

THIRD PERSON SHOOTER CONTROLLER

➤ REQUIRE TAGS AND LAYERS: -

(Note: - if project does not contain followings tags and layer add manually to get asset work properly)

- **LAYERS:** -

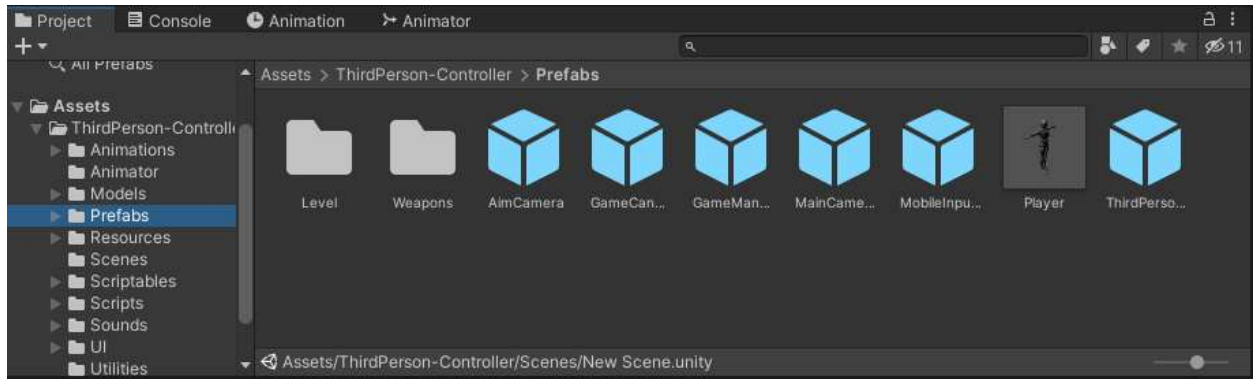
- Player
- PickupItem
- Equiped

- **TAGS:** -

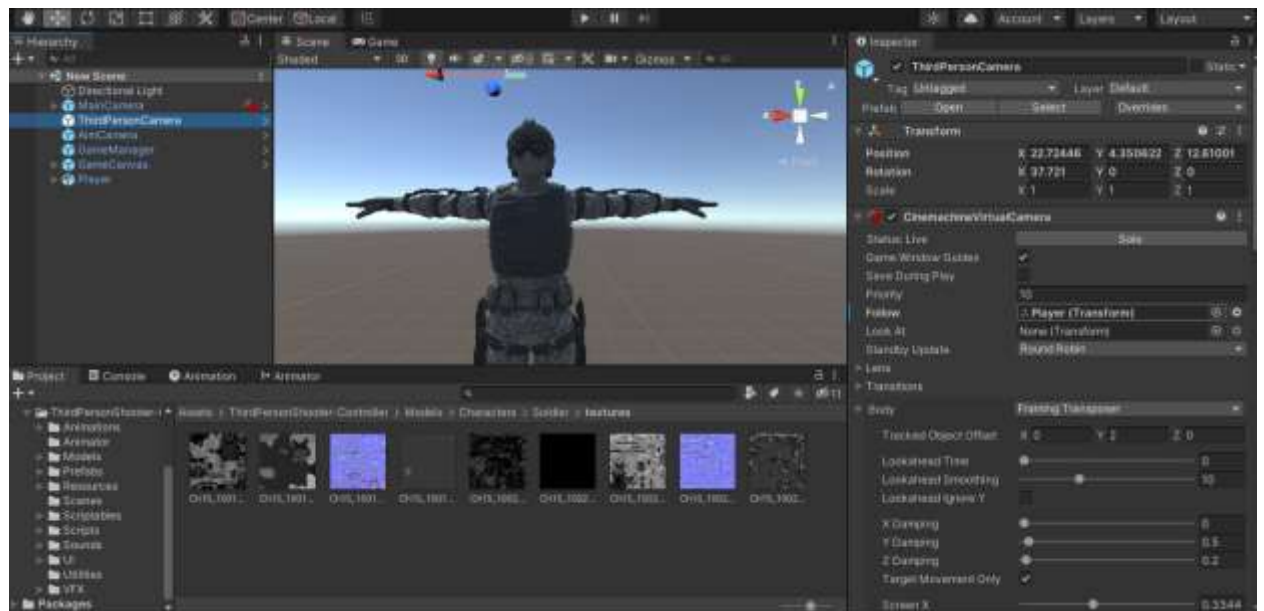
- Weapon

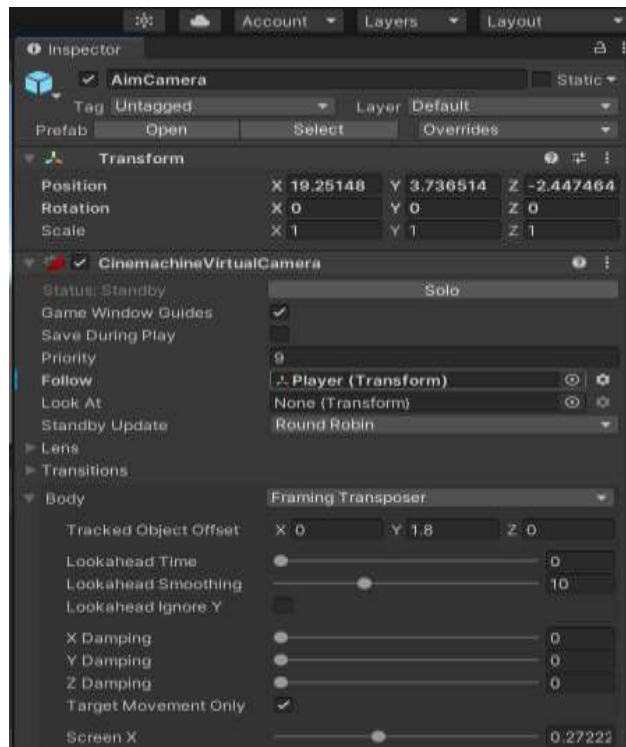
➤ HOW TO SET UP CHARACTER: -

- Remove the “**Main Camera**” from scene if it has, then drag and drop following prefabs from ThirdPersonShooter-Controller->Prefabs.
 - MainCamera
 - ThirdPersonCamera
 - AimCamera
 - GameManager
 - GameCanvas

