Warping SpriteKit Content By Using an Effect Node

Distort the child nodes of an effect node by applying a warping effect.

Overview

If you want to warp a node that doesn't conform to SKWarpable, you can add it as a child to an effect node that is warped. As an implementer of SKWarpable, effect node inherits the SKWarpGeometry property that you assign one of the SKWarpGeometry types to then warp the effect node's children.

Warp Text By Using an Effect Node

SKLabelNode is one such class that doesn't conform to SKWarpable. The following code shows how you can warp a label node by adding it as a child to a SKEffectNode and assign the effect node a SKWarpGeometryGrid that pulls out the corners horizontally and stretches the center vertically.

```
let labelNode = SKLabelNode(text: "SpriteKit")
labelNode.fontColor = UIColor.blue
labelNode.fontSize = 144

let effectNode = SKEffectNode()
effectNode.addChild(labelNode)

let destinationPositions: [vector_float2] = [
    vector_float2(-0.1, 1), vector_float2(0.5, 1.3), vector_float2(1.1, 1),
    vector_float2(0.1, 0.5), vector_float2(0.5, 0.5), vector_float2(0.9, 0.5),
    vector_float2(-0.1, 0), vector_float2(0.5, -0.3), vector_float2(1.1, 0)
]

let warpGeometryGrid = SKWarpGeometryGrid(columns: 2,
                                          rows: 2)

effectNode.warpGeometry =
warpGeometryGrid.replacingByDestinationPositions(positions: destinationPositions)
```

The following image shows the warped label.