**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
  + <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
  + <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
  + Remove from the game world
  + Spawn a new agent with the mode “hide”