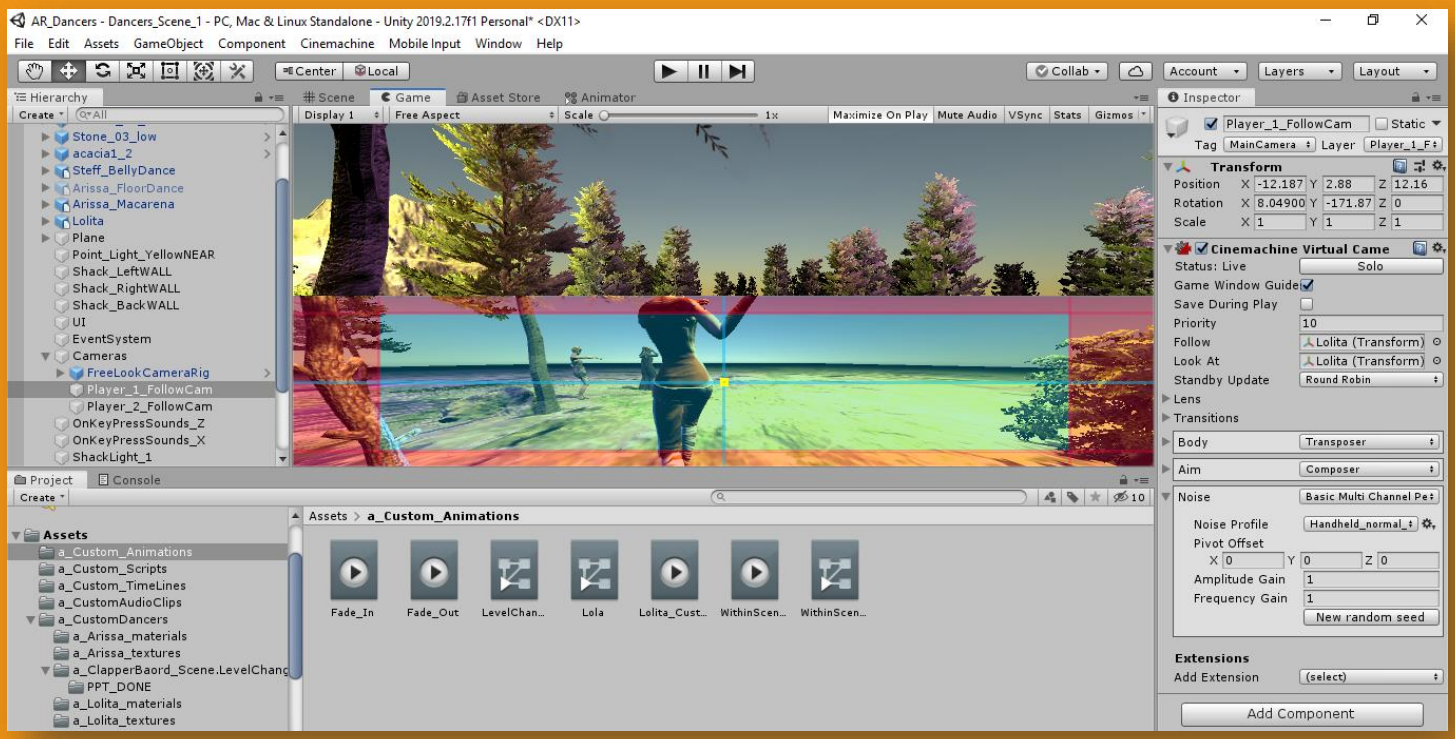
Absolute Beginners Unity Book

Chapter – II



This is the rough first cut of the Second Chapter of the – **Absolute Beginners Unity Book** , this is being written in near realtime by **Rohit Dhankar** (independent / self employed Unity game developer / animator / designer – working under the title of **Unreal Game Labs**) .

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YouTube – https://www.youtube.com/channel/UC9J9N9CNv15s9U9Aejpza6g/videos

https://www.youtube.com/watch?v=3Rm0TlBx1O4&list=PLLpHcww3qjp7n6i2DznVnbDEmP9OENBqc

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Its to be considered a Log of the , hidden quips that have been encountered during creating the very first basic games , game plays and animations with Unity2D and Unity3D.

This content as on date is totally raw and un-edited , shoddy to a great extent – its being put to help anyone who may need it .

There are lots of external to official Unity tutorials being referred , all references as on date are inline within the main text .

