TileMazeGen-Doc-EN

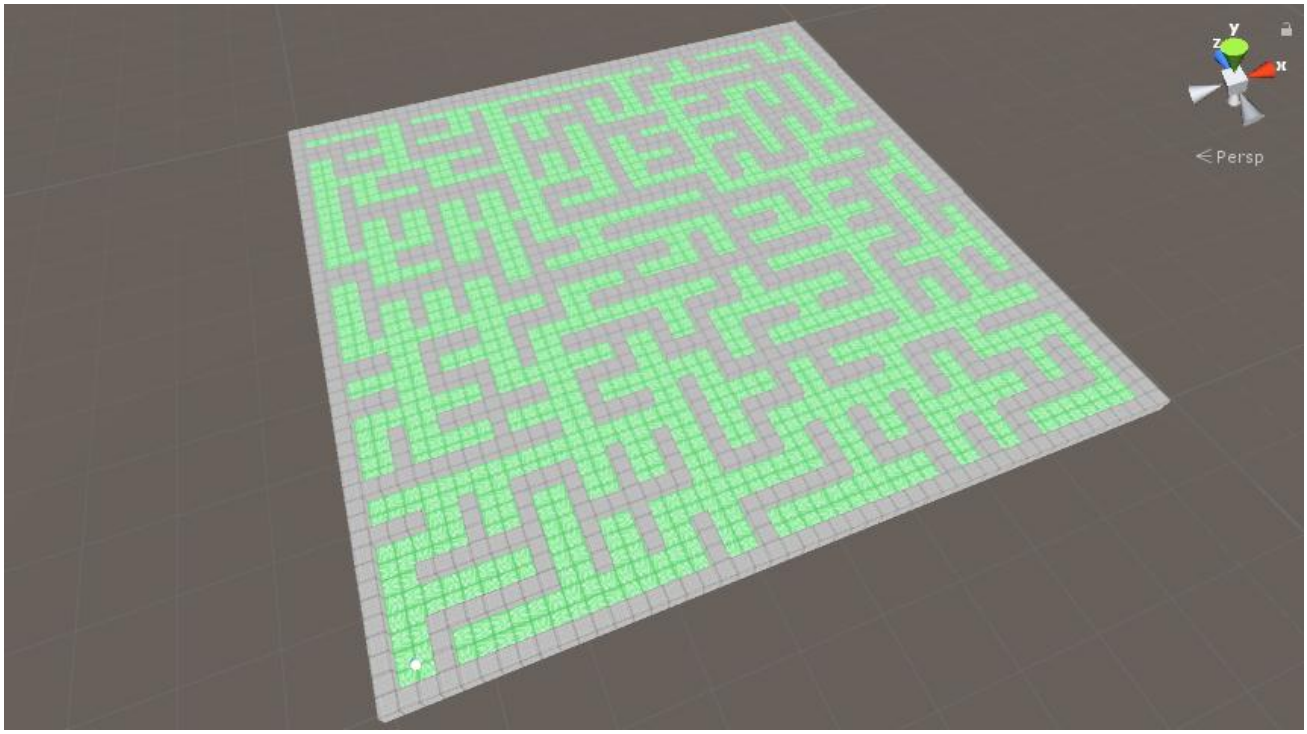
English Documents

（1）Prepare Resources

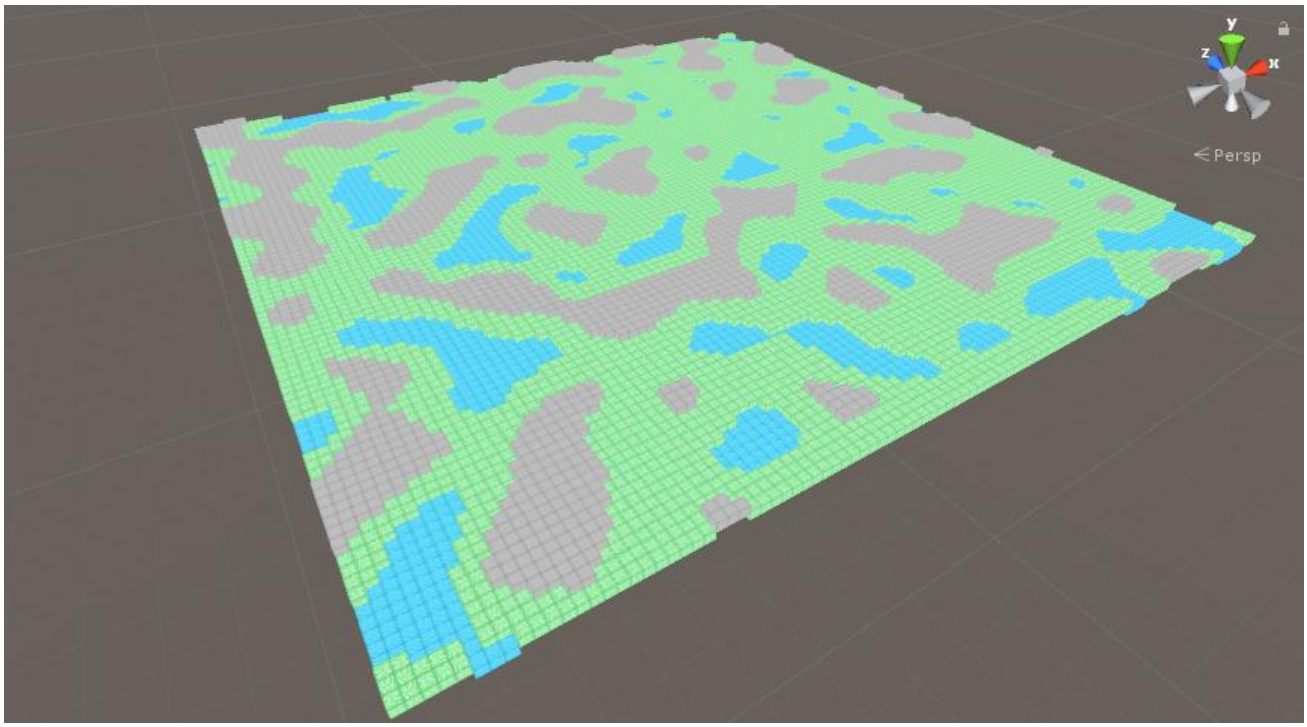
（1.1）Introduce

TileMazeMaker is a random map creator that can create both maze and perlin noise based random map.

You can create maze with 12 different algorithms as you need.



Random map generator based on perlin noise, define Size and OriginX and Origin Y params, you can get random with different seeds.



if you do not like may ugly tiles, go and down load 3D Cartoon Box Map form asset store, which fit my random map creator very well.

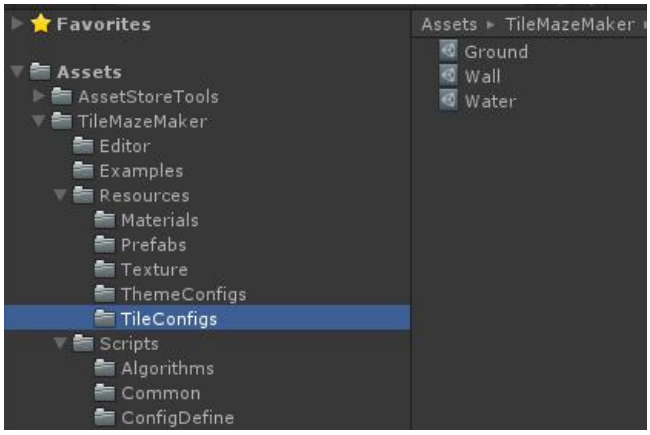
（1.2）Tile

I use a tile size of 2*2 in x,z plane, this can be config in settings. You can create a cube set it to 2,2,2 and assign it a texture and material, a 3D tile resource is ready.

