Project Design document: Plant Disease Detection System

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Abstract

This document outlines the design of the Plant Health Monitoring System project, aimed at assisting users in identifying potential plant health issues by analyzing environmental data such as soil moisture, air humidity, and temperature. The system provides insights into environmental conditions that may impact plant health and offers users access to nearby plant care centers for further support.

1 Introduction

This design document outlines the architecture, use cases, and class structure of the Plant Health Monitoring System. The system assists users in monitoring plant health by analyzing environmental factors such as soil moisture, air humidity, and temperature. The architecture section describes the core components and interactions within the system, while the use case diagram highlights essential functions and user interactions, including accessing environmental data, receiving threshold-based alerts, and locating nearby plant care centers. The class diagram defines the primary entities and their relationships, laying a foundation for system implementation and future expansion.
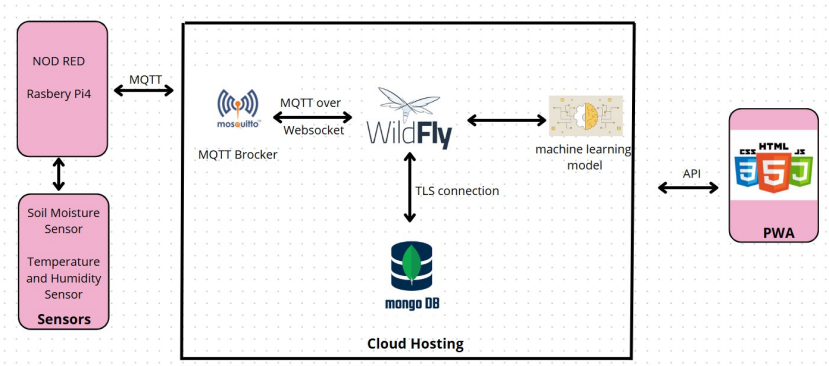
2 Architecture

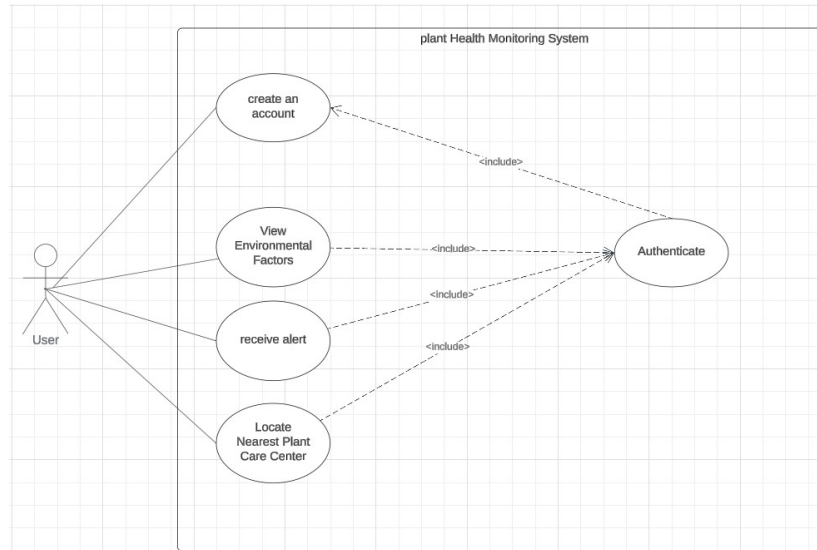Figure 1: Project Architecture

3 UML diagrams

3.1 Use Case Diagram

Figure 2: Use Case Diagram

3.2 Class Diagram
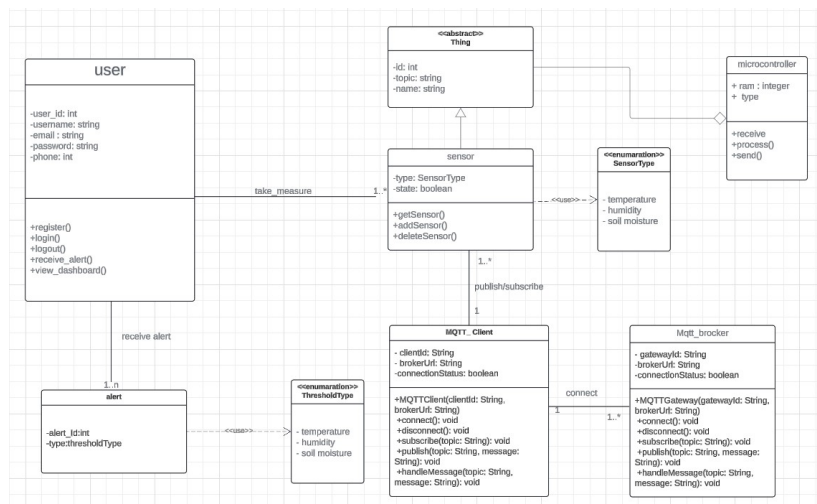

Figure 3: Class Diagram