



# by Tag of Joy

This document describes usage guidelines for the **UI Text Effects** developed by **Tag of Joy**. The effects should be purchased on the Unity Asset Store (http://u3d.as/n57). Sharing or distribution is not permitted.

There are currently **14 effects** included in the package:

- Better Outline
- Gradient Color
- Depth Effect
- Soft Shadow
- Outer Bevel
- Skew Effect
- Curve Effect
- Character Spacing
- Limit Visible Characters
- **ToJ Shadow** (same effect as the default Unity shadow, but works properly with other effects from this package)
- **ToJ Outline** (same effect as the default Unity outline, but works properly with other effects from this package)
- Overlay Texture (uses a custom shader, included in the package)
- Inner Bevel (uses a custom shader, included in the package)
- Inner Outline (uses a custom shader, included in the package)

All effects are made for the standard Unity UI Text and work with each other. They also support Rich Text.



## **CONTACT INFORMATION**

You can contact the developers of the UI Text Effects by e-mail: info@tagofjoy.lt

Feel free to send us suggestions for improved or new text effects!

#### **GENERAL NOTES**

- The effects are applied by adding them to the UI Text objects in the scene. They work with the
  standard Unity UI Text and should be used in the same way as the default Unity UI effects. They
  can be located in the menus: Component > UI > ToJ Effects.
- The "**Text Area**" term is sometimes used in this document. It means the actual area that the text characters cover. This is usually smaller than the Rectangle of the text component.
- Overlay Texture, Inner Bevel and Inner Outline require a shader named "Fancy-Text" (with a
  different shader they will not work). These effects are therefore called "Fancy Effects". When these
  effects are used, apply the "Fancy-Text" material (included in the imported assets) on the Text
  component, in the Material field.
- Fancy Effects do not generate any additional geometry, so it's usually better to use them rather than regular effects. However, depending on the font used, Fancy Effects might introduce some small visual issues on Inner Bevel and Inner Outline.
- When Fancy Effects are used, the standard Unity shadow and outline will not work as intended. Therefore, ToJ Shadow and ToJ Outline were added to the package. They have the same effect as the standard effects, but work properly with the Fancy Effects.
- No matter what order the Fancy Effects are used in, these effects will still be applied in the same order: Overlay Texture first, then Inner Bevel and, finally, Inner Outline.
- Inner Bevel and Inner Outline might not work properly with dynamic fonts (when more characters are added to the text, the depth of the bevel and the thickness of the outline can change). This is due to a bug in Unity, which should be fixed in future Unity releases. The effects will be updated when the fix is out.
- Be careful when using multiple effects that generate additional geometry. The text might become a heavy mesh as a result.

## **BETTER OUTLINE**

Better Outline effect is very similar to the standard Unity Outline effect, but has less issues (holes) around the characters. Generates additional geometry.

Effect Color - the color of the outline.

**Effect Distance** - the thickness of the outline on both, X and Y, axes.

Use Graphic Alpha - should the effect inherit the transparency of the initial color and previously



applied effects?

#### **GRADIENT COLOR**

Gradient Color effect adds the possibility to use gradient colors on the text. *Doesn't generate* additional geometry.

**Gradient Mode** - the effect can be applied locally (for each character), globally for the whole text area or globally for the whole rect.

Gradient Direction - the gradient can be vertical or horizontal.

**Color Mode** – the gradient can fully override the initial text color, but it can also be added or multiplied with the initial color.

First Color - the first (upper or left) color of the gradient.

**Second Color** - the second (lower or right) color of the gradient.

**Use Graphic Alpha** - should the effect inherit the transparency of the initial color and previously applied effects?

## **DEPTH EFFECT**

Depth Effect can be used when the text needs to have visual depth. Generates additional geometry.

**Effect Color** - the color of the depth effect.

**Effect Direction and Depth** – X and Y values define the direction of the effect and also how much depth there should be.

**Depth Perspective Strength** - the perspective strength of the depth over X and Y axes.

**Only Initial Characters Generate Depth** – should only the initial characters generate the depth effect? When some other effects (e. g. outline) are applied before this one, there might be a lot of new geometry generated in the final result. This flag reduces the new geometry in those cases by only using the initial characters (without other effects) for the depth effect.

**Use Graphic Alpha** – should the effect inherit the transparency of the initial color and previously applied effects?

#### **SOFT SHADOW**

Soft Shadow is similar to a standard shadow, but it can be softened (blurred). Generates additional geometry.

Effect Color - the color of the shadow. Reduce alpha for softer shadows.

Effect Distance - the distance of the shadow on each axis.

Use Graphic Alpha - should the effect inherit the transparency of the initial color and previously



applied effects?

**Blur Spread** - the amount of softness/blur. Caution: the shadow will look pretty bad with higher values. This is because the effect is optimized to generate as little additional geometry as possible.

**Only Initial Characters Drop Shadow** – should only the initial characters drop the shadow? When some other effects (e. g. outline) are applied before this one, there might be a lot of new geometry generated in the final result. This flag reduces the new geometry in those cases by only using the initial characters (without other effects) for the shadow.

## **OUTER BEVEL**

Outer Bevel creates an effect of the text having lit edges (highlighted and shaded) outside the characters. Generates additional geometry.

