

INTELLIGENT PEDESTRIAN SYSTEM



IPS is an Ai system that can control multiple humanoid characters in a game scene , navigating round a specified area .

It uses node based system to navigate AI.

It spawns Humans Based on Camera veiwport.

Pedestrains make their way through zebracross.

Pedestrian Avoids obstacle this way they will always slip through in tight places.(Note this doesnt mean they are confused).

they walk in group or individually.

they spawn based on player position using pooling technic , for performance.

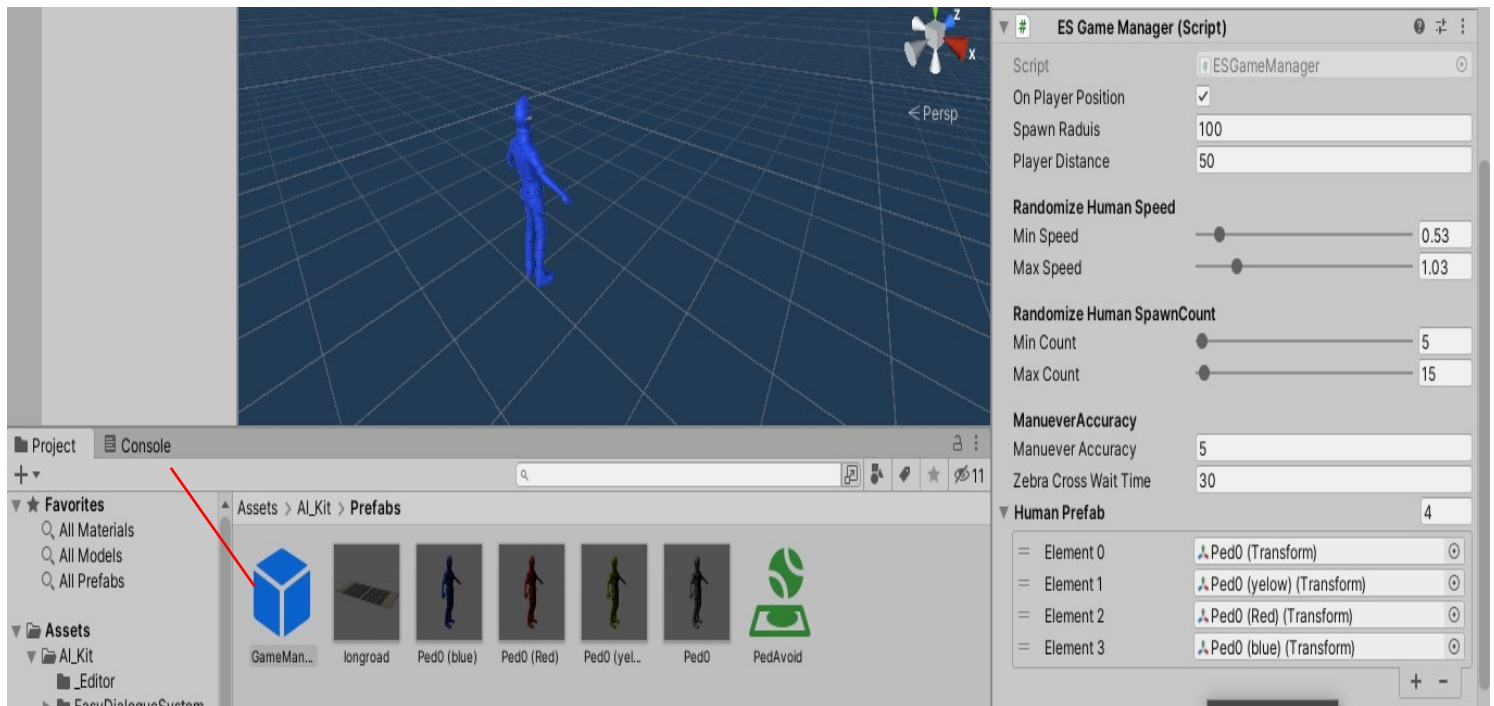
Supports unity3d mecanim , Yes you can use your own rigged humans as far as it is humanoid rigged.

THANKS FOR CHOOSING IPS

How to use this system

Step 1: Create an empty scene in unity3d, Call it whatever you like.

