Rapid Ball Game

Setting up the pawn

Problem:

For the input the player can use either the mouse or the keyboard so for the vertical movement I took the input using the InputAxis LookUp event and the InputAxis MoveForward event. I took the axis values and then passed them to a function that added the vertical thrust but that didn’t work. During simulation either the mouse or the keyboard would work but never both. Same with the horizontal movement, for them I took input from InputAxis Turn and InputAxis MoveRight but only the effect of one of the input devices would be seen. Usually if the mouse worked for the vertical movement, then the keyboard wouldn’t move for the horizontal movement.

Reason:

The above events were called every tick. At any given time, I would be using only 1 device so the other device’s axis values would be 0 which is why only 1 of the devices could be used for movement during simulation because when we use the other device the velocity immediately gets updated to 0 when the other event is called as the events are in a queue.

Solution:

Instead of passing the axis values directly to the function from the events, I made 2 variables – LookUpAxisValue & and MoveForwardAxisValue. Then I extended the Axis value pin from the Look Up event and added a set LookUpAxisValue node and I extended the Axis value pin from the MoveForward event and added a set MoveForwardAxisValue node.

Then in the Add Thrust function I decide which axis value to use by comparing their absolute values (as axis values can be -ve depending on the direction) and using whichever one was the greater. This axis value would then be multiplied with the ThrustMultiplier and the result would be applied on the body in the Z direction.

We do the same for applying the horizontal thrust.