

Description of the World:

In a galaxy far, far away there is a space station in the middle of the galaxy. My world is a pretty simple design. It is a open space (no pun intended) with a large space station sitting in the middle slowly rotating. The space station is surrounded by asteroids that are randomly placed so it's slightly different every time you enter the world. This space station is also right outside a planet thanks to the skybox I found.

This space station is protected by ships and their squad of drones that follow behind them. They fly around the station ensuring its protection.

Steering Behaviors

Flocking implementation: the drones use alignment, cohesion and separation

Steering Behaviors: Seeking (which is used inside arrive and path following), Fleeing (which is used in evade), arrival (used in leader following), evade (used in leader following), and two advance behaviors: Leader Following and Path Following.

Advanced Steering Behavior 1: Leader following

The leader is the ship and the drones follow behind it. The drones arrive behind the leader ship and when they are in the way/ in the safe zone of the leader they move out of the way with evade. There are some times where the drones have issues with moving out of the way fast enough.

Advance Steering Behavior 2: Path Following

The leader has a set points that it files around to around the station. It circles around the station in order to "protect" it. There are no issues with this method

Characters' response to other characters

The drone avoid each other and stay a certain distance from each other. The drones also moves out of the way of the leader ship.

Characters' response to the environment

The leader ship and the drones will avoid the many asteroids in their path. If for any reason a ship or drone is too close to the station there's a chance they will go straight through them. I had difficulty getting the ships to avoid it for some reason.

Other notes:

There are a few different camera angles. It will start off with following right behind the leader ship. If you press the left shift it will go to a side view of the ship. If you press caps lock it will go back to that view behind the ship. If you press the same button two times in a row it goes into free style mode where you control the camera. If you press w on the keyboard and press left mouse button you can move the camera up, down, left and right. If you press e and the left mouse button you can rotate the camera. Finally if you press r you the left mouse you can zoom in and out of the scene. Any time you want to go back to following the ship just press left shift or cap lock. Sometimes doing that can be wonky just be patience with it.

Resources:

The Ship, drone, and space station models were all created and textured by yours truly. If I had more time and own photoshop on my personal computer the textures would have been so much better.

Asteroids: Unity Asset Store, Made by TripleBrick, found here: <http://u3d.as/8hX>

Awesome Skybox: Unity Asset Store, Made by Hedgehog Team, found here: <http://u3d.as/2We>