**Highlight Color** - the color of the highlighted side of the bevel.

**Shadow Color** - the color of the darker side of the bevel.

**Bevel Direction and Depth** - X and Y values define the direction of the effect and also how much bevel thickness there should be.

**Use Graphic Alpha** - should the effect inherit the transparency of the initial color and previously applied effects?

## **SKEW EFFECT**

Skew Effects enables the possibility to add skew transformations to the text. It can be used to achieve vertical, horizontal perspective or just skew the text area. *Doesn't generate additional geometry*.

**Skew Mode** - the effect can be applied for the whole text area or for the whole rect.

**Upper Left Offset** - X and Y values of the offset on the top left corner of the text area.

**Upper Right Offset** - X and Y values of the offset on the top right corner of the text area.

Lower Left Offset - X and Y values of the offset on the bottom left corner of the text area.

Lower Right Offset - X and Y values of the offset on the bottom right corner of the text area.

#### **CURVE EFFECT**

Curve Effect uses a curve to transform the area vertically. It can be used to add waves, bends or other shapes to the text. Useful for title texts. *Doesn't generate additional geometry*.

**Curve Mode** - the effect can be applied for the whole text area or for the whole rect.

Curve - the curve, which will be used to transform the text over the width of the text area.

**Strength** - the multiplier that is used to reduce or increase the curvature of the effect.



## **CHARACTER SPACING**

Character Spacing is used to increase or decrease the distance between each character. Since Unity does not have this functionality in its UI Text, this effect can be used to easily change the character spacing. Have in mind that this effect does not affect word wrapping of the text, since it is applied after Unity wraps the text. **Note:** this effect should be the first one on the list of all effects to work as intended. *Doesn't generate additional geometry.* 

**Offset** – positive or negative offset of character spacing (negative means that the spacing will decrease, in comparison to the original spacing; positive will increase).

#### LIMIT VISIBLE CHARACTERS

Limit Visible Characters is an effect used to easily limit the visible characters of the text. It is useful for typewriter effects, but can be used in any situation. **Note:** this effect should be the first one on the list of all effects to work as intended. *Reduces or keeps geometry*.

**Visible Character Count** - the amount of characters that should be visible (if the number is higher than the amount of originally visible characters, the effect doesn't change anything; if the number is equal or lower than 0, no characters will be visible).

## **TOJ SHADOW**

ToJ Shadow is the same effects as the standard Unity shadow, but it should be used instead of the standard one when any of the Fancy Effects are used. *Generates additional geometry*.

**Effect Color** - the color of the shadow.

**Effect Distance** - the distance of the shadow on each axis.

**Use Graphic Alpha** – should the effect inherit the transparency of the initial color and previously applied effects?

## **TOJ OUTLINE**

ToJ Outline is the same effects as the standard Unity outline, but it should be used instead of the standard one when any of the Fancy Effects are used. *Generates additional geometry*.

Effect Color - the color of the outline.

**Effect Distance** - the thickness of the outline on both, X and Y, axes.

**Use Graphic Alpha** – should the effect inherit the transparency of the initial color and previously applied effects?

# **OVERLAY TEXTURE**

Overlay Texture effect adds the possibility to overlay a custom texture on the text. **Note**: It will be applied on top of the Gradient Color effect, even if it is higher on the component list. **Note**: for this effect



to work, apply the Fancy-Text material on the Text component (included in the assets). *Doesn't generate* additional geometry.

**Texture Mode** - the texture can be applied locally (for each character), globally for the whole text area or globally for the whole rect.

**Color Mode** - the texture can fully override the initial text color, but it can also be added or multiplied with the initial color.

Overlay Texture - the texture that will be applied onto the text.

## **INNER BEVEL**

Inner Bevel creates an effect of the text having lit edges (highlighted and shaded) inside the characters. **Note**: It will be applied on top of the Gradient Color effect, even if it is higher on the component list. **Note**: for this effect to work, apply the Fancy-Text material on the Text component (included in the assets). *Doesn't generate additional geometry*.

**Highlight Color Mode** – the highlight can fully override the initial text color, but it can also be added or multiplied with the initial color. **Note**: this setting doesn't have any effect on Shader Model 2 level GPUs – it's always treated as "Override".

Highlight Color - the color of the highlighted side of the bevel.

**Shadow Color Mode** – the shadow can fully override the initial text color, but it can also be added or multiplied with the initial color. **Note**: this setting doesn't have any effect on Shader Model 2 level GPUs – it's always treated as "Override".

**Shadow Color** - the color of the darker side of the bevel.

**Bevel Direction and Depth** – X and Y values define the direction of the effect and also how much bevel thickness there should be.

#### **INNER OUTLINE**

Inner Outline effect applies an outline inside the characters of the text. **Note**: It will be applied on top of the Gradient Color effect, even if it is higher on the component list. **Note**: for this effect to work, apply the Fancy-Text material on the Text component (included in the assets). *Generates additional geometry*.

**Color Mode** – the outline can fully override the initial text color, but it can also be added or multiplied with the initial color.

Outline Color - the color of the outline.

Outline Thickness - the thickness of the outline.