VRGENERATOR SCENE READER

A Project created by Sascha Worms

Inhoudsopgave

Scene Reader

Introduction

Welcome to my Awesome Scene Reade. This Simple file will explain to you how you can generate files that will create your own scene.

This Library will read a scene file and then get parameters for a vr scene from said file. This makes it very easy to create a scene and will reduce your work a lot!!

Though we are working on more application for this text file, only the KettlerProject v3.153 or Higher will work with this. In the following lines the document we will explain in which way commands should be given and in which way the syntax and order should be formatted.

Also Please Note: Since this is about code, try to make as few spelling errors as possible

Code Samples

There are a lot of things you can add to the VR environment. In the following chapter we'll explain them one by one.

Note all values should be separated by a ',' all items.

All items should be separated by a new line.

Terrain

This one should be the first line in your code. And look similar to this:

"Terrain, 256, 256, Scene1\terrain1.png, Scene1\terrain2.png, Scene1\terrain3.png, -10, 10"

As You can see there are multiple values in this line. I will now declare the meaning of each value.

Terrain: The Type of item that should be created.

256: The x-length.

256: The y-length.

Scene1\terrain1.png: The heightmap image. This will decide which heights there should be at which spots.

Scene1\terrain2.png: The diffuse or shadow image.

Scene1\terrain3.png: The Terrain Image

-10: The minimum height.

10: The Maximum Height

Node

Nodes are all physical objects in the world. They vary from houses to trees, from bikes to cars. X and Y values are randomly generated as well as multiple instances and if set the height of the object. These nodes can not be animated. The lines should look like this:

" Node, Tree, 10, 0, 50, 0, 50, true, Scene1\tree1.obj "

As You can see there are multiple values in this line. I will now declare the meaning of each value:

"Node" : The type of item that should be created

"Tree" : The name of the set items (Should be unique per line).

"10" : The amount of items that should be created.

"0": the minimal X coördinate.

"50" : The maximum X coordinate (should be the same as min for specefic placing)

"0": the minimal Y coördinate.

"50" : The maximum Y coordinate (should be the same as min for specefic placing)

"true" : This decides if the Nodes can vary in height each instance.

"Scene1\tree1.obj" : The location of the object file you want to create.

Bike

This is a special kind of node. The camera wil follow the (last of these) node(s). Also this object will move and always start on 0,0,0.

Note: This might change in the future.

A Bike line should look like this:

"Bike, Bike,Scene1\bike_anim.fbx,Armature|Fietsen"

As You can see there are multiple values in this line. I will now declare the meaning of each value:

"Bike": type of the object that should be created.

"Bike": The name of the Node.

"Scene1\bike_anim.fbx" : The name of the 3D render object,

"Armature|Fietsen" : The name of the animation.

Water

This is a special kind of node that generates a field of water.

A Waterline should look like this:

Water, Water, 50, 50 ,1.0,25,25,0.1

As You can see there are multiple values in this line. I will now declare the meaning of each value:

"Water" : The type of node that should be created.

"Water": The name of the Node (this should be unique).

"50": The X value starting position.

"50": The Y value starting position.

"1.0" The scaling of the Water. You can use this to increase or decrease the size of wave.

"25" : The length of the X line.

"25" : The length of the Y line.

"0.1" : The water intensity, should vary from 0.1 to 1.'

Route

Generates a route and road which the bike will follow. Default route only for now.

Note: This might change in the future.

A Route line should look like this.

Route, default, 4.0

As You can see there are multiple values in this line. I will now declare the meaning of each value:

Route : The type of object that should be created.

default : The type of route that should be created (default only)

4.0 The speed of the object following the route.

Time

Sets the time and starts automated time increase.

A Time line should look like this.

Time, start, 10.5

As You can see there are multiple values in this line. I will now declare the meaning of each value:

Time : The type of object that should be created.

start : Should automated time start enter start. Else enter a random string.

10.5 The time thats set and started from.

Installation

1. Implement the VRGenerator class in your project.
2. Create sceneX.txt files in which the X should be replaced by the number of the scene.
3. Check your scenes according to this style guide.
4. Place your object and image files in a map called SceneX\ in the Scenes map of your project.
5. Enjoy!