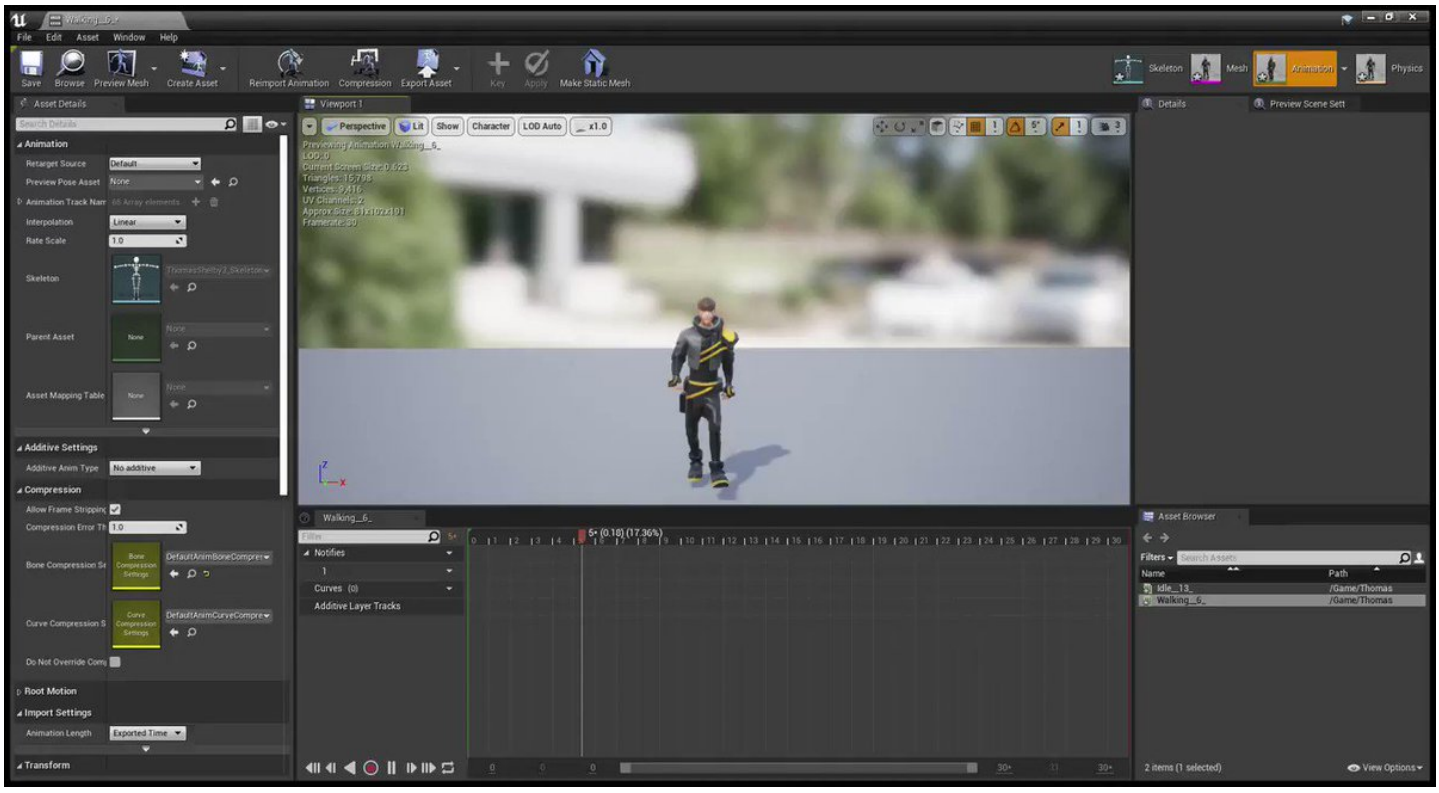
Twitter Thread by Abhiram Reddy

Abhiram Reddy
@nrabhiram

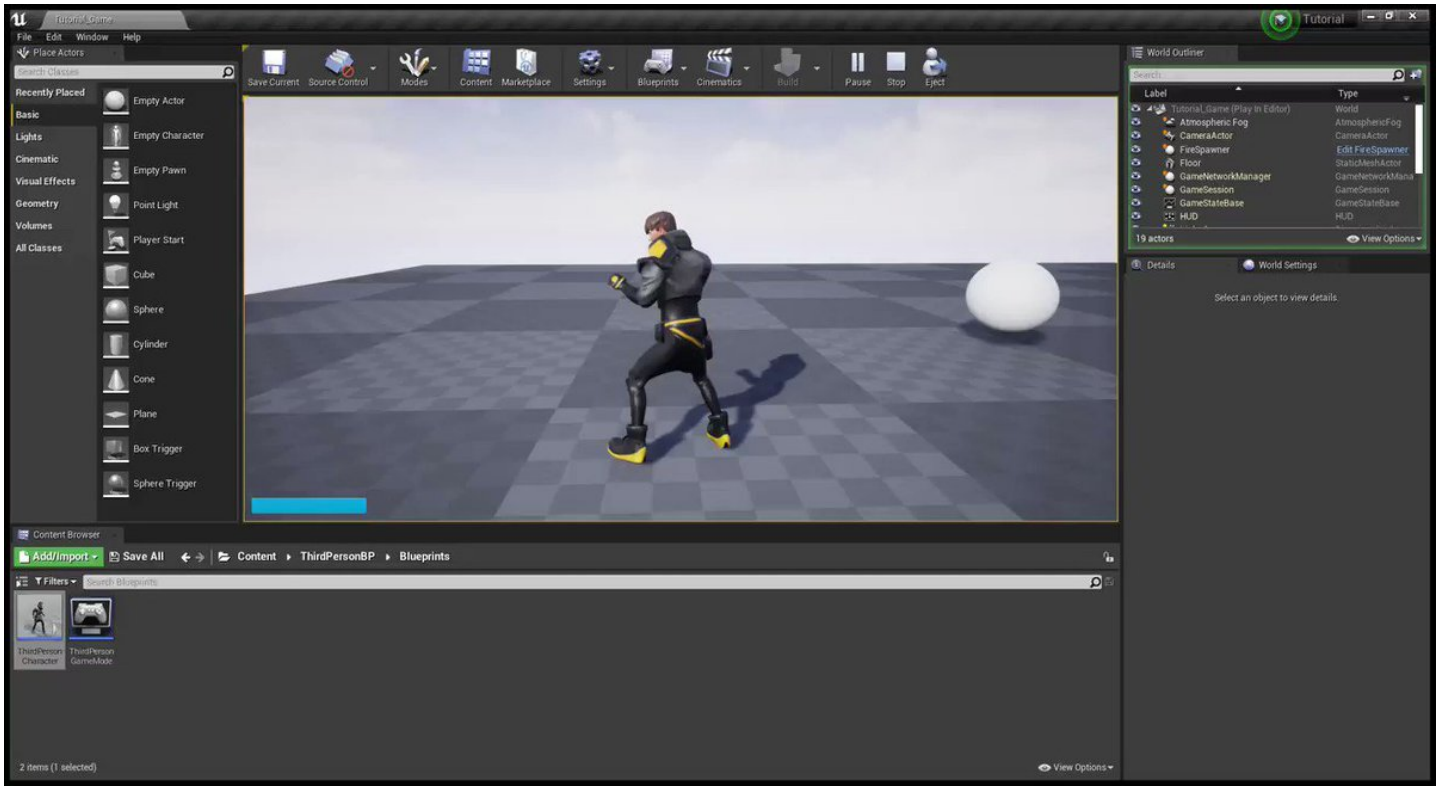
It’s been a minute since I’ve written code. So, I figured that now might be a good time to start learning how to use the Blueprint system in #UnrealEngine. I felt that it’d be interesting to share my progress and mistakes. So here goes!

