Release Plan

Product: Tiny House
Team: Sensor Network Team
Release: Sensor Network Completion
Release Date: 12/24/2015
Revision #2
Revision Date: 10/22/2015

High Level Goals:

- Create a modular sensor network that can capture information about the immediate environment and collect that information into the main program
- Implement a database system that can be used to store, organize, and model the data that has been captured by the sensors
- Design and deploy a frontend web application that will provide a user-friendly overview of the house's environmental processes and resource flows

User Stories for Release (Each user story is followed by specifications on what the story entails for the developers):

- Sprint 1
    - (3) "As a user, I want to view a basic web application dashboard to get an idea of how my house data will be displayed."
        - Includes creating basic web application skeleton
        - Includes researching data being handled
    - (5) "As a user i want to be able to be able to view house data (possibly through a sample dashboard using actual or sample data)."
        - Includes researching hardware/software to create complete view of the project
- Sprint 2
    - (5) "As a user, I want an improved web application dashboard that shows sample or actual data."
        - Includes creating beta web application front end
        - Includes connecting web front end to database
    - (5) "As a user, I want actual sensor data to be coming from tested or implemented sensors"
        - Includes deploying successful sensors and that store/read environmental info
        - Includes data base system test and design research
    - (3) "As a user, I want a basic understanding of what data is coming from my house and why it is important."

        - Includes parsing the database to model the data for the frontend
- Sprint 3
    - (3) “As a user, I want a straightforward dashboard that accommodates each of the types of data coming from my house and adequately displays it.”
        - Includes deploying web application and expanding feature set based on incoming data from house
        - Includes deploying database system for incoming data
    - (3) “As a user, I want to have multiple types of sensor data coming from my house.”
        - Includes implementing a modular sensor network that constantly reads environmental data and wirelessly sends it to the main program
    - (5) “As a user, I want recommendations made based on my consumption. I want to understand what I can do to be more efficient with my power and energy consumption.”
        - Includes integration of the sensor network, web application, database, and modeling system into seamless unit.

Product Backlog:

- Design algorithms that can analyze sensor data in the database in order to identify resource flow trends, and use identified trends to automate some of the house’s processes.
    - This would be difficult and time consuming to implement in parallel with the other tasks. Essentially, we cannot develop algorithms for something we do not have yet.

Project Presentation:

https://docs.google.com/presentation/d/18FOVU_9ofe_1NhNHJxRJeawDOQtNwVCfW08Ca3VKZk8/edit#slide=id.p