**Agile Project: League of legends icon identifier**

**Project vision –**

To make a league of legends icon identifier, using tensor flow machine vision to identify actual league of legends icons from a collection of video game portraits. With a 95% accuracy!

How long should it take? –

10 hours?

**Project roadmap**

**01/03 – Goal: Set the foundations.**

Create a webscraper to gather and store images

Create conda environment.

set up project on git along with an initialised folder.

retrieve images for classifying.

Metrics – have over 100 league images and 100 non-league images, have a conda environment and initialised git folder

**06/03 – Goal: Classifying data.**

Organise data into non-league and league images.

Determine test, dev and train sizes and justify why you are using those splits

Create python pages for each ‘class’ of function – loading, processing, model, etc. as well as test pages

Integrated testing within git push

Metrics - Finished these tasks – git commit

**09/03 & 10/03 – Goal: Build you model.**

Learn how to use TensorFlow to build your model

Start with a 2 layer NN, using ReLU for hidden and Sigmoid for L

Make layer an adjustable value for optimisation.

Metrics – build a NN that functions with an accuracy of at least 70% - git commit.

**13/03 – Goal: Make it deep!**

Modify your NN to make it much deeper with multiple layers.

Use drop-out regularisation to reduce overfitting.

**16/03 – Optimise if necessary.**

Check parameters such as error rate (w/o DO regularisation) and determine which optimisation techniques to use.

Use them! Implement the techniques and measure accuracy of network.

Metrics – accuracy ~90% - git commit.

**17/03 – continue tweaking!**

Change hyperparameters and regularisation values until accuracy is at 95%

Metrics – accuracy ~95% - git commit.