

Problem Statement Title: Build an AI-powered system that suggests best farming practices (crop rotation, land usage, optimal use of fertilizers and water) based on local agricultural conditions (weather patterns and soil health)

Team Name: UNFAZED

Team Leader Name: B.JASHWANTH

Institute Code : Q9

Institute Name: MALLA REDDY COLLEGE OF ENGINEERING



Idea/Approach Details

Describe your idea/Solution/Prototype here:

IDEA: Build an AI-powered system that suggests best farming practices (crop rotation, land usage, optimal use of fertilizers and water) based on local agricultural conditions (weather patterns and soil health)

This project addresses the multifaceted challenges that Indian farmers face, including unpredictable weather, volatile market prices, limited resource access, and insufficient information.

OUR SOLUTION:

FarmWell, is a holistic digital platform designed to empower farmers with essential tools and information, leveraging technology to enhance agricultural practices and improve livelihoods.

- **Real-Time Weather Updates:** Alerts for proactive crop protection.
- **AI BOT:** It Provide answers to farming queries using comprehensive agricultural data.
- **Crop Health Monitoring:** Satellite imagery for optimal planting and harvesting schedules and Recommends crop rotation.
- **Resource Connection:** Links to local suppliers and equipment rental services.
- **Soil Health Monitoring:** AI models process this data to determine the nutrient deficiencies and suggest the best fertilize to optimize soil health.

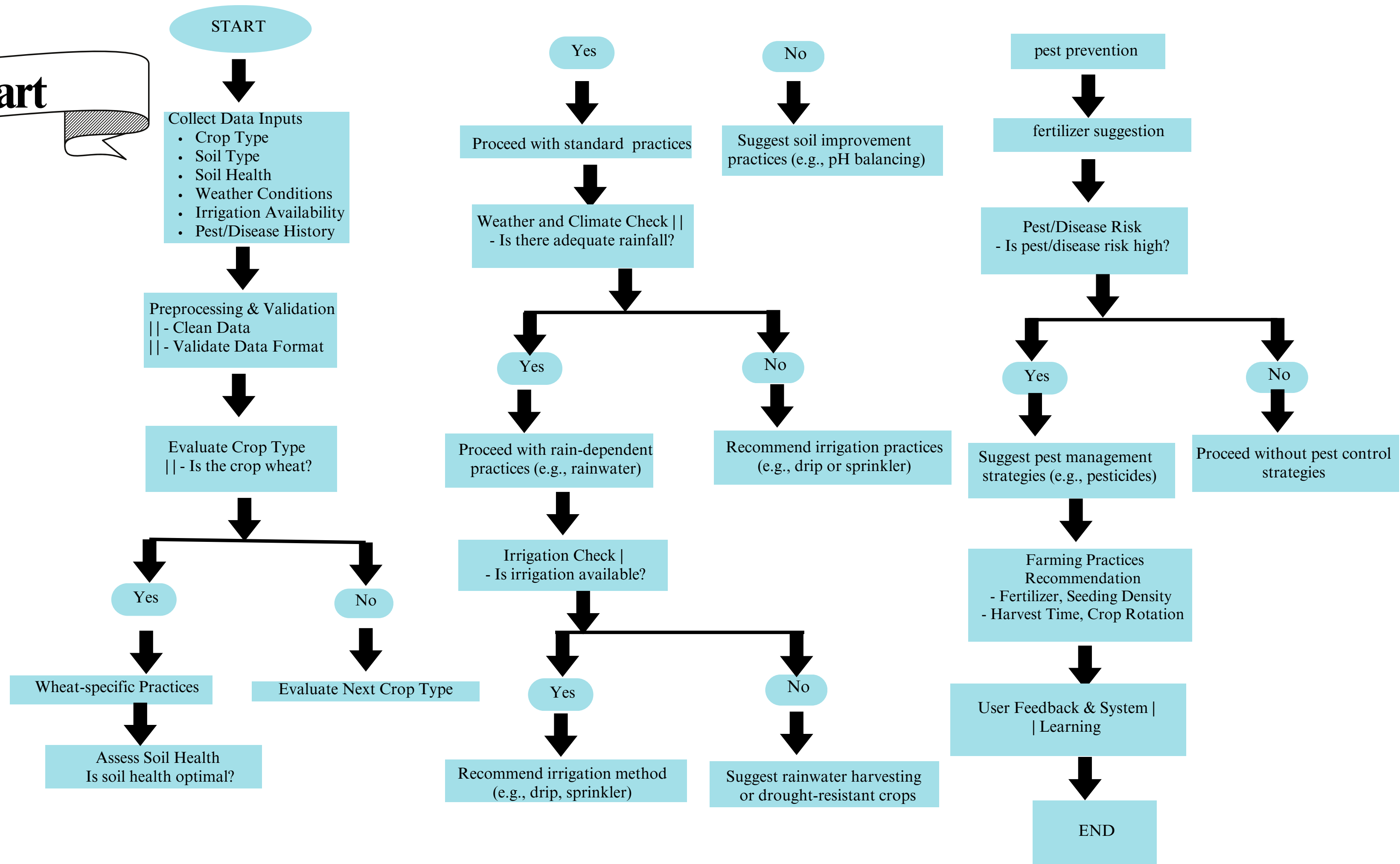
Goals:

Enhance productivity and crop management.