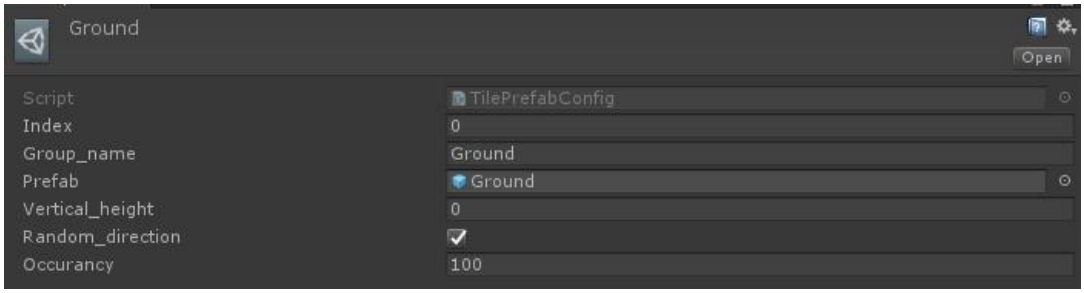
If you use a group of tiles that shard a same texture, you will got a performance boom.

Choose: MazeGen-Tile Prefab Config to create a config file for a new tile

The default position is here:



It looks like：



Index：Tileindex，try to assign a different ID for different tile Or it will result a confict in Dictionary.

Group Name：Group same style tile together, then you can get random form them.

Prefab：fill the tile prefab you just created.

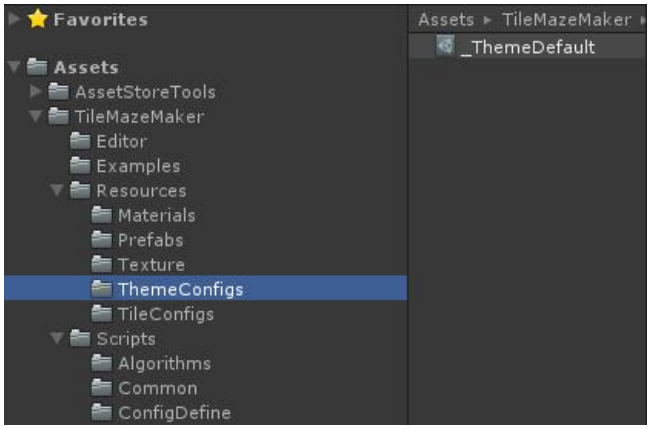
Vertical Height: Height for you tile.

Random Direction：random position for tile init direction.

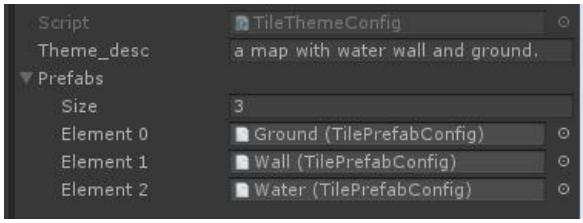
Occurancy：Occurncy rate if there is more than one tile in group.

（1.3）Theme

Choose：MazeGen-Tile Theme Config，This will create a theme config file.



Config a theme such as Sands, Snow mountain, forest or dungen, you can easily change random map out-looking by themes.



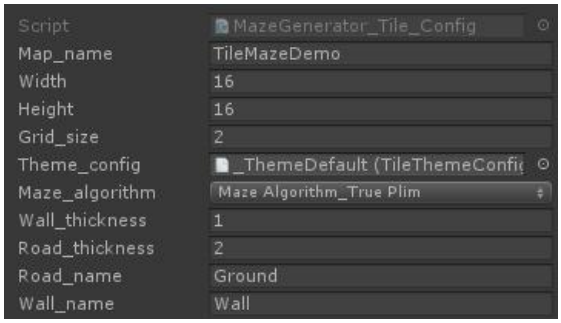
Theme_Desc：description for easy remembering.

Prefabs：Set a Size，and fill it with fall tiles need in this theme.