Content Disclaimer :-

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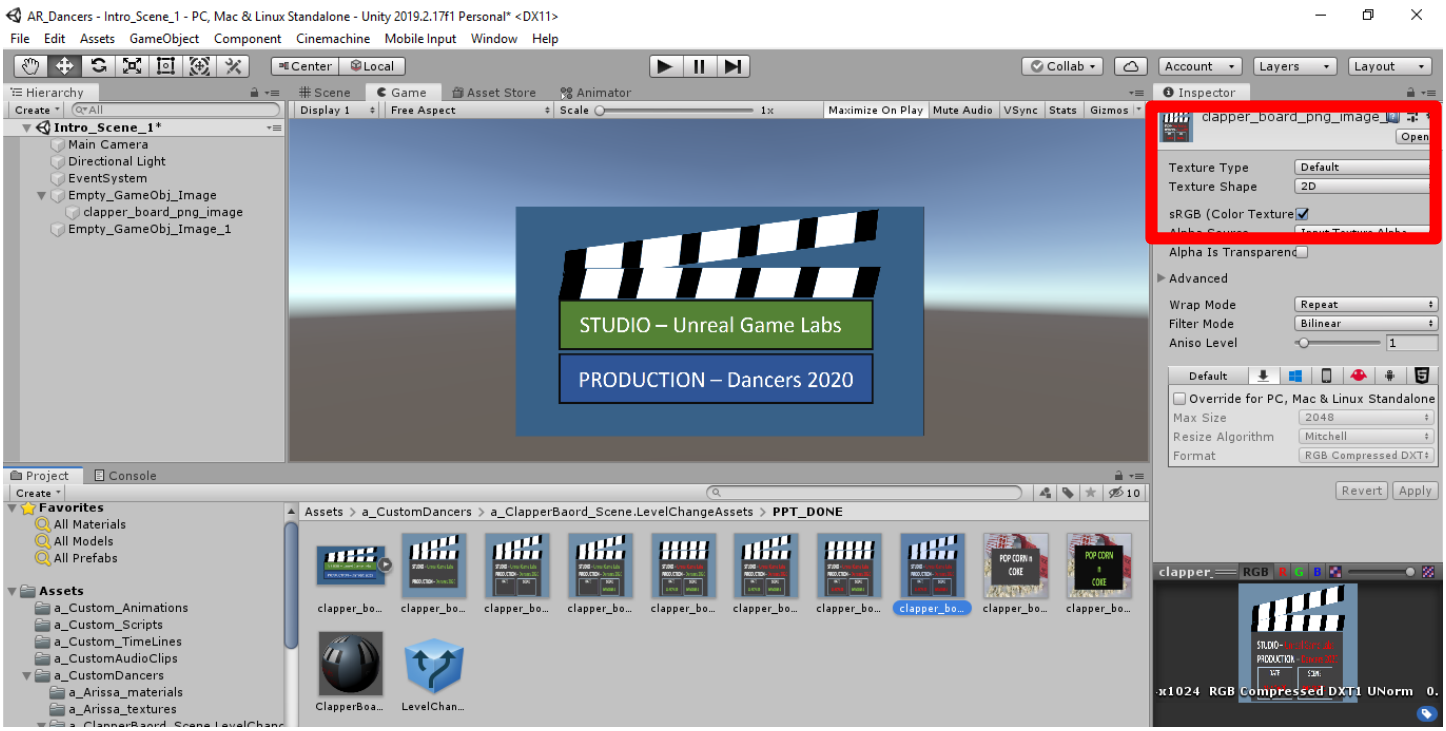
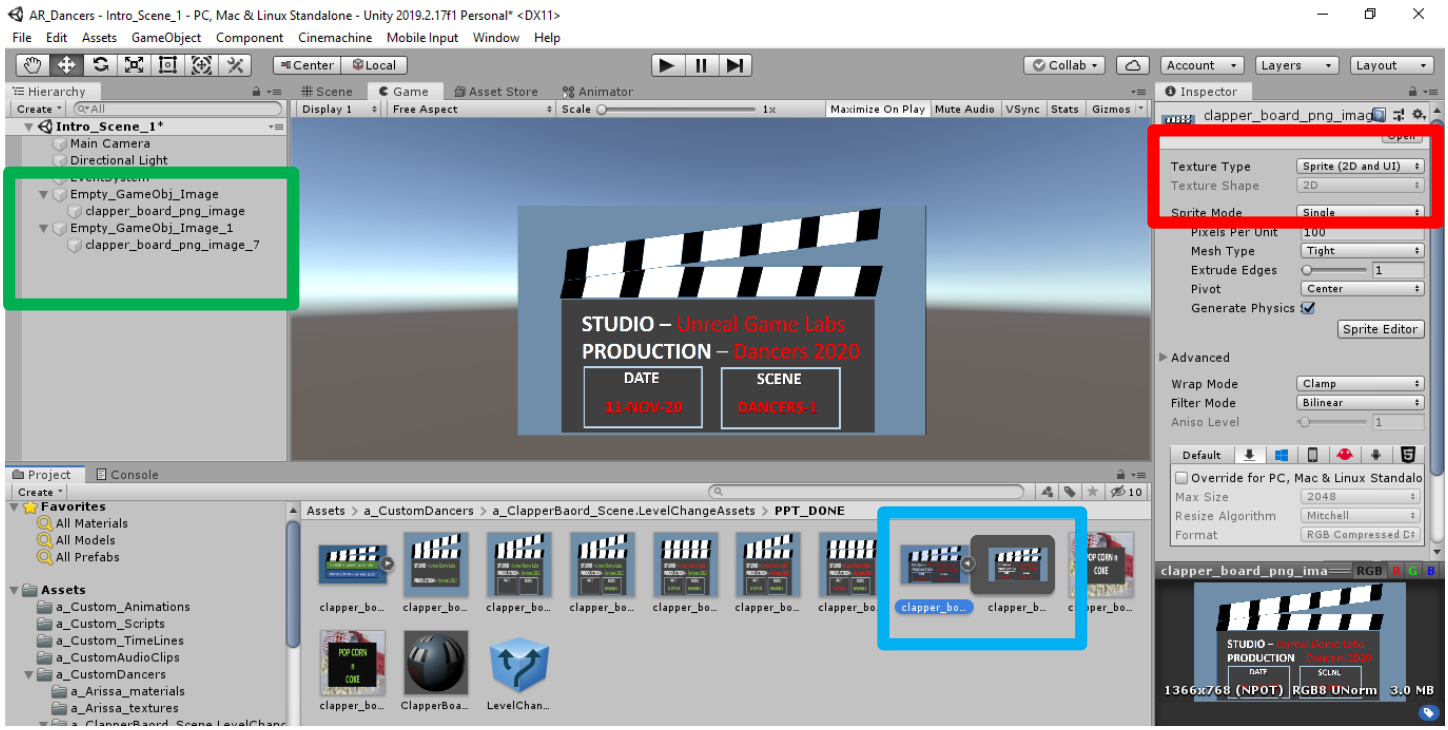
Unity 2019 – Adding a PNG Image as a Sprite

