Spike: 8

Title: Tactical Steering

Author: Steven Efthimiadis, 1627406

Goals / deliverables:

Create a hunter prey simulation with multiple agents. The agents must be able to:

- Can hide from the hunter by
 - Search for the best hiding spot
 - Find a new spot if the hunter is nearby
- When hiding, the best spot must be identified by a "x"
- Must be a difference between the hunter and prey

Technologies, Tools, and Resources used:

- Knowledge of python
 - o https://docs.python.org/3/tutorial/
- Python Interpreter
 - Visual Studio
 - https://www.visualstudio.com/downloads/
- Knowledge of how an agent should work out how to find the best hiding spot
 - https://ilearn.swin.edu.au/bbcswebdav/pid-6302928-dt-content-rid-34403398_2/courses/2017-HS1-COS30002-220387/Autonomously%20Moving%20Agents.ppt.pdf

Tasks undertaken:

- Created a new class for the hiding spots
- Agents can search for the hiding spots that aren't within the radius of the hunter
- A "x" will be displayed for the best hiding spot a hunter can find.
 - Some agents might have different hiding spots depending on spawn position and hunter location
- Hunter will only pursuit an agent if it's within the radius. If outside the radius, it will wander around the map

Spike: 8

Title: Tactical Steering Extension

Author: Steven Efthimiadis, 1627406

Goals / deliverables:

Create a hunter prey simulation with multiple agents. The Hunter must be able to:

- Devour its prey
 - Must be able to remove the agent from the list
 - Spawn a new agent that is in hiding mode

Technologies, Tools, and Resources used:

- Knowledge of python
 - o https://docs.python.org/3/tutorial/
- Python Interpreter
 - Visual Studio
 - https://www.visualstudio.com/downloads/
- Knowledge of how an agent should work out how to find the best hiding spot
 - https://ilearn.swin.edu.au/bbcswebdav/pid-6302928-dt-content-rid-34403398_2/courses/2017-HS1-COS30002-220387/Autonomously%20Moving%20Agents.ppt.pdf

Tasks undertaken:

- Added a tagged variable to agent
- If an agent is successfully devoured by the hunter it becomes tagged
- If main game loop if the agent is tagged
 - o Remove from the game world
 - Spawn a new agent with the mode "hide"