LOW POLY

2.3

ANIMATED ANIMALS

by **POLYPERFECT**

Have a Suggestion?

INFO@POLYPERFECT.COM

Want Low Poly Models?

CLICK HERE

Thanks!

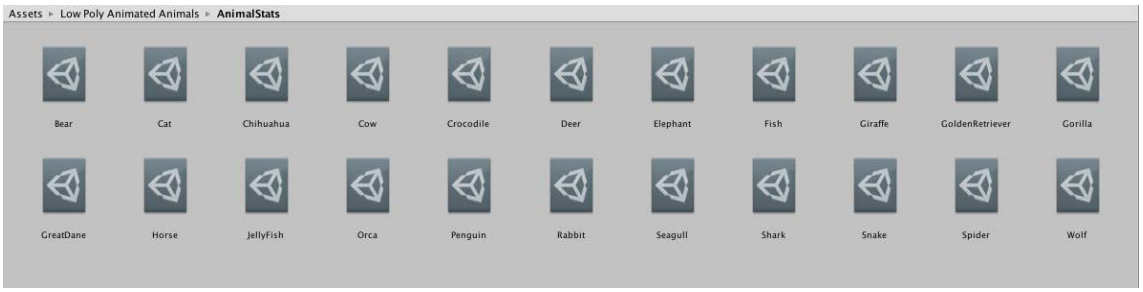
First of all, thank you for purchasing our pack, we really apreciate that! We are putting lot of effort to this.

Just you to know – we are planning to expand the list of the animals in the future with free. updates of the pack. Check out our FB page for any news.

UPDATES

VERSION 2.1

So we have been hard at work making sure to keep the animal pack up to date! We have listened to your feedback and for this Update have added **Gorilla**, redone **horse animations** and created new way of **managing stats of the animals**.



VERSION 2.00

For this Update have finaly added dogs: Chihuahua, Great Dane and Golden Retriever.

Match Rotation

For this to work, you will need to set the **LAYER** of the floor you want the animals to walk on set to the word ("Terrain"), to do this. Simply click the layer option and add a new one.

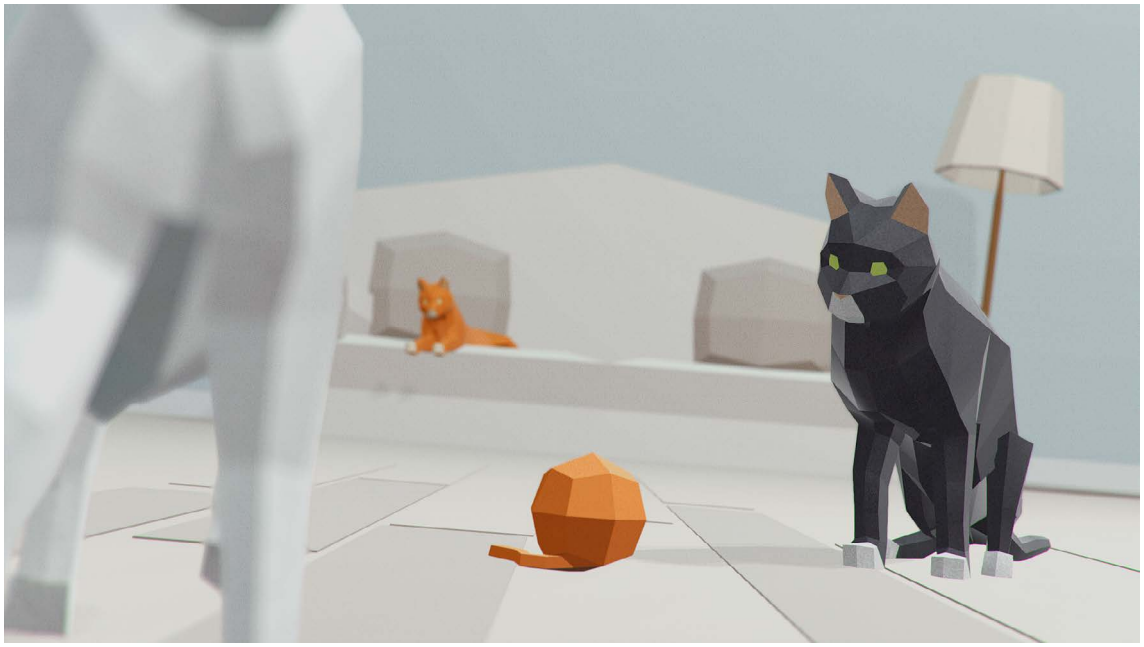
After this, look at the Wander Script attached to each animal and simply tick the tick box next to "**Match Surface Rotation**". Now see your animals will match the rotation of the floor. Use the "**Surface Rotation Speed**" box to set the speed you want the animals to rotate at.

