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EGP-410 Game A.I.

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Assignment 1

1. The overall architecture of your solution.
2. Challenges faced in the development.
3. Areas where further improvements could be made.

1. In my scripting, I chose to use specific cases for naming my variables. I would start with an under case then I would use an uppercase with each additional word that's connected to the variable. Each steering has their own file. Some steering has a combination of different steerings. These steerings include Wander and Chase steering and Arrive and Face steering. The other steerings that are within these scripts are Seek steering, Arrive steering, Wander steering, and Face steering. Wander and chase includes face, wander, and seek steerings. Arrive and face include the arrive and face steerings. The arrive and face steering used anglings from the character to the target using the rotations velocity along with the rotations acceleration. The wander and chase steering used the position of the character and the target but used some other aspects as well. It generated a point in front of the character to move towards, randomly. I made the input system very simple. It would check for a simple command from the keyboard or mouse then would return either true or false. Based on this, the game would do certain commands. The commands that are connected in the input system are the enter key, the "d" key, the escape key, and the input of the mouse. The enter key would allow the game to spawn an enemy randomly

on the screen. The “d” key deletes a random unit that is not the player. The escape key exits the program. Lastly the mouse input makes a point to where the player will head towards.

2. Some of the challenges I faced in the development of the steering was mainly wander steering. All of the steerings that did not include wander were pretty easy to write up from the pseudocode given by the book. There were sometimes where I did not know what to put for some of the given variables, but with the help of other students, I was able to figure it out. I also looked into what the different steerings were supposed to look like for reassurance.

3. I feel that the one steering I could improve on was the wander and chase steering. The A.I. looks weird. If it were up to me, I’d just randomly pick a point to head towards rather than choosing points in front of the character. This way the A.I. looks less like a swimming fish and more like a person looking in different areas.