

AnyShape Button plugin v1.0

How to Install?

Enable the AnyShape Button plugin from the list of plugins (reload the Editor, if needed).

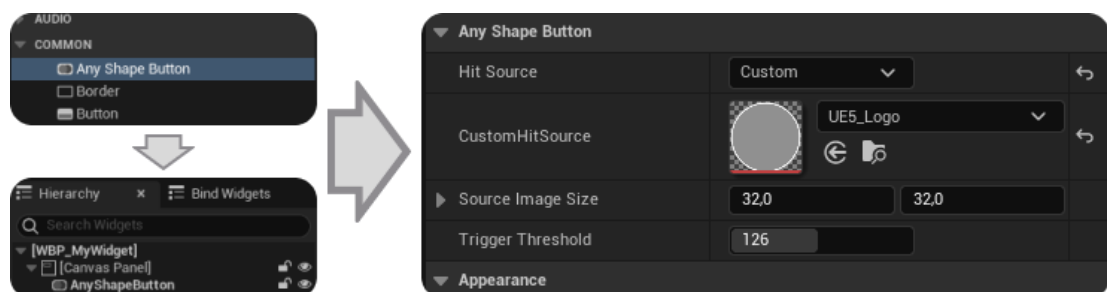


How to Use?

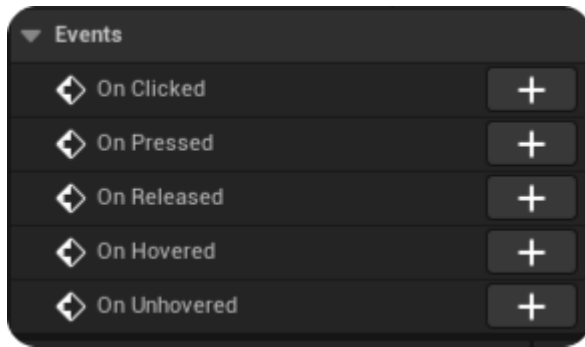
([Link to Example Project](#))

In Your UMG Widget:

- In the *Palette* list find the *Common* tab and add an *Any Shape Button* to the Hierarchy.
- Use the desired settings by adding a specific texture or material mask in *Hit Source* -> *Custom* -> *CustomHitSource* (or *Normal*, *Hovered*, etc.)
- Use *Trigger Threshold* to set detection of hit value from 0 to 255



- Use *Events* for your needs



Done!

Advanced info

General Features

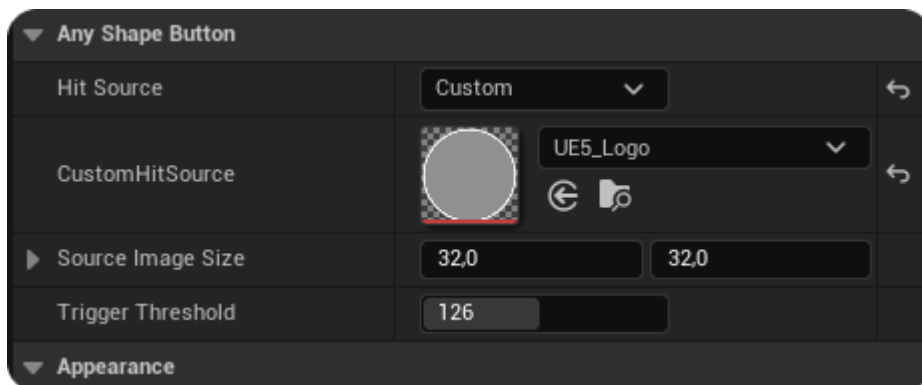
- Extends the functionality of regular buttons by using a texture mask to determine the cursor's intersection with the button's geometry.
- The hit geometry of the button can be defined using either the texture mask from the button's default style or a custom texture, depending on the developer's choice.
- There is no need to worry about accurately tracking the intersection of button geometries anymore.
- Developers can now use any shape for buttons, not limited to standard geometric forms.
- Simplifies the process of defining button geometries, saving time and effort for developers.

AnyShape Button

Widget with advanced button functionality.

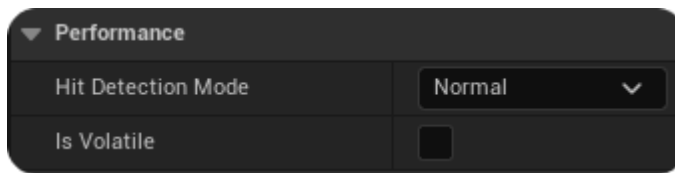
Settings:

- *Hit Source* – sources for hit testing:
 - *Normal* – the source for hit testing will be the texture or material from the "Normal" button style (if available).
 - *Hovered* – the source for hit testing will be the texture or material from the "Hovered" button style (if available).
 - *Pressed* – the source for hit testing will be the texture or material from the "Pressed" button style (if available).
 - *Disabled* – the source for hit testing will be the texture or material from the "Disabled" button style (if available).
 - *Custom* – the source for hit testing will be a custom texture or material (if available).
 - *CustomHitSource*: The source (material or texture) used for hit testing.
 - *SourceImageSize*: The texture size required when using a material, determines the resolution (precision) for hit testing.
- *Trigger Threshold* - a numerical value ranging from 0 to 255. (126 default value)
0 - means that the hit detection will trigger if the alpha channel of texture has a value of 0 (fully transparent).
255 - indicates that the hit detection will trigger when the cursor is over the area of texture where the alpha channel value is 255 (fully opaque).



Performance:

- *Hit Detection Mode* – Selecting the mode for hit detection:
 - *Normal* – In this mode, hit detection will occur only when the button is activated (e.g., during movement or click events).
 - *Advanced* – In this mode, hit detection will be continuous as long as the cursor is inside the button's geometry. This is suitable for animated widgets.



Limitation

- AnyShape Button does not support hit testing of child widgets unless it is another AnyShape Button. Any widget nested inside an AnyShape Button (text, native button, etc.) will not respond to its own hit testing, even if this option is enabled.
- AnyShape Button does not support animated materials. This means that material with animation will not function correctly for hit detection.
- AnyShape Button requires specific settings for the texture mask:
 1. **Texture Group** should be set to **UI**
 2. **Compression Settings** should be set to **UserInterface2D (RGBA)**