Animals

Each animal has multiple version of textures for more diversity. You can also create your own.

- Bear (376 vertices)
- Polar bear (376 vertices)
- Cat (371 vertices)
- Cow (704 vertices)
- Crocodile (779 vertices)
- Deer (529 vertices)
- Golden Retriever (466 vertices)
- Great Dane (496 vertices)
- Chihuahua (438 vertices)
- Elephant (730 vertices)
- Giraffe (630 vertices)
- Gorilla (643 vertices)
- Horse (605 vertices)
- Jellyfish (520 vertices)
- Orca (474 vertices)
- Penguin (303 vertices)
- Rabbit (317 vertices)
- Seagull (82 vertices)
- Shark (401 vertices)
- Snake (215 vertices)
- Starfish (55 vertices)
- Spider (529 vertices)
- Wolf (594 vertices)

Demo scenes



We encourage you to explore our demo scenes with interactive interface for playing our animations. You will find them in DEMO scenes folder. Just switch to game and hit play.

WANDER SCRIPT 4.4

Hello and welcome to the tutorial on how to use our new wander script in Low Poly Animals Pack

About

The wander script is a solution for quick and easy drag and drop AI, we have taken the idea of AI (Artificial Intelligence) and turned it into a more manageable script, it lets you decide which Characters you want at the top of your food chain and gives you the flexibility to use them in your own world.

Before you go ahead and make a killer army of bunny rabbits, I suggest you look at this guide and see what each part of the wander script does, so you don't get lost.

How it works

So, let‘s move onto the test scene where will be able to talk you through some of the awesome new features of the script such as the new NavMesh option, allowing you to make the animals walk across your terrain. So for nav mesh to work, all you simply need to do is make the objects that you want the animals to be able to walk on set to static, this will allow you toNavMesh bake onto the object and allow the animals to walk around. (If you are uncertain how to create a NavMesh please refer to Unity Documentation).

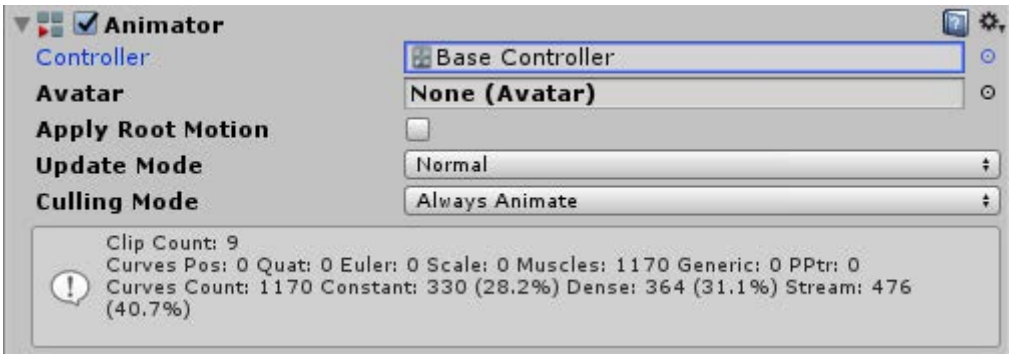
For this feature to work, you will also need to make sure that the characters you want to walk along the terrain have a navmesh Agent component attached to them. The script also relies on having a character controller as a backup, so you will not be able to delete this component.

Helpful section to help with set up errors

Section 1.

Error ("Character name" has no animator controller, make sure you put one in to allow the character to walk. See documentation for more details (1).

To fix this error simply drop the base controller into the controller section of the Animator.



MORE INFORMATIONS

Animator Controllers - An animator controller acts as a brain for all the animations, it tells which animation to play using what's called a "Parameter".

