A.I. Behavior - Made Easy - Tutorial

Overview

The A.I Behaviors tutorial document is designed to provide an outline for the use of and application of the system and its tools.

In the tutorial the user will be able to do the following:

- Load / Import AI Behavior into a project
- Understand the workflow and usage of the tool
- Create and assign components necessary to start the AI Behavior system
- Create your first interaction with an AI driven character



Step 1 – Let's get started!

We begin the tutorial by creating a new project and importing the AI Behavior Package into a blank scene.

- 1.) Start by loading Unity3d and create a new Project in the Project Wizard
- 2.) After the Project loads, create and save a new scene for us to work with
- 3.) Next we want to load the AI Package into Unity
- 4.) Select -> Assets / Import Package / Custom Package...
- 5.) Choose the AlBehavior.unitypackage and import all files

Step 2 – So, what did we get??

We now have the exciting new system loaded and ready for us to start exploring. Let's jump right in and see what we have!

- 1.) Editor Scripts
 - a. Custom inspector and menus
- 2.) Mockup Art / Prefabs
 - a. Character
 - b. Animations
 - c. Materials
 - d. Textures
 - e. Levels
- 3.) Example Scripts
 - a. Tying into the AI System
- 4.) Documentation
 - a. The how to and where to

Be sure to take a minute and scan through all the files included in this package. There are lots of great scenes to practice with and a character to build around.

Step 3 – How to use it

The AI System was designed as an easy to use tool that allows for complex and simple designs all from within the inspector. The basic workflow is illustrated below:

Design and write down the Al Behavior

Assign Al
Behaviors
Default Setup
to your
Character

Assign and Setup the Animations

Assign States and Adjust Properties Test!
Play!
Enjoy!

Step 4 – Getting it Setup

Setup the Character

- 1.) Select and Drag the avatar_empty into the Hierarchy from the Prefab Folder
- 2.) Next, add the AI Component to the prefab, avatar_empty
- 3.) Select -> Component / AI / AI Behaviors Default Setup
- 4.) This adds all the components necessary to your character
 - a. Components Added
 - i. Nave Mesh Agent (handles pathing)
 - ii. Al Behaviors Animation States (assign animations here)
 - iii. Al Behaviors (the designer side options for the Al system (The Fun Stuff!))
 - iv. Al Behaviors Character Animator
 - b. Objects Added
 - i. Animation States (handles animation states)
 - ii. States (handles the various states the character has)

Assign Animations

- 5.) With the character selected, find the AI Behaviors Animation State Script on the root of the GameObject
- 6.) Select the 'Add' button to add animations to the character
- 7.) Fill in the name option with idle breath 01 (Note: This corresponds with the animation name.)
- 8.) Next we need to assign this animation to the idle state
- 9.) Go to the AlBehavior Component on the Character and select the Edit Idle button
- 10.) This sets-up the ability to edit properties for the idle state as well as to assign an animation to this state. Look to the mid-section of this component and you see the Animation Rollout.
- 11.) Press the Add button and select the Idle Animation idle_breath_01
- 12.) Our character is now ready; next we need to prep our environment
- 13.) From the prefabs folder in the Project tab, drag and drop the scene 01 into the Hierarchy
- 14.) Create a navigation mesh for this prefab using the Navigation Tool.
 - a. Select the level mesh
 - b. Click bake
 - c. The navigation mesh is generated and we are now ready to see our guy in action!
- 15.) Click Play and enjoy

For detailed Video Instructions on how each behavior functions, be sure to join us at:

http://www.walkerboystudio.com/html/aibehaviorsmadeeasy.html

(Note: If you would like to review the completed scene, open scene_01)