Read me

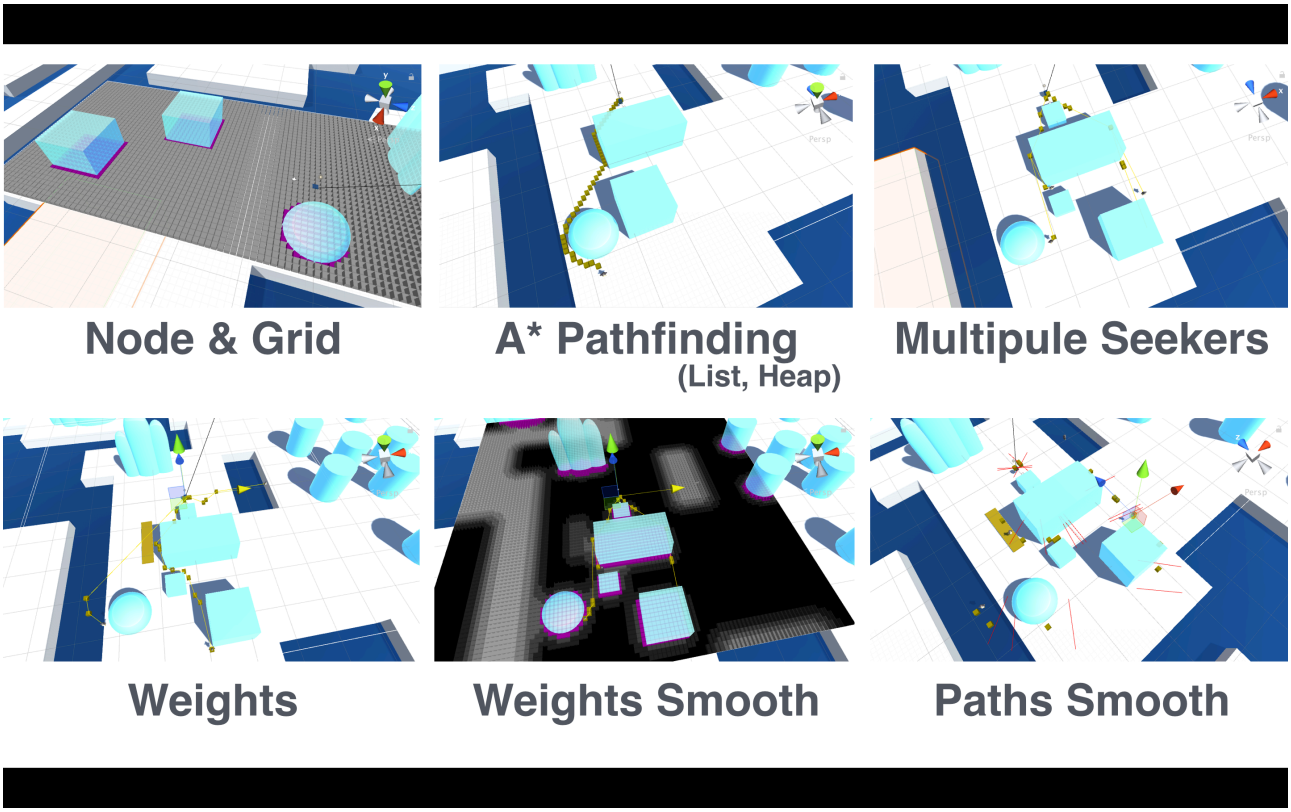
This project is an assignment of the Game AI course taken in Goldsmiths. The game was made as an experimental material for a research purpose: whether *shooting* can be replaced by *giving* in a video game? The develop environment is Unity.

Game

The story is inspired by my friend, Stuart, and his research area, Whales. In the game, Boris (the player) needs to find his whale. However, he is so attractive to the penguins that they will come jump on him once they see him. When there are too many penguins on Boris, he will not be able to walk anymore, thus lose the game. So to stop the penguins chasing after him, Boris can throw fish out of the distance - penguins will go after the fish instead of Boris (In the other version, Boris shoot the penguins). During the assignment, besides Boris's actions, I focused on working out the penguins' behaviour, mainly using the A* path finding and behaviour tree.