There are 4 types of parameters that you can use in an Animator Controller, but we are only going to focus on a "boolean parameter" while using the Wander Script.

A boolean parameter can either be **True** or **false**

If you click on any of these white lines you will see that each line has a "condition", a condition is a place for you to use a "Parameter" to tell that transition to happen or not.

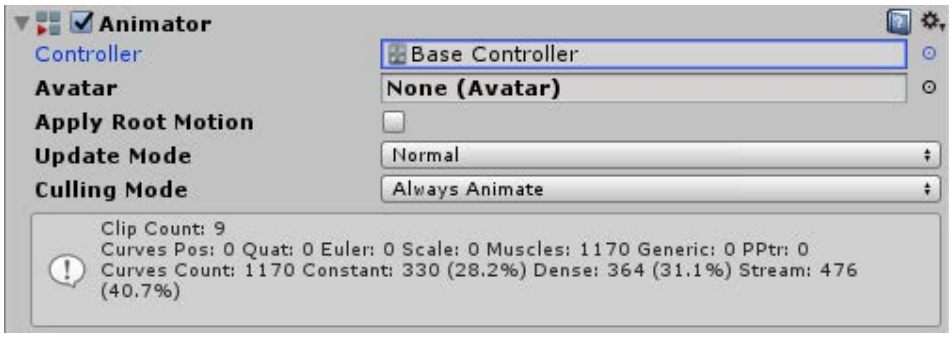
If we look at the walk for example, we can see that the transition going away from Idle has a condition with the parameter "isWalking" on it. It is also set to true because we want this transition to only happen when our parameter "isWalking" is set to true.

So now you know what an animator controller is, did you know that you can create what's called an "Animator Override Controller", this will let you keep all the logic of the base controller but simply swap the animations you want to see. Give it a try!

Section 2.

Error("Character name" has no avatar, make sure you put one in to allow the character to animate (2)

To fix this error simply drop the main_Rig Avatar into the avatar section on the animator.



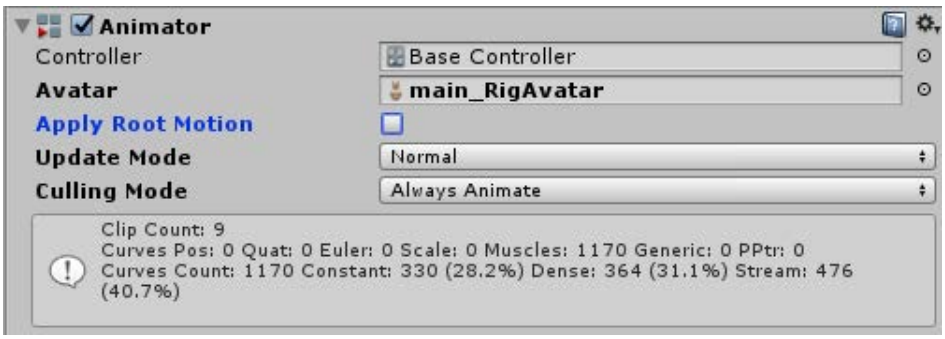
MORE INFORMATIONS

Each "Humanoid" Rig will need an avatar to be able to animate, this avatar identifies which rig it belongs to. We have already set up all the characters in this pack to use the same avatar, this avatar belongs to a rig called the main_Rig. This avatar will be the one you are looking for if you want to retarget animation.

Section 3.

Error("Character name" has root motion applied, consider turning this off as our script will deactivate this on play as we do not use it (3))

To stop getting this error you will simply need to turn this tick box off.



MORE INFORMATIONS

We do not use root motion animation in our scripts or animations, so please make sure that if you want to add any new animations then you make sure they are animating on the spot.

Section 4.