Step 2: Navigate to 'Assets/AI_Kit/Prefabs/GamaManager.prefab' now that prefab into your scene.



Humanprefab : this is were all pedestrians prefab u created should so they are easily when game starts

ZebraCrossWaitTime : This a human waits in line before it is allowed to cross the road.

ManueverAccuracy : This how far a ped would try to avoid an obstacle before returning back to its tracking point.

RandomizeHumanCount : This contains the Amount of humans that would spawned in active scene, if both mincount and maxcount are same value the system would spawn same amount of humans at player position..... if you want random spawns at player pos please set min and max to of diff vals.

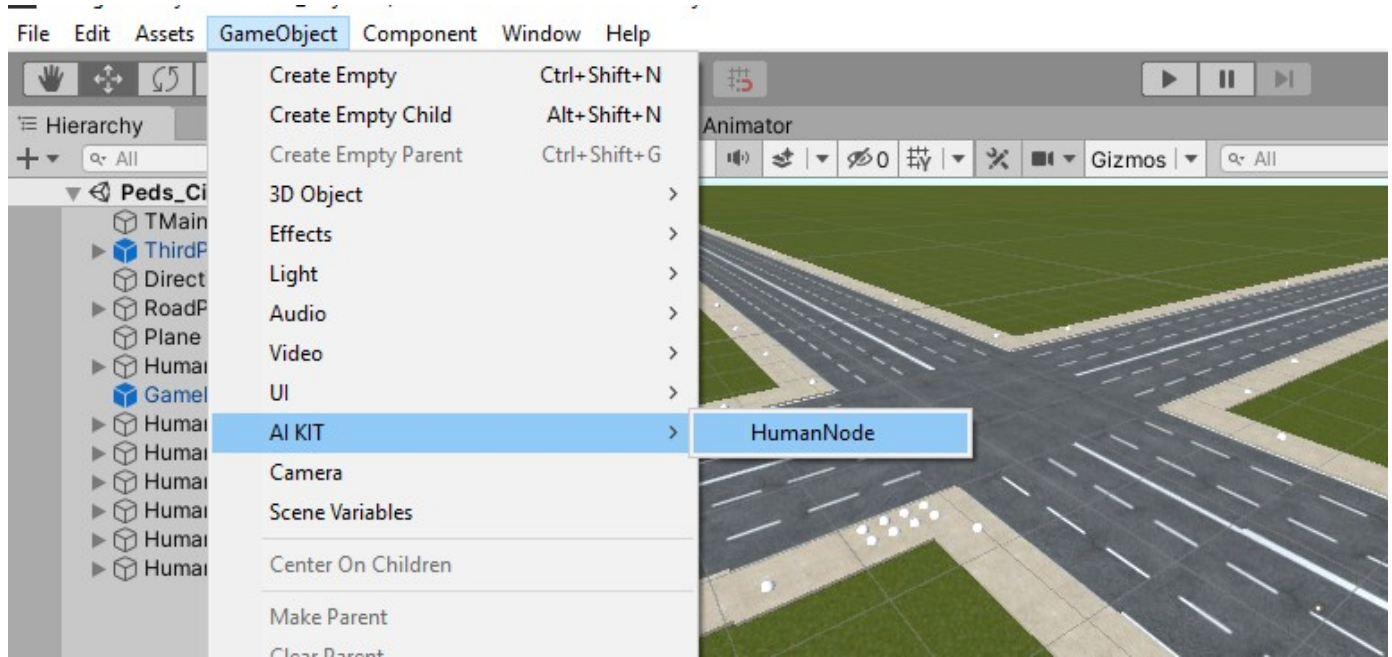
RandomHumanSpeed : This affects the speed of each humans spawned ,it gives each pedestrains radom speed based on min and max values specified.

