COMP 476 – Assignment 1

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Running the Game

To run the game, please open the **COMP476_A1.exe** file.

Exiting the Game

No exit function exists therefore you will need to use the Windows Alt-F4 function to exit the game.

Controls

The gameplay is automatic. The only input you may make is changing the type of AI movement between kinematic and steering.

K: Kinematic

S: Steering

Architecture

The overall game logic is found in the **Game.cs** class. This includes assigning NPC roles.

NPC AI is implemented in the **NPC.cs** class.

The flags also needed a bit of logic therefore I created a **Flag.cs** script.

Issues

Although the requirements have been met to the best of my ability, there still exist some bugs which I have not been able to pinpoint. (ex: NPC occasionally unfreezing before ally can reach him).

I had to make some changes to the requirements in order to balance the game.

- Toroidal distance calculation does not apply for flag capturing and returning to base since that would make it too easy.
- NPC only flees if the pursuer is sufficiently close.
- I only created one wandering function that is the same for both kinematic and steering. It's basically a random Look Where You're Going.
- It is easy to see which NPC's are tagged since they are not moving.