■

1.
Firstly, I made use of the auto-rigging feature in Mixamo to give my character a skeleton. This allows you to use the Mixamo animations for the character in Unreal Engine.



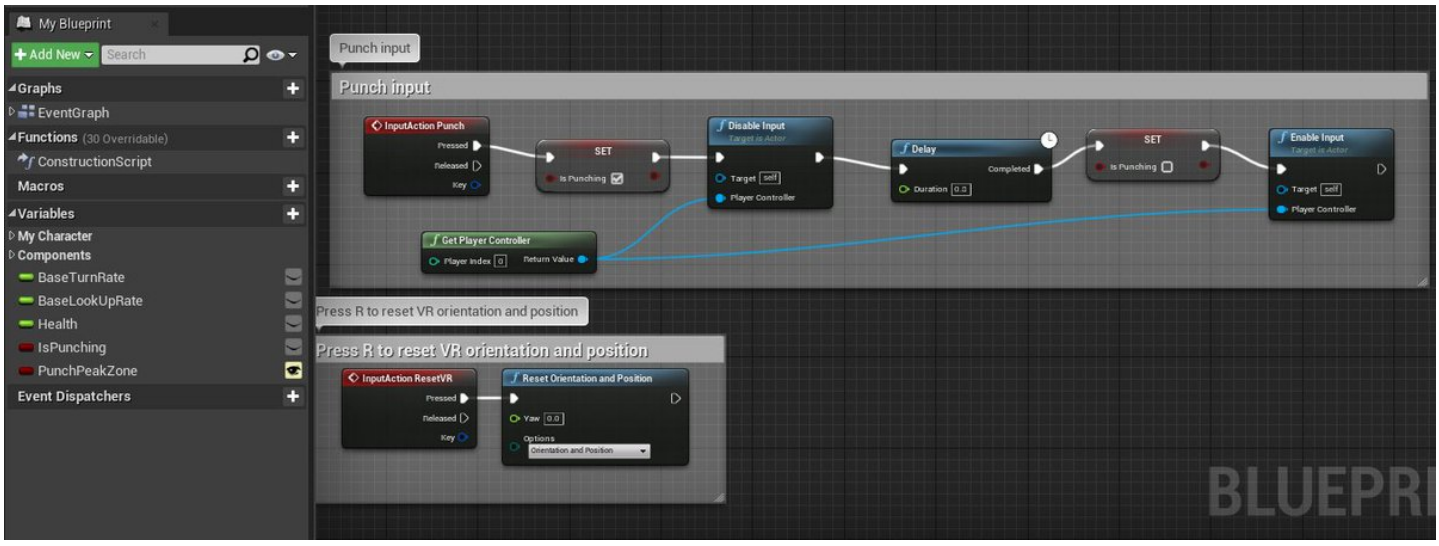
2.
In the Animation Blueprint, I tried to add a punching state to the character. The problem I faced initially was that the character glides while punching. This occurs because multiple states of the animation are active (as their transition conditions are satisfied).



