

## Minutes

Location: Shed

Date: Tuesday 14th November

Not In Attendance: N/A

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

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

- As per previous minutes:
  - Sampling the sensor's take measurement function by the Canterbury river.
  - Some case designs.
  - Writing/reading to the SD card

### **Topics discussed:**

- **SD card:**
  - Dan Knox suggests we test out the SD card and sensor on the adalogger instead, which runs on 3v. He suspects changing rapidly from 5v to 3v has slightly damaged the SD card module.
  - He also confirms that the adalogger running on 3v will have better compatibility with the sensor (even if we increase the voltage later on, keep it at 3 for now).
- **Serial interrupts to bring up engineering menu:**
  - Dan Knox suggests we use button interrupts instead. Adalogger has endless interrupt pins that can be used.
- **Processor:**
  - Any ints should be changed to small int or given a size for better compatibility when moving from arduino to adalogger.
  - Dharius asks whether a serial sketch will be very different outside of an arduino?
    - Dan Knox confirms we should still be able to use standard C libraries in the adalogger.
    - Arduino does have a printf() function however it's not as useful or complete as the one used in mbed.
- **Batteries:**
  - We agree to use disposable batteries - Dan Knox confirms this is fine. He also says the final PCB can contain a charging circuit to charge them as they are being used.

### **What's Being Done/What was done:**

Moving from arduino to testing our sensor and SD card together with the adalogger.

### **Further Discussion:**

Look up the **readstringuntil()** function recommended by Dan to eliminate some of our loops when reading the serial.