CurvedUI Documentation

Preface.

Hello there! Thanks for using CurvedUI. If you run into any problems or want to offer feedback, feel free to contact me at curvedui@chisely.com. Have fun building curved interfaces!

Daniel from chisely.com

How to get started with CurvedUI

1. Create a Canvas and switch it to World Space mode.
2. Add **CurvedUISettings** component to Canvas gameobject.
3. Set desired angle in **CurvedUISettings** component.
4. Start the game.

You can change the UI cyllinder angle at runtime using **Angle** property in **CurvedUISettings** component. CurvedUI will automatically update child gameobjects.

Technical Stuff - How does it work?

CurvedUI works by bending Vertices of UI elements in Canvas's object space. To achieve a nice, quality curve, a quad tessellation is performed first. Number of created quads depends on desired angle and size of the UI object. Small UI objects may not get tessellated at all, while full screen Panels will require a lot of quads to be drawn properly.

Best Practices

While CurvedUI has been optimized to use as few processor cycles as possible, there are few edge cases where things can go south on you pretty fast. Here are some tips to improve performance:

Avoid large Panels.
things that span from edge to edge of your canvas will hit you hard. These require a lot of quads to be created and a lot of vertices to be mapped to a curve.

Avoid large rotated panels.
To improve performance, CurvedUI tessellates non-rotated objects only in x-direction. If you rotate one, we have to build full quad mesh to map that sucker.

Avoid resizing a lot of objects at once.
Curved UI has to tessellate UI object every time it changes size. Don't do it too often to many canvas-wide panels.

Avoid resizing large rotated panels.
This is absolute worst case scenario as we have to retessellate in both directions and map all the vertices every frame you do such an evil thing. 20 rotated panels (20 x10 quads) being resized every frame will make my desktop i5 slow down to 15 fps. Just don't.

Try lowering the quality.
Set Curve Segments Multiplier variable on your CurvedUISettings component to less than 1. It will make UI use less segments. This will greatly improve performance if you're in a pinch, but can result in ugly jaggedness.

Experimental Features

TextMeshPro Support
CurvedUI supports basic functionality of TextMeshPro beta 3.1. To enable this feature, go to your player settings and add new custom define: CURVEDUI_TMP
To learn how to do it, visit http://docs.unity3d.com/Manual/PlatformDependentCompilation.html and search for “Platform Custom Defines”

CurvedUI will properly bend the TMP text and automatically add needed components. It will also update the generated mesh whenever there is a change in TMP text properties. Unfortunately, scripts that modify vertices of TMP text object to achieve additional visual effects will not work with CurvedUI. You must also be aware that moving the TMP object, or its Canvas will result in its mesh being regenerated. This will hit your performance hard. if you have many TMP objects on your canvas. There are also some cases when a change to TMP object will not trigger new mesh generation by CurvedUI and no change will be visible. You can then set Dirty flag to true on CurvedUITMP component to force new mesh generation.