PlayerDistance : How far the player move away from the humans before they get pooled or deleted

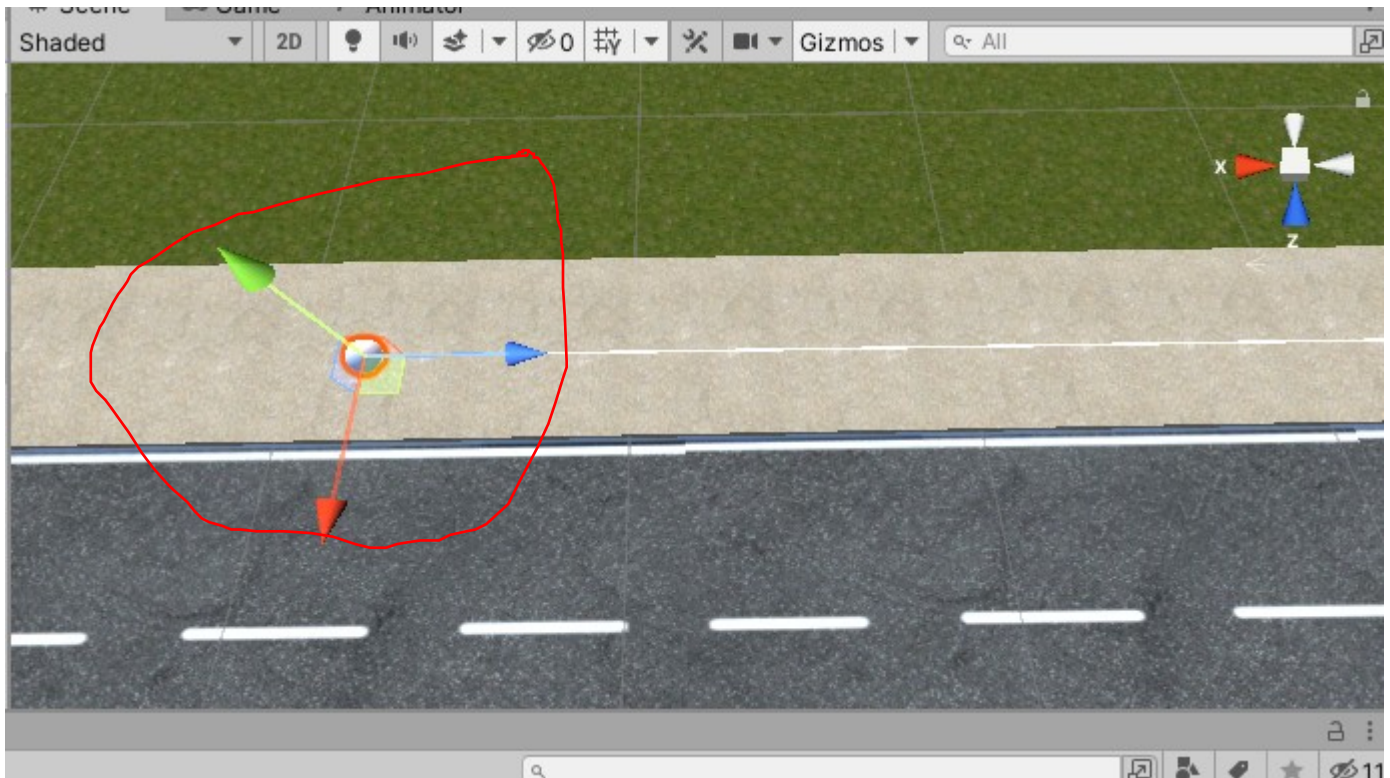
SpawnRaduis : How far the player moves away from the SpawnPoint before it is rendered useless.

