

Developer

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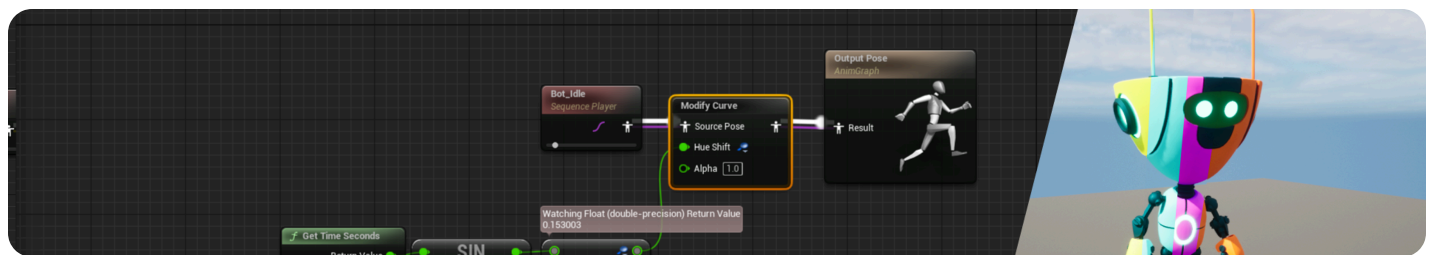
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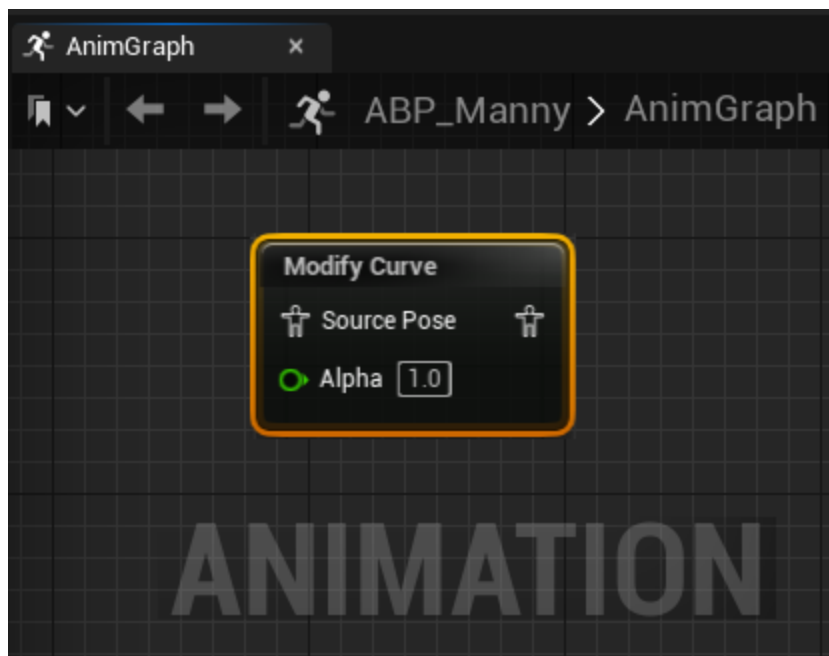
/ Modify Curve

Modify Curve

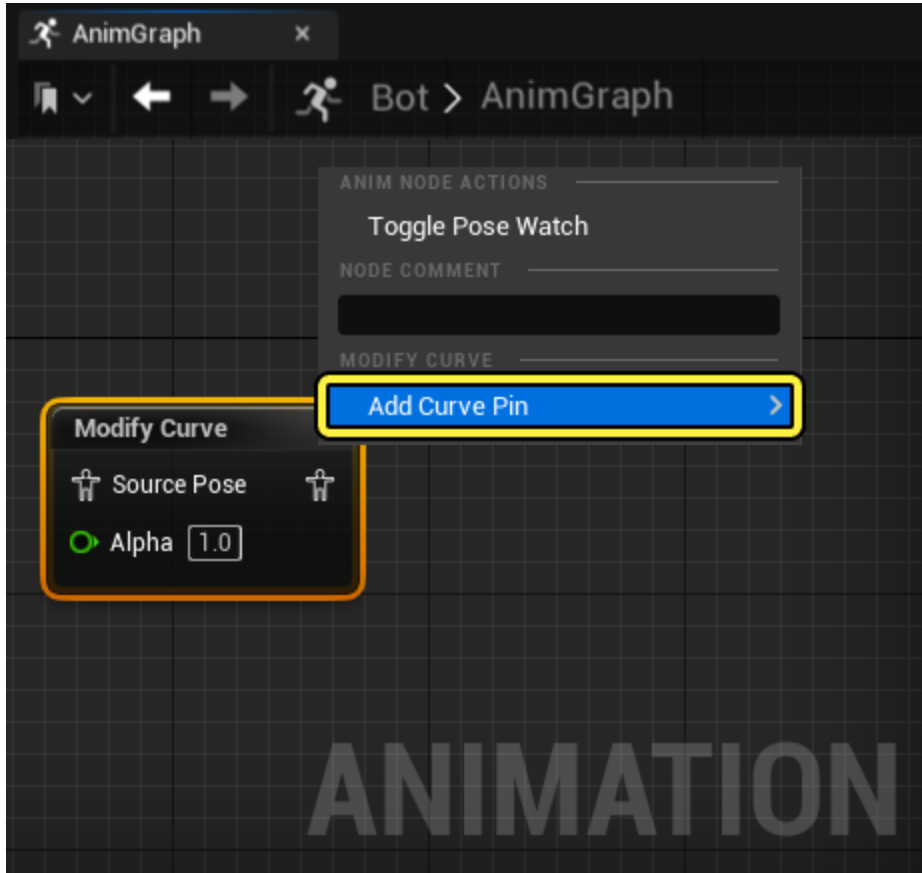
Describes the Modify Curve node which can be used to modify animation curves with arbitrary logic inside Animation Graphs.