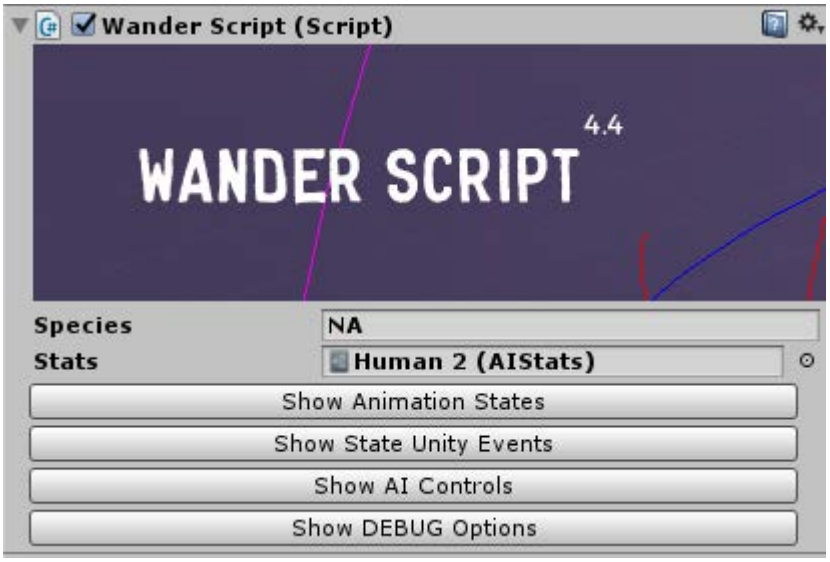
Error("Character name" has no idle or movement states, make sure you fill these out. See documentation for more details (4)

To fix this you will need to fill out the states located under the "Show animation States" tab in the inspector. **See below if you need more information.**

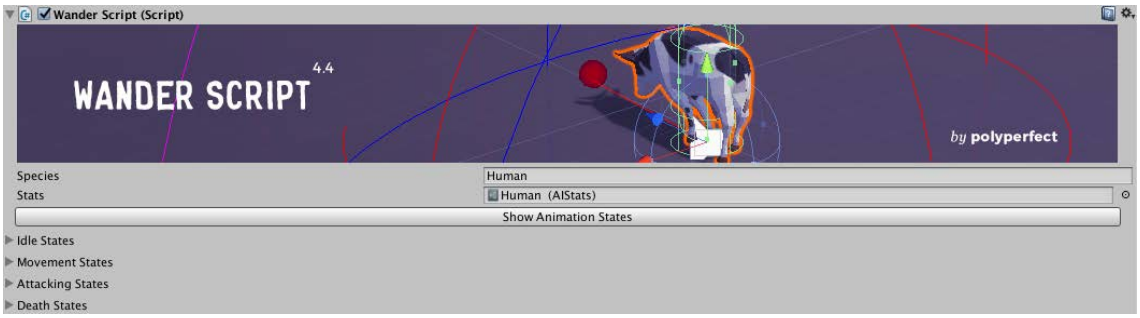
Section 5.

Error(has no AI stats, make sure you assign one to the wander script. See documentation for more details (5)

To fix this make sure the Stats section is not empty! Check below to make your own.



States



Idle States

SIZE

How many idle states this animal has, changing the layer weights later will allow you to have more generic idles play more often and less generic playing only every now and again.

STATE NAME

Name your state, call it whatever it is.. So eating, standing, peeing, whatever the animal has

ANIMATION BOOL

The name of the Boolean set up in the animator, Read Section 1.) for more information.

MIN STATE TIME

The length of time that the animal is has to stay in that.

MAX STATE TIME

The length of time that the animal is allowed to stay in that state.

STATE WEIGHT

This is weight of this state being chosen over another, for instance if the layer weight of eating is set to 2, the layer weight of standing was set to 1. Then because the weighting is higher on the eating, it will most of the time choose to eat over choose to stand.

Movement States

SIZE

How many movement states the animal has, eg. Running, walking, Sprinting, Crawling,
Hopping.

STATE NAME

Name your state.

ANIMATION BOOL

The name of the Boolean set up in the animator, **Read Section 1.) for more information.**

MAX STATE TIME

The length of time that this movement can happen for.

MOVE SPEED

The speed at which the character moves when in this state, e.g.running should be faster than walking.

TURN SPEED

The speed at which the character can turn when in this state

Atacking States

SIZE

How many Attacking states the character have.

STATE NAME

Name your state.

ANIMATION BOOL

The name of the Boolean set up in the animator. **Read Section 1.) for more information.**

Error(„ this character will not be able to attack. See documentation for more details (4)) To fix, read below.

