Spike Plan

Name: Adjustable PIR Passive Infra Red Motion Detector Module HCSR501 usage and suitability.

Context:

The sensor has a possible use in the shower sensor project because it is cheap and could be used as a part in the process of determining if whilst the shower is running, there is someone using it. The sensor was bought from http://tronixlabs.com/sensors/motion/adjustable-pir-passive-infra-red-motion-detector-module-hcsr501/

Knowledge Gap: Does the sensor perform as expected (sense movement within the shower area).

Skill Gap: How to use the sensor.

Technology Gap: Is the sensor appropriate technology for this job.

Goals/Deliverables:

1. Guide on connecting the sensor.

- 2. Outcome report on how sensor works.
- 3. Test of sensitivity and appropriateness for the job as shower sensor.

Planned start date: 09/04/2015 **Deadline:** 10/04/2015

Planning notes:

- 1. Design circuit for breadboard that integrates the sensor.
- 2. Verify sensor works as expected.
- 3. Test and document different range and sensitivity values.
- 4. Tabulate best settings for various sizes (as showers are different sizes).