Product: CHG2D-001

Date: 5/23/2024

Publisher Name

Memstow

Product Name

CHG2D-001 (Character Humanoid Genderless 2-Dimensional – number 001)

Package Name

2D Character Stick 001 by Memstow

Release Notes

Version

Release Version: 1.0.3

Change Log

Version: 1.0.0

- New Release

Version: 1.0.1

- Added Theme Style Sheet to CHG2D Panel Settings.

- Modified PlayerMode2D script for better fall detection, to allow waving hello while moving, and to better detect when able to jump.

- Changed the character's layer order value

Version 1.0.2

- Updated version of Unity Hub used.

- Renamed a game object from "Path" to "GroundPath"

Version 1.0.3

- Added a demo scene for use with the 2D (Build-In Render Pipeline)Core template.

- For sprites in the demo scenes, changed the material from "Sprite-Lit-Default" to "Sprites-Default"

- Changed the "TagManager" presets file name to "MemstowTagManager"

- Removed an unused component from the Main Camera that was causing a "The referenced script (Unknown) on this Behavior is missing!" warning.

Summary

This package contains a 2D stick figure character. This is intended as an aid for someone interested in trying out 2D animation without having to create the artwork. To get the fun started, it comes with some simple animations and scripts.

Description

This character was created with the intent to give someone a shortcut to getting started with 2D character animating. When I first started, I took a look in the Unity Asset Store for something free to download to tinker with. Ideally I wanted something simple like a stick figure, but didn't find it. So, after some practice, I made one.

This package contains two different stick figures to tinker with. There is a version in black and a copy in red. The forward facing stick figure in black has been rigged and animated in a simple environment. It supports the basic WASD controls. The version in red is the version for someone else to try to rig and animate on their own, using the black version as an example.

Regarding the side facing stick figure in black, that I may rig and animate in the future. It will be included it as an update to this package.

The images are 480x640 pixels with a resolution of 300 dpi. The forward facing stick figure is a single layer image. The side facing stick figure is a multi-layered PSD file.

In regard to animating, for myself, for single layer images I use the method of weighted bending/deformation of the skinned mesh. But, for multiple layered images I use an additional technique of putting limb segments on separate layers with points of rotation between them. With rotation points, the limbs do not get deformed when adjustment them for animations. Some of my other characters I made include this method.

Sample Animations:

- Idle
- Walk
- Twinkle Toes (The run, faster moving)
- Jump Up
- Jump Down
- Show Off

No AI/ML was used during the creation of this content.

Package Contents

The package contains the following:
- 1 character prefab
- 7 animation files
- 1 animation controller
- 1 demonstration scene - 2D (Built-In Render Pipeline) Core
- 1 demonstration scene - Universal 2D Core
- 1 single layer PSD file, 640x480, 300 dpi, Raster Image
- 1 PNG image file, 640x480, 300 dpi, Raster Image
- 2 multi-layer PSD file, 640x480, 300 dpi, Raster Layers
- 2 scripts: Camera Movement, Player Movement
- 1 Tag Manger file

Demo Project Details to Know

The demo project was created using the following.

- Template: Universal 2D Core (URP)
- Unity Hub Version: 3.8.0
- Editor Version: 2022.3.17f1 LTS

