Weather Dashboard

Objectives

o **Empowering farmers with personalized, real-time weather data and AI-driven crop management advice to enhance productivity and decision-making.**

Technologies

- OpenWeatherMap API
- LangChain & OpenAI's GPT models
- ReactJS for frontend development
- Flask APIs

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Workflow

- **Setup the front-end development using ReactJS**
- **Integrate Google Maps in the dashboard allowing the user to select their location**
- **Use the OpenWeatherMap API to get current weather and forecast for the selected location**

Workflow Continued ...

- **Create dashboard to display the current weather and forecast**

- **Create Flask API to send the weather info to the backend.**

- **Integrate LangChain to interact with ChatGPT to get weather-based advice**

- **Create chatbot interface on the front-end**

User Interface
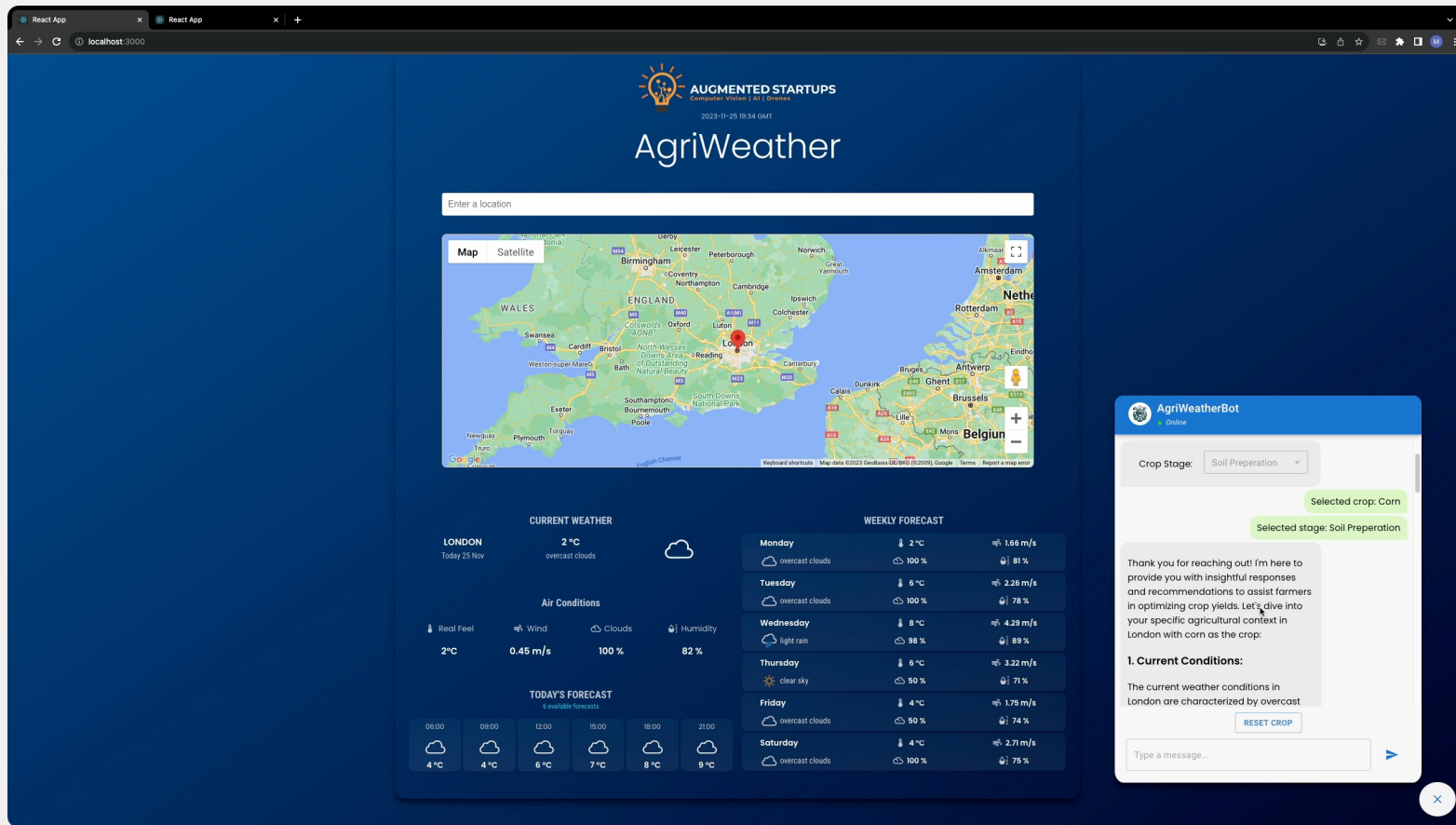
Benefits to Farmers

- **Access to precise, location-based weather forecasts and current conditions, allowing farmers to make timely decisions on irrigation, planting, and harvesting**

- **Tailored guidance for different crops at each stage of growth**

- **User-friendly chatbot interface offering expert advice, making advanced agricultural knowledge accessible to all farmers.**

Future Steps

- Adding multilingual support to make the app accessible to farmers worldwide, breaking language barriers in agricultural technology

- Incorporating Internet of Things (IoT) devices for real-time data collection, further personalizing and enhancing the advice given.

- Update LLM's data for richer and more precise insights.

Thank you & Welcome