Project 2 Document

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How to start the environment:

The environment is a Unity build executable. Opening the executable and running it will bring the player to the main scene. The player can be controlled by WASD keys and the mouse wheel can be used to zoom the camera in and out.

How to run the A\* demonstration:

The A\* demonstration is within the main scene, however it currently does not work as we were unable to properly implement it in time. The A\* unit is represented by a white cube. The player is supposed to be able to designate a target point for the unit to seek through a mouse click or designating another object in the scene, but we were unable to get this working. We had several errors we were unable to resolve.

How to run the flocking demonstration:

The flocking demonstration is within the main scene. The flockers are represented by green units. They move on their own throughout the scene.

How to alter the flocking demonstration:

This is the key map for controlling flocking behavior.

W – increase wander priority

Q – decrease wander priority

L – increase alignment priority

K – decrease alignment priority

C – increase cohesion priority

D – decrease cohesion priority

S – increase separation priority

Z – decrease separation priority

B – decrease avoidance priority

Issues with the bottlenecks (if any):

We had a few minor issues with the bottlenecks. Setting up the controllable values to work properly took some time. Since all of the flocking objects have rigidbodies, their collisions sometimes caused issues when going through the bottlenecks because they would sometimes push each other off into the pit.

NOTE: the avoidance with the enemies is not working properly as a result the flockers a flying off the terrain, A boundary of enemies was created to keep the flockers on the terrain