Step 2 : Next we gonna create our first human path, to do this navigate to

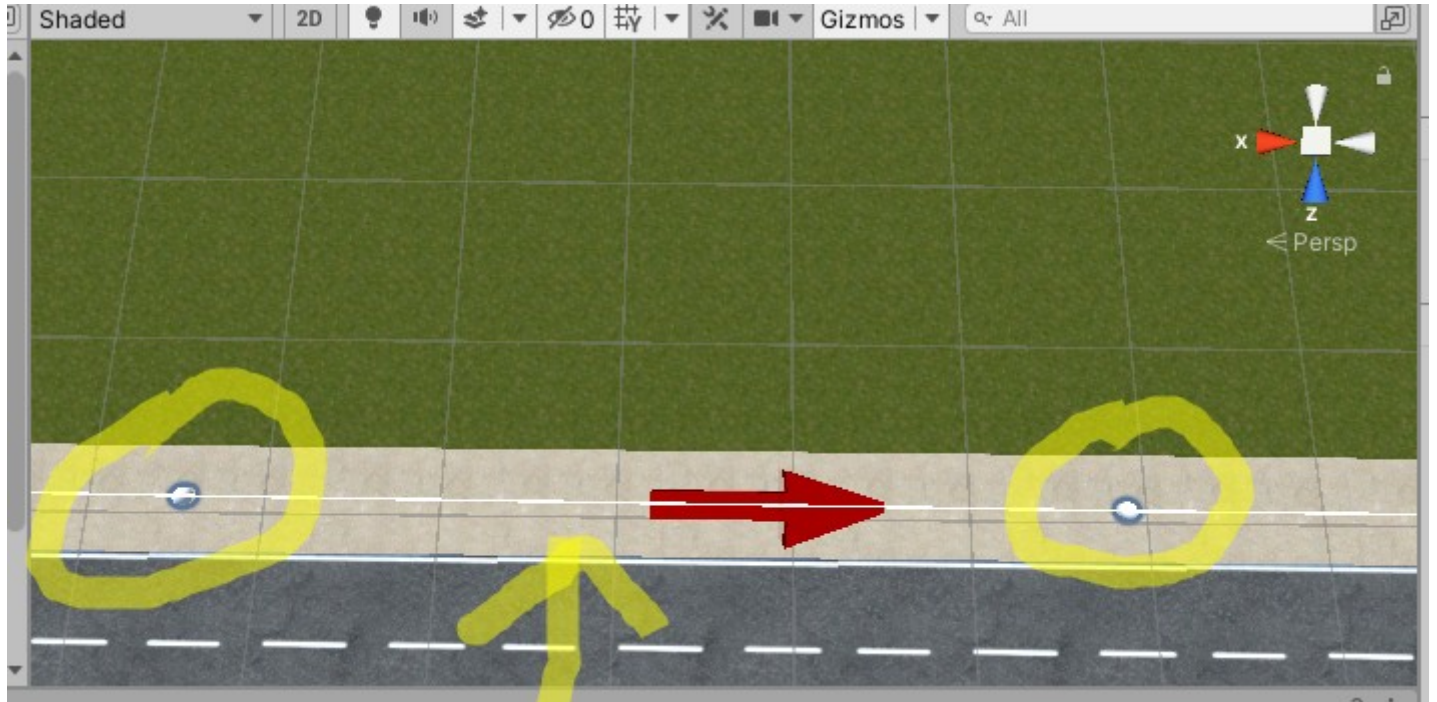
'GameObject/AI_Kit/HumanNode' create a new humannode.



Step 3 : Now Select the NodePath gameobject , now navigate ur mouse cursor to were u want the first node to be and click on 'A key' to create the first node observe in image below.