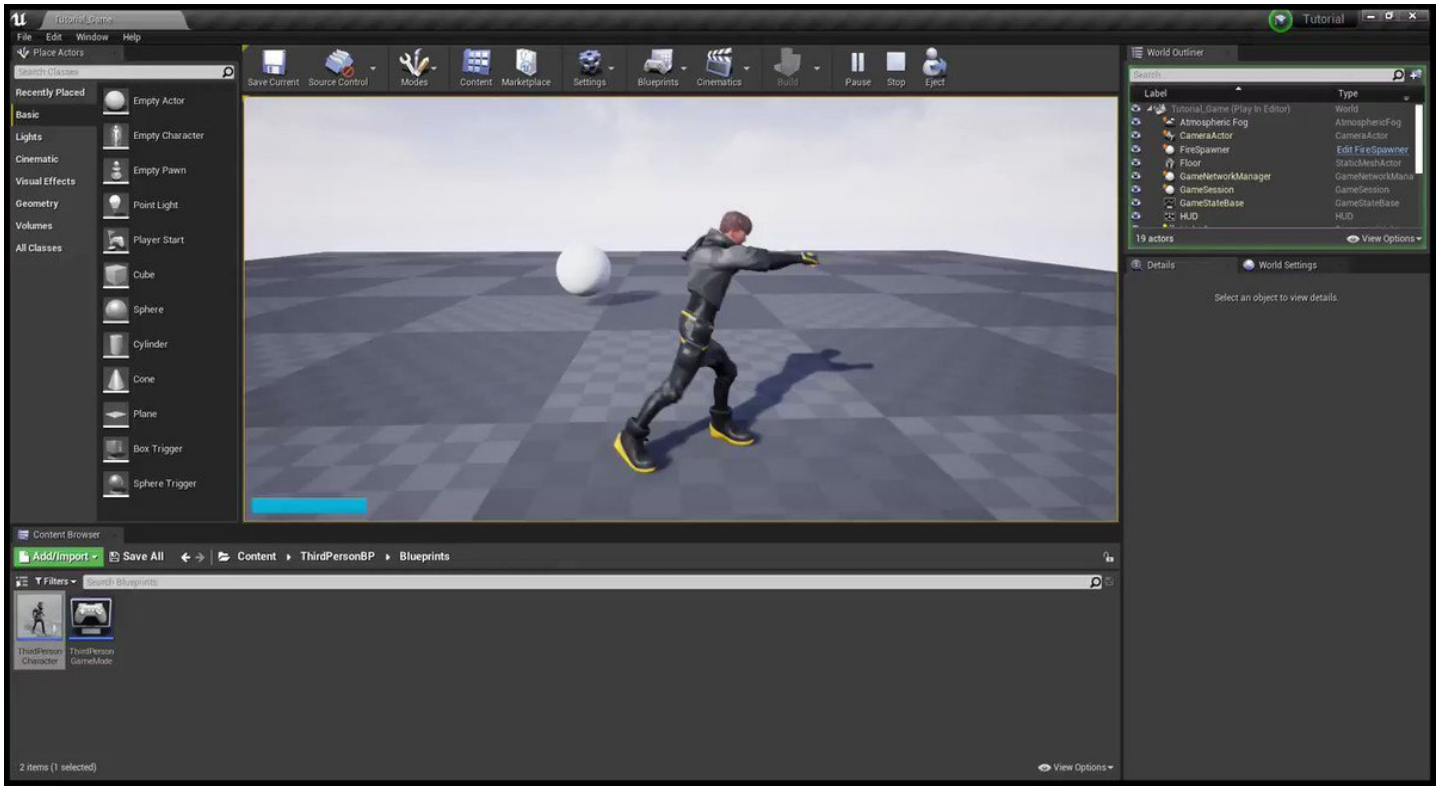
3.
There are a couple of solutions for this:

■Blending the punch and idle states (character can punch while running) by using the Layered Blend Per Bone node.

■Disabling input while the punch occurs.