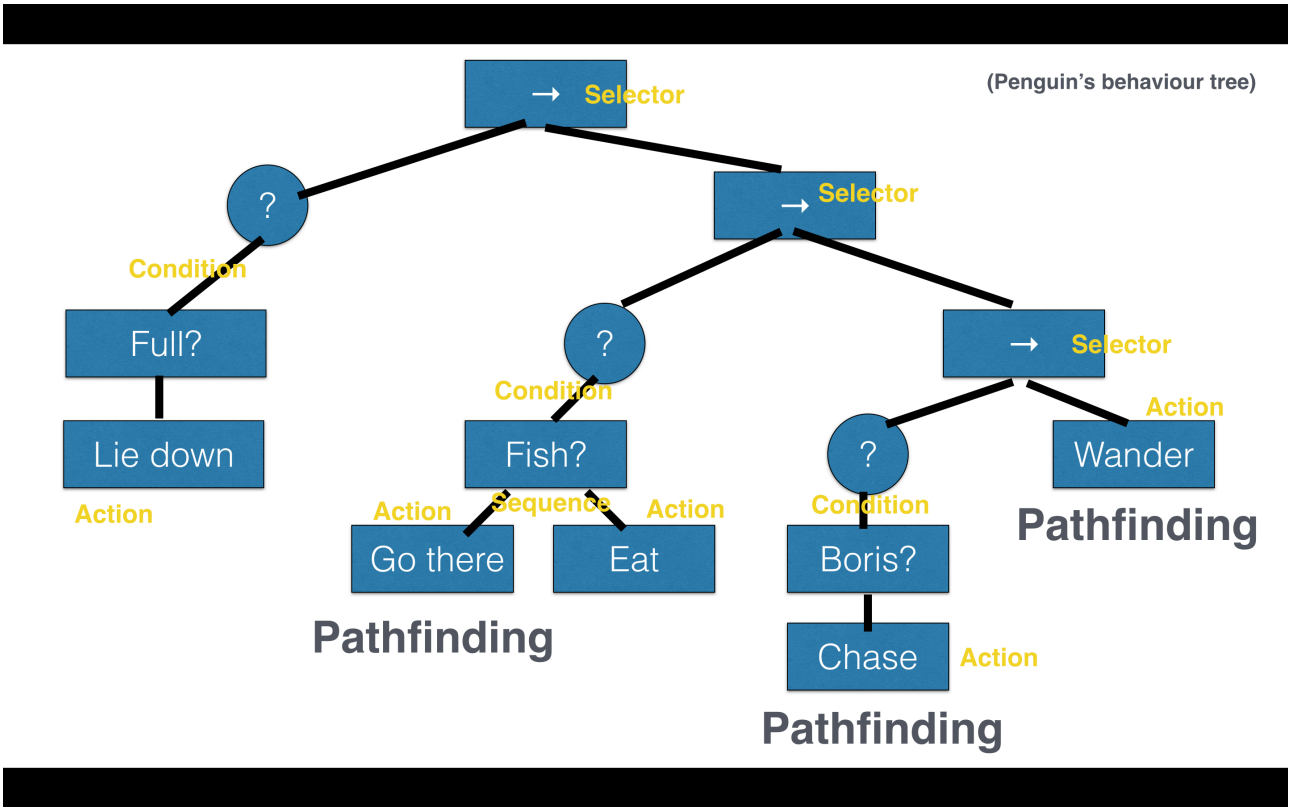
A* path finding

Through 6 steps, practicing how to program A* Path Finding in Unity using C#, shown as below:



Behaviour tree

Using the NPBehave library introduced during the course to design the behaviour of penguins. Penguins' behaviour tree is shown as below:



Others

Randomly generated obstacles of the map.

Parabolic trajectory of the launch objects.

Smooth steering movement of the player.

3D modelling of the penguins.

Link to videos

https://youtu.be/gUzIE3H8_Xo