（2）Config Maze

（2.1）Configuration

Choose MazeGen-MazeMapConfig，That will generate a final maze config file. it will show itself at TileMazeMaker/Resources root folder



MapName：give a easy to read name.

Width：this is logic cell in x direction of maze, not a grid count of maze.

Height：this is logic cell in y direction of maze, not a grid count of maze.

GridSize：if you 3D model is not in size of 2*2, you have to change this value to fit you model.

ThemeConfig:Drag the theme config file you create and drop here.

MazeAlgorithm：Choose one form 13 algorithms——Aldour Border&Wilson algorithm is a combined algorithm, but NOTICE：

single Aldour Border or Wilson will be very low due to the alogrithm itself，Try to Use AldourBorder-Wilson you will get nearly the same maze structure at a high performance.

WallThickness：Thickness of wall

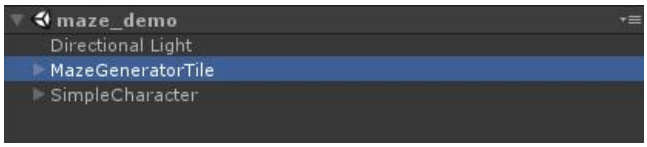
RoadThickness：thickness of road

RoadName：Currentlyt maze noly support two type of tile, I will make it more beautiful in furture edition.

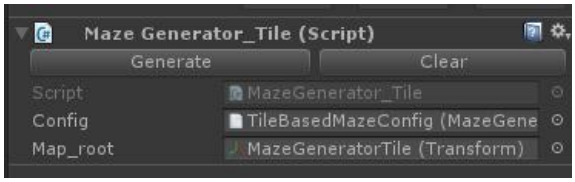
WallName：The same as above.

（2.2）Generate

Create a empty GameOjbect, Name it at you will, add a scripte of MazeGenerator_Tile