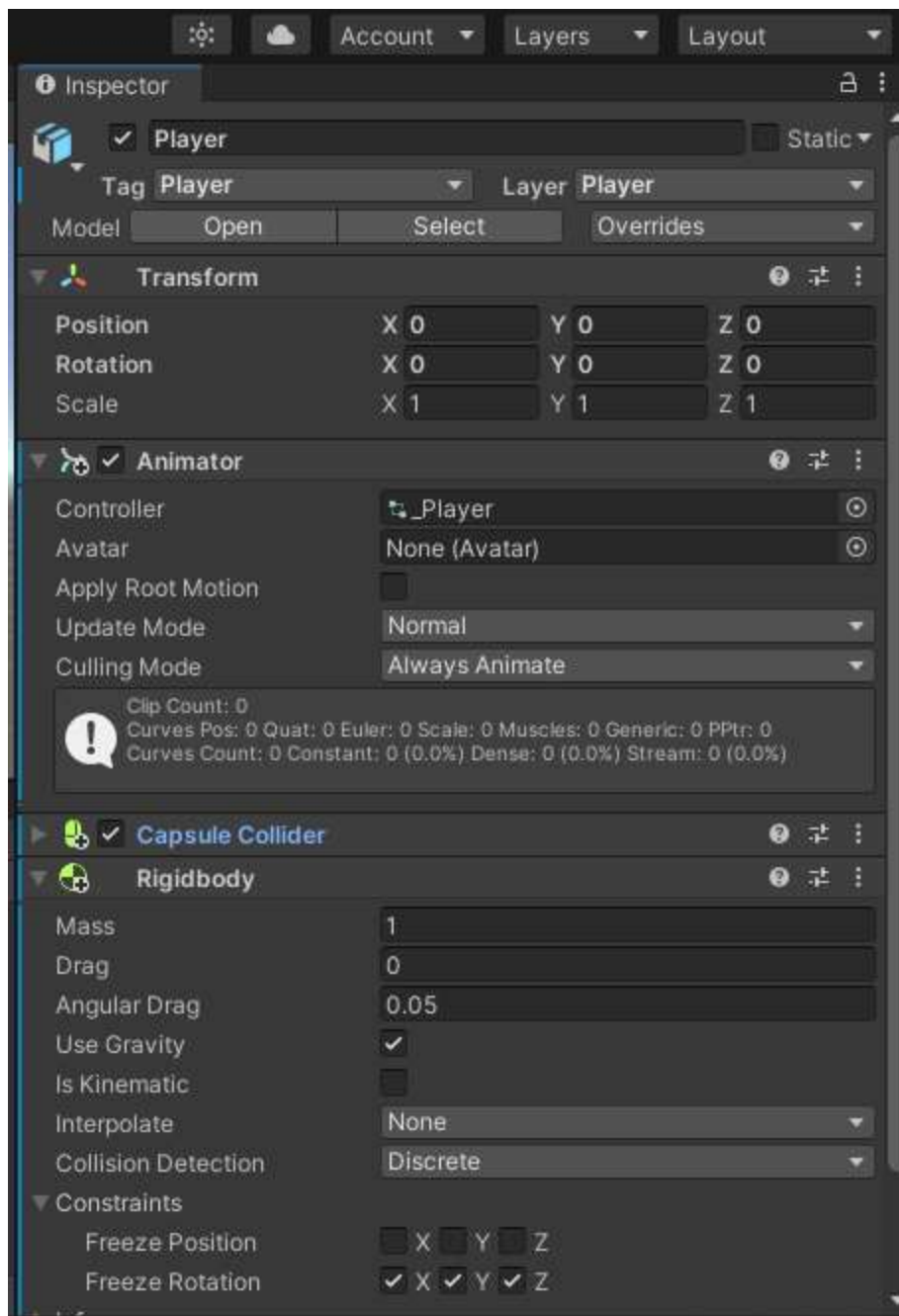


- Add your character to scene, then give character reference to **“ThirdPersonCamera”** and **“AimCamera”**.