Specific to 2D images being added as Sprites within the Unity 2019 editor .

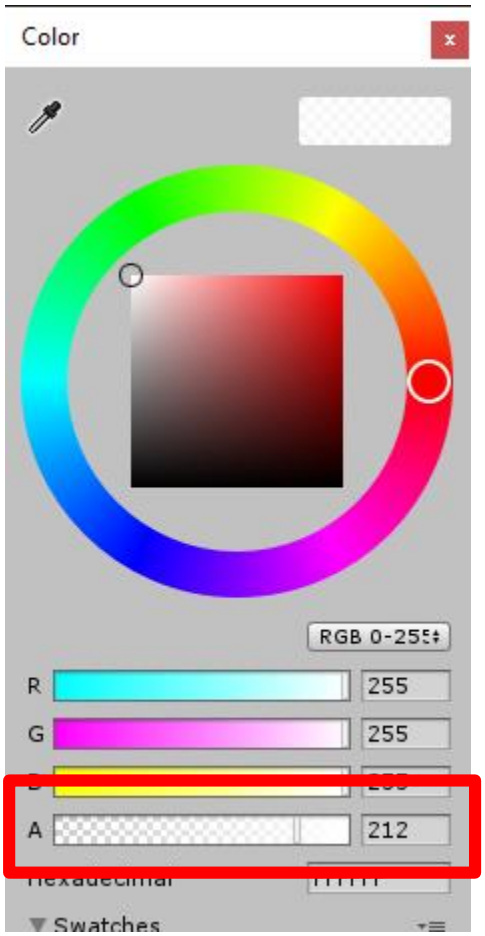
a. Add the PNG image to the Assets or any Sub DIR of assets .
b. Select image , in the INSPECTOR change the TEXTURE TYPE – from Default to Sprite 2D and UI
c. Drag image to below the Empty Game Object created earlier , image shall now appear within the Scene.

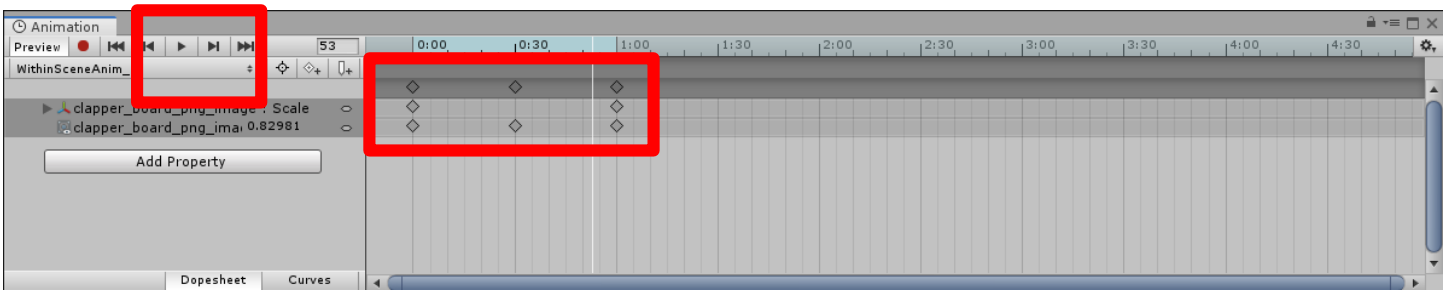




Choose the Image in the Inspector >> Color >> Change the ALPHA channel to make Image Transparent at the beginning of the Animation .

