

Smart Farming Application

AQ Blue Ring Team

Our Team Information



Zhenning Tang
Product
Owner



Liu Lei Scrum Master



Zewei Liu

Developer

Leader



Yitong Qu Developer



Wenlin Wang
Developer

Client and Supervisor Information



Lokesh Chanda Client



Wei Wang Supervisor

Project Overview

Client
Background

AquaTerra is a company that focuses on providing digital agricultural solutionst. They promote the success of smart agriculture by offering information on soil conditions, weather forecasts, and other relevant data through IOT device.

Current Status

AquaTerra using PC-based web platform hosted on AWS cloud services.

Project Objective

An Android mobile application for agricultural data management and information visualisation.

Project Challenge from user perspective

- Limited Portability: Web version restricts access outside of the office.
- Real-time Data Dependency: Reliance on continuous internet connectivity.
- Higher Learning Curve: Steeper learning curve with complex interfaces.
- Cumbersome Hardware Pairing: Inefficient fieldwork due to complex setups.

Project Goals

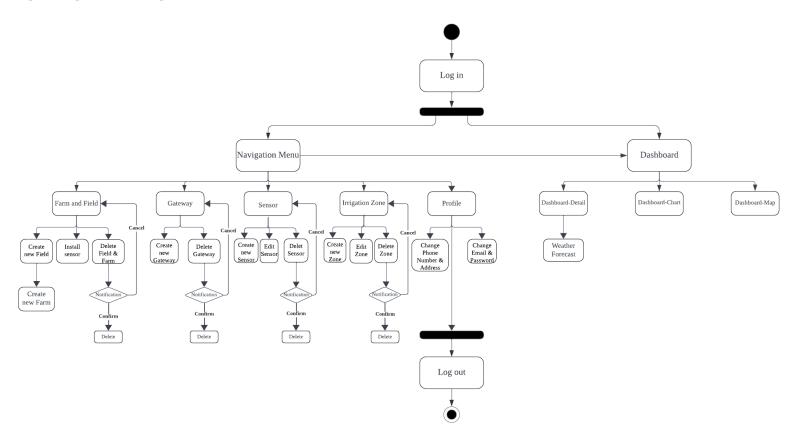
User-friendly Interface Design

Design an Android mobile application with an intuitive interface.

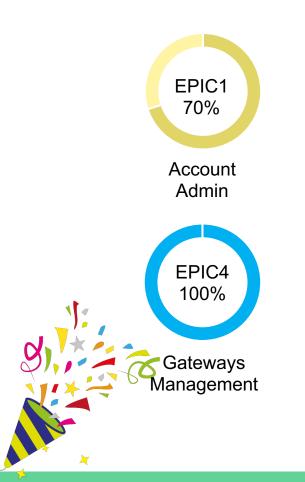
Enhanced User Experience by using mobile application

- Provide timely soil data tracking.
- Offer historical data analysis.
- Ensure reliable information
- Data support Action.
- Manage various data: Farm, Field, Irrigation Zone.
- Sensor pairing, Gateway.

Demo Time



Current Process of Project









Management



Farm & Field Management



Non-Core Function

Project Handover



Github Code



Android APK



System maintain Document



User Instruction

Reflection



Code Quality

The smooth implementation of product features is inseparable from concise code. At the same time, we also place great emphasis on the readability and maintainability of the code.



Communication

During the project implementation, team members maintained good communication to keep the progress on track, and also obtained feedback and suggestions for modifications from the client and customers.



Test Case

For different sprints in our development process, we set up test cases. Through these test cases, we successfully ensured the stability, reliability and predictability of out product's features.



Future Improvement

We need to pay attention to tasks monitoring to improve the efficiency and execution quality of the project. Additionally, the quality of documentation should also be a focal point.

Thanks for watching!