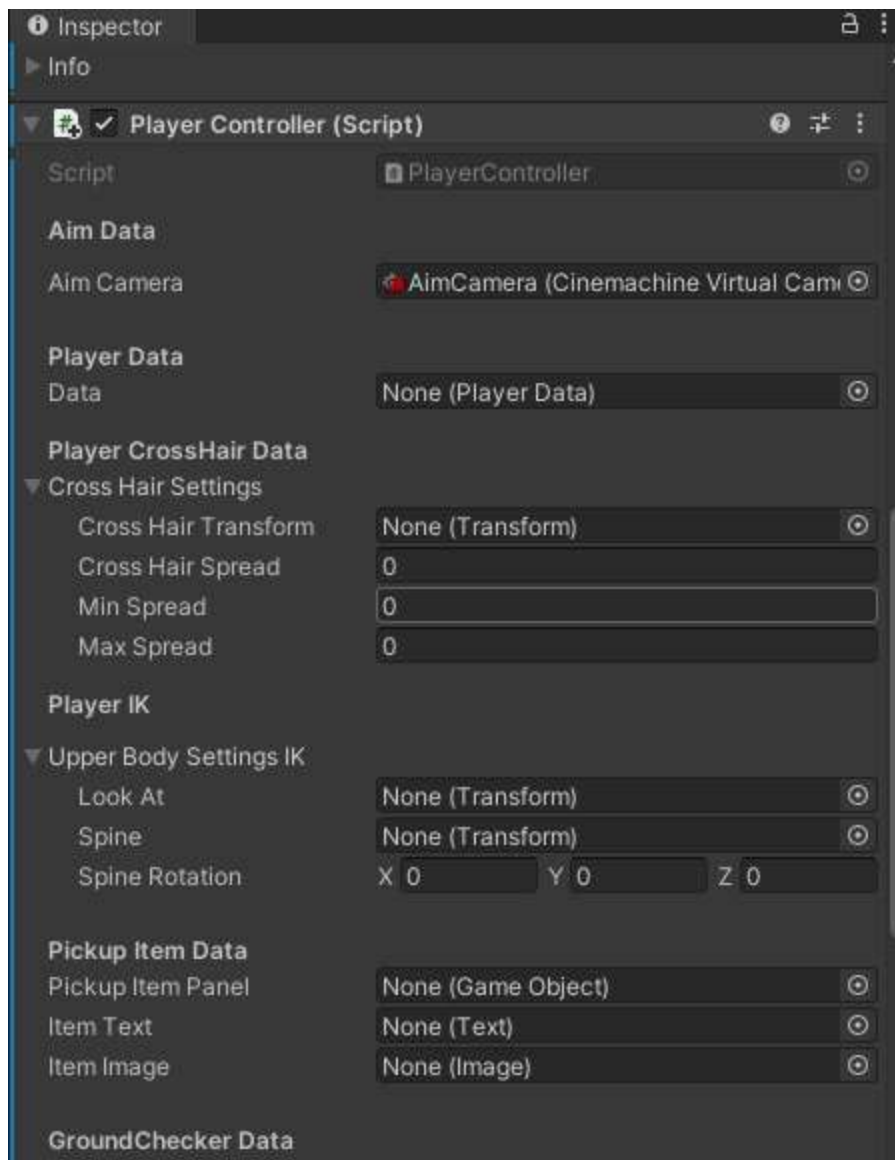




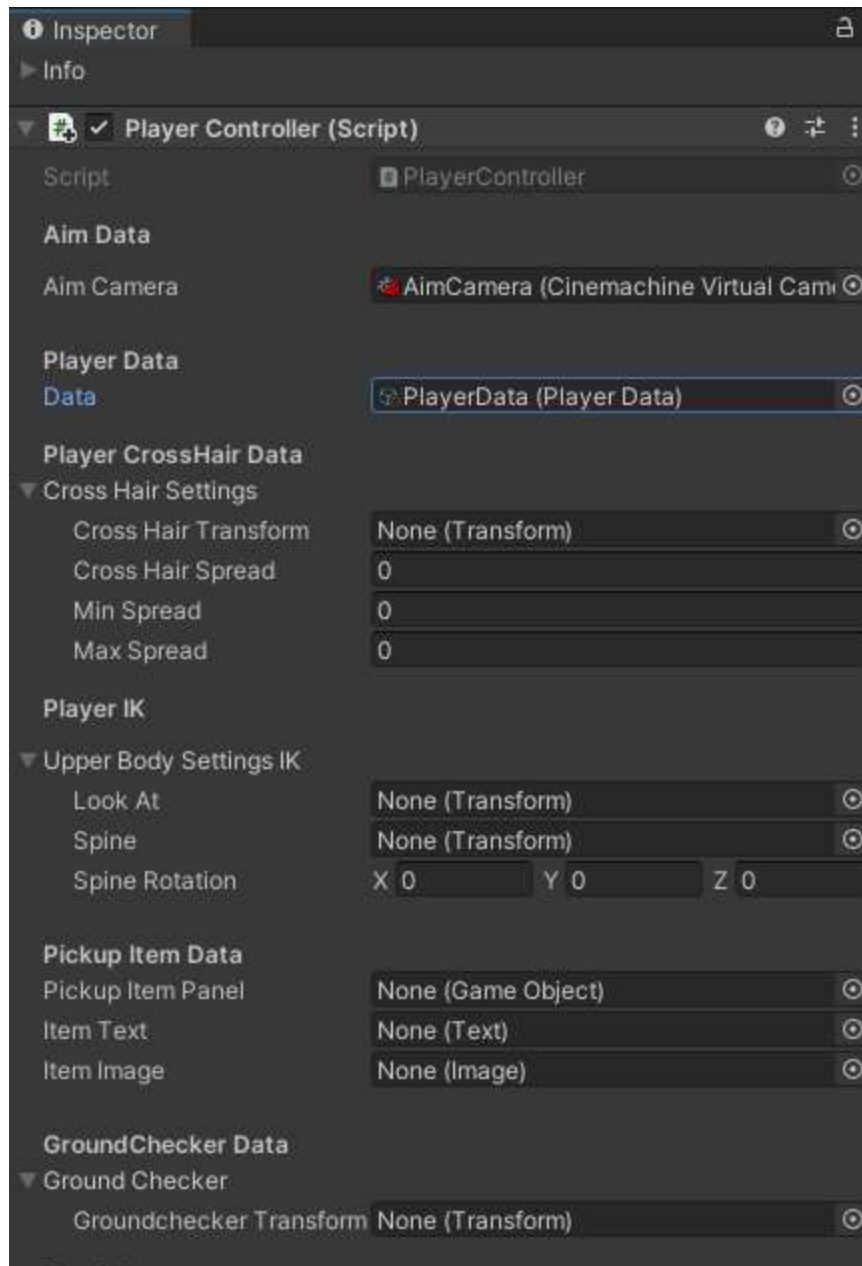
- Add appropriate capsule collider and rigid body and animator to character.
- In Animator use `_player` as controller.
- Add player to Player layer and tag to Player.



- Now add player controller script to the player character.
- Add aim camera reference to the player from scene.



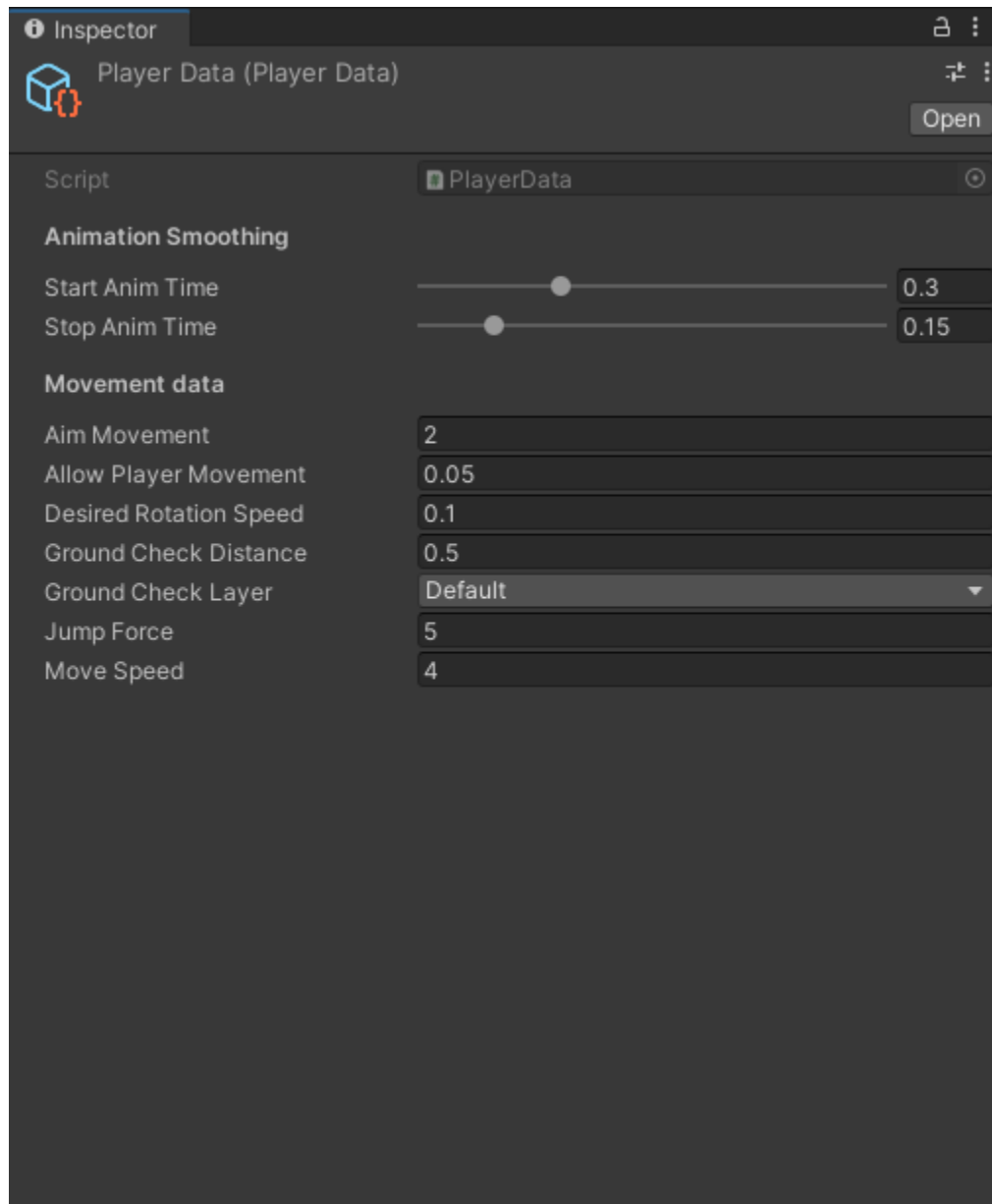
- Now add player data from ThirdPersonShooter-Controller->Scriptable->Player->PlayerData.



- Or you can create your own by right clicking and selecting Create->ScriptableObject->Player->PlayerData.

➤ Player Data

- What is player data? It contains the basic data of player.