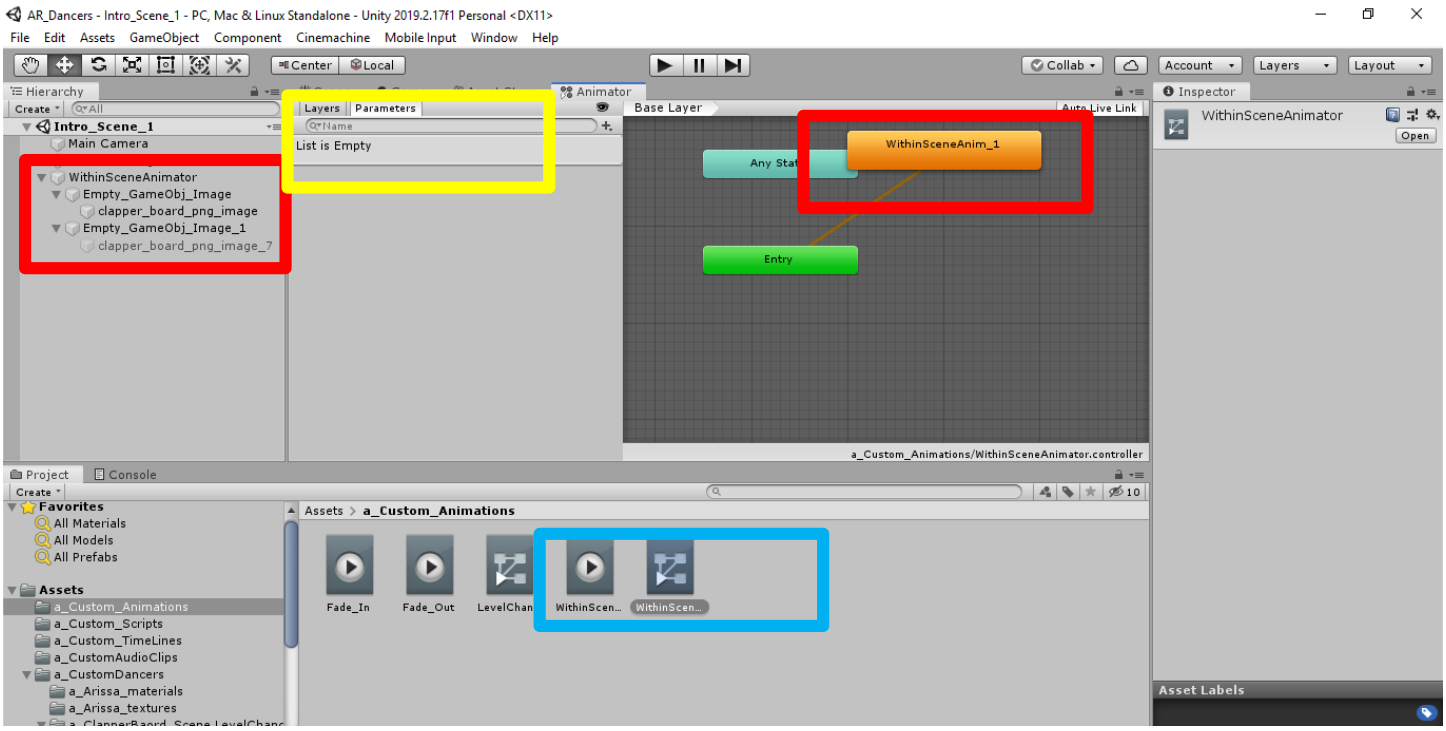
Change Alpha slider as required at various stages of the animation.





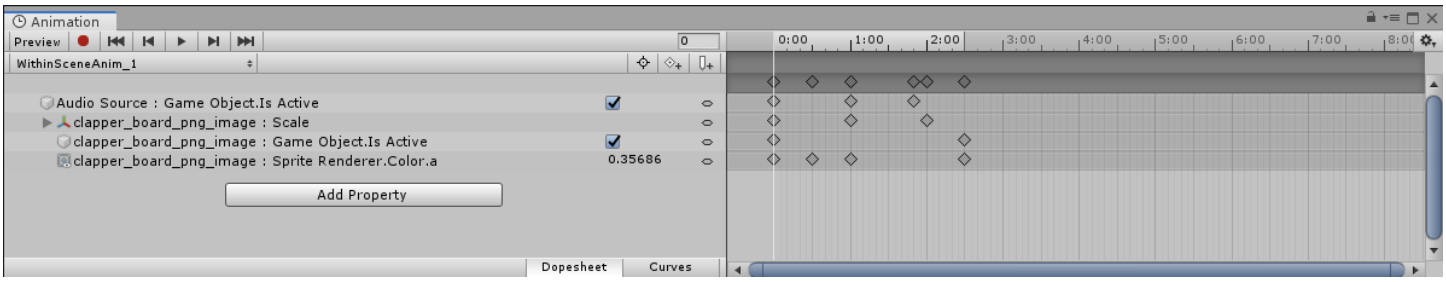
As seen above – we have added 2-3 KEYS to the Animation as seen in the DopeSheet above . Can check the animations now by clicking play .

The animation thus created is saved within the **Custom_Animations DIR** created earlier, its named - **WithinSceneAnimator.anim** and has a **WithinSceneAnimator.controller ,** both seen below in the **BLUE RECT**. The Controller is as seen below in the **RED RECT**