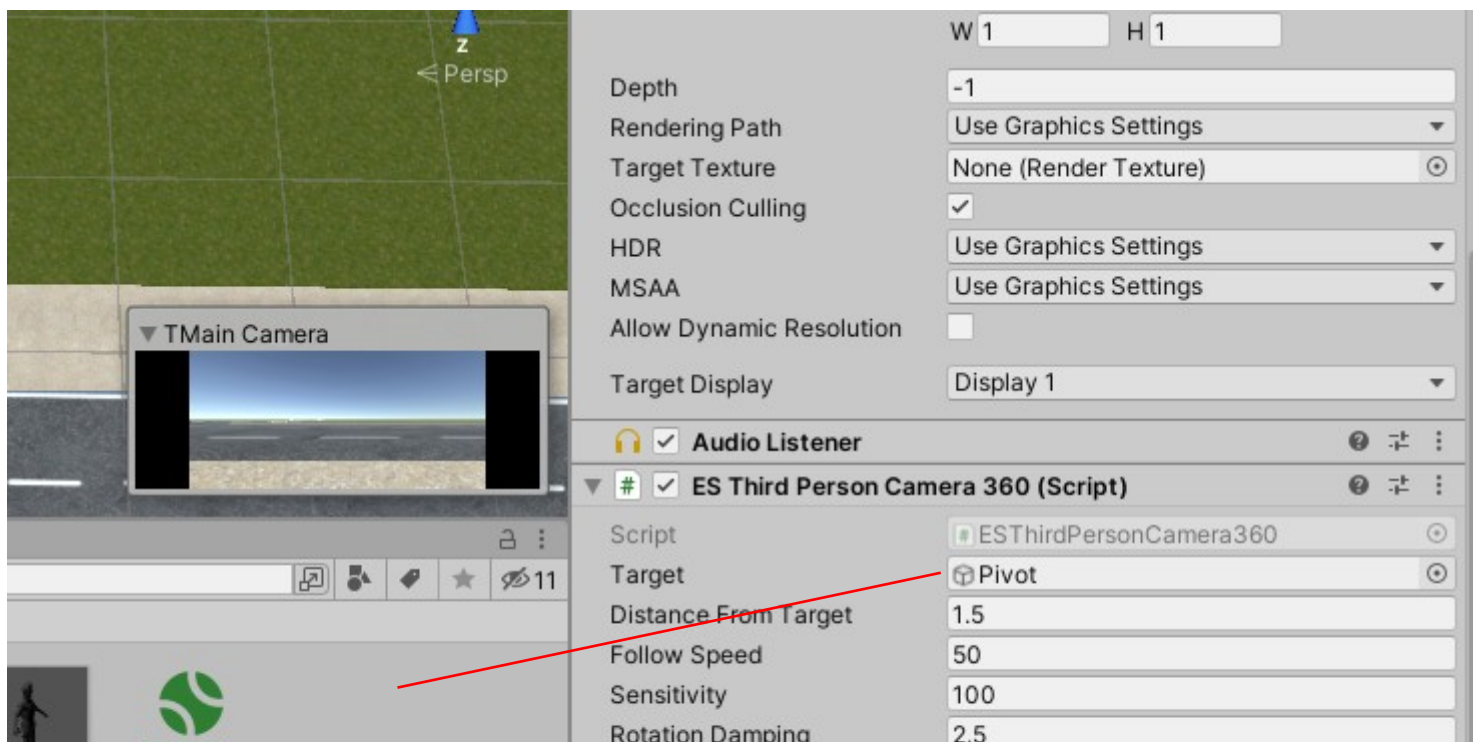


Step 4 : Keep progress adding nodes and creating pathway for humans , u should see a white line arrow to show direction, observe..



Step 5 : Now when u are conformtable with your node path, you need a player object to activate spawned humans goto prefabs and drag and drop the third person character controller into scene change the tag to 'Player' Note "player can be a static obect it could be a camera it could be anything with tag name player"

Step 6 : set up camera for spawn, goto main camera and add component "ESThirdPersonCamera360" now drag your player character into the target slot so camera tracks player in your scene.

