

## Minutes

Location: Shed

Date: Thursday 15th December

Not In Attendance: N/A

Attendance: Dan Knox, Dharius Robinson, Daniel Carl Beauchamp, Natalie McLaren

### **What's Been Done since the Previous Meeting:**

N/A

### **Topics discussed:**

- **Data processing:**
  - We asked Dan Knox for his opinion on our thinking behind data processing based on the decision made in the last meeting on the 13th Dec - that processing will be done in two different places - between sensor and database and between database and api:
    - Dan Knox suggests we do it wherever we think it is going to solve a problem.
- **Source code:**
  - Dan Knox suggests we use classes instead of separate .ino files which compile into one.
- **Case:**
  - Dan Knox suggests we use 2mm max thickness for walls.
- **Battery:**
  - Adalogger docs will tell us how to monitor battery and work out voltage on it.
    - Use RTC to wake it up.
- **Adaptive rate - to be used on lorawan - will let us adjust spread factor:**
  - Increasing spread factor will help on those bridges where we lost signal at Westgate Towers.

### **Further Discussion:**

General suggestions from Dan Knox:

- Make the framework we've used explicit - explain the reason behind the chosen frameworks/libraries and state where we have used an external library.
- Emphasis on explaining why we have worked in a certain way or with certain technologies.

**\*\*\*\* Brief meeting between group members to discuss what to do over christmas \*\*\*\***

- **Dharius:**
  - Will work on completing the engineering menu and deciding on batteries.
- **Natalie:**
  - Will work on separating the source code from the one sketch file into separate classes and will start adding material to the corpus.
- **Daniel:**
  - Will continue working with LoRaWan and the the back-end (API).