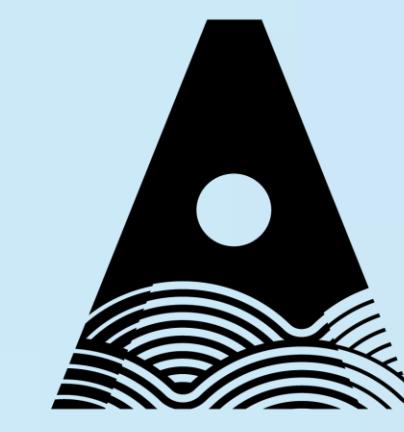


FarmPulse

Paddy Downey

B.Eng (Hons) Software and Electronic Engineering



Ollscoil
Teicneolaíochta
an Atlantaigh

Atlantic
Technological
University

Introduction

- FarmPulse is a comprehensive web application designed specifically for Irish farmers.
- It offers an easy-to-use digital platform to manage all aspects of farm operations.
- The application combines real-time data visualization, weather forecasting, inventory management, financial tracking, and agricultural information in a simple and clean interface that ensures help with productivity and decision-making for farmers across the country.

Features

- Interactive Farm Map
- Activity Tracking
- Inventory Management
- Financial Analytics
- Product Catalog Searching
- Weather Forecast Analysis

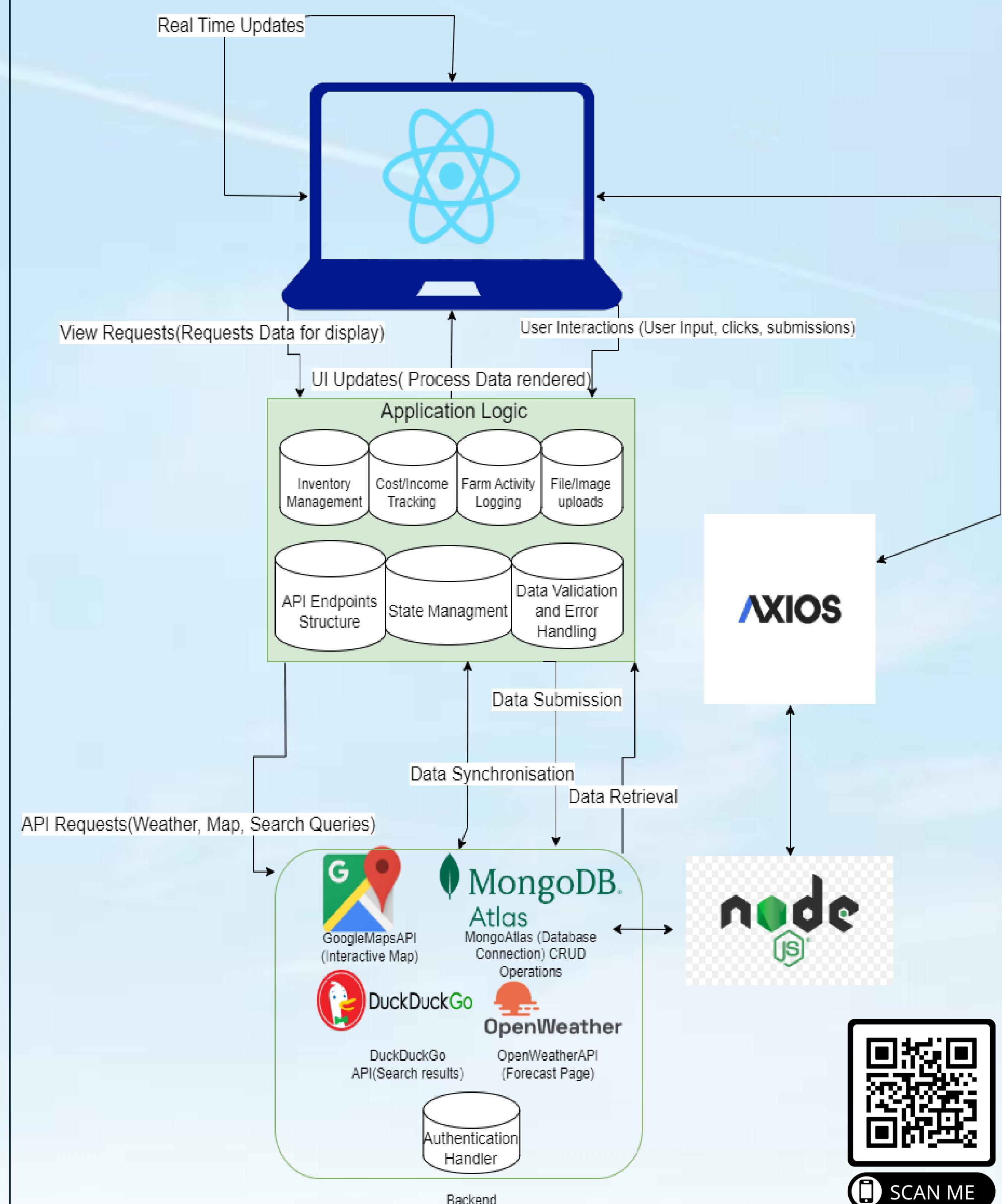
Why Axios instead of Next.js?

I used Axios instead of Next.js as I preferred to have my frontend and Express backend as independent services for independent development, and I felt it was easier for testing.

Technologies

- React.js - Framework
- JavaScript
- HTML5/CSS3 – Website Design
- Axios – make HTTP Requests
- React Router
- OpenWeatherMap API – For Fetching weather forecast
- DuckDuckGo API – Search results
- Node.js - Backend Server
- Mongo Atlas – Database connection and storage
- Google Maps API – Interactive Map
- Authentication System

Architecture Diagram



Result