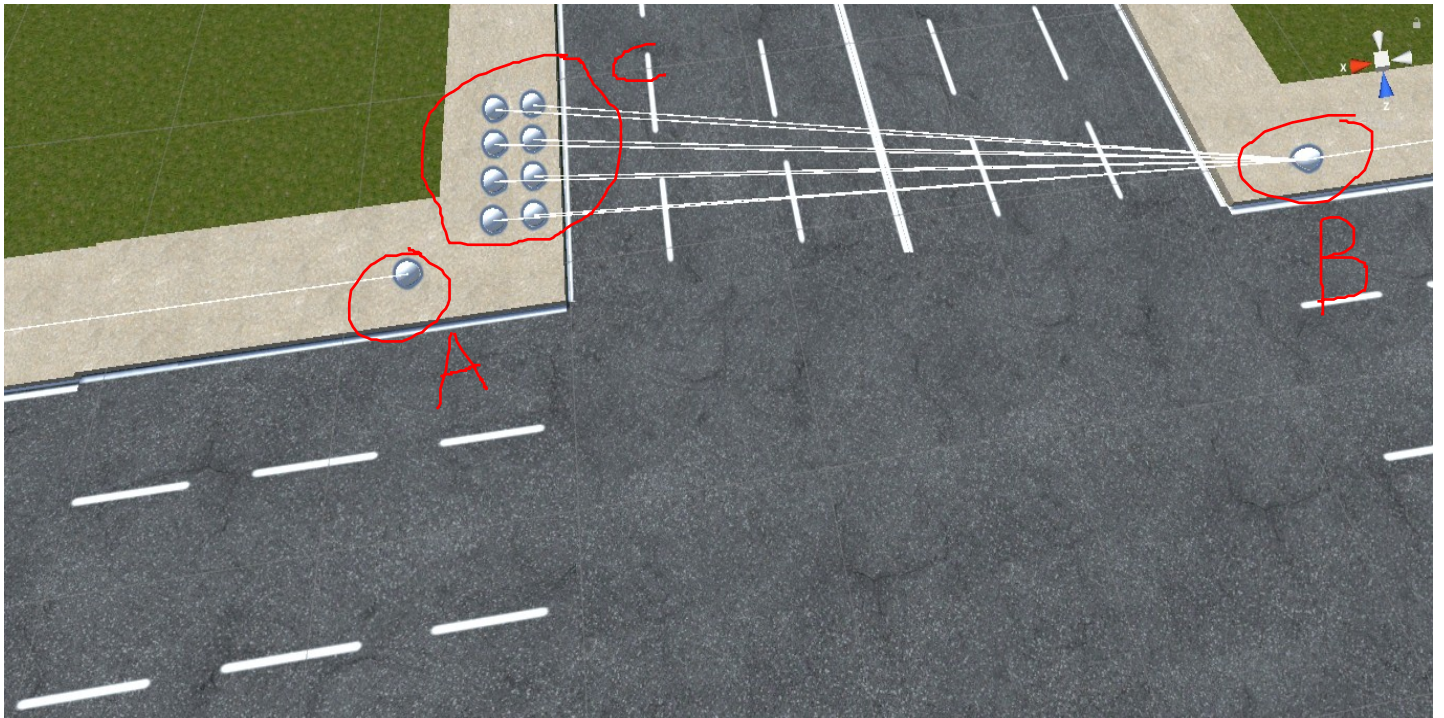


Step 7 : Next click on play u should see spawnin.

Connecting One Node With Another

This mehod comes in handy when want our pedestrain to zebra crossing or make them cross roads randomly.