With the **Modify Curve** [Animation Blueprint](#) node, you can blend, scale and remap [Animation Curves](#) at runtime.



By **right-clicking** the Modify Curve node in the **AnimGraph**, you can select one of the character's [Animation Curves](#) from the **Add Curve Pin** option in the context menu to add a pin that corresponds to the selected [Animation Curve](#).



Here, a **Hue Shift** curve has been added to the Modify Curve node to alter the hue of the characters material.

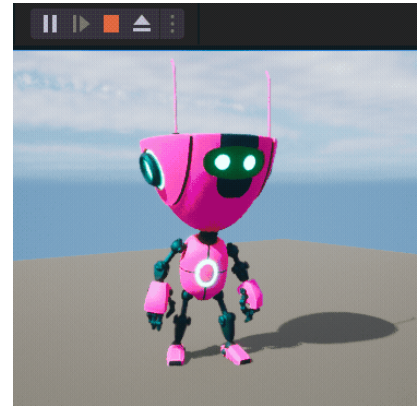
Description	Graph	Results
<p>Here the Hue Shift curve has been set to a static value of 1.0 on the Modify Curve Node in the AnimGraph. This returns a static value from the curve, resulting in the character displaying a single color material.</p>	A screenshot of the AnimGraph interface during simulation. A 'Bot_Idle Sequence Player' node is connected to a 'Modify Curve' node. The 'Modify Curve' node has two pins: 'Hue Shift' set to 1.0 and 'Alpha' set to 1.0. The background has a 'SIMULATING' watermark.	A 3D render of a small, orange and black robot character standing on a grey ground against a blue sky. The robot has a circular head with two antennae and a single body color.

Description

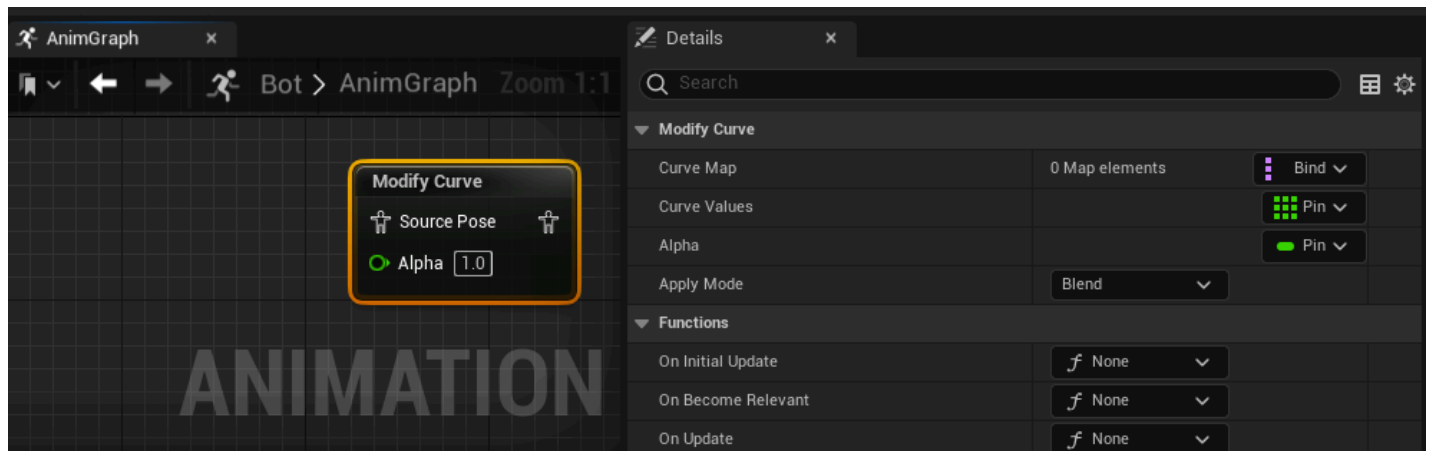
Graph

Results

Here a **sine wave** is set to drive the **Hue Shift** curve value on the **Modify Curve** node in the **AnimGraph**. This returns a dynamic value, resulting in the character displaying a rotating color material.



Property Reference



Here you can reference a list of the **Modify Curve** node's properties.

Property

Description

Curve Map

Here you can set any curve maps. Curve maps are associative, unordered containers that associate a set of keys with a set of values. Each key in a map must be unique, but values can be duplicated.

Curve Values

Curve values are the values used to drive curve modifications. You can add a new curve by right-clicking the **Modify Curve** node in the **AnimGraph** and selecting one of the character's Animation Cures from the **Add Curve Pin** option in the context menu. These added curve pins can then drive their respective curves with a value.

Property	Description
Alpha	Set the alpha value to control the blend of the modified curve pose and the source animation pose. By default this property appears as a pin on the node in the AnimGraph .
Apply Mode	<p>Set the method to apply the modification to the Animation Curve. The application modification options include:</p> <p>Add: Add new value to input curve value. Scale: Scale input value by new value. Blend: Blend input with new curve value, using alpha setting on the node. Weighted Moving Average: Blend the new curve value with the last curve value using Alpha to determine the weighting. For example, .5 is a moving average, higher values react to new values faster lower slower.</p> <p>Remap Curve: Remap the new curve values between the Curve Values entry and 1.0. For example, .5 in Curve Values makes 0.51 map to 0.02.</p>