

Sprint 2 Plan

Product: Tiny House

Team: Sensor Network Team

Release: Sensor Network Completion

Release Date: 12/24/2015

Revision #1

Revision Date: 10/25/2015

Goals:

- Deploy sensors that can read environmental data and store it in a database
- Have a beta version of the web application up and running

Task List (by user story):

User Story 1: “As a user, I want an improved web application dashboard that shows sample or actual data.”

Tasks:

1. Prepare web application for incoming data through javascript and html/css (10 hours)
2. Design basic layout and “flow” of the web application (3 hours)
3. Establish how database and hardware will communicate with each other, and what kind of data will be fed into the database (5 hours)
4. Create link between web application and database (2 hours)
5. Design database schema (3 hours)
6. Configure and customize VM server (3 hours)

Total: 26 hours

User Story 2: “As a user, I want actual sensor data to be coming from tested or implemented sensors”

Tasks:

1. Deploy functional sensors that successfully read and store environmental data (10 hours)
2. Implement code to operate ds18b20 temperature sensor (5 hours)
3. Implement state machine that will run inside Arduino Mega microcontroller and handle the sending and receiving of data from sensors (10 hours)

Total: 25 hours

User Story 3: “As a user, I want a basic understanding of what data is coming from my house and why it is important.”

Tasks:

1. Code a method of parsing data from the database (4 hours)

2. Determine ways to model the data that has been parsed from the database (8 hours)
3. Implement a system of feeding the modeled data to the web application (2 hours)

Total: 14 hours

Team Roles:

- Joseph Ou: Product Owner, Hardware Developer
- Sean Ashe: Scrum Master, Backend Developer, Frontend Developer
- Sargis Yonan: Hardware Developer
- Shivam Dave: Frontend Developer, Backend Developer
- Reza Barghi: Backend Developer, Frontend Developer

Initial Task Assignment:

- Joseph: User Story 2, Task 1
- Sean: User Story 1, Task 5
- Sargis: User Story 2, Task 1
- Shivam: User Story 1, Task 2
- Reza: User Story 1, Task 4

Burnup Chart: In Baskin 316

Scrum Board: In Baskin 316

Scrum Meeting Times:

Tuesday, October 13

Wednesday, October 14

Friday, October 16