**Technical Report – Group Project**

**COSC310 – Software Project Management**

**Team Crocodile**

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**Introduction**

**Project overview**

Project overview goes here.

**Goals of the project**

* Develop an AWS Cloud solution to retrieve raw data from deployed camera traps to be processed by a trained TensorFlow machine learning model and stored in an SQL database.
* Develop the required website and mobile phone application to inform the general public about dropbear sightings and assist in dropbear research.

**Project scope**

To meet the user requirements for this project the following software components.

* Cloud-based API using Amazon Web Services (AWS) to retrieve raw data from email generated by pre-deployed camera traps, to then be processed by a pre-trained TensorFlow machine learning model.
* A secondary Cloud-based API using AWS to retrieve various classification data from the TensorFlow machine learning model, to be stored in an SQL Cloud-based database on the same AWS platform.
* A two-facing website to facilitate the database information for the general public and researchers. On the public level, it will allow the retrieval of dropbear sightings based on a specified postcode. On the researcher level, it will provide an invite-only web portal for researchers to apply for, which will grant access to various information on dropbear sightings.
* A cross-platform smart phone app for Android and Apple iOS with identical functionality as the general public website.
* Email alerts and smart phone notification functionality for postcode sightings.

**Assumptions**

* The project team has the required experience to meet user requirements and deliver the project on time.
* The client will convene with the development team every 3 months.
* The budget allocated provides enough for additional human and computer resources if required.

**Constraints**

* Additional funding is not available for the project.
* Existing software components cannot be modified.
* Team members time on the project is limited to 40 hours per week, Monday to Friday, for the duration of the project.