AI Agent Intern – Take-Home Assignment

The Challenge

Design an AI agent that helps with **task planning**. The agent should:

- Accept a natural language goal (e.g., *"Plan a 3-day trip to Jaipur with cultural highlights and good food"*).
- Break the goal into actionable steps.
- Enrich steps with external information (e.g., web search for places, weather API for forecasts).
- Output a clear, day-by-day plan.
- Save each plan in a database so it can be revisited.
- Provide a simple **web view** showing a history of all past plans.

What You Should Build

- An agent that uses an **LLM + 2 fixed tools**:
    - **Web Search API** to gather external info.
    - **Weather API** (OpenWeather or similar) for contextual data.
- A planner that structures tasks into a clear, ordered plan.
- A database (SQLite or MongoDB) for storing goals and generated plans.
- A lightweight web interface to:
    - Enter a new goal
    - View the generated plan
    - Browse previous plans

What to Submit

1. **Code Repo** (GitHub).
2. **README** with:
    - How it works (short description + simple diagram).
    - Set up/run instructions.
    - At least 2 example goals with their generated plans.
    - Disclosure of where you used AI help, if any.
3. A short **demo recording** (≤3 min) showing: entering a goal → getting a plan → viewing it later.

Example Goals to Try

- *"Plan a 2-day vegetarian food tour in Hyderabad."*
- *"Organise a 5-step daily study routine for learning Python."*
- *"Create a weekend plan in Vizag with beach, hiking, and seafood."*

What we're looking for: ability to design workflows, combine tools, and deliver a practical agent with clear presentation.