

## Minutes

Location: Shed

Date: Tuesday 6th February

Not In Attendance: N/A

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

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

<Natalie M>:

- Test c++ code is functioning properly after refactor and merge of the things network code.

<Dharius>:

- Test c++ code is functioning properly after refactor and merge of the things network code.

<Daniel B>:

- Fix API InfluxDb error and improve overall functionality by setting new endpoints

### Topics discussed:

- **API:**

- Daniel B explains that he had included comments in API code and documentation, however he hadn't pushed the code.
  - Dan Knox says we can push and send repository link to him.
- Daniel B explains that he fixed the InfluxDB issue we encountered last week - the issue was that the library was not returning all results together, but separately. So he fixed this by merging separated tags and columns
- He also explains that he improved the database setup (via the node.js repository) by including code that will create the database and seed it with 3 years worth of data.

- **Module design:**

- Natalie asks for clarification on the module design process, and how to show that in the corpus.
  - Dan Knox confirms that for this stage we should include our tests cases and pseudo code - without including our final code itself. An analysis of each function and check that it works exactly as we expect it to.

- **Node.js code:**

- Daniel B asks how we should go about writing tests for node.js setup?

- Dan Knox says this would be an integration test. He explains that we should test each module specifically i.e. a function testing device IDs:
    - We could throw in some wrong device IDs and ensure it throws an error
  - Dan emphasises that we should test at the minimum level and work outwards
- Daniel B asks whether a suitable test for our Redis database setup would be ensuring it stores a value and returns it later:
  - Dan Knox says it is up to use - we should test what we think is reasonable. He explains that we should test it enough that we are confident it can be deployed
- **The Things Network:**
  - Daniel B confirms that he is working on implementing a The Things Network inheritance instead of having it as a member in the LoRaWan class.
- **Viva:**
  - Dan Knox explains that we should be able to back up each process used, with the ability to explain how the process works/what it is as well as the reasoning behind using it. I.e. what is Agile and why use it?

### **What's Being Done:**

- Testing sensor on tripod and arm tomorrow
- More work on the API to fix endpoints
- Continue coding to finish code by the deadline we have set - mid February (approx. 16th)
- Dharius to rewrite the battery document
- All members to create a document listing pending features and tasks
- After this meeting, all group members had another meeting to carry out a code review of all repositories (node.js and API) and LoRaWan portal, to ensure all members are up to date with every functionality involved in the project.

### **Further Discussion:**