Increase farmer income.

Contribute to a sustainable and resilient agricultural sector in India.

Flow Chart



Technology Stack

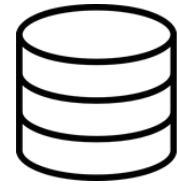


Web Application Framework



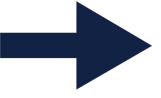
Backend Frameworks

Node.js



Database

MY SQL



Cloud Storage

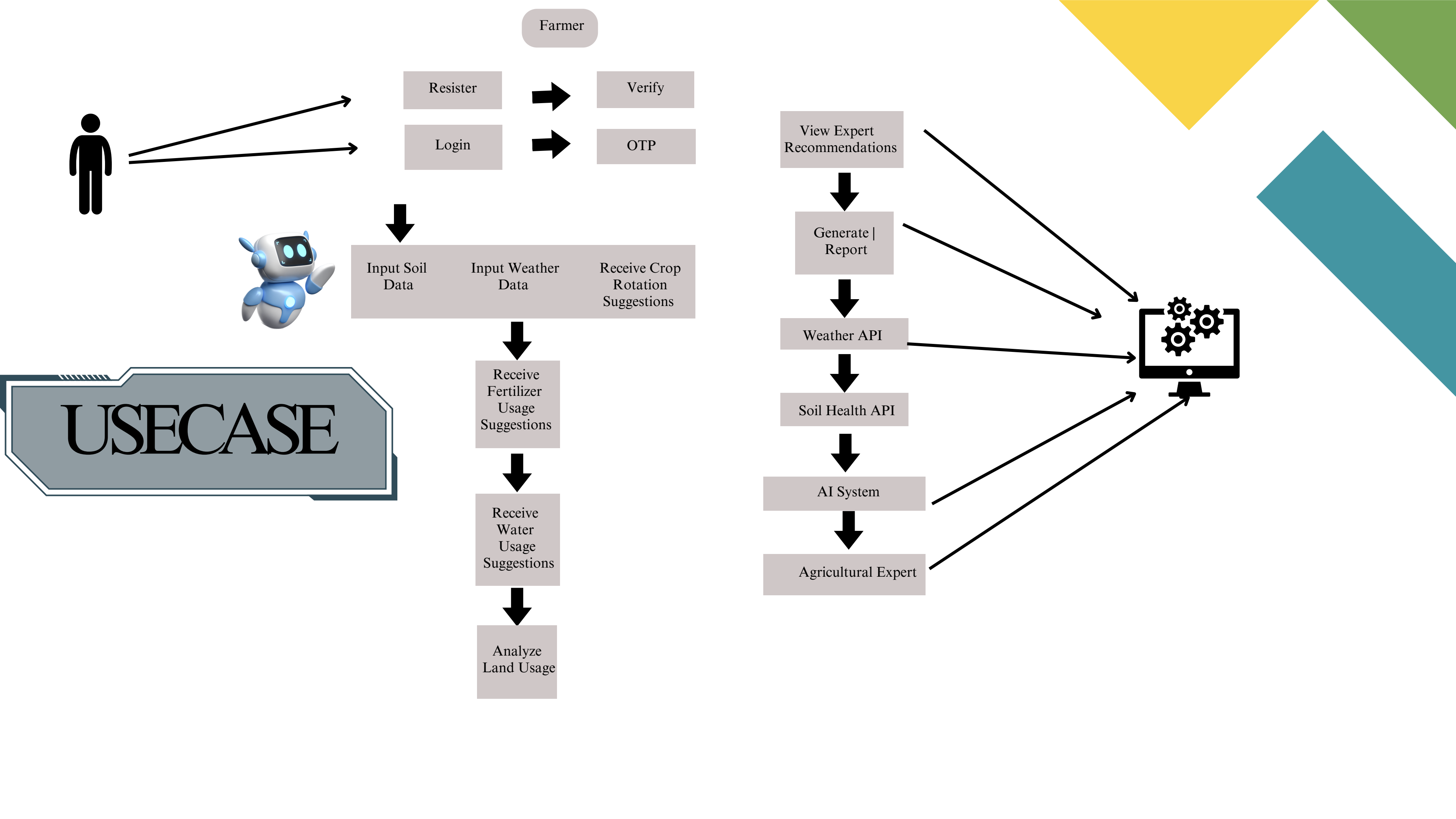
GOOGLE CLOUD



AI BOT

python





Team Member Details

Team Leader Name: B.Jashwanth

Branch : CSE

Year : II YEAR

Team Member 1 Name: B.Rajendhar

Branch : CSE

Year : II YEAR

Team Member 2 Name: K. Eshwar

Branch : CSE

Year : II YEAR