Project Resurgence - NPC/Enemy AI System - Rev 5/29/2018

Attached to Nav Zone

AI_Wake_Up_Zone

Activates inactive AI that is stored in the list when the player hits the trigger.

AI_Debug_Draw_Zone

Draws boxes around zones for use in the Editor.

Use "Debug" when setting up zones to make the zones visible.

AI_NPC_Assistor_Nav_Mover

Moves the position of navpoints to be closer or further from the player based on a raycasting system.

AI_General_Navpoint_Pool

Handles nav point groups for NPCs both on the player and in zones.

Open nav points can be claimed by NPCs. This means other NPCs wll not try to follow the navpoint. Also contains a method to release all of the navpoint claims.

Supplement this document with the Resurgence_AI_Doc.pdf.

Attached to Player

AI_NPC_Assistor_Nav_Point

The actual nav points that are used. They have storage for a claim owner that is used via the nav point pool.

AI_Player_Helper

Controls the switching into and out of zones - and flags if the player is "moving" or not. "Moving" is defined as moved more than 0.25 of a unity unit since the last check.

AI_Enemy_Assistor

Routes enemies to another assistor based on the assistor that they hit. Allows for circling and moving around the target.

AI_Enemy_Assistor_Controller

Handles the enemy assistor group that is attached to the player.

Rotates the assistor if activated to vary the enemy pathing. Rotations turn on and off controlled via time.

Attached to NPC

AI_NPC_Targeter

Adds and removes enemy targets that enter and exit the target zone.

AI_NPC_Shotpoint

Shoots rounds at the enemies - via the NPC.

NOTE: Instantiation is used but it needs to be replaced by a pool.

AI_NPC_Navigator

Controls the movement and behavior of the NPCs.

Initiates shooting while not moving, moves while the player moves, eases out of movement when the player stops.

Attached to Enemy

AI_Enemy_Charger

Manages the movement and attacking of the AI_Enemy_Charger. Selects targets and selects their assistors. Initiates attacks.

AI_Enemy_Charger_Targeter

This targets NPCs and AI when they collide with the targeting trigger sphere.

AI_Enemy_Debug_Signal_Attack

Signals a string to the console when trigger is entered that matches the Player or NPC tags.

THIS MUST BE REPLACED WITH ACTUAL ATTACKS!