<u>Simple Rope Generator</u>

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v0.1

Contents

Summary

Simple Rope Generator is an asset package for Unity that contains the tools for making a *runtime interactive* rope object.

This package is intended to be a quick option to make a non-static rope, cable, wire, etc… for your game/unity project.

Usage

To use the SRG package once imported, you only need to load the *Rope* prefab to your scene. Once loaded, to customize the rope you can edit the position of the *Beginning* and *End* gameobjects inside the *Rope* and the parameters inside the *RopeGeneratorController* component inside the *Rope* object.

Beginning and End positions

Dragging the *Beginning* and *End* objects inside the *Rope* object will lead to the individual nodes to be further apart. If you want to separate them too much apart, you may want to add nodes to the rope, which is explained on the *Parameters* section.

Parameters

Modification of parameters is done on the *RopeGeneratorController* component in the *Rope* object.

Beginning and End

By default, the *Beginning* and *End* gameobjects are already created inside the *Rope* object and referenced in the *RopeGeneratorController* component. You can change the reference to an object of your liking, but it is not recommended. If you do, the gameobject has to contain the same components as the Joint gameobject prefab. You can have whatever children you want inside the *Beginning* and *End* objects.

Freeze Position

On version 0.1, freezing the position of the beginning or end will also freeze its rotation. This will be changed in future versions.

Freezing the position is very useful for ropes that hang from a ceiling for example. It is recommended to place the end (or beginning) of the rope vertically below the beginning (or

end) of the rope, as the first segment of the rope will mostly point to the end (or beginning), causing a strange result.

Joints

The default (and minimum) amount of joints on each rope is 5. You can increase this number to achieve a better result in longer ropes.

Note: The larger the number of joints, the greater the probability of unwanted behaviour to appear.

Thickness

The thickness of the line renderer.

Note: The use of the built-in Unity Line Renderer achieves a medium quality rope. It accomplishes the need, but it is not an entirely 3D cylindrical rope.