**Joel’s Groups - Collated**

**Required platforms:**

* iOS and Android app: This will display the number of dropbear sightings over a 24 hour period based on the postcode. User can set up push notifications to be notified of new sightings.
* Website (Chrome/Firefox): Same as the app in functionality. Instead of push notifications, a user can enter an email and postcode and be notified by email. Sign up/Log in feature is needed for a researcher portal, where they can query the database directly. The sign up form will be reviewed and accepted by Dr Client at the moment.

**The cameras:**

* Currently 12 cameras (6 cameras each in state forest of New England and northern NSW). Set up and maintained by UNE team.
* Camera is Swift Enduro 3G (<https://outdoorcameras.com.au/shop/swift-enduro-3g/>).
* Takes 750x750 resolution photos, each photo is 500kb in size and JPG format.
* When triggered, it will take a 3-photo burst, attach all images to an email and send through SMTP using a 3G connection.
* We will be notified of the cameras GPS locations, we can then set up an email for each camera. When we receive an email from a camera, we can then tell which camera and what the GPS coords are.
* Cameras work day and night.

**The project:**

* One year project (our budget is $300,000 not including hosting). Milestone dates every three months where we sit with Dr Client and discuss things with him + show him and train him in what we have done so far so he can interact with stakeholders.
* Dr Client would like to know our timeline/plan to organize milestones around that.
* Last three months of project will be a field trial with all cameras being used.
* They have secured hosting funding for three years and would like an estimate on running costs per month over this time (expected by third month).
* This is a prototype only but we should consider documenting our code well and allowing for easy expansion in the future.
* We’re expected to help work out user requirements as project is only in preliminary stages in first few months.
* Deploy using AWS specifically.
* Must create a database that’s organized with the following info: Time/Date, Image, GPS/Trap ID, classification (sighting or not), accuracy in confidence.
* Incorporate their prediction model (using a Tensorflow framework). Consider services needed for this.
* All data must be kept and stored in the cloud – both positive and negative sightings. Important that there is no lost data.
* Expect images to be processed and database to be updated immediately.
* They currently have images stored on an internal shared drive, could incorporate that into our database.
* Image runs through model within two seconds. Expect the transition to our server, running through their algorithm and storing on our database to take a minute or two.

**General:**

* Our only point of contact is Dr Client. He is in charge of keeping stakeholders happy. Meeting with him for each three-monthly milestone. We must train him on the basics and ensure code is well documented.
* This system will be used to demonstrate whether their models can be used in application. Want to know if possible to receive/review/show data through this project.
* A positive sighting is a classification of 75% positive or above.
* Expect their modelling to be 90-95% accurate.