Spike: 13
Title: Tactical Steering (Hide!)

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Goals / deliverables:

- Code
- Report

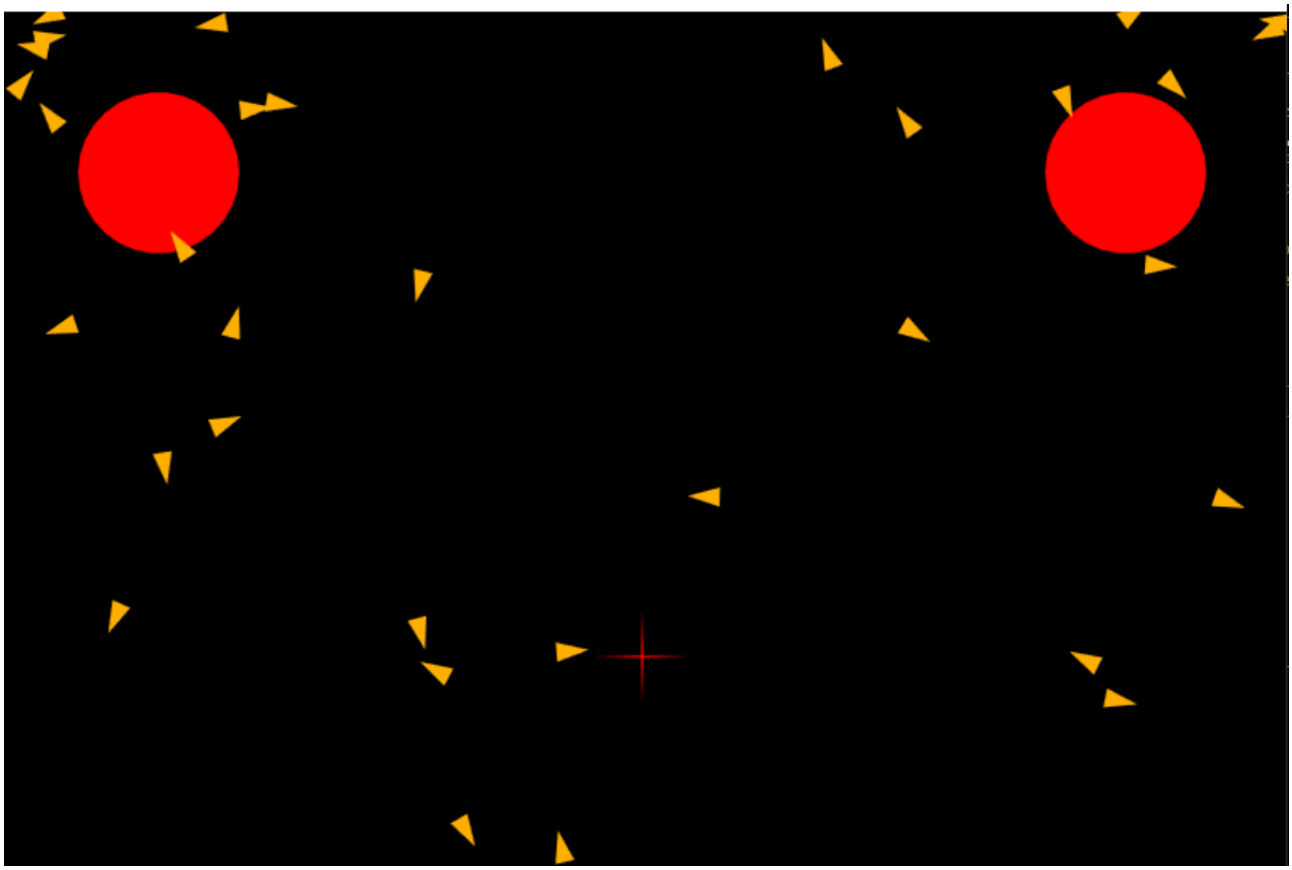
Technologies, Tools, and Resources used:

- Latest Version of the Visual Studio Code or the Python IDE
- GeeksforGeeks: https://www.geeksforgeeks.org/python-functions/?ref=shm
- W3schools: https://www.w3schools.com/python/python_classes.asp
- Computer/Laptop

Tasks undertaken:

- Download and install the latest version of the Python IDE or Visual Studio Code
- Download and install Git bash terminal
- Use the git bash terminal for configurating and running the code while the code is initialised in a folder
- The Agent class is used to represents an entity in a simulation, with properties such as position, velocity, heading, and acceleration. It is initialized with a reference to the world it exists in, a scale for its size, a mass, and a mode of operation. The agent's initial position and heading are randomly determined. The agent also has a steering force that can affect its acceleration. The mode of operation, such as 'seek', could potentially influence how the agent interacts with its environment.
- The hide method in the Agent class is responsible for the hiding behavior of the agent. Initially, it finds all the potential hiding spots by calling the find_hiding_spots method. Then, it evaluates these spots using the evaluate_hiding_spots method to determine the best spot to hide. If a suitable hiding spot is found (i.e., target_pos is not None), the agent seeks this position using the seek method. If no suitable hiding spot is found, the method returns a new instance of Vector2D, which could represent a zero movement vector, indicating that the agent stays in its current position.

What we found out:
The outcomes that occurred were most of the agents in the program were able to hide behind a circle and find the nearest one



Open issues/risks:

List out the issues and risks that you have been unable to resolve at the end of the spike. You may have uncovered a whole range of new risks as well.

- The agents don’t stay put
- Not all of them get away from the hunter
- Some of them don’t find the nearest hiding circle