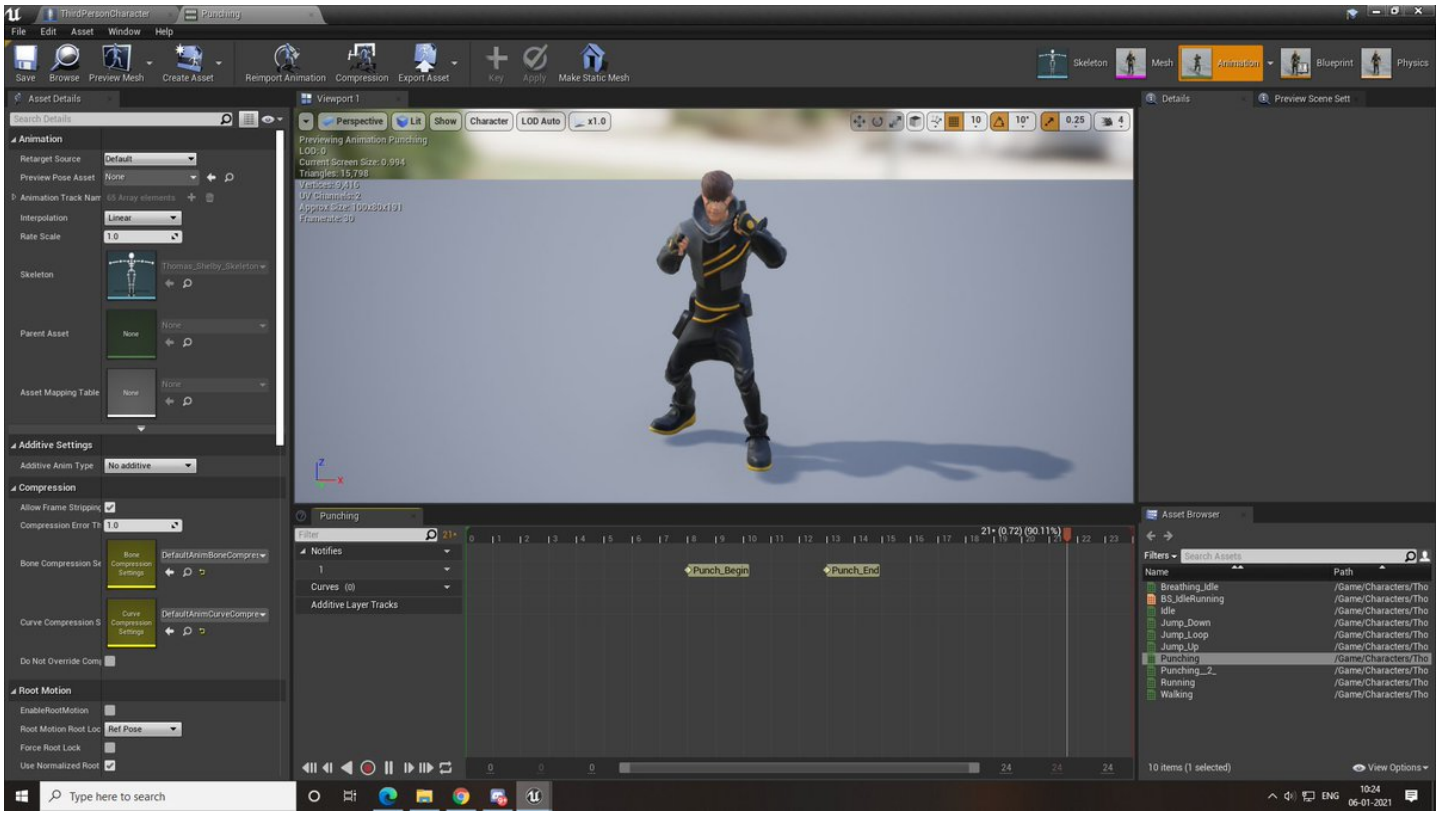


4.
I didn’t like the outcome when I blended the animations. as the hip rotates more than we’d like it to. This leads to the character punching upwards and to the left. This isn’t favorable as the enemy is usually straight ahead. Disabling the input worked way better!



5.

The punch's effect takes place before its impact is felt. To solve this issue, we add notifies to the punch animation to indicate whether the punch has reached its zone of impact. These notifies create events for which we can write code. During impact, I spawned an explosion.



6.