Death states

SIZE

How many Death states the Character have.

STATE NAME

Name your state.

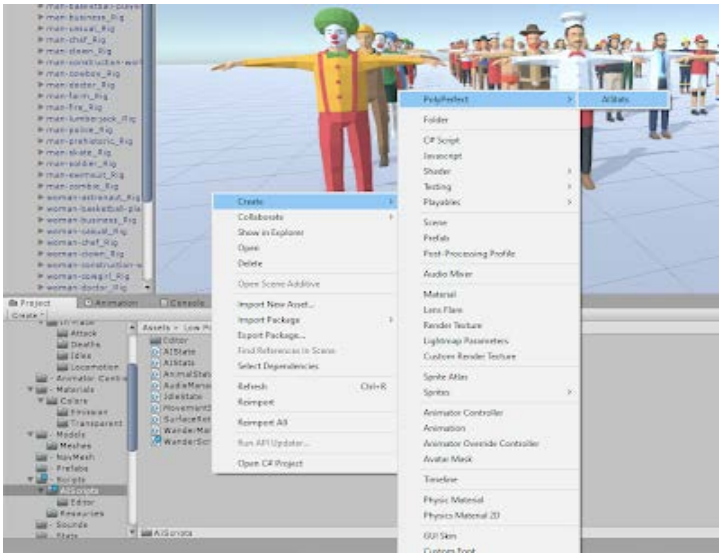
ANIMATION BOOL

The name of the Boolean set up in the animator. Read Section 1.) for more information..

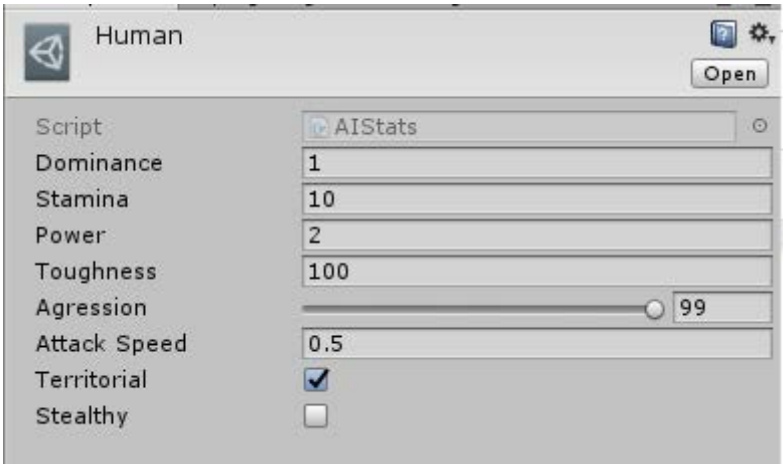
Stats

Stats are what make each AI unique, they give each character the ability to have advantages over other Characters. They come in a handy asset file so you do not need to set this up over and over again for each character.

To create a new Stats simply right click in the Assets folder, click create/Polyperfect/AIStats.



This will make you a new file in the project called “New AI Stats”, if you click on this file you will see some values that you can edit in the inspector. Below is a description of what each of these values mean.



SPECIES

This is nice and simple, this simply indicates what species the animal is.

WANDER ZONE

The Wander Zone indicates how far the animal is aloud to wander from its origin point, set this as high as you need to if you want the animal to be able to travel across your world

DOMINANCE

This is the first part of our clever system, this indicates how high up the food chain the animal is. This can be changed to your liking, therefore allowing you to create a killer rabbit army.

AWARENESS

This range is how far this animal can sense a predator, for instance if there is a bear lurking nearby, a deer will run off if it sees it in its awareness range. This will stick to the animal as it travels around it wander radius.

SCENT

This is how far an animal can sense its prey, this will stick the position of the animal as it travels around its wander radius.

STAMINA

his is how far the animal can run for, before it gets tired. Lets hope its up high for those killer rabbits to not catch them.

POWER

This is the attack of an animal, the higher this number, the more damage it will do to another animal when it attacks.

TOUGHNESS

This means the animals health, setting this higher will allow the more powerful animals to not damage this one as much.