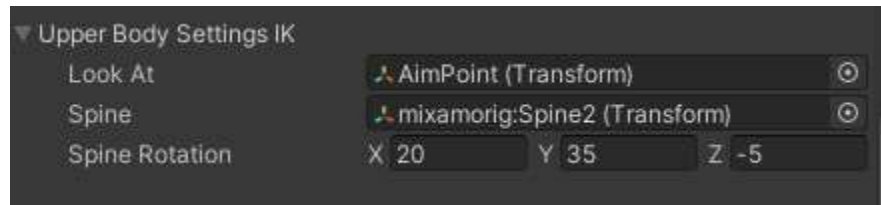
- **Animation Smoothing:** - Set the animation start and end damp time.
- **Aim Movement:** - Character speed while aiming.
- **Allow Player Movement:** - If the player speed is less than allow player movement character won't move and rotate.
- **Desire Rotation Speed:** - Rotation speed of character.

- **Ground Check Distance:** - Distance between character and ground to check if player is on ground or not.
- **Ground Check Layer:** - Layer of all ground and other things that player can stand on.
- **Jump Force:** - Force of character while jumping.
- **Move Speed:** - Character's normal speed while moving.

- Now in cross hair setting add reference to "Cross Hair Transform" from GameCanvas-> CrossHairHolder.

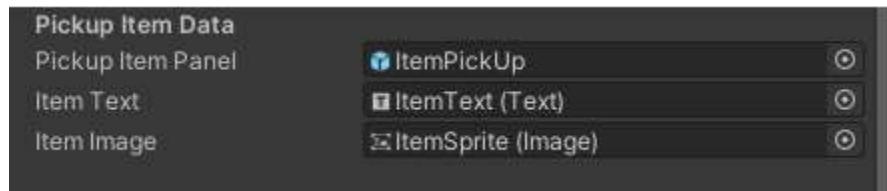


- **CrossHairTransform:** - Gameobject's transform that holds all cross hairs
 - **Min Spread:** - Minimum spread of cross hair.
 - **Max Spread:** - Maximum spread of cross hair.
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- Now add AimPoint reference from MainCamera->AimPoint in look at transform in upperbody ik settings.
 - Add spine bone of character to spine.

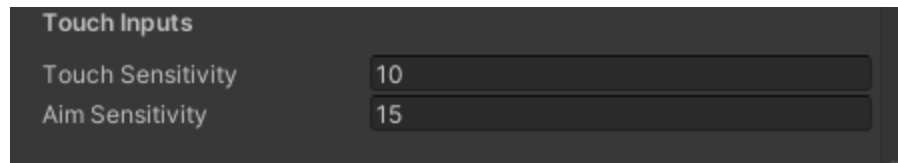


- **Spine Rotation:** - offset rotation of upper body spine x ,y and z while aiming.

- Now add ItemPickUp from GameCanavs-> ItemPickUp in pickupitem panel.
- Add ItemText and ItemSprite in Pick Up Item Data.



- Create an empty game object under character and assign into ground checker



- **Touch Sensitivity:** - Sensitivity of touch input in.
- **Aim Sensitivity:** - Sensitivity of touch while aiming.

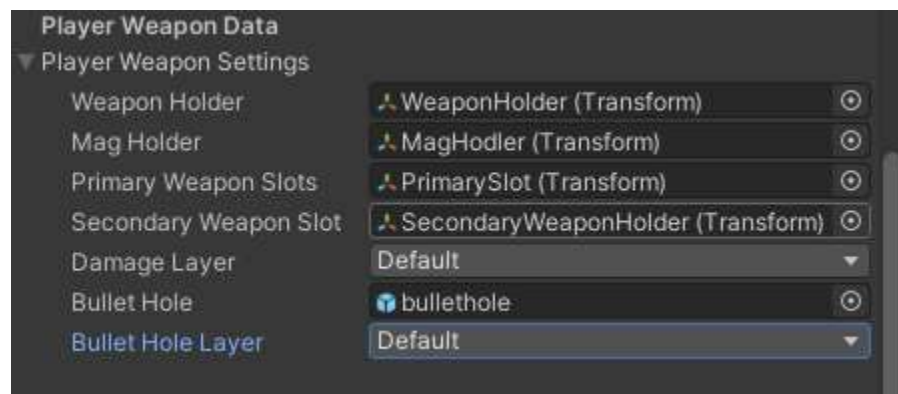
- Now create empty object in character's left-hand bone and right-hand bone.



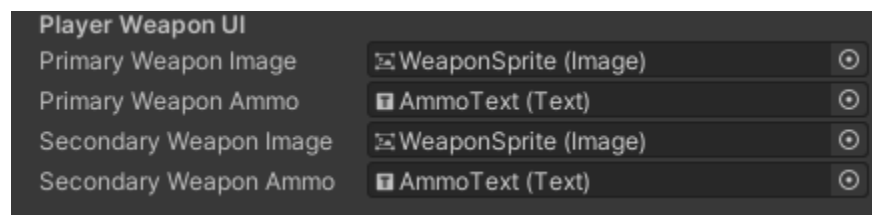
- Create empty object in spine bone and left leg bone.



- Now assign all create bone to player weapon data as shown in image. Add bullet hole prefab from VFX->Prefab->bulletHole to bullet home game object.

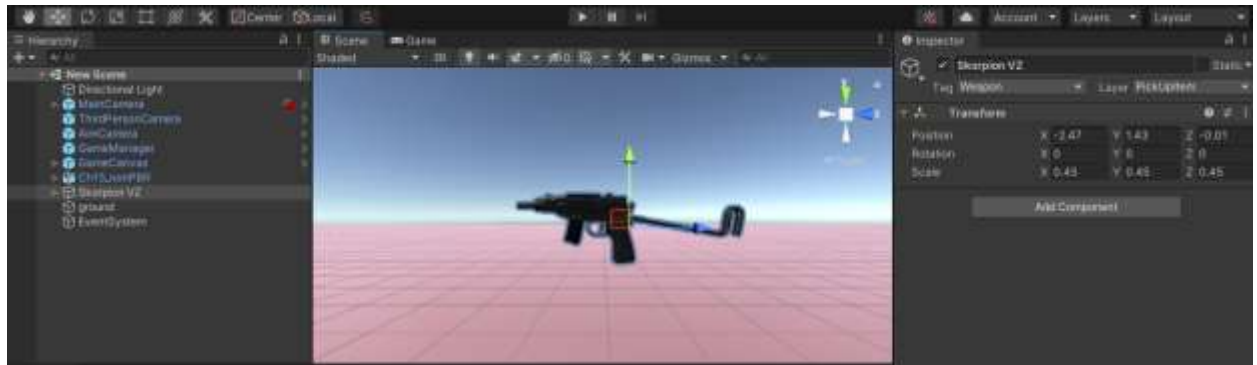


- **Damage Layer:** - Damage layer contains the layer that can be damaged by gun.
- **Bullet Hole Layer:** - It contains the layer that instantiates bullet hole when damaged by gun.
- Assign Weapon sprite and text of primary and secondary weapon from GameCanvas->WeaponUI

