

Release Plan

Product Name : Smart Irrigation Backend

Team Name : Wubadubdubs

Release Name : Smart Irrigation V2.0

Release Date : November 25th, 2015

Revision Number : 2

Revision Date : 24 OCT2015

High level Goals :

Our backend goals for release include the following:

-Be able to automatically push data from the smart irrigation Raspberry Pi to MySQL database with the SOE ftp servers acting as an intermediary storage device.

-Be able to search and retrieve data from the database for use on front end applications.

-Be able to return watering schedule given aggregate data from sensors

-Be able to supply the front-end team with any data support required in their applications.

-Be able to add additional sensors to the system with minimal effort.

User Stories for Release :

Sprint 1

- As a developer, I want physical access to the raspberry pi and project site, so that I can test implementations and ensure proper data polling from sensors.
- As a developer, I want the data from the raspberry pi to be stored on a MySQL database that can be easily queried for data.
- As a developer, I want to obtain ssh access from raspberry pi to facilitate easy access to site data from remote terminal.

Sprint 2

- As a developer, I want to be able to generate dummy data for use in testing.
- As an administrator, I want the system to be expandable so I can easily add additional sensors.
- As a frontend developer, I want to be able to access data through an API.
- As a user, I want the system to include weather data.

Sprint 3

- As an administrator, I want the system to recognize overwatering and make it clear to me when overwatering is happening.
- As an administrator, I want a time window for when the next watering might be so I can go on site and monitor the watering.

- As a user, I want the system to work with different plants and their nutritional needs

Product Backlog

- Automated Weather Adjustment given cross-referencing rainfall data :
 - Although this is a useful feature, it's implementation requires a great deal of knowledge outside the general team's sphere of expertise. As a result, time will be allocated to the completion of this goal only in the event all other required functionality is met.
- Automated watering:
 - While this was originally a primary goal, a lack of communication from IDEASS as well as several apparent faults in the current hardware makes it unlikely that this goal will be achieved this quarter. Instead, we have shifted our goals towards making the system as robust and expandable as possible.