Christopher Katcher

IGME 202, Section 01

Final Project Documentation

**Description of World:**

A small farm in the middle of no-where has some cows and pigs on it as well as a corn field. The cows and pigs mind their own business and simply wander around in their pens. A UFO comes to visit the farm and abduct the cows and pigs. It will randomly choose between abducting a cow and abducting a pig. Once it chooses one, it will control it with its alien mind control device, rendering it helpless and unable to move. It will then approach the creature and lift it with its tractor beam. After the creature has been abducted it then chooses a new target until there are none left.

It has another purpose in the farm though, it will create a crop circle when it is prompted to. After the user tells it to, it will fly over to the corn field and follow a path to create the crop circle.

Once there are no more cows and pigs, the UFO leaves and it begins its tests.

**Steering Behaviors:**

Arrival:

The UFO will always use arrival to move towards a target. This includes cows, pigs, and points on the path in the corn field. It will always slow down and stop above its target.

Wander:

The cows and pigs can clearly be seen wandering around in their pens.

Path Following:

Press the ‘C’ key on the keyboard to start the UFO’s crop circle. It will follow a pre-determined path in the cornfield by arriving at each point. There a total of 11 nodes in the field that the UFO will approach. This represents it going around destroying crops. Once it reaches the last one or there are no more crops to destroy, it will go back to abducting.

**Resources Used:**

Lecture notes regarding the steering behaviors and most links in the slides to the code for those behaviors.

**World Exploration:**

Press the numbers 1, 2, 3, 4, 5 on the keyboard to switch between the cameras in the scene, game will start on camera 1.

Camera 1: The first person player controller. This starts in the front of the farm house.

Camera 2: Overall view of most of the farm with a focus on the cow pen

Camera 3: Another Overall view of the farm with a focus on the pig pen

Camera 4: Top down view of the corn field

Camera 5: Underhead camera for the UFO. This follows the UFO’s movements. I don’t

recommend using this camera while making the crop circle as its a lot of 90 degree turns

and fast movement.

The user also has to manually tell the UFO to make the crop circle by pressing ‘C’ on the keyboard. This will not work if it is currently abducting a creature, or if it has already made the crop circle.

**Other notes:**

When a creature is abducted it will seek the UFO. The UFO also will have a fixed velocity added to it when it is done abducting creatures. If you wish to walk around the world there are a few objects with physics attached to them that you can knock around.

Play the game on the “Beautiful” setting for the best results when making the crop circle. I’ve had a tough time getting the delay on crop destruction to be accurate and found on that setting it is the closest.

**Asset Resources:**

There's a ton of models I used for this project, they are all listed in the file label “Credits”