. Setup Pydantic Model (Schema Validation)
2. Setup AI Agent from FrontEnd Request
3. Run app & Explore Swagger UI Docs

Phase3–Setup Frontend

1. Setup UI with streamlit (model provider, model, system prompt, query)
2. Connect with backend via URL

TOOLS AND TECHNOLOGIES

- LangGraph ReAct Agents
- FastAPI for API calls
- Groq & OpenAI for LLM
- Streamlit for UI (Frontend)
- Langchain for tools
- Uvicorn for hosting the App
- Python
- VS Code

TECHNICAL ARCHITECTURE