In order to connect to NodePath together you must have to nodepaths,

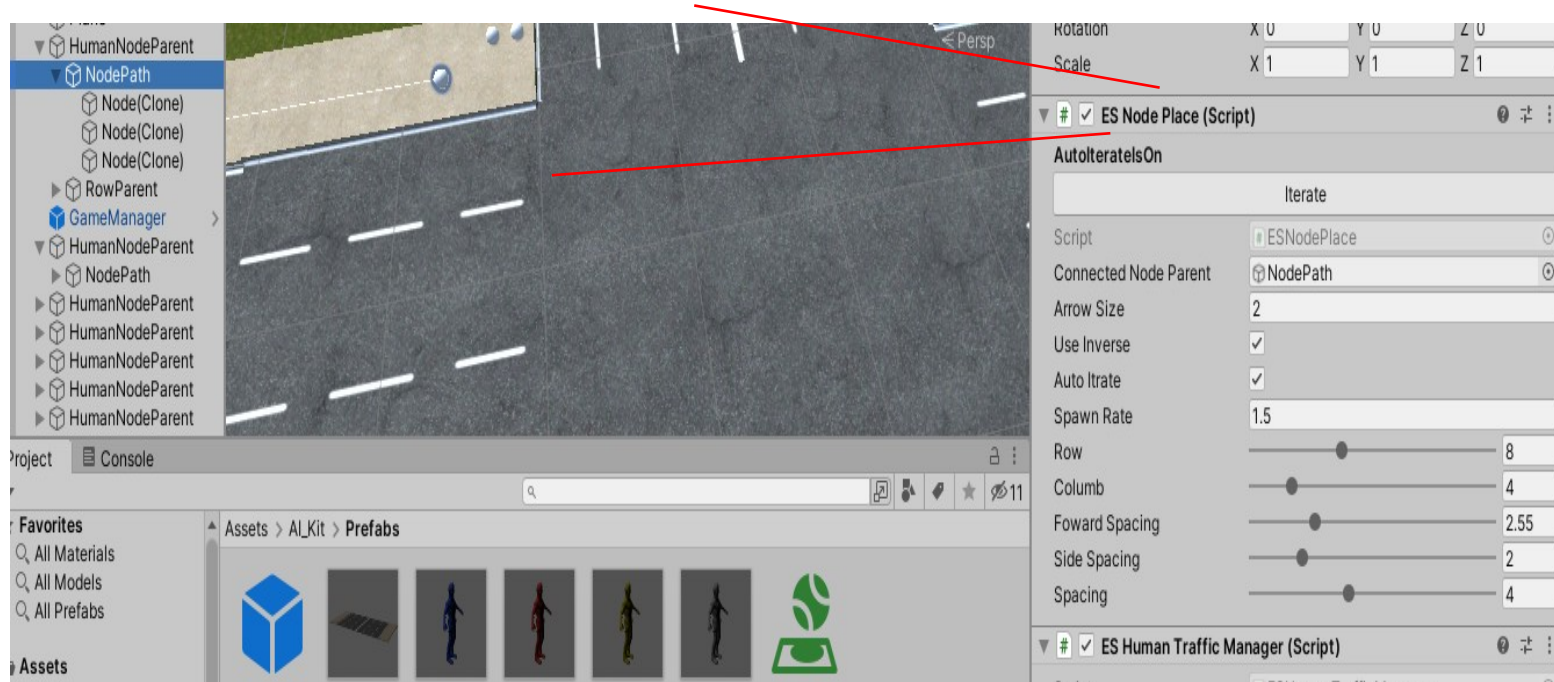


A : Stands for first NodePath.

B : Stands for second NodePath.

C : Stands for connectors.

Step 1 : to connect A to B select A and you should see a "ESNodePlace" compnent in your inspector..... observe in image below.



Now we create the connectors first drag and drop be into the Connected Node Parent slot in ESNodePlace.

next set the number of rows and columb you want from the connectors

set the spacing of your connectors.

now you are confy with the values click on ittrate button.

this creates the connector nodes based on ur settings and connects node A to B easily.

Finally click on play u should see peds stop at connector and the time is right them cross over to the conected node

Please suscribe to my channel to stay tuned for new video tutorials on this....

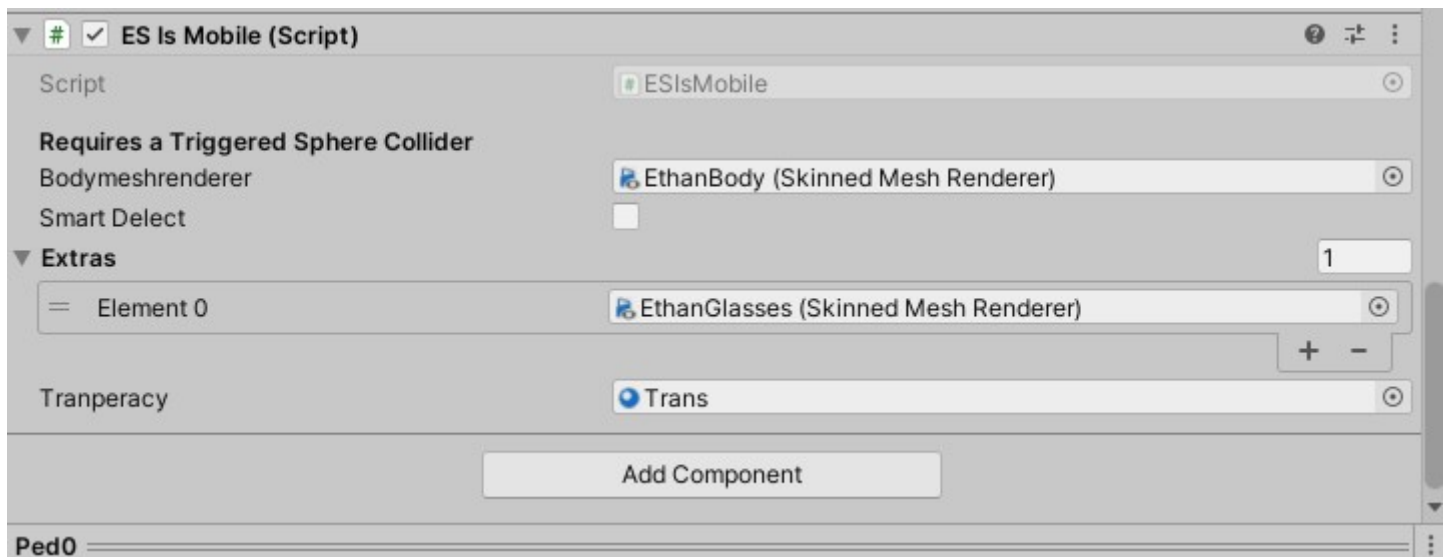
New Update Available

. ESisMobile.cs : this component increase performance when used , it has mass effect on gameplay if , you do not like its function just delect the script component from the pedestrain prefab

.ESRagdollz.cs : this script handles the ragdoll behaviour of the pedestrains, it is fully compatible with the in-built unity ragdoll system.