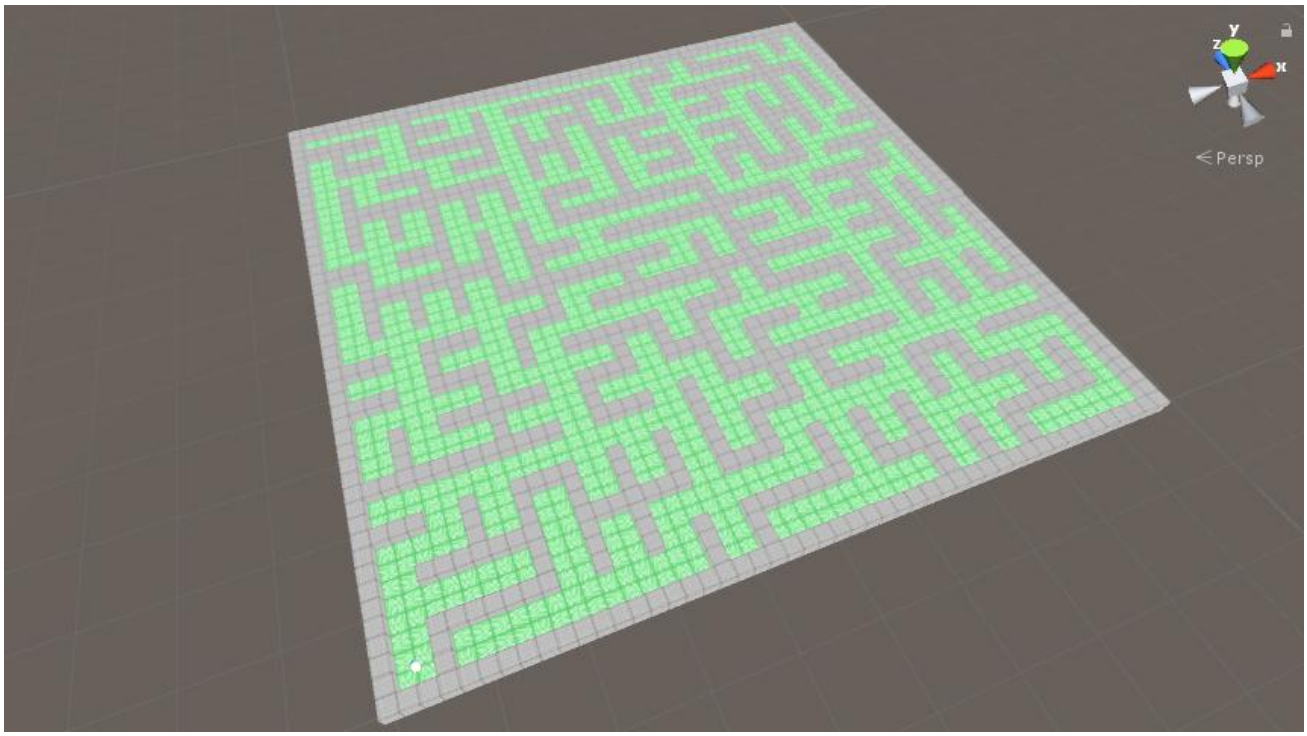
Config it：



Config：is a configuration file you create at (1.3)

MapRoot：Root of your maze, usualy is the GameOjbect where the script MazeGenerator_Tile lay on.

Click Generate，You got a MAZE!

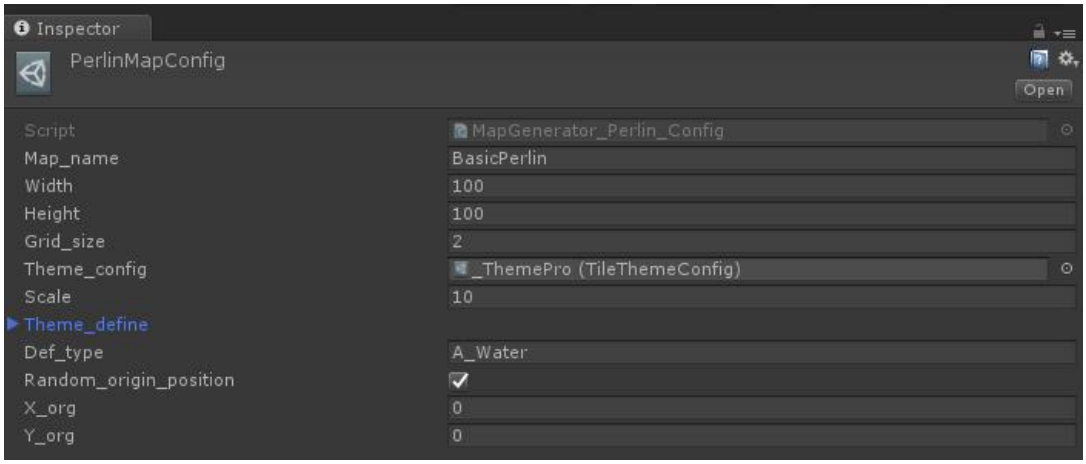


Click Clear，You can clear the maze.

（3）如何创建-随机地图Create-Random Map

（3.1）Configuration

Choose：MazeGen-Random Map Config, You can got a PerlinNoise based, random map config file at TileMazeMaker/Resources



MapName：Give a cute name for you map.

Width：Tiles in row.

