

Indoor Plant Monitor IoT

Project Description

I aim to develop a platform which consumes incoming stream data from discrete IoT devices. The platform will track sensor readings for nutrients, water moisture, and light. This data will be used for information on a plant's status and predictive modeling. Customers will need our physical device to consume this data.

Team

I have received approval from Professor Conrad to work independently on the implementation of this project.

Implementation

The MVP will be built using a SQL database, moving to a NoSQL for following iterations at scale.

SQL

I will use PostgreSQL to implement my SQL database.

NoSQL

I will use either Cassandra or Redis to consume the incoming stream data from Kafka.

Web Server

I will build a web server using the Play framework in Scala.

Business Model

We will sell both monitors and an app subscription. Once a monitor is purchased, users have access to a freemium model which allows users to view live readings. A monthly subscription will give access to track historical recordings for individual plants. Monitors will be sold on our website and marketed on social platforms.