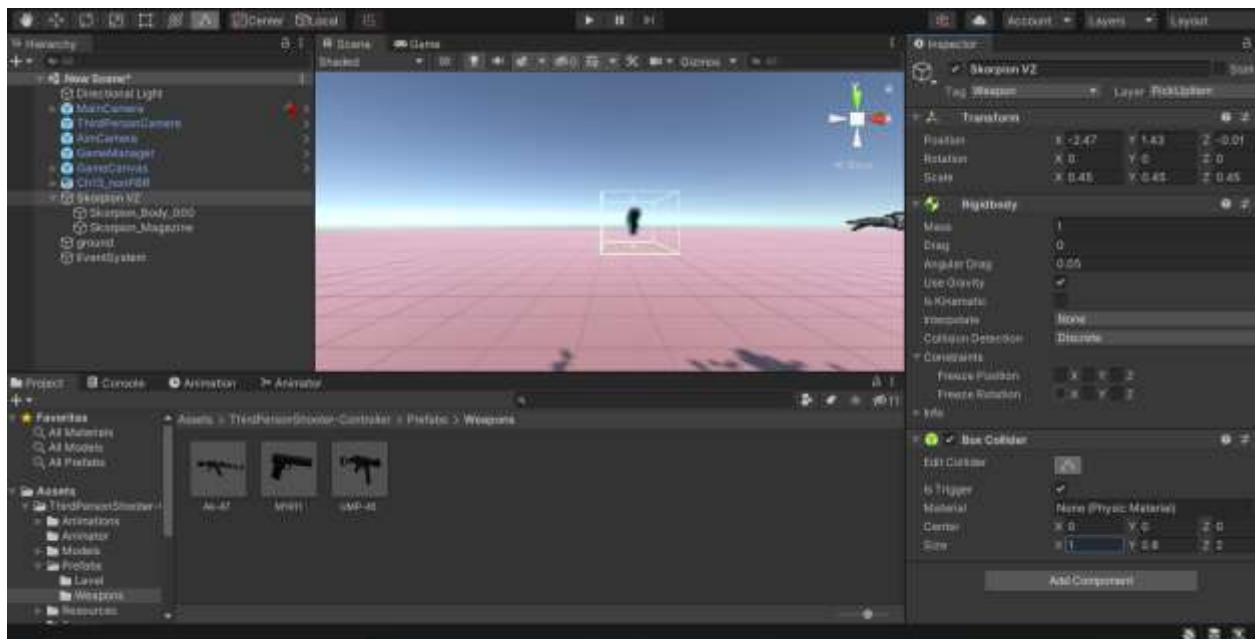


➤ HOW TO SETUP GUN: -

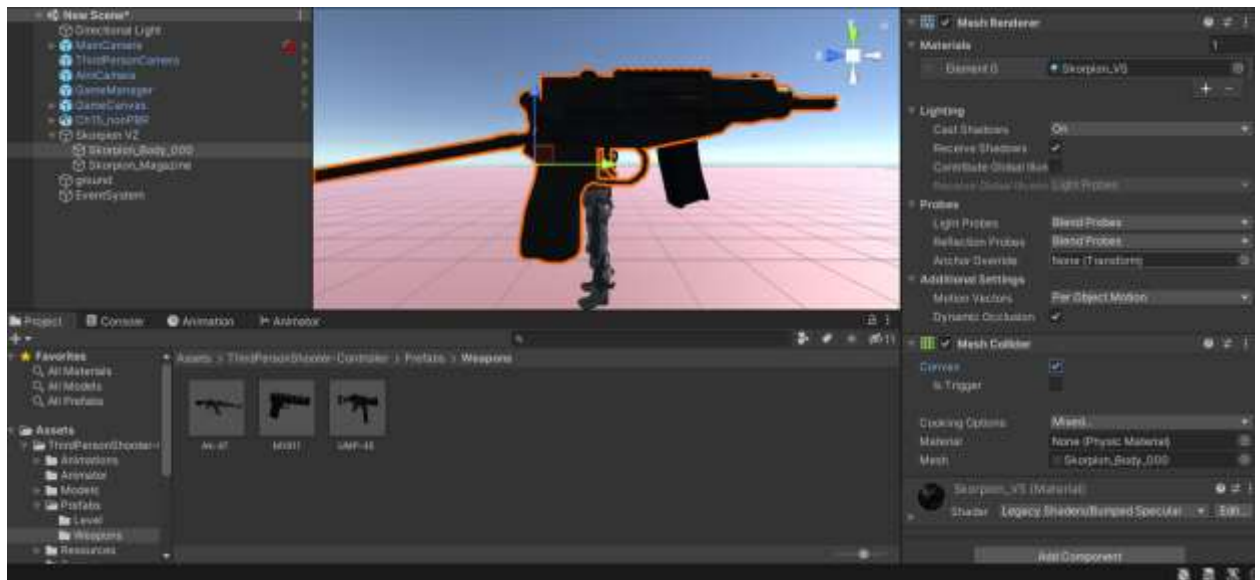
- Drag your weapon model to the scene.
- Set model tag to “Weapon” and layer to “PickUpItem”.



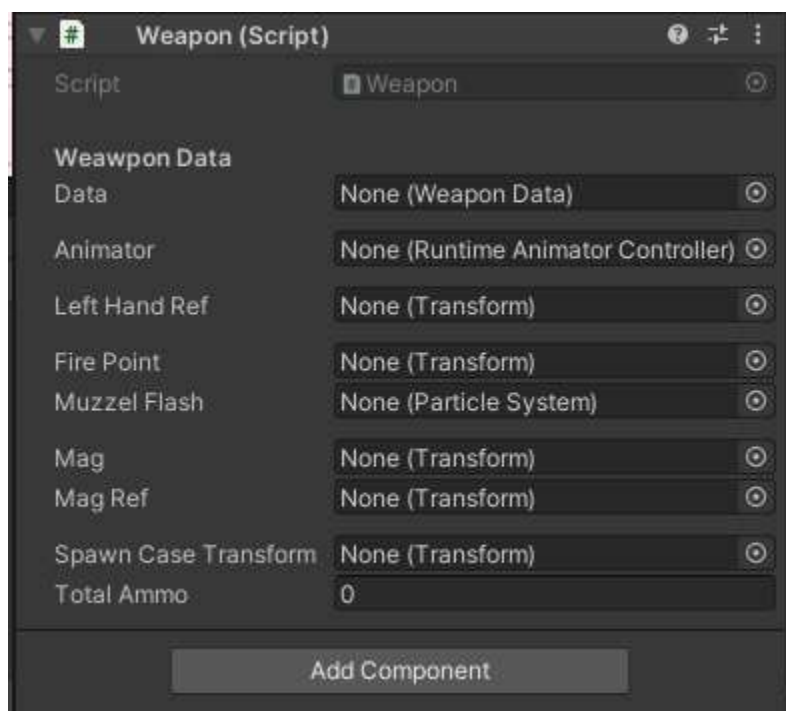
- Now add rigid body and box collider to model
- Check is triggered in collider.