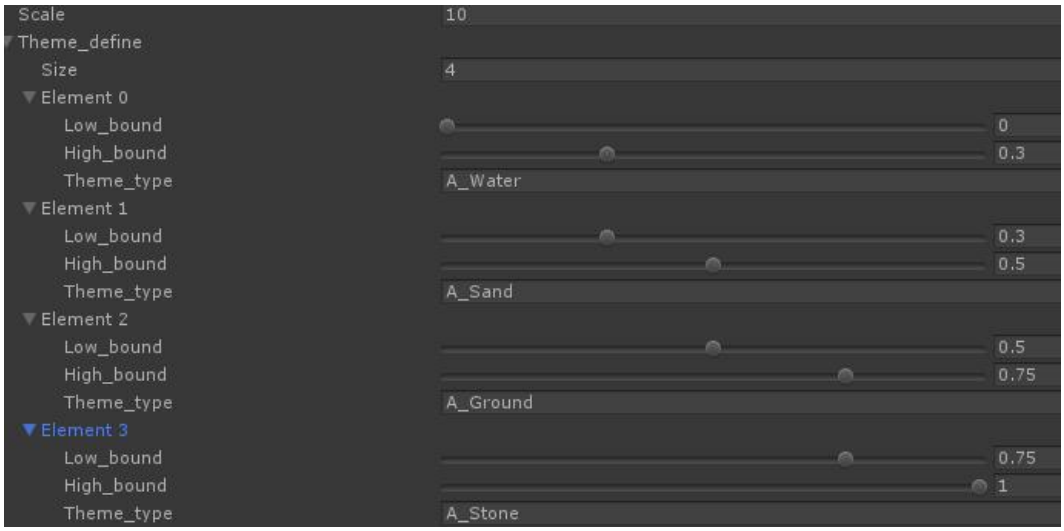
Height：Tiles in col.

GridSize：if you 3D model is not in size of 2*2, you have to change this value to fit you model.

ThemeConfig:Drag the theme config file you create and drop here.

Scale：This will control the detail of the map, 8-15 is a reasonable value.

ThemeDefine：Controll which range of random number will got what type of tile.



For example, if the random number cames form 0-0.3, you will at a tile A_Water. which total occurance rate is 30%.

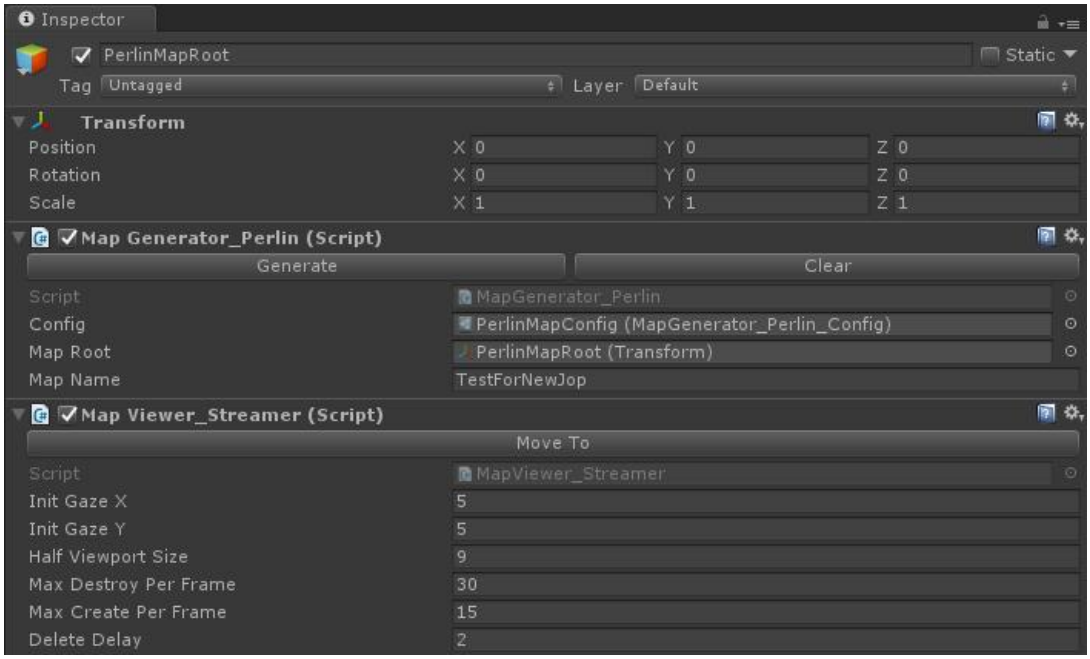
Def_Type: If not set in theme_define, what kind tile will be set as default one.

Random_origin_positon: Click this you will get a different map when click Generate.

X_Org: define you own X start position of perlin noise map. This only work when Random_origin_position is NOT clicked.

