

Empowering Farmers Through AI-Driven Insights

Link for the demo video: [Demo Video \(Nurture Wise Agro\)](#)

Overview

NurtureWise Agro is an intuitive application designed to revolutionize farming practices by integrating technology with agriculture. Built with Streamlit, the app leverages AI-powered crop disease detection and economic impact analysis to help farmers optimize yields, reduce losses, and make informed decisions.

Features

Farmer Management

- **Registration & Login:** Securely register and log in to manage profiles and track field data.
- **Field Data Tracking:** Monitor field size, crops planted, and other essential details.

Crop Disease Detection

- **AI Integration:** Upload crop leaf images for real-time disease detection using an AI-powered inference model.
- **Actionable Insights:** Receive confidence-based diagnostic results and tailored recommendations.

Economic Impact Analysis

- **Revenue Impact:** Calculate yield loss percentage, revenue loss, and post-loss income based on affected field area and crop prices.
- **Proactive Decision-Making:** Access links to Google and YouTube resources for disease-specific management tips and fertilizer recommendations.

User-Friendly Design

- **Responsive Interface:** Built with Streamlit to ensure ease of use for farmers and other stakeholders.
 - **Scalable Architecture:** Easily adaptable to handle growing user data and integrations.
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Technologies Used

- **Frontend:** Streamlit
- **Backend:** SQLite for database management
- **AI Integration:** InferenceHTTPClient for crop disease detection