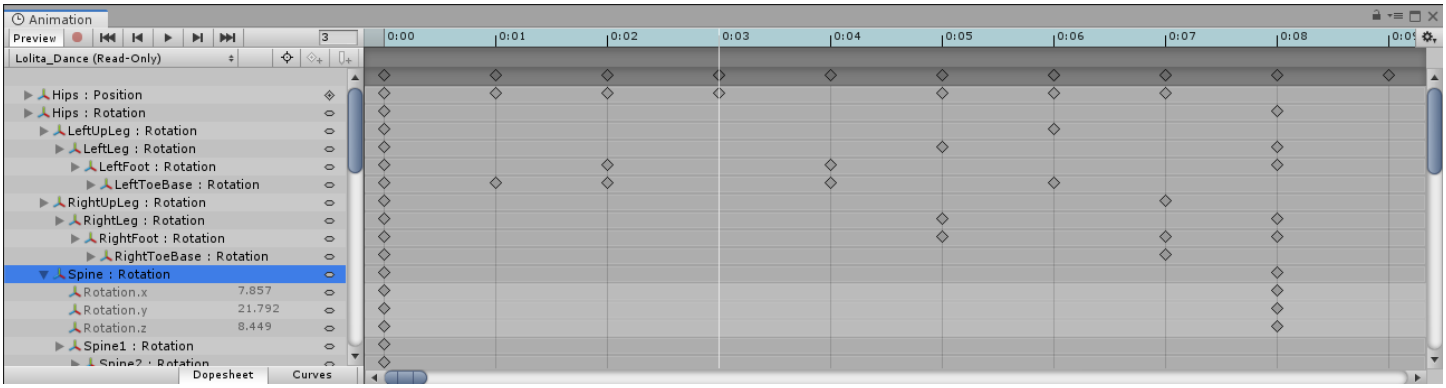


As seen above the ANIMATOR / CONTROLLER – has no PARMETERS yet – the List of PARAMETERS is EMPTY , highlighted above in the **YELLOW RECT**.

Use the **MOUSE SCROLL WHEEL** to reduce / increase the **DopeSheet TimeLine duration** , from within the Seconds view to the Minutes view .

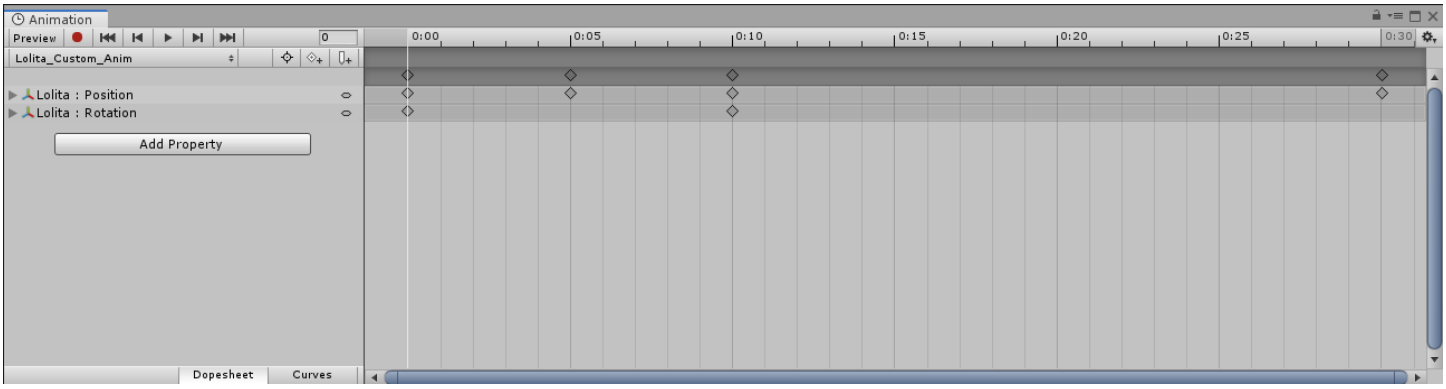


Looking through the Dope Sheet for Mixamo Models



The mixamo models have very many parts of the skeleton animated as is apparent from the dope sheet .

