**CITS3200 Group 24**

Minutes of Meeting 2 held on 7th August

Present: Alex, Minh, Eleanor, Ron

Apologies: Serhat, Ekin, Avi

Meeting started: 12:05pm

**2.1 Clarify project specifications with Ron**

Need an easy interface (for people who cannot code) to use three Google Cloud services:

Vision API (not the AutoML one), Speech to text, Video intelligence.

Main example as the focus for this project: Ecologists. Motion triggered cameras are used in the field to photograph small animals, but 90% of photos are blanks (i.e. false triggers). They spend time manually looking through 10s of thousands of photos to identify the useful photos. Image analysis would be tremendously helpful. *Our project is specific to this situation.*

Ron has written an app in python to process these images (He will send us the GitHub link). The app has a multi-step decision making process which uses camera metadata to decide whether to process an image with Google's Vision API, and separates the images into 'blank' or 'animal' folders. Images are processed one at a time, so it is slow. A 'key file' from google is needed as authentication.

Our first deliverable will be to replicate this app in a website form.

Key management could be worked on later down the track. Not first priority.

Note: the bait used in the field alongside the cameras resembles a small rodent, so many false positives occur. Use a confidence threshold to cut most of these out.

Confidence thresholds: False positives 56%, true positives 65%.

Chose 60% threshold as a compromise, cut out most of the false positives but still some overlap.

Website user inputs:

Module choice, target directory, key file.

Only one module for now, the ecology photos.

Google key file handles billing, project authentication, database authentication. We are using them manually for now, but could be more automated/integrated further down the track.

Final deliverable: GitHub project.

**2.2: Development Process**

Google keys: Either set up group account or individually. It does require a credit card to sign up but they give you $300 of credit. It won't cost you anything.

Ron has written some tutorials on the google cloud services.

Technology constraints: We have to use the Google API, has to be a user friendly webpage. No further constraints.

Agile Sprints: Webpage deliverable at the end of each sprint. Important to have a functional product, even if it is extremely basic. We will show it to the ecologist and see if he can use it.

Recommended first step: Webpage takes one image, spits back 'animal' or 'blank'. Don't worry about file moving or any other complexity. Slowly make it more complicated.

1st priority: back end. An image can be processed and identified.

2nd priority: front end. The webpage is usable by those without a CompSci background.

**Actions**

* Set up a group account for the Google API and link a credit card.

Meeting closed: 12:40pm