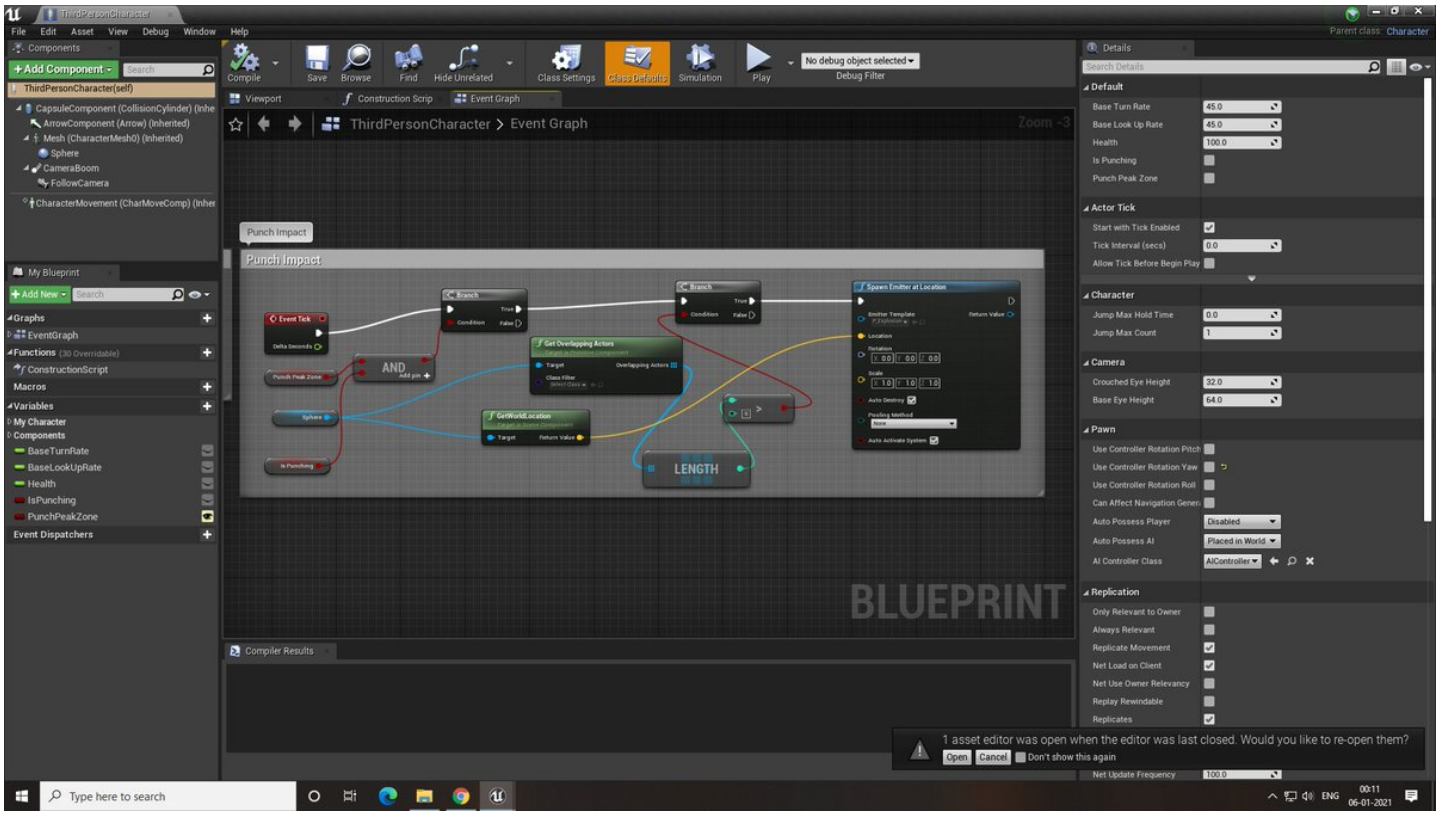
A small bug I came across was that the emitter doesn't get destroyed as soon as the punch ends in some cases. I realized that the boolean used to check whether the punch was in the zone of impact wasn't being set back to false.

As a result, my man turned into Bakugo lol.



7.

I’m assuming this has something to do with the tick event, which runs every frame and the duration of the punch. To solve this issue, I made use of another boolean which checked whether the punch animation was ongoing by setting it as one of the conditions for the branch.



8.

Then, I tried to set up the jump functionality of the character. One thing I learned was that creating a single state for the jump doesn't work as the duration of the animation may not match that of the jump.