Add an Animation to the MIXAMO.com Models



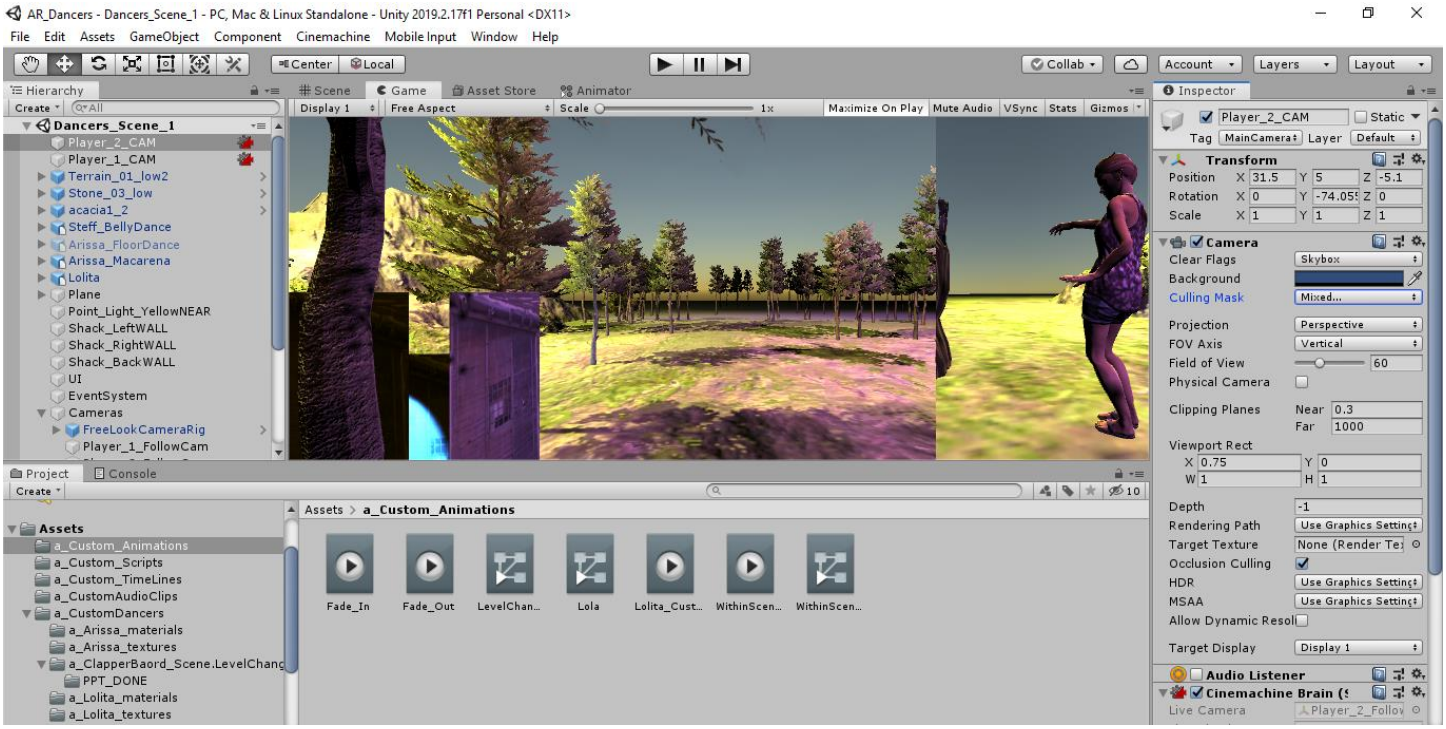
As seen above have added an additional Animation – named it , **Lolita_Custom_Anim , this is very basic in comparison to the Mixamo animations .**

Revisit the Follower CAMS

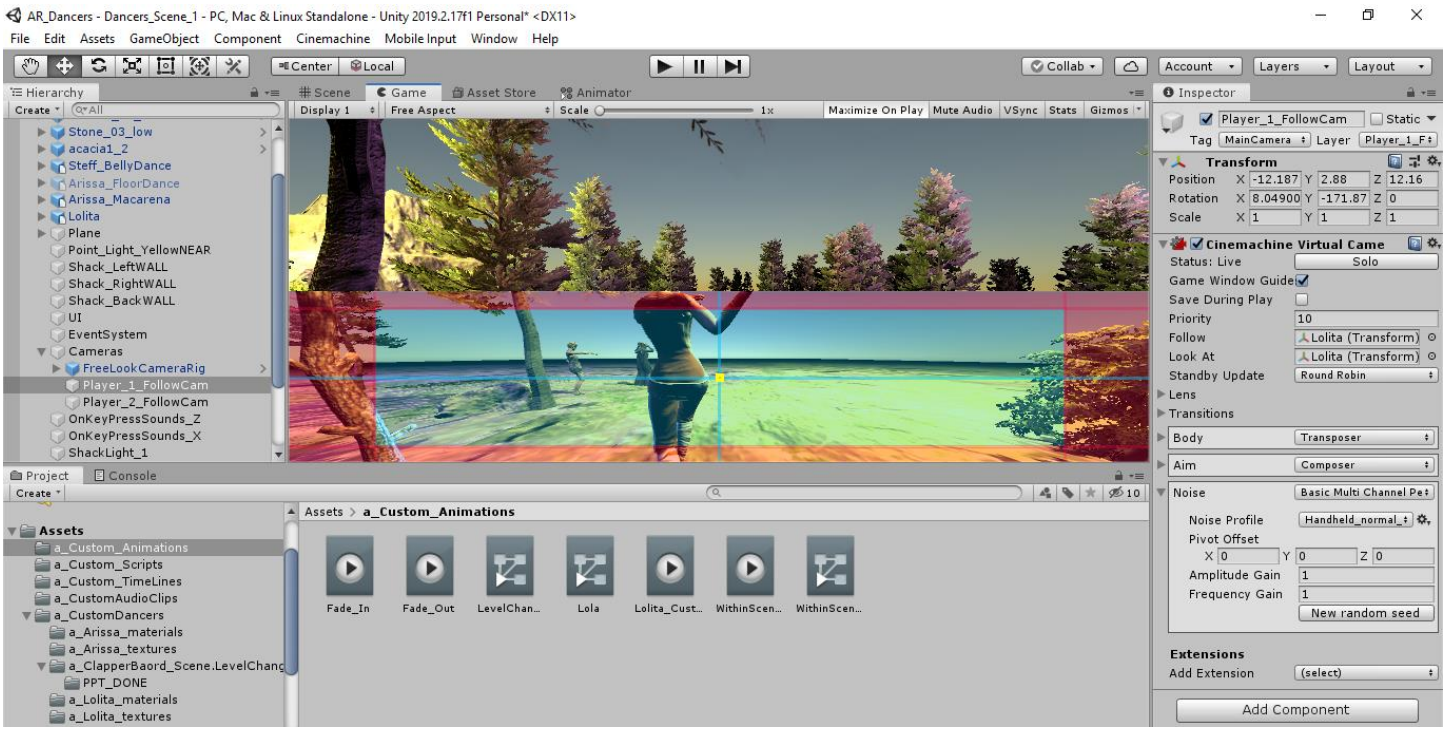
This portion involves adding Virtual cameras to the scene in addition to the Main Camera and managing the Three cameras using the CineMachine Brain. Splitting the screen to view two Virtual Follower cameras, is to be considered optional as it may or may not be required by your gameplay.

