## Hand Animation:

The hand animation is in the folder called "PointAnimSystem". The is based on the following <u>YouTube Video</u>\*. Below outlines the video's methodology and settings applied to generate VR hand animation.

- Select the any hand prefab. (NOTE: Both hand prefabs will have the same properties
  For simplicity the left hand will be referred.).
- Once selected look at the inspector tab for the following properties:
- (1) **Animator:** This is set as follows:
  - a. Controller: There is a single animator both for the left and right hand –
    handAnimControler. The Controller constricts of the entry state that leads to a blend tree:
    - i. The blend tree consists of:
      - two animations (idleAnim and pointAnim). Animations can be added or remove on the motion component in the inspect tab once the blend tree is selected. Animations are added as follows:
        - a. Select the "+" icon with a drop-down arrow.
        - b. Select the "Add Motion Field".
        - c. Drag and drop desire animation into the "None(motion)" field.
        - d. Then set the Pos X and Pos Y. This is typical ideal for 4 different animations as you can set the X/Y positions as either the following: (0,0), (0,1),(1,0) and (1,1).
        - e. The last column changes the animations speed. This is initially set to 1 and can be kept at 1. It's Okay.
      - 2. two entry values (grip and trigger). These values correspond to the grip and trigger values as 0 being unpressed and 1 pressed. These values further related to the X/Y positions mentioned above X/grip and Y/Trigger. Example at position (0,0) the idle animation is triggered.
  - b. Avatar: **SK HandAvatar**.
  - c. Apply root motion: unchecked.
  - d. Update Mode: Normal
  - e. Culling Mode: Cull Update Transform.
- (2) HandController Script: The script collects the grip and trigger values when pressed. This is done by collecting the XRI LeftHand/Select (Input Action Reference) and XRI LeftHand/Activate (Input Action Reference) that are selected for the Controller Action Grip and Trigger respectively in the inspector tab. The XRI LeftHand/Select (Input Action Reference) are selected (in the inspector tab) by clicking on the circle with a dot in its center. That opens a dropdown list you can search from.

- (3) Other animations configurations: This is the last time to get the animations working completely.
  - a. Search for "XRI Default Input Actions (input Action)" and double click it when
  - b. Click on the XRI LeftHand (same applies to the RightHand as well)
    - i. On the Action column select "Select". Set these properties as on the property's column (last column):
      - 1. Action Type: Value
      - 2. Control Type: Axis
    - ii. Then click on the arrow before the word "Select".
      - Select the drop arrow for the path field and follow this path:
        XR Controller > Controller Lefthand > Optional Controls >
        Grip
    - iii. On the Action column select "Activate". Set these properties as on the property's column (last column):
      - 1. Action Type: Value
      - 2. Control Type: Axis
    - iv. Then click on the arrow before the word "Activate".
      - Select the drop arrow for the path field and follow this path: XR Controller > Controller Lefthand > Optional Controls > Trigger

**NOTE**: This all relates to in getting the values from the controller to the blend tree.

(4) \*In the link is not accessible here is the URL for it: https://www.youtube.com/watch?v=qThIKMMHSpU&t=1013s&ab\_channel=DanielS tringer