KITE
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PY-EXPO
KGiSL Institute of Technology

Team ID: T088

Team Name: Pymond Tech

PS Number: PY051

PS Title: Assisting farmers with the help of data from the Meteorological department

Domain: Web Development

Category: Software

Problem Statement:

➤ We are solving problems like

- **Resource Optimization**
- **Pest and Disease Control**
- **Weather Impact Mitigation**
- **Soil Health Monitoring**

Target audience :
➤ Farmers
➤ Input Suppliers
➤ Consumers

➤ Due to a lack of weather knowledge, farmers are not aware of future weather conditions ,resulting in the loss of their crops . This project aims to solve this problem by providing farmers with accurate and timely weather information in a user-friendly and accessible manner.

➤ This project helps young or new farmers by providing guidance throughout the farming process ,enabling them to succeed without needing to seek external help.

STEP 1

User Authentication
- Log in or register on the web application
- Enter their location, land and crop details ,
- water resource available.

STEP 2

Plantation guidelines
- Based provided on user registration details crop selection is recommended
- Duration for farming , fertilizer, pesticides details will be provided.

STEP 3

Fetch Meteorological Data
- Retrieve live weather data from meteorological department.
- Based on data ,providing proper irrigation schedule.
- Alerts are provided when disasters arise like(flood, drought, earthquake, hurricane)

STEP 4

Notification
- Regular notifications are issued.
- Fertilizer , pesticides will be remained for farmers with quantities

LOGIN → **HOME** → **WEATHER PAGE**

Crop Management → **Pest & Disease Control**

Pest & Disease Control → **Fertilizer recommendation**

Fertilizer recommendation → **Plantation Tips**
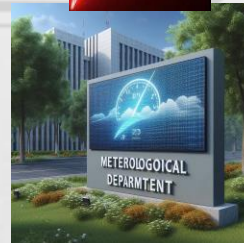
Plantation Tips → **Logout**

Proposed Solution:

- ❑ Helping farmers in agricultural activities
- ❑ Plantation Guidelines
- ❑ Irrigation scheduling
- ❑ Extreme Weather Alerts
- ❑ Pest and Disease management
- ❑ Fertilizers suggestions
- ❑ Weather Forecasting

Technology Stack:

➢ **Chatbot** is implemented for farmers easy access

➢ Technology Stack Used : PyApps

Languages	**Frame work**	**Database**
✓ Python	✓ Django	✓ MySQL
✓ HTML	✓ Bootstrap	
✓ CSS		
✓ Javascript		

Impact and Future Scope:

Impact
- ❖ Increased crop yields
- ❖ Reduced Crop Losses
- ❖ Economic Benefits
- ❖ Empowerment of Farmers

FUTURE SCOPE
- ❖ Improved Food Security
- ❖ Healthy & Organic Farming
- ❖ Increased Productivity
- ❖ Resource Management
- ❖ Youth Involvement

Research and References:

https://mausam.imd.gov.in/chennai/

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