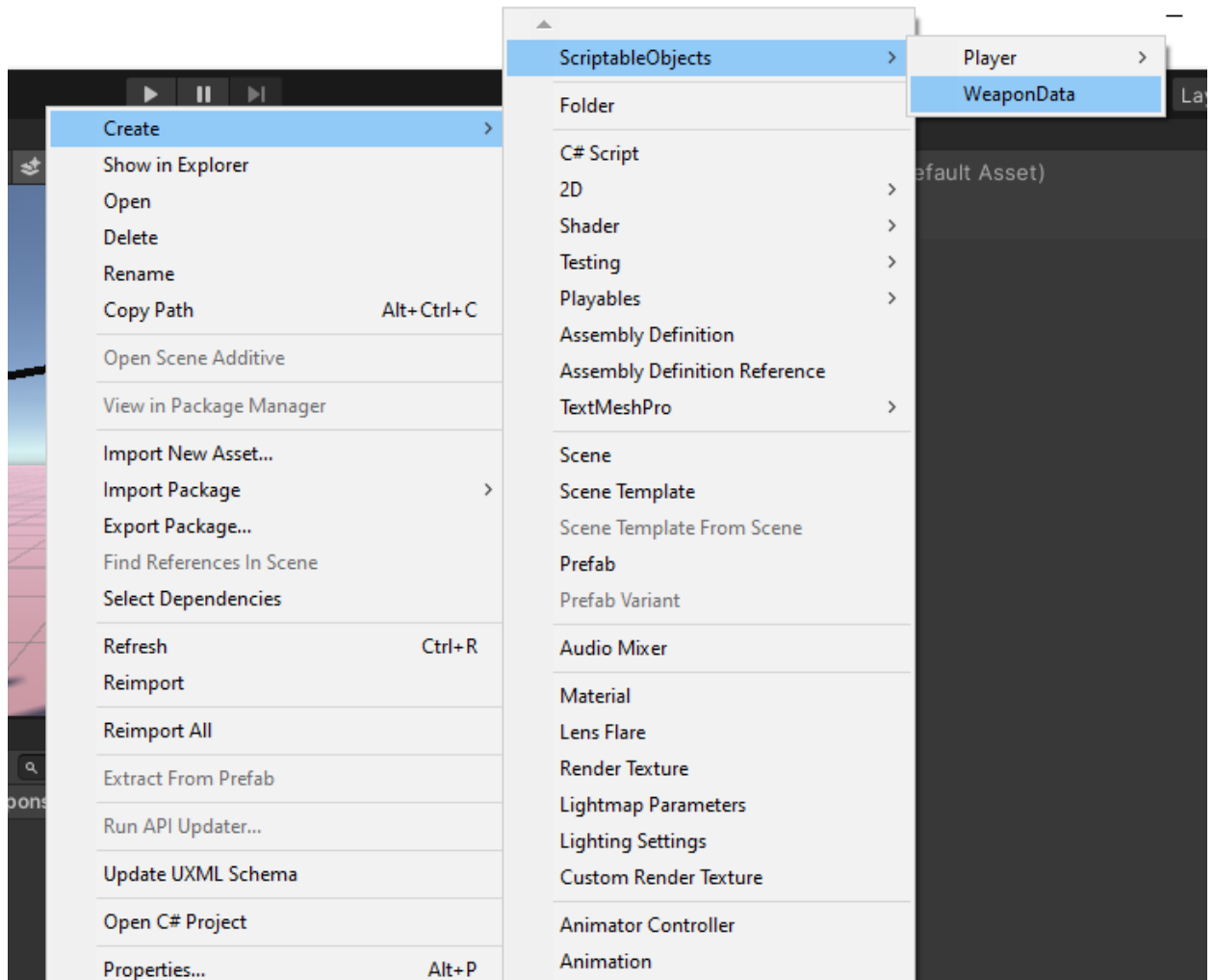
- Add mesh collider to model's mesh and set convex on in mesh collider.



- Add weapon script to model.



- Create weapon data create->ScriptableObject->WeaponData.