AGGRESSION

This is simply the chance that this animal will attack another animal, setting this to 100% WILL MEAN IT ATTACKS EVERYTHING. 50% will mean it might attack half the time.

TERRITORIAL

This means that this animal will attack another animal of the same species, allowing the king of the forest to stay the king.

STEALTHY

These animals cannot be detected by another animal, great for spiders and snakes which are less obvious.

Extra Handy Scripts

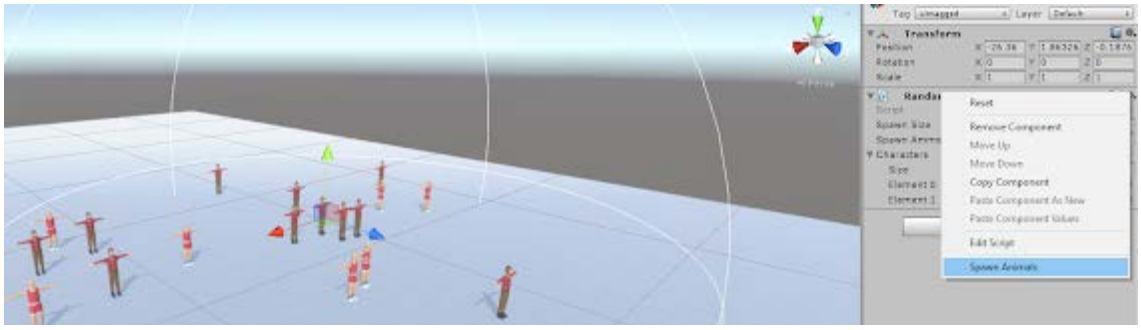
Stats Table

View your character stats side by side with the **Stats Table**! This table will show you a side by side comparison of all the stats you have in your project so that you can balance how your characters behave. To view this, simply look at the top of the project under **PolyPerfect/Stats** Table to open.

Random Character Placer

There are also some extra handy script in the project that can help with randomly placing characters around your terrains, this is **called RandomCharacterPlacer**.

To use it, simply add this script to a gameobject in the scene, then change the spawn size, choose how many you want to spawn. Then drag the characters you want to spawn into the list. To spawn the Characters, simply right click on the script and press "**Spawn Characters**"



Wander Manager

Another handy script is called the **Wander Manager**, add this script to a gameobject in the scene and you will be able to set all the characters in your scene to peaceful. During play mode you will also be able to press the nuke button and watch all the characters die..

Make sure you only ever have one wander manager script in your scene or things will break.

Anim Speed

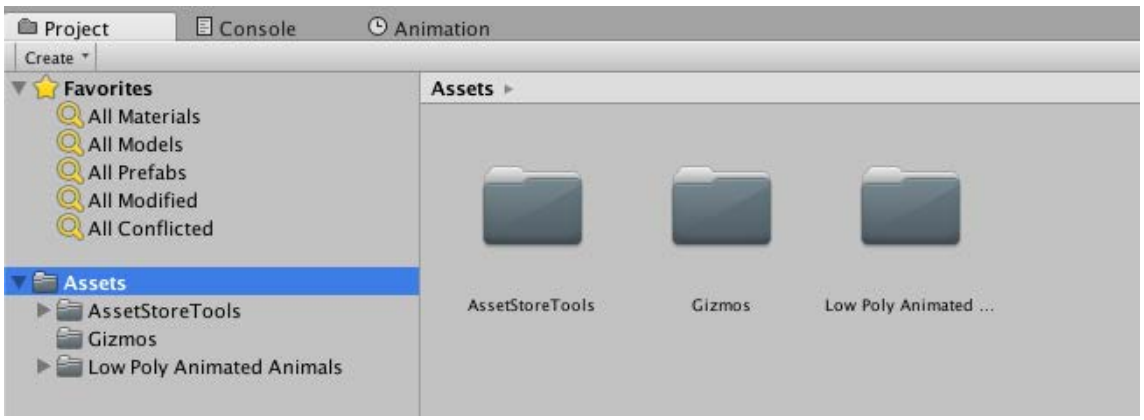
AnimSpeed is a cool little script you can add to a character which will speed up or slow down all the animations in a character by a random amount. This is useful to get the characters walking at different speeds.