Primary Source – Unity Official Video = https://www.youtube.com/watch?time_continue=38&v=X6Ou8InMUbg

a) To the **Main Camera** – Add Component >> Cinemachine Brain
b) Rename MAIN CAMERA = Player Cam_1 , duplicate this Player Cam_1 and rename it **Player Cam_2**
c) Create Two **Virtual Cameras** , rename them **- Player_1_FollowCam** and **Player_2_FollowCam**
d) Deag and Assign the MAXIMO 3D Model – Lolita , to the - **Player_1_FollowCam ,** by dropping into the text box like space within **- CimeMachine VirtualCam >> Follow** and **CimeMachine VirtualCam >> Lookat.**
e) Exclude the Camera-1 from the Camera-2's CULLING MASK – by unchecking the - Camera-2 from within the Culling Mask Drop Down.
f)

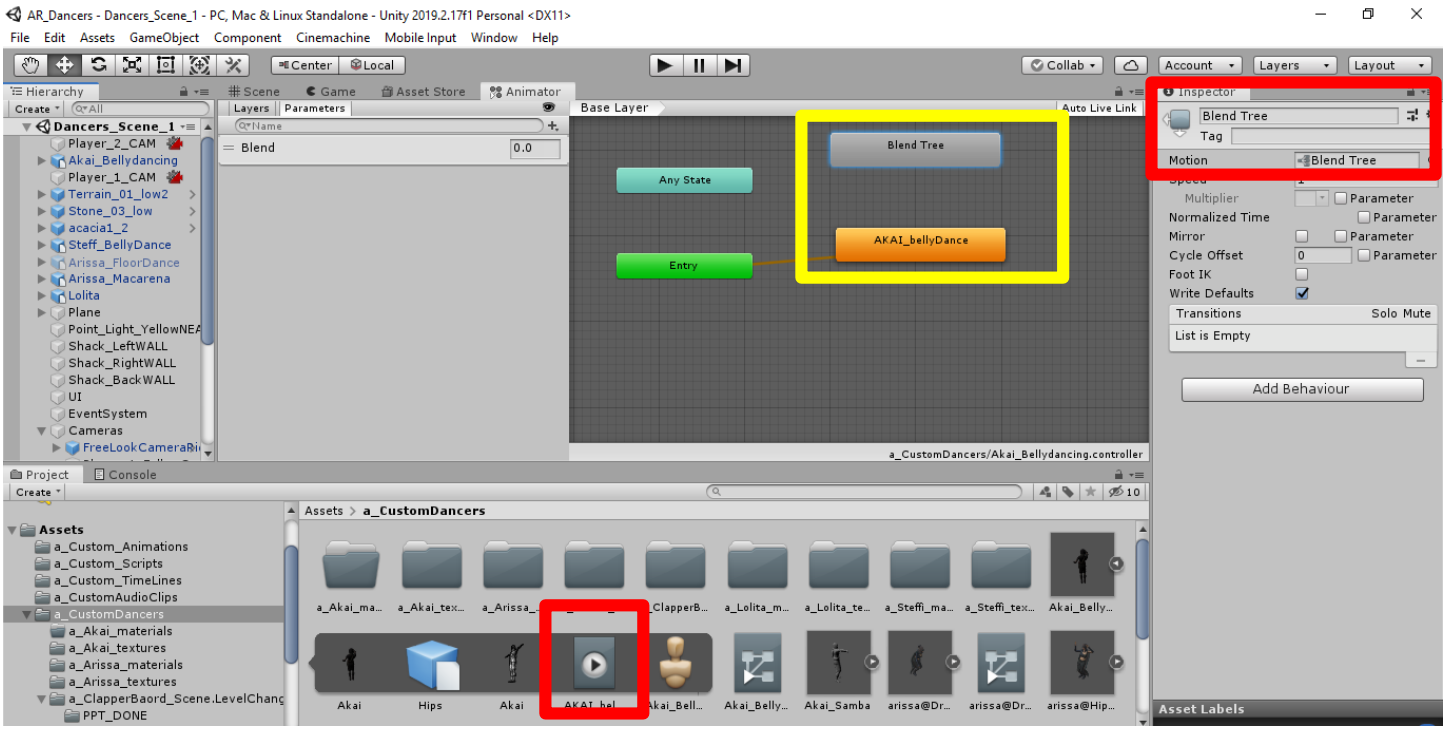


Seen below the - **Player_1_FollowCam**

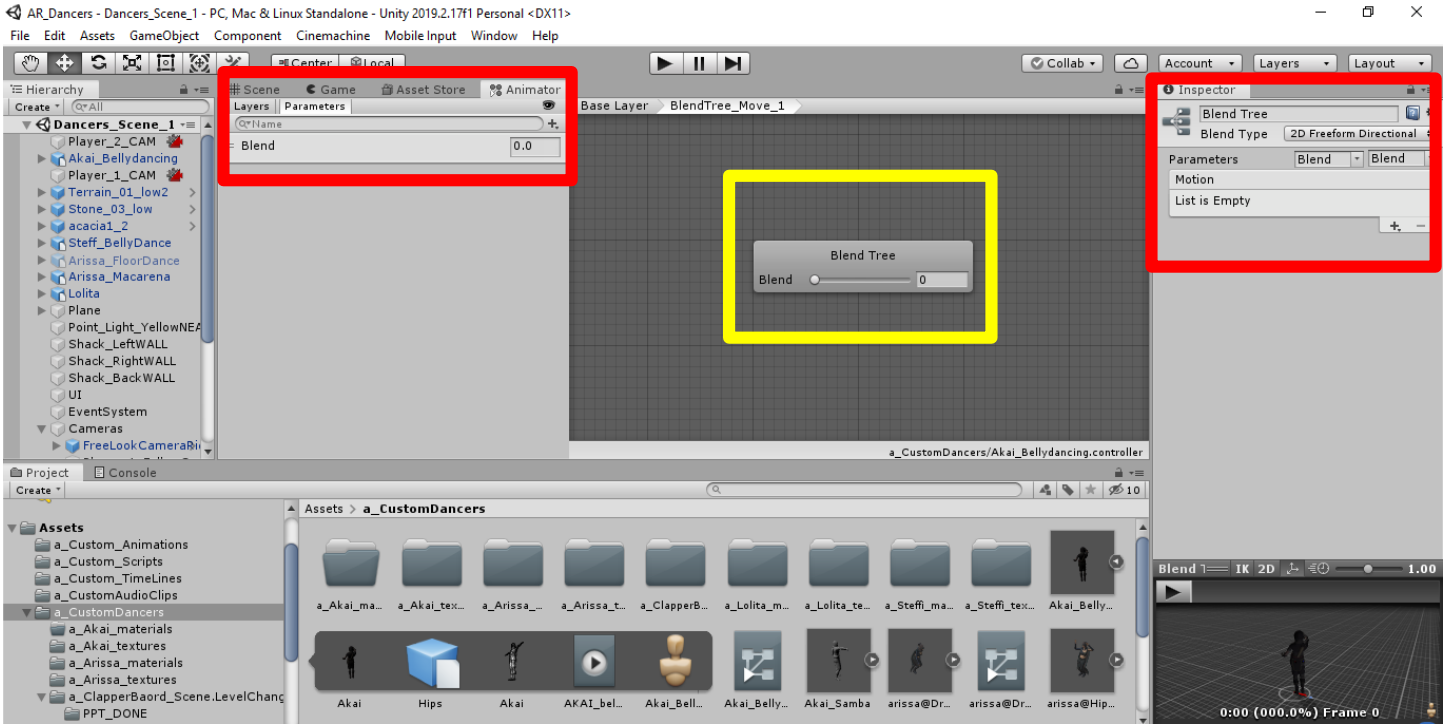


Add BlendTree Animations to the MIXAMO.com Models

Primary Source Unity Official tutorials and - https://www.youtube.com/watch?v=YgaLKrSApWM



a) As seen above – created a New BLEND TREE .
b) Double Clicked on the BLEND TREE.
c) Choose from within INSPECTOR – **Blend Types** >> **2D FreeForm Directional**
d) Top Left corner within theANIMATOR TAB – Create a New PARAMETER .