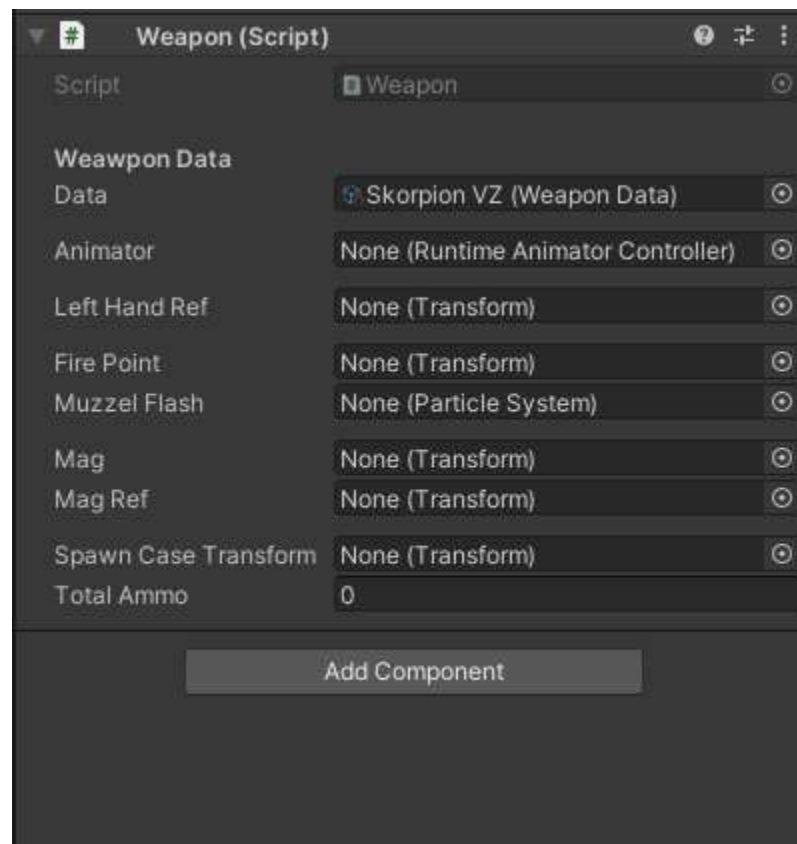
- **Weapon Data:** -



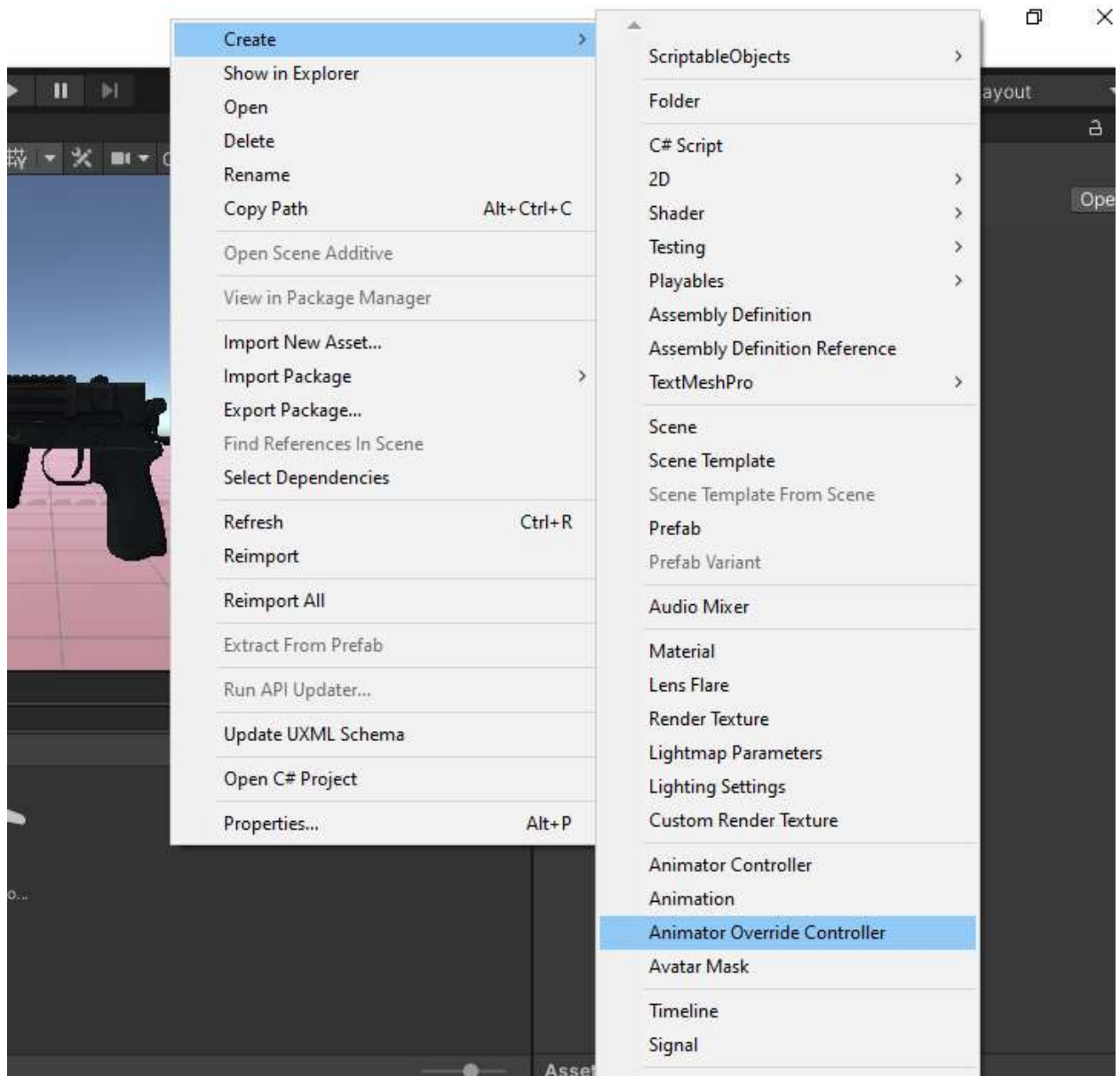
- **Weapon Image:** - Sprite of weapon that will be displayed on pick up and weapon slot.
- **Weapon Name:** - Name of the weapon.

- **Weapon Holder Transform:** - Weapon position and rotation on player's hand
- **Weapon Slot Transform:** - Weapon position and rotation on weapon slot.
- **Mag Transform:** - Weapon's magazine default position and rotation.
- **Damage:** - Damage of weapon per bullet.
- **Fire rate:** - Fire rate of weapon.
- **Mag size:** - Weapon's magazine size.
- **Range:** - Range of weapon.
- **Weapon Index:** - Index of weapon (for primary weapon 2 and for secondary weapon 1).
- **Bullet case:** - Empty shell prefab that will instantiate on weapon fire.
- **Bullet ejecting speed:** - Speed of empty case while ejecting.
- **Weapon Type:** - Type of weapon primary/secondary.
- **Fire mode:** - Fire mode of weapon Auto/Single.
- **Duration:** - Duration of recoil.
- **Horizontal Recoil:** - Weapon's horizontal recoil.
- **Vertical Recoil:** - Weapon's vertical recoil.
- **Crosshair Spread:** - Crosshair spread while firing weapon.
- **Weapon Spread:** - Weapon's bullet spread while firing.
- **Weapon Sound:** - Different sound of weapon while reloading like bolt, mag in / out.

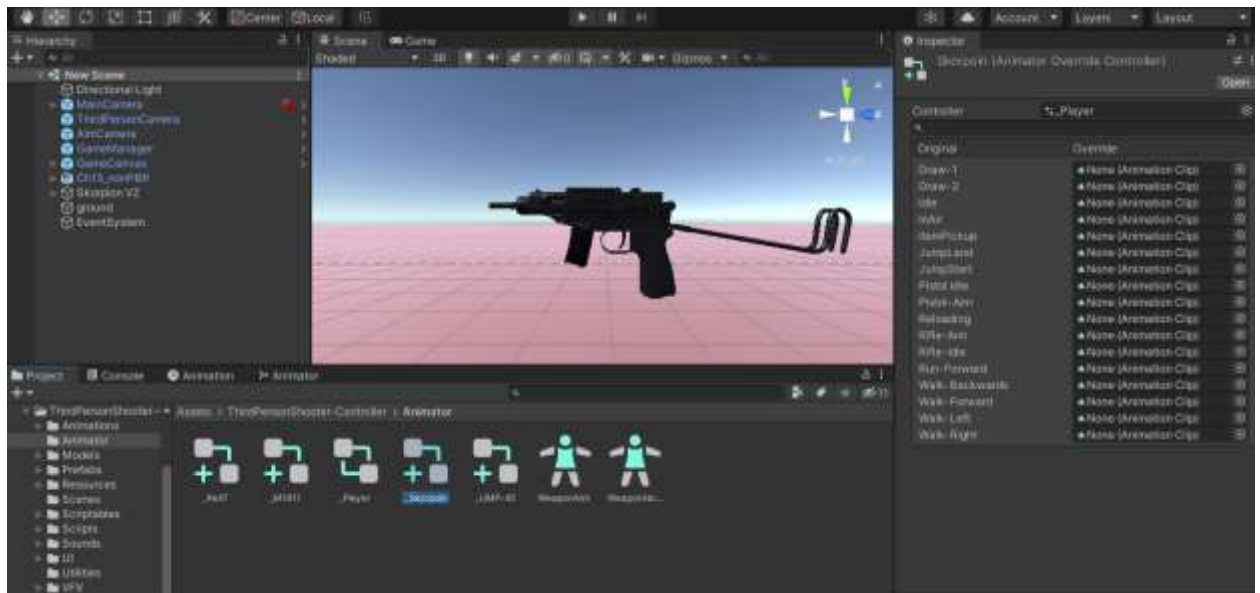
- Now add weapon data to weapon data reference in weapon script.



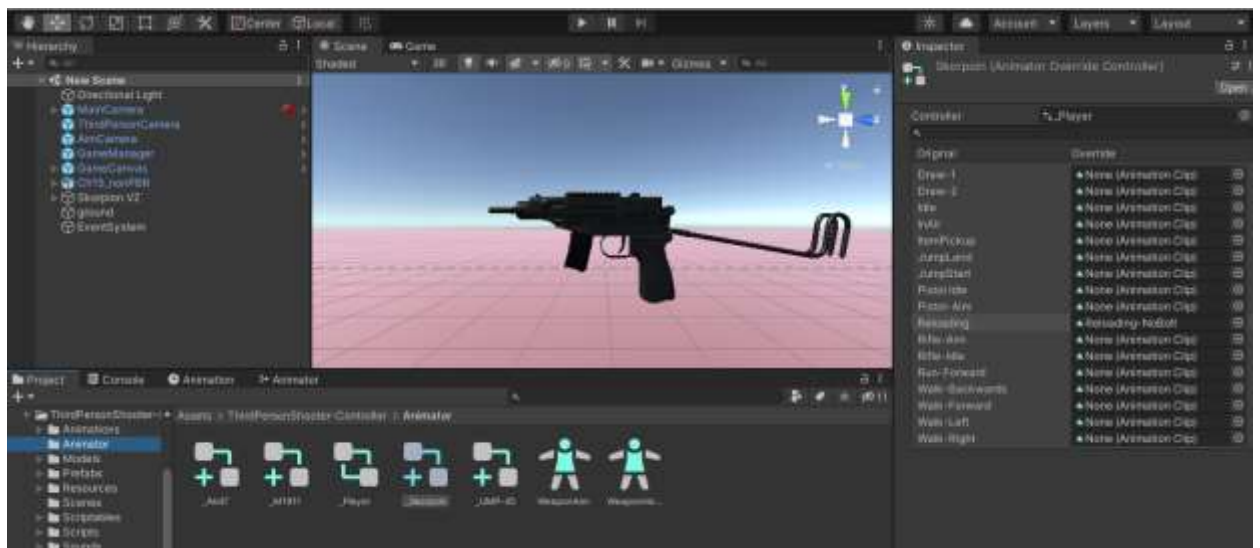
- Create animator override controller for weapon.