Special Project Setup Items

After importing the package, the settings for the layers and sorting layers will not be present. The layering properties of the objects of the package may be set manually according scene they were imported into, or they may be set using the following procedure to import the layer and sorting layer properties from the project the package was originally created in.
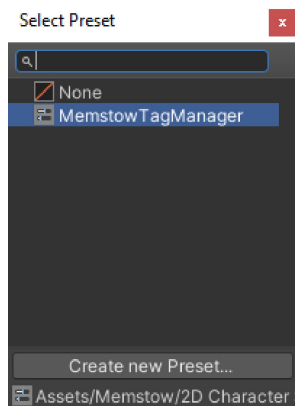
To import the layer and sort layer properties, navigate to Edit -> Project Settings -> Tags and Layers and open the window as shown below.
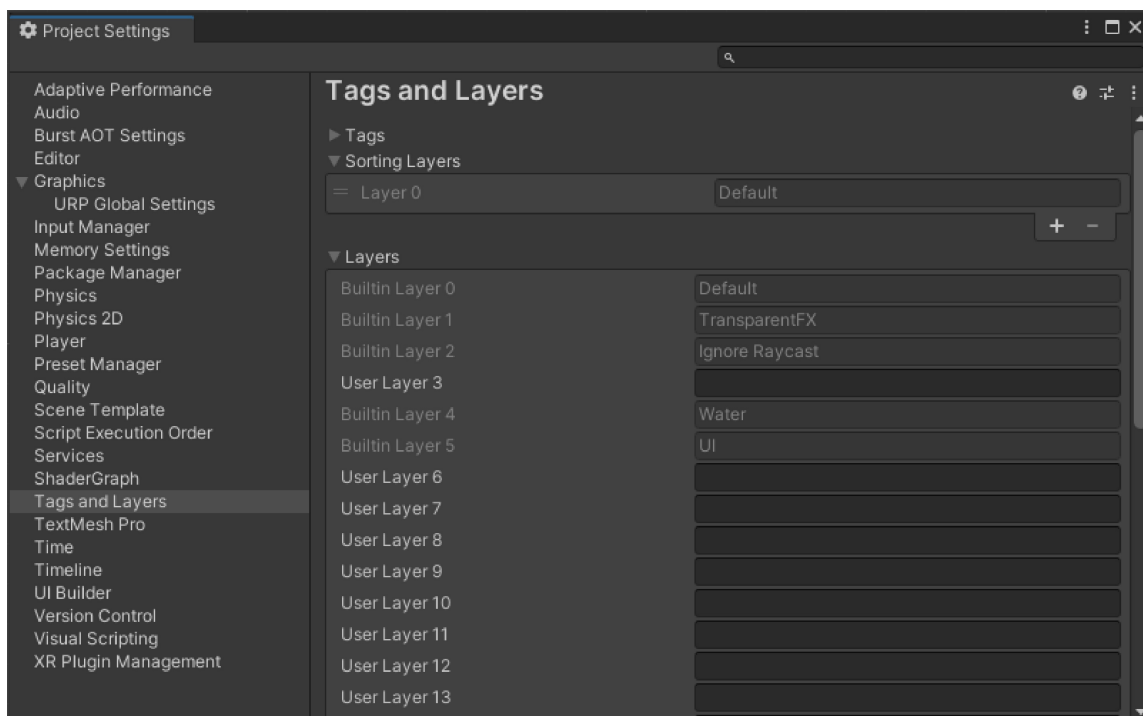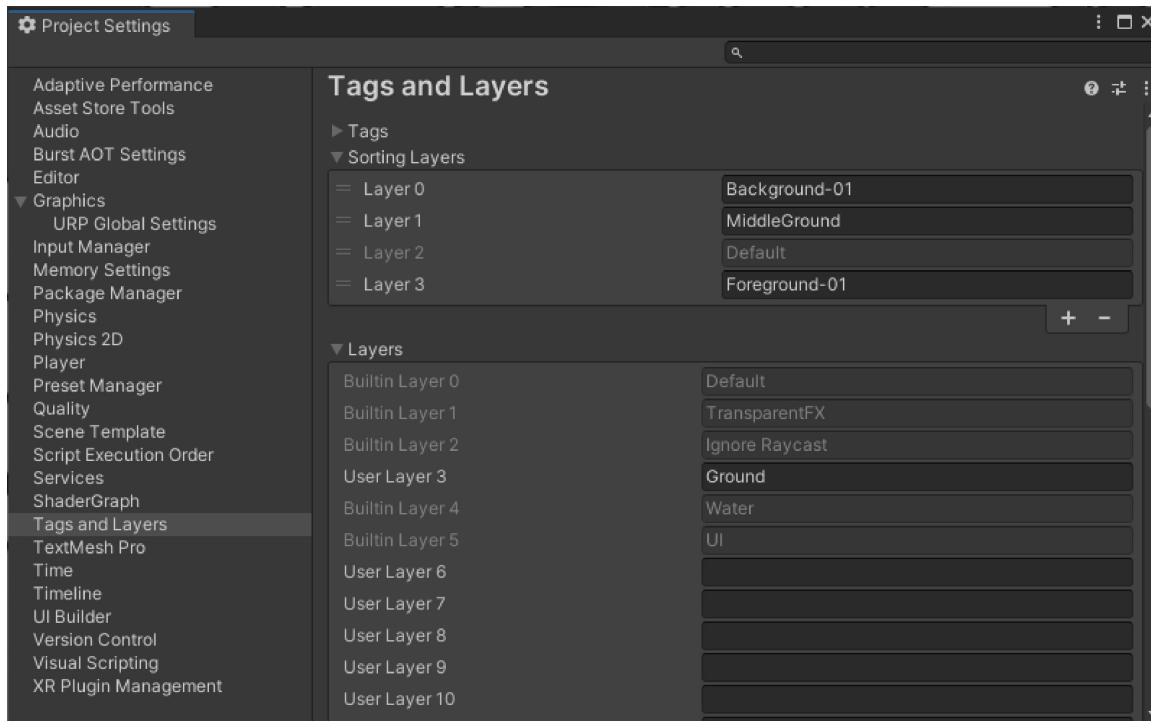

