**Date:** 13th November 2018

**Not In Attendance:** N/A

**Meeting agenda:**

1. UI Prototype
2. Use cases
3. Requirements from Debbie
4. Zigbee options (API vs AT modes)

* Can API mode be used directly?
* Can we ‘ping’ a feeder if our hub is an API mode but feeder is in AT?
* Does the RFID reader provide a checksum? - Protocol provides, RFID doesn’t

1. Loss of packets - Is it okay to have occasional data loss?
2. To what extent can the XBEE setup be automated?
3. Can we get an access to Balsamiq?

**Meeting discussion:**

* Use cases - we discussed how to classify users and what would be the best way to plan UI. System requires to have different levels of access. Field workers are not allowed to export data from the database and so on. Dan advised that the best way would be to have users with different privileges rather than having different levels of users.
* The best way to design UI is to have different views for users with certain privileges **(look into JWT tokens to achieve this)** and instead of disabling some options or buttons it is better to hide them so that users are not aware that there are some restrictions for them.
* Zigbee modes discussed with Dan(API vs AT). Decided on going with a **controller in API mode** and having **hoppers in AT mode** to make them simpler (avoid the need for a microcontroller) but accepting the risk that if the controller goes down their will be data loss for the whole system until it’s back, however when weighing this with the likelyhood of the controller failing it is an acceptable risk because the controller is so simple (a single board computer) so it’s very unlikely to fail hardware wise.
* The **controller** Zigbee device can be programmed to buffer data in case it cannot push it to the central database, adding a layer of redundancy
* The RFID reader provides a checksum however we can’t request another reading if the feeder is in AT mode. However, we can read the checksum on the controller / hub and discard the data if we detect corruption.
* Questions to ask from Debbie:
* What classifies as a basic report and normal report (request examples)
* Who would register new users into the system? (Project coordinators?)
* Do birds get separated by projects or are the echos just one project (i.e. will our system need to support splitting and tracking birds into projects)?

**Actions:**

1. Dan to request Balsamiq access for the team and setup Zigbee.
2. Elina to send Use Cases to Dan to check and email Debbie for further clarifications.
3. Priyesh to request and get MBed from shed and familiarize self with coding on the mbed and using the zigbees / readers, getting help from Afzi/Karlis as needed