**Project work Diary**

Date:03/12/2019

# Tasks

* The Task I am currently working on is trying to SSH into each node on the virtual network to simulate an SDN controlling it and I will turn off nodes to simulate my AI turning off a node if it were infected
* I am using X11 forwarding to do this and command line prompts
* I am also doing further research into Q learning algorithms so I can use them in the future.

# Reflection

* I installed a GUI into mininet to make working with this project a lot more convenient
* This GUI allows me to open multiple SSH terminals so I can connect to each node on my network
* I am using an X server to allow me to SSH into the hosts.
* I also started using Wireshark to view traffic control within the network
* I have created multiple different types of networks with different switch and host configurations and successfully performed ping tests for each one.
* I have done more research into my project and have found another book relating to reinforcement learning

# Issues:

*Software:*

* Everything went according to plan today the only issue was the length of time it took to install the GUI

# Solutions

*Software:*

* The GUI allowed me to perform all the tasks I needed to do whereas in the past the commands did not work.