Minutes

Location: Shed
Date: Tuesday 17th October
Not In Attendance: N/A

Attendance: Daniel Knox, Daniel Carl Beauchamp, Dharius Robinson, Natalie Mclaren

What's Been Done since the Previous Meeting:
<Natalie M>: Looked different casing and storing options - which are more feasible/convenient.
<Dharius>: Looked into battery tech (lithium etc.. recharge Vs throw, mAh, size, solar), pulley measurement device possibilities, sent emails to environment agencies about cost, data wanted etc..
<Daniel B>: Looked at setting up a LoRaWan node, some 3g stuff, and put some thought into the format of the data.

Topics discussed:

- Natalie explains today's meeting will be an update of our progress:
    - Explain to Daniel K that we collectively designed our System Design and then delegated work to each other for the next design stage.
- Daniel Knox explains pressure sensors - consists of a pipe with air and measures the water coming in and out. Float in an isolated chamber.
- Daniel Knox explains that the power supply will become less efficient the colder it gets.
- Mentioned the possibility of using solar/wind for power.
    - Daniel Knox warns that it could be risky due to:
        - Technology wear and tear if using wind
        - Not enough hours of sun for sonar so the panels will have to be quite large.

What's Being Done:
Meeting on thursday to further discuss our research and choose options.

Further Discussion:

<u>Email sent to environmental agency by Dharius:</u>

Hi,

I am a student at the University of Kent. I am currently working with a group for a project for a device that would be similar to the flood network sensors that are used by you, and is aimed at environment agencies such as yourself.

I was hoping you would be willing spare some time to share your thoughts on some of our questions, about what you would expect from the device:

- What would be your limiting budget price for each individual sensor?
- Would you expect the device to be self powered (e.g. solar powered)?
- What information would be most important to receive from the sensors (e.g. water levels, speed, rate of level change over time, etc..)?
- What would be the best way to have this information displayed (e.g. graphs, heatmaps, etc..)

Thank you very much for your time, and I hope we can hear from you soon.

Kind regards,
Dharius