Y_Org: define you own Y start position of perlin noise map. This only work when Random_origin_position is NOT clicked.

（3.2）Generate



Now PerlinRandomMap support stream reading you can create a 1000*1000 size map, which contains 1M tiles，that shoud not be loaded all in your scene but only those shows to player.

If do not need this founction, Use MapViewer_Full instead, for smal maps.

MapGenerator_Perlin:

Config：Config file for PerlinNoise Based Random Map you created in 3.1

MapRoot：Root Transfom of your random map

MapViewerStreamer

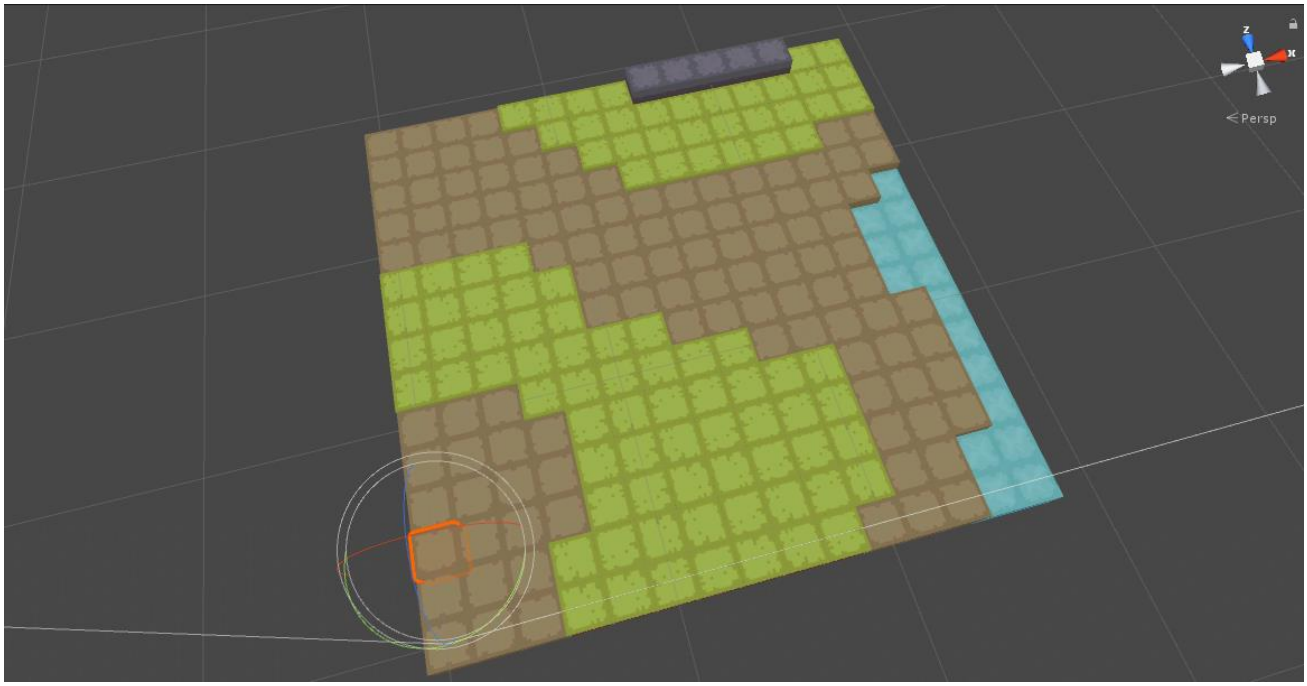
Init GazeX：Look At center of x row

Init GazeY：Look At center of y col

HalfViewportSize：Paging show radius.

MaxDestroyPerFrame：Max Gameobject Destroy in one frame, for smaller lag of frame. Set a higher value if you use a Object Pool, which I will provide a simple one.

MaxCreatePerFrame：Max Gameobject Created in one frame, for smaller lag of frame.

DeleteDelay：Reserved value.

Click Generate, you can got a random map, click move to you can focus a different position.