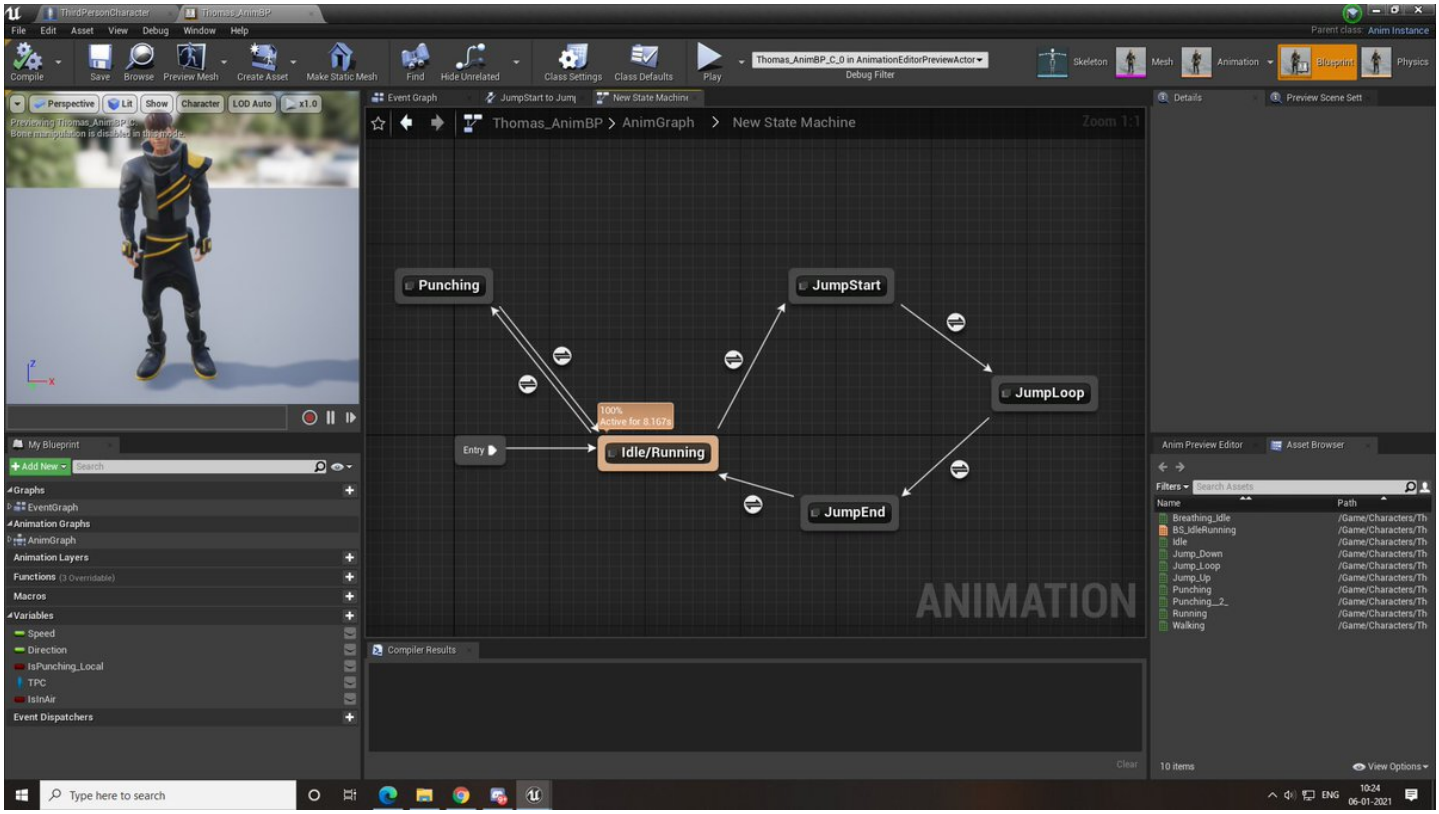
9.

