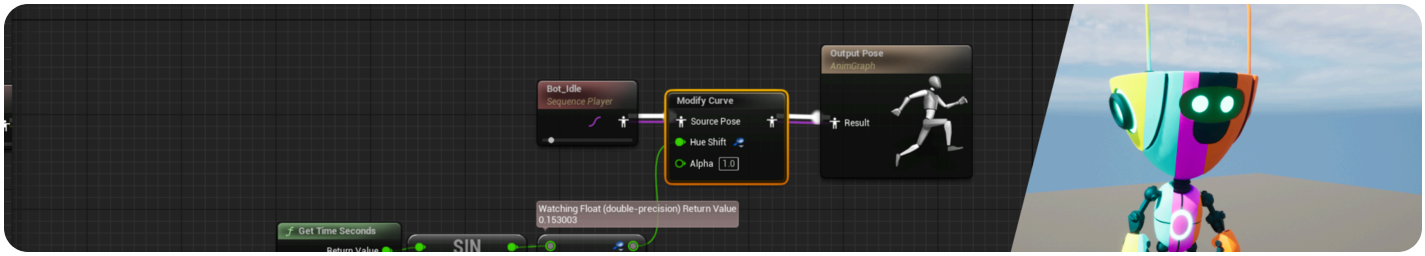
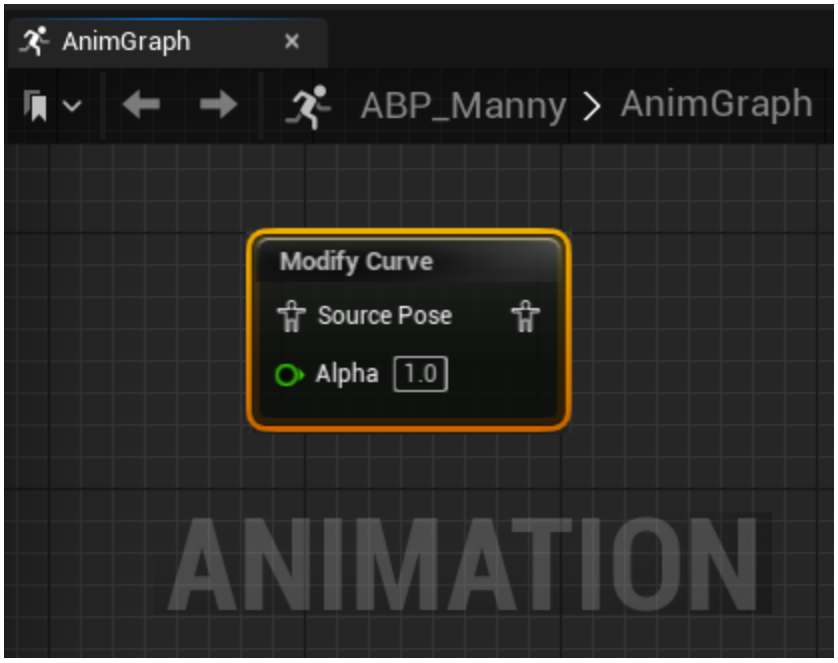
Modify Curve

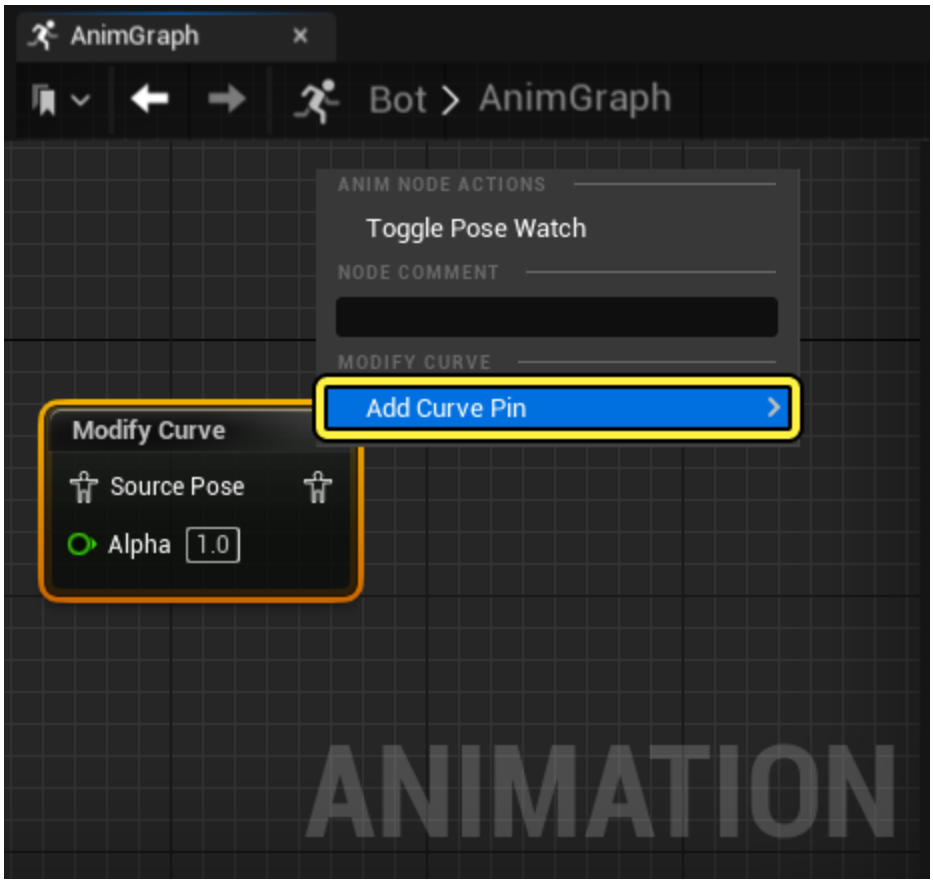
Describes the Modify Curve node which can be used to modify animation curves with arbitrary logic inside Animation Graphs.



