GAM 376/476 : Homework 3

Due Date: **2/11 11:59pm**

Download: ZOMBIES Project from D2L

Submission: Submission to the class Perforce

Resources:

To Get Started:

- Use Behavior Trees lecture notes as a guide to setting up behavior tree and tasks
- Download the correct files
    - Download "ZOMBIES_Base" from the "ZOMBIES Project" section of D2L
    - Download this very Homework 3 PDF from "Homework" section of D2L

Description

Welcome to our ZOMBIES project, where over the course of the next five weeks we will build out advanced AI agents to survive a zombie apocalypse.

The agents for which we are writing code are the SURVIVORS/PLAYERS, not the Zombies!

Our first sprint of this project is to assemble up a Behavior Tree to perform the following behaviors:

- **Movement**
    - Current Behavior
        - Survivors stay in the same position where they originally spawned
    - Goal Behavior
        - Survivors will move around the map to pick up loot & avoid zombies
- **Weapon Swapping**
    - Current Behavior
        - Survivors only use pistols
    - Goal Behavior
        - Survivors pick the right weapon based on factors like zombie strength/distance/etc
- **Priority Targeting**
    - Current Behavior
        - Survivors pick the closest zombie target and fires until it is dead
        - No line-of-sight detection

- o Goal Behavior
    - Target the closest zombie to the survivor, update target
    - Target special/stronger zombies if present
    - Ignore zombies if there is no line of sight
- **Smarter Avoidance**
  - o Current Behavior
    - Survivors current target is the zombie the survivor will flee from (also fireballs)
    - Survivors will run into other zombies
  - o Goal Behavior
    - Survivors will take other zombies into consideration when fleeing

Submission

Submit the following things to ==Perforce==

1. **Your zipped project to D2L folder, titled "Homework 3"**
   - o Delete all folders EXCEPT:
     - Assets
     - Packages
     - ProjectSettings
   - o Essentially it should have the same major folders as the project you downloaded from D2L, plus any extra scripts you wrote
2. **A ~5 minute demo video where you explain your code and the outcome**

More instructions for Perforce are coming soon!