Alesandra Roger
Alex Mitchell
Rashad Kayed
Yugraj Singh
Evan Hughes
Ian Hamilton

Smart Irrigation Project Sprint Plan 2

Product Name: Smart Irrigation Project (SIP)
Team Name: iSlugs
Sprint Name: System Setup and Delegation
Sprint Completion Date: Nov. 12, 2014
Revision Number: 0
Revision Date: Nov. 2, 1014

Goal: Implement water valve/sensors and possibly the solar powering of our irrigation system.

User stories and tasks:

1. **(3)** As a user of the system, I need a user manual for the Smart Irrigation Project so that I know how to operate the system.
   1.1. Design a simplified user manual highlighting the various processing areas of our irrigation system and what they do.
   1.2. Make a chart showing each software processing area of our system.
   1.3. Make a flowchart showing each hardware processing area of our system and how it interacts with the software.
2. **(13)** As a farmer, I need the system to be able to deliver water to the plants so that they are not stressed by dehydration.
   2.1. Have the water sensors identify the appropriate soil moisture level through experimentation and using the “Watermark Soil Moisture Manual.”
   2.2. Determine what pump or valve we will use to deliver water to the plants.
   2.3. Create a class that is specific to opening and closing the pump or valve that will deliver water to the plants.
   2.4. Test our system to see if water is actually being delivered to the plants.
3. **(21)** As a farmer, I need the system to be capable of running off of solar power so that I don’t have to waste money on higher electricity bills and so that I don’t have wires criss-crossing my field. (A potential electrocution hazard!!)
   3.1. Talk to Kevin Bell about how we will be using our solar panel and what kind of power usage we will be using to power the arduino and sensor. Question to ask Kevin: Will the solar panel be used to pump the water or will or is there an external power source already implemented for the pumps we will be drawing water from?

Team Roles:

Alesandra Roger: hardware and software developer
Rashad Kayed: Product Owner
Alex Mitchell: software and hardware developer
Ian Hamilton: software and hardware developer
Yugraj Singh: software and hardware developer
Evan Hughes: SCRUM Master, software and hardware developer

Initial Task Assignment:

Alesandra Roger: Implementation of water valve and sensors.
Alex Mitchell: Implementation of water valve and sensors. Contact Kevin about solar panel and use.
Evan Hughes: Scrum Master.
Yugraj Signh: Research solar panels and use of power in our irrigation system.
Ian Hamilton: Implementation of water valve and sensors.
Rashad Kayed: Testing our implementations.

Burnup Chart: See github repository for file.
Scrum Board: See github repository for file.
Scrum Times: Mon/Wed/Friday 11:30 am.