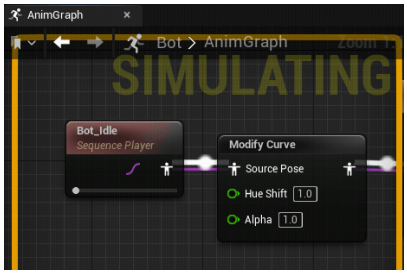
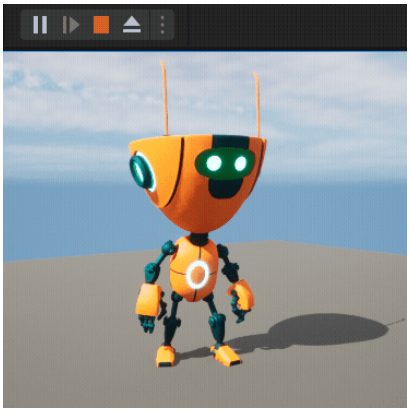
With the **Modify Curve** Animation Blueprint node, you can blend, scale and remap Animation Curves at runtime.

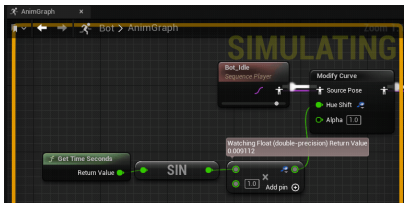


By **right-clicking** the Modify Curve node in the **AnimGraph**, you can select one of the character's Animation Curves from the **Add Curve Pin** option in the context menu to add a pin that corresponds to the selected Animation Curve.

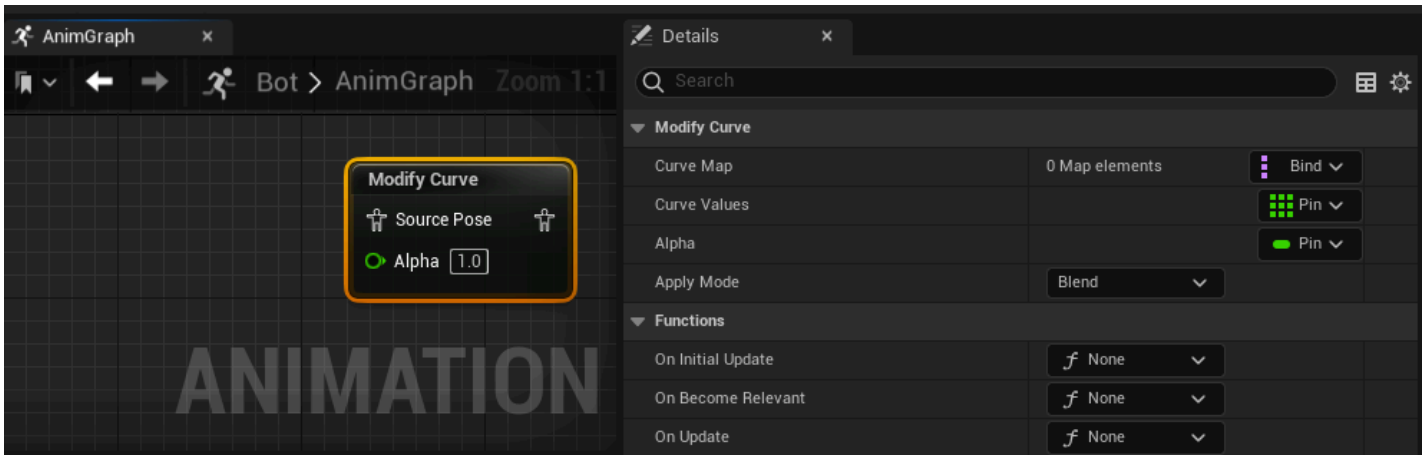


Here, a **Hue Shift** curve has been added to the Modify Curve node to alter the hue of the characters material.

Description	Graph	Restults
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.		

Description	Graph	Restults
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	Set the method to apply the modification to the Animation Curve. The application modification options include: **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**: Bend the new curve value with the last curve value using Alpha to determine eht weighting. For example, .5 is a moving average, higher values react to new values faster lower slower. **Remap Curve**: Rempas 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.