More About New Components

ESisMobile.cs

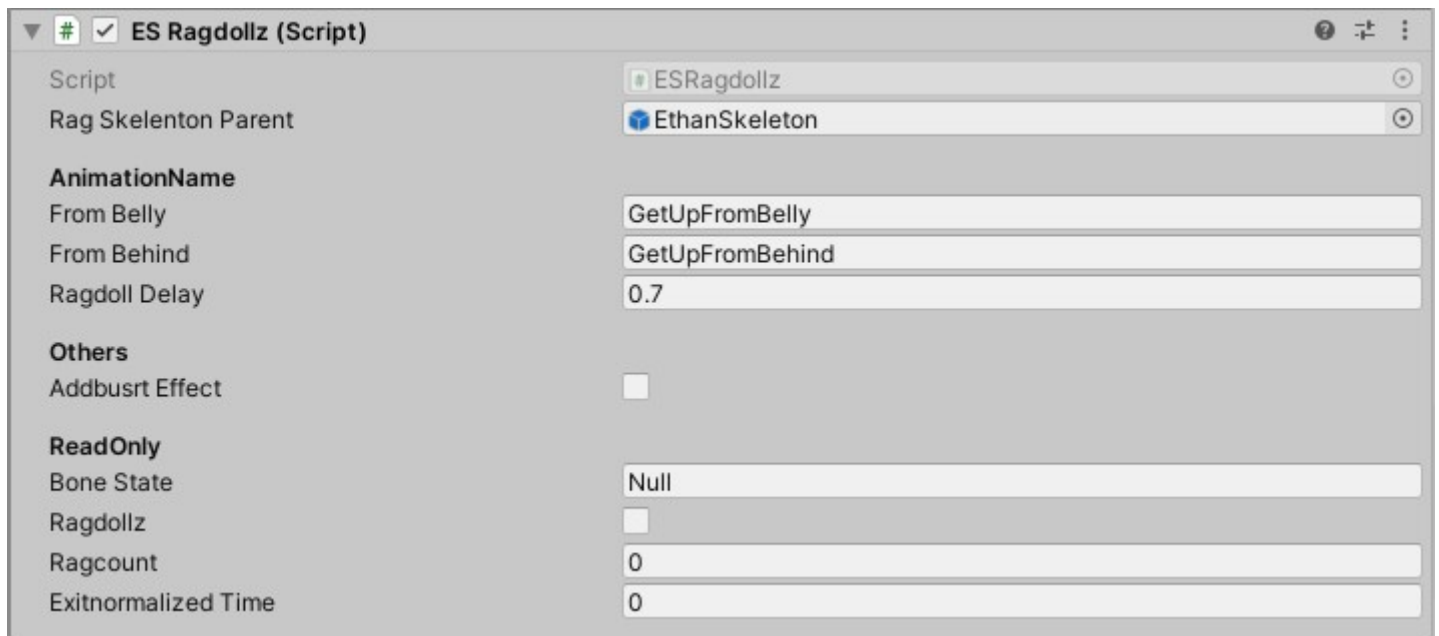


.Note: it requires a Triggered sphere to function very well.

.drag and drop your character skinned mesh renderrer.

.Extras , in case you have multiple skinned mesh.

.requires a transparent material



.Rag Skelenton Parent: drag and drop character bone parent

.A get up from belly and from behind animation is needed in your animation layer.

.Ragdoll Delay : how long should pedestraings stay in ragdoll mode.

.BurstEffect : adds random force to character in rag mode.

.Any thing below read-only cannot and should not be edited.

Thanks for Choosing IPS

do not forget to susbcribe to my youtube channel to stay tuned,
more updates coming