e) Choose Parameters Type = Float
f) Create Two Such Floats – **velocity_X** and **velocity_Y**


AR_Dancers - Dancers_Scene_1 - PC, Mac & Linux Standalone - Unity 2019.2.17f1 Personal <DX11>
File Edit Assets GameObject Component Cinemachine Mobile Input Window Help
Hierarchy
Dancers_Scene_1
Player_2_CAM
Akai_Bellydancing
Player_1_CAM
Terrain_01_low2
Stone_03_low
acacia1_2
Steff_BellyDance
Arissa_FloorDance
Arissa_Macarena
Lolita
Plane
Point_Light_YellowNEA
Shack_LeftWALL
Shack_RightWALL
Shack_BackWALL
UI
EventSystem
Cameras
FreeLookCameraRig
Scene
Game
Asset Store
Animator
Layers
Parameters
Blend
0.0
Base Layer
BlendTree_Move_1
Blend Tree
Blend
0
a_CustomDancers/Akai_Bellydancing.controller
Inspector
Blend Tree
Blend Type
2D Freeform Directional
Parameters
Blend
Motion
List is Empty
Project
Console
Assets
a_Custom_Animations
a_Custom_Scripts
a_Custom_TimeLines
a_CustomAudioClips
a_CustomDancers
a_Akai_materials
a_Akai_textures
a_Arissa_materials
a_Arissa_textures
a_ClapperBaord_Scene.LevelChang
PPT_DONE
Assets > a_CustomDancers
Akai
Hips
Akai
AKAI_bel...
Akai_Bell...
Akai_Belly...
Akai_Samba
arissa@Dr...
arissa@Dr...
arissa@Hip...
Blend
IK
2D
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