The solution for this is to break the jump down into 3 states:

■Jump Start

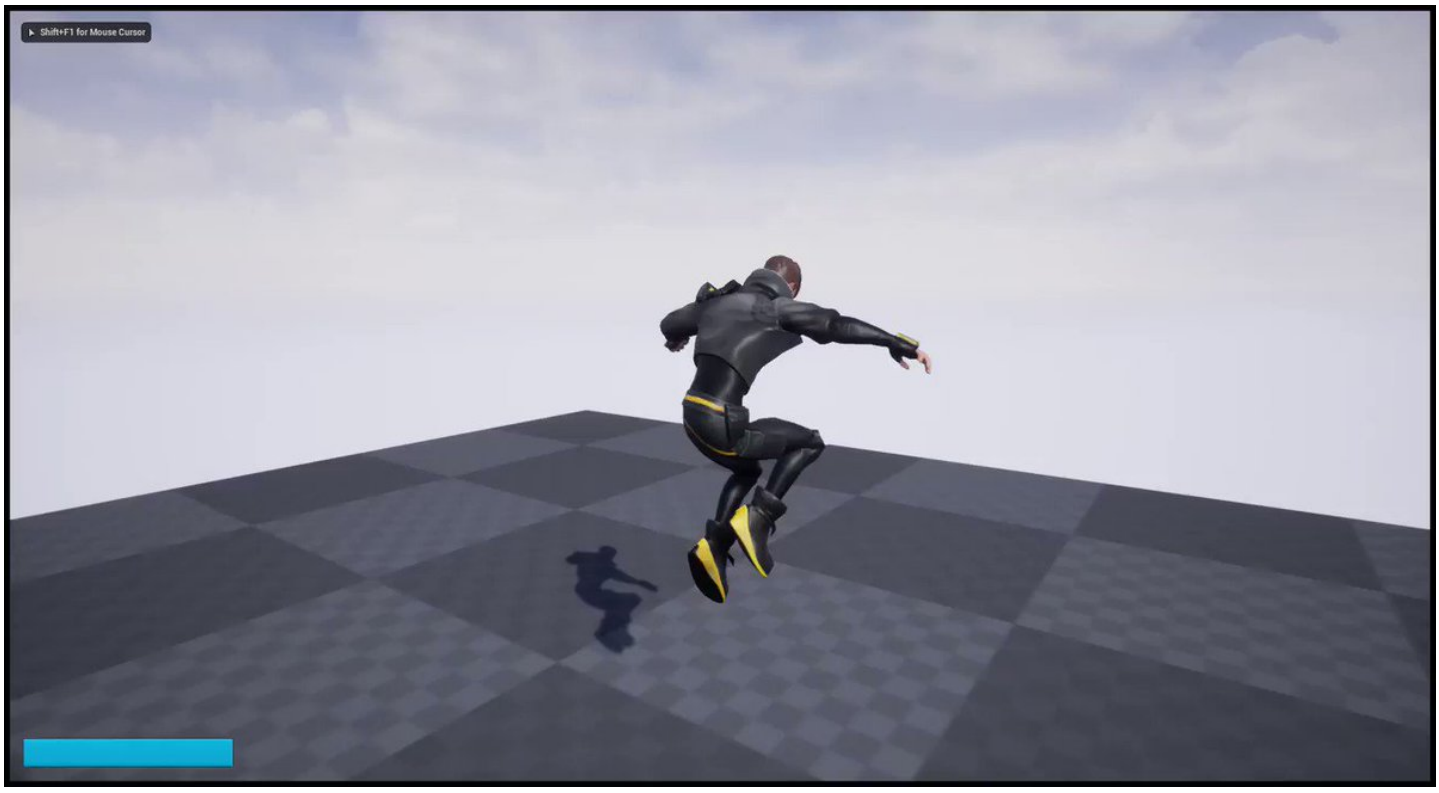
■Jump Loop

■Jump End



10.
Initially I tried using a single animation and divided it into three chunks. This didn't work as the transition b/w the states wasn't smooth enough.

The best solution is to find loop animations in Mixamo for the jump, fall and landing.



Here's a cool tutorial to set up your character in Unreal Engine using Mixamo!
https://t.co/NbpT6mHJei

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