To use it, simply put the script on the same object that has an animator on it.

Gizmos

if you turn these on then you will get three coloured rings that go around the animal.

RED – Scent, **BLUE** – Wander, **PINK** – Awareness



If you would like visual indication with a little icon above each circle, please drag the Gizmos folder next to the assets folder in the project window. It should look like this:

Upgrading from a previous version of the Wander Script..

It is very important you follow these steps to make sure that the upgrade goes smoothly, or you will be required to set up your animals again. The main changes that we have done are to the “WanderScript”, because this is the heart of the AI it is important you follow these steps or your animals might loose data.

Download the new update into a new Unity Project, you are then going to copy over the scripts one by one to make sure it does not break. Make sure you also have a back up for you original project so that you don’t lose anything.

I am going to refer to the project you want to update to **Project A** and the new project with the new update in as **Project B**.

STEP 1:

Open the windows folders for both projects, we will first replace the old WanderScript in **Project A** with the new version from **Project B**. With both Windows open, we will simply copy the WanderScript file from **Project B** and paste the file into the same folder as **Project A**. We will get a prompt which asks us if we would like to overwrite this file. Click **YES** and replace the file.

STEP 1:

In **Project A** We will now have 5 errors in the console, these errors are here because the new wander script file you just copied is in a different namespace. To fix this open up the wander

script file and replace “namespace **PolyPerfect**” with “namespace **LowPolyAnimalPack**”. Click save and go back to unity.

STEP 3:

If you have done this correctly you will now only have three errors in the console, to fix these errors we need to rename a file in Project A. This file is originally called “AnimalState” and we want to rename it to “AIState. Once you have renamed the file in Unity, double click the file and go into the code.

STEP 4:

Once you are in the code we will want to right click on the bit where it says “AnimalState”, choose the rename symbol and type “AIState”. This will replace the name of this file across all other scripts that use it. Click save and go back to unity.

STEP 5:

You will now still have three errors, if you click double click on the first error open the file and simply press save. The error will go away. Do this with the second error as wel and you should only be left with one error.

STEP 6:

To fix this remaining error we will need to change the name of another file, the file name is called “AnimalStats”, we need to change this to “AIStats”. One you have renamed the file in Unity, you will need to once again open the script, right click on the part where is says “AnimalStats”, the choose rename symbol and type “AIStats”. Click save and go back to Unity.

STEP 7:

There will be another error in the console, this time we will need to change the name of another file called “AnimalManager”, rename this in Unity to “WanderManager”, you will need to once again open the script, right click on the part where is says “AnimalManager”, the choose rename symbol and type “WanderManager”. Click save and go back to Unity.

STEP 8:

You will now have 5 new errors in the console, to fix these errors simply double click on the

first error. Then press save, go back to unity and you will have no more errors!

STEP 9:

You will now need to change a unity folder name from "AnimalScripts" to "AIScripts".

STEP 10:

Go into the Editor folder in **Project A**, rename the "AnimalManagerEditor" to "WanderManagerEditor", you will need to once again open the script, right click on the part where is says "AnimalManagerEditor", the choose rename symbol and type "WanderManagerEditor". Click save and go back to Unity.

STEP 11:

Go into **Project B** and grab the script called "WanderManagerEditor", copy this file and replace the file Project A.

STEP 12:

Double click this script and change "namespace **PolyPerfect**" with "namespace **LowPolyAnimalPack**". Click save and go back to unity.

STEP 13

: Go into **Project B** and grab the script called "WanderScriptEditor", copy this file drop it into the editor folder of **Project A**.

STEP 14:

Go into **Project B** and grab the script called "StatsTable", copy this file drop it into the editor folder of **Project A**.

STEP 15:

Go into **Project B** and grab the folder called script called "Resources", copy this folder into the main "-Scripts folder".

STEP 16:

You will now need to go through every .cs file in the AIScripts folder and change the

namespace from “namespace **LowPolyAnimalPack**” with “namespace **PolyPerfect**”

STEP 17:

You will need to change the namespace of “PlaySound” script to **PolyPerfect**” as well.

This is a very long process and we are sorry for that, however, this was a much needed upgrade and now we will be able to work on updated the scripts more often as the structure and names are not going to change.