USER_DOCUMENTATION

" AgriSense: Leveraging IoT for Precision Farming"

Developing an IoT-based system for precision farming, integrating soil moisture sensors, weather data, automated irrigation, and crop health analytics.

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1. Introduction:

Welcome to AgriSense! AgriSense is an innovative solution designed to bring precision farming to your fingertips. With real-time soil moisture monitoring, weather pattern analysis, and intelligent irrigation recommendations, AgriSense aims to optimize your farming practices for maximum yield and sustainability. This documentation will guide you through the features and functionalities of AgriSense, ensuring a smooth user experience.

2. Getting Started:

Setting Up:

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1. Visit the official AgriSense website at

[https://github.com/XuKaiyang1/2023U_CSCI441_VB_Software-Engineering_Xu-

- 2. Register for an account by providing your email, setting a password, and entering farm details.
- 3. Confirm your registration via the confirmation email sent to your inbox.

Logging In:

- 1. Navigate to the AgriSense login page.
- 2. Enter your registered email and password.
- 3. Click the "Login" button.

3. Dashboard Overview:

Once logged in, you'll be taken to the dashboard. The dashboard provides a

comprehensive view of your farm's current conditions and trends.

Soil Moisture Monitoring:

- Displays real-time soil moisture levels.
- Use the date picker to view historical data.
- Set alerts to notify you when moisture levels drop below a certain threshold.

Weather Patterns Analysis:

- View current weather conditions, including temperature, humidity, and rainfall predictions.
- Access historical weather data to identify patterns.

Irrigation Recommendations:

- Based on soil moisture data and weather patterns, AgriSense provides personalized irrigation recommendations.
- Follow the suggested irrigation timings and quantities to optimize water usage and crop health.

4. Settings and Preferences:

Navigate to the "Settings" tab to:

- Update personal and farm details.
- Change your password.
- Set moisture alert thresholds.
- Customize notification preferences.

5. Troubleshooting and FAQs:

- Q: I forgot my password. How can I reset it?

A: On the login page, click the "Forgot Password" link. Enter your registered email,

and you'll receive a password reset link in your inbox.

- Q: The dashboard isn't displaying the latest data. Why?

A: Ensure that your IoT devices are connected and transmitting data. If the problem

persists, try refreshing the dashboard or contacting support.

- Q: How can I add another farm or field to my account?

A: Navigate to "Settings" and click on "Add New Farm/Field". Enter the required

details and save.

6. Contact Information:

For any further queries, concerns, or feedback, please reach out to our support team:

- Email: 13456304506@163.com

- Phone: +86 13456304506

- Address: China