Open the "Select Preset" window
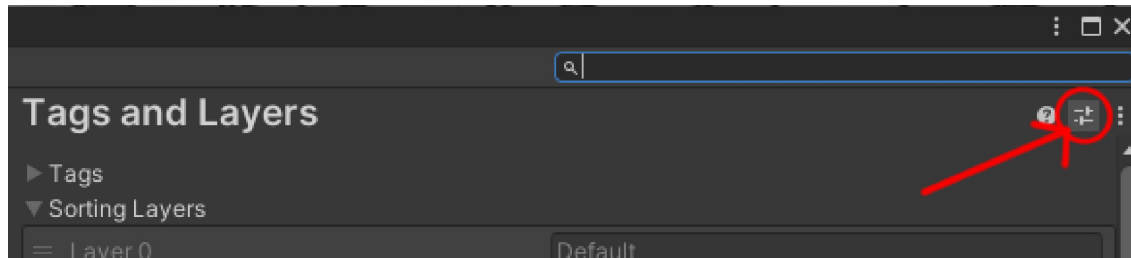
In the Select Preset window, select the MemstowTagMagager file from the Memstow/2D Character Stick 001 package.

Confirm in the Tags and Layers list they are now the following.

See that the following layers are added under Sorting Layers.

    Layer 0 = Background-01

    Layer 1 = MiddleGround

    Layer2 = Default

    Layer 3 = Foreground-01

See that the ground layer was added under Layers.

    User Layer 3 = Ground

In this demo project, the 2D collider box the character walks on is assigned to a layer named "Ground". If not named ground, the jump functionality of the character will not work.

Troubleshooting

If you see the entire character or parts of the character missing, this may be because of "Sorting Layer" settings. This was addressed by setting sorting layers as explained above in the section of "Special Project Setup Items". In the project Hierarchy panel, select the background image "environment01-bg01. Then go to the Inspector panel and navigate to "Sprite Renderer" -> "Additional Settings" and see that the "Sorting Layer" is set to Background-01.

If the character won't jump, it may be because the 2D collider box the character is in contact with, as in walking on, is not on a layer named "Ground". Review the above section "Special Project Setup Items" for more details.