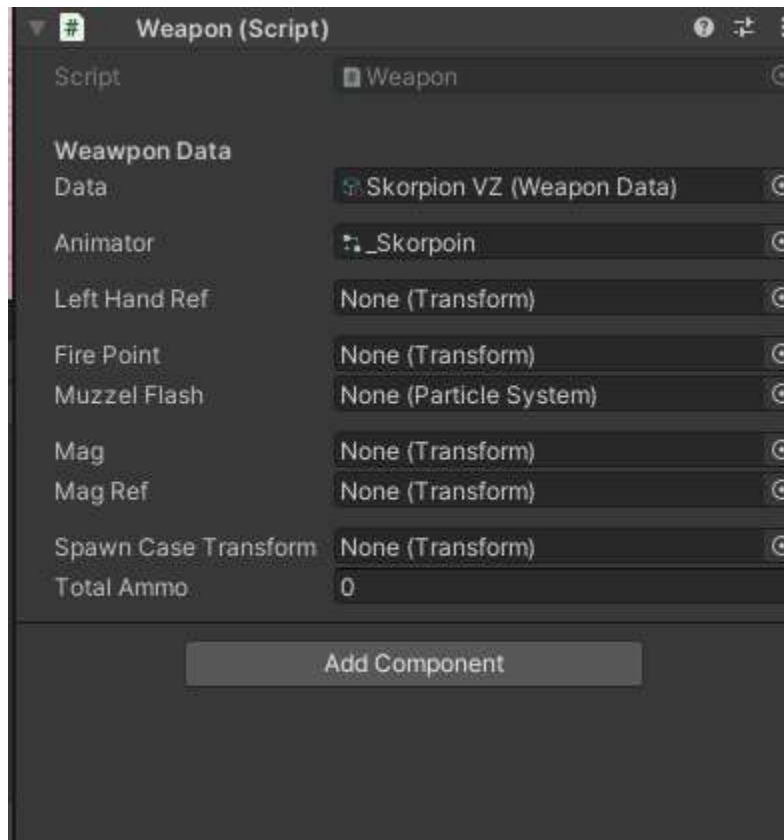
- Add player controller to animator override controller.



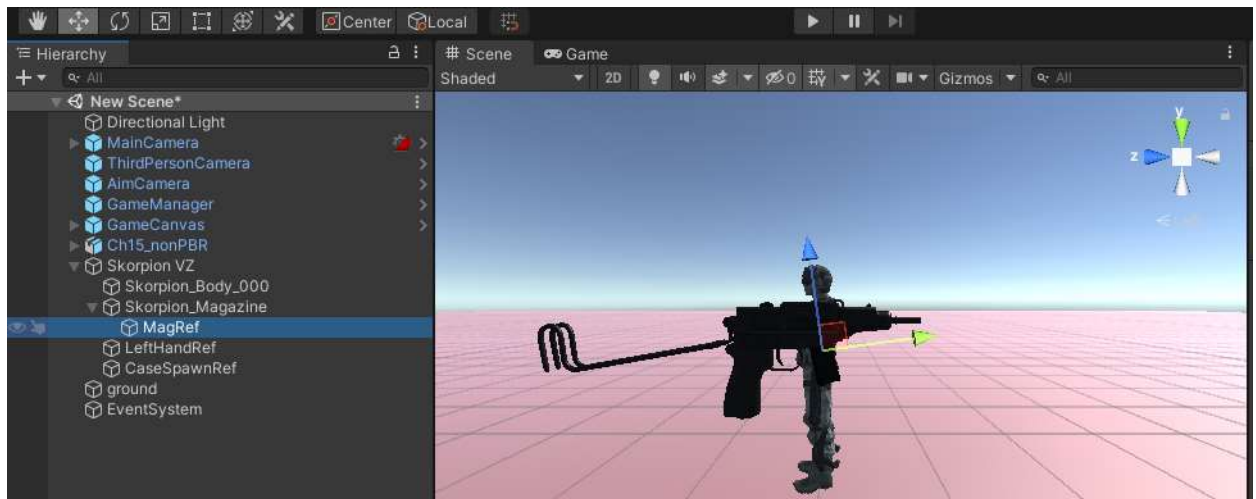
- Change reload animation to Reloading-No Bolt/Reloading/Pistol Reload or you can use your custom reload animation too.



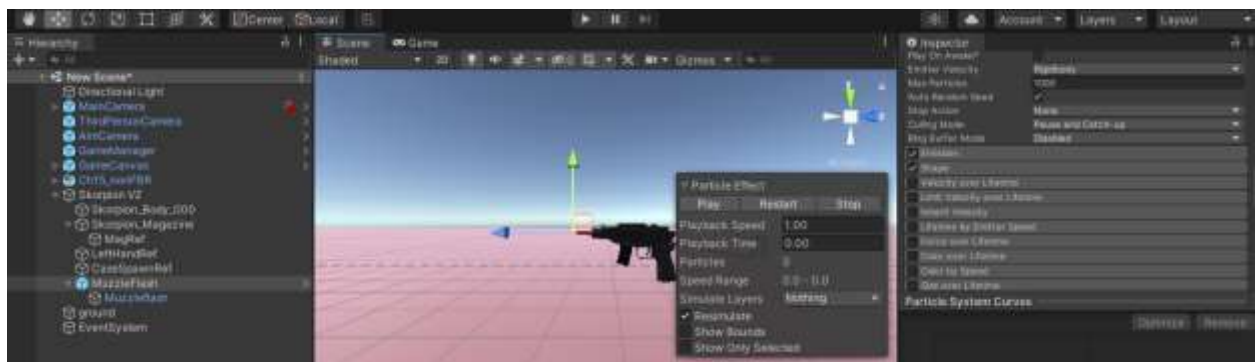
- Add new weapon override animator to animator reference.



- Now needs to add some reference in weapon model.
- **Left Hand Reference:** - Sets the left-hand position in weapon.
- **Mag Reference:** - Set mag reference under magazine.
- **Spawn Case Reference:** - Sets the reference position where empty bullets case spawns.



- Add muzzle flash from VFX->Prefabs->Muzzle-Flash. To weapon.



- Set all reference to weapon script.

