CS4287 Assignment 3

Setup & Justification

Setup

If running in test mode, ensure you have weights stored in `./weights/` with the name `agent_weights.h5`

Train

```
python 17197813_actor_critic.py -m train
```

Test

```
python 17197813_actor_critic.py -m test
```

Justification

I had initially chosen to pursue a DQN approach, but this proved to not be possible as the game cannot provide the next state of the game, due to its random nature. As a result, I chose the Actor Critic (A2C) approach, which was able to work with this limitation. The actor network differs slightly between training and testing mode, as test mode does not provide an advantage or old predictions for the network.