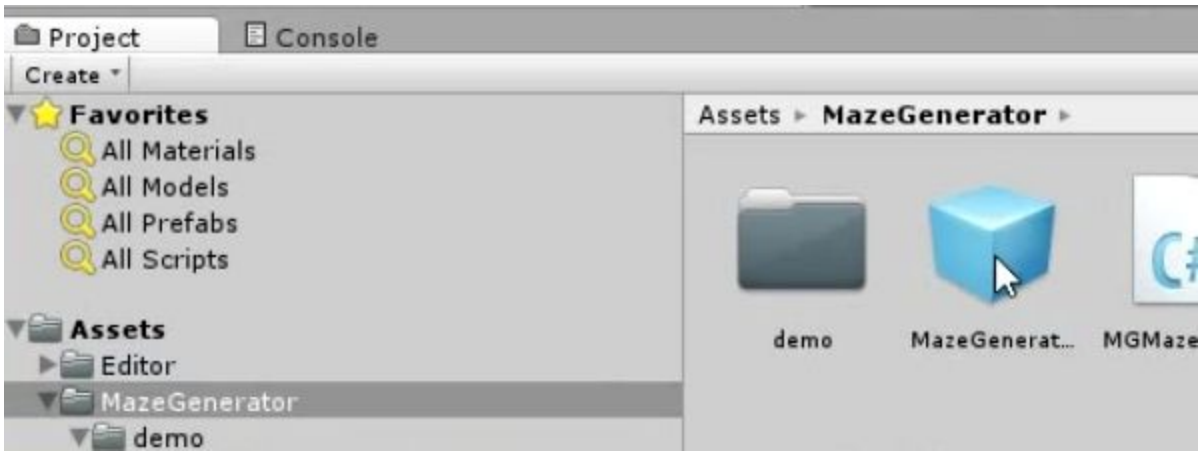
Maze Generator Setup Guide

v1.2

MazeGenerator is versatile, easy to use component for generating maze in run-time from selected tiles. Maze can be generated any size from any number of tiles with specified distance from starting point. Drop component to your scene, put tiles, adjust few parameters and build your project with randomly generated mazes.

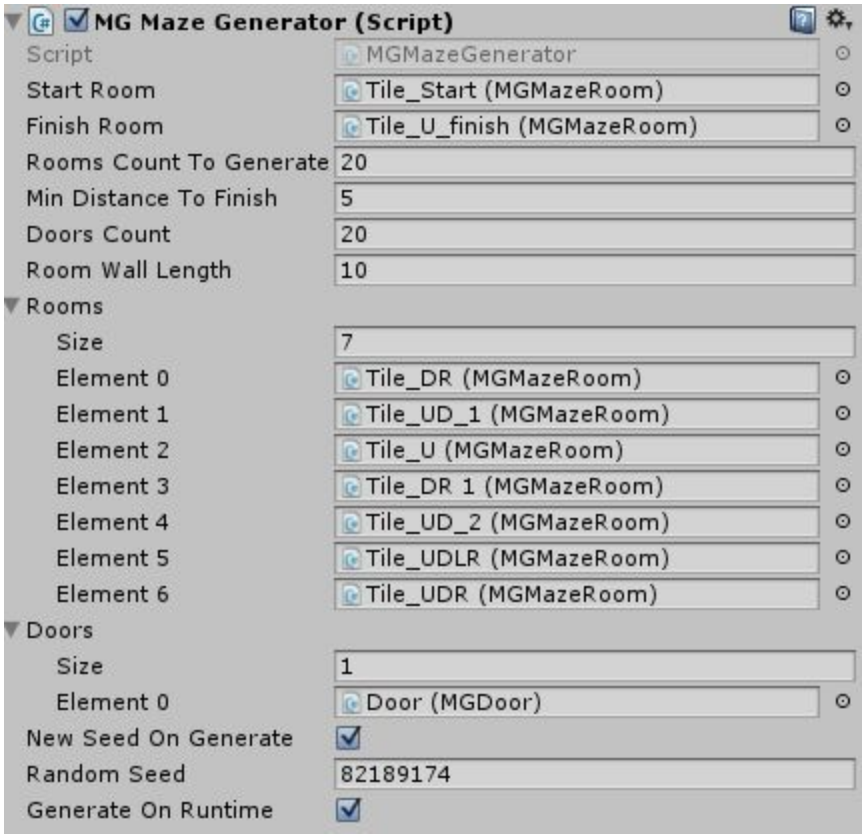
Setup is quick and easy, here we go step-by-step:

1. Put an instance of **MazeGenerator** prefab to your scene. You can drag just drag it in.



2. Select MazeGenerator object from Hierarchy panel.

3. Set size of your maze tile (**Room Wall Length**).



4. Specify tiles count to be used for maze generation. (**Rooms -> Size**).
5. Drag and drop your prefabs to the tiles list.
6. Specify doors prefabs count to be used, 0 if none. (**Doors -> Size**)
7. Drag and drop your prefabs to the doors list if any.
8. Set up **Start Room** and **Finish Room** prefabs..
9. Set up **Rooms Count To Generate**. It's the minimum rooms in your maze. Please take into account, that actual number of rooms can be higher, because the dead-end tiles are put after main paths generation.
10. Set up **Min Distance To Finish**. It's minimal shortest path from start to finish, measured in how much rooms player should pass to reach finish. i.e. If you set here **3** then the shortest possible way from start to finish title will be through 3 tiles between them.
    Note: If this number is very high in relation to **Rooms Count To Generate**, you will get situations then there is no possible path of specified length and Maze will not have finish at all. It may vary depending on your tiles set, but I recommend to experiment with different values.
11. You can specify **Random seed** for specific maze to be generated. Or just check the **New Seed On Generate** to use random seed every time.
12. Hit "Start" and enjoy your maze.

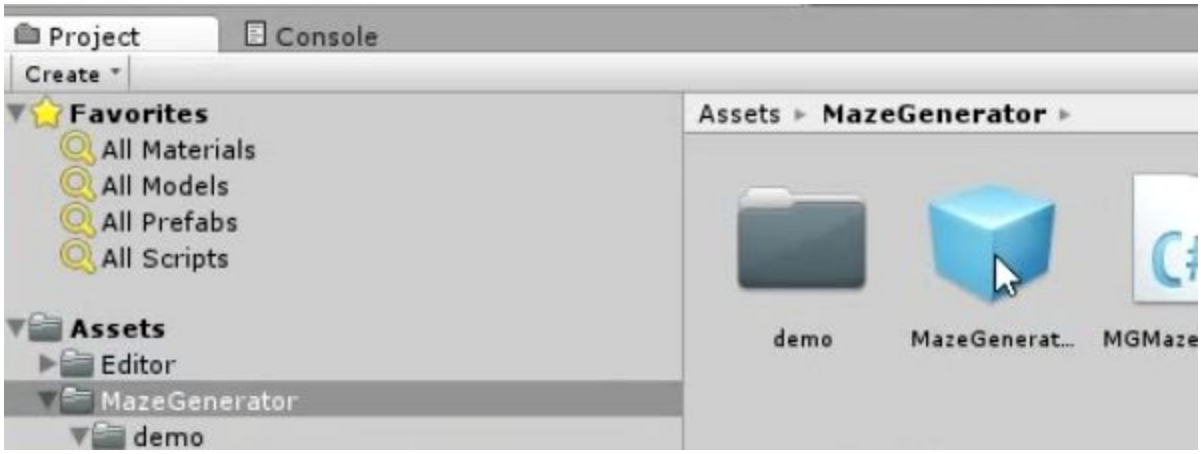
Tiles

Requirements for tiles:

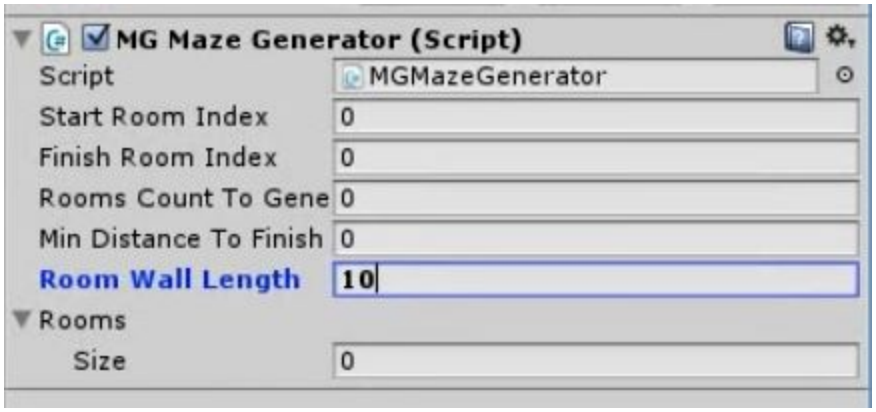
1. All tiles should be square-formed as generator will rotate them by 0, 90, 180 or 270 degrees during generation of map.
2. Your set should contain at least one tile of 1-way (dead-end), 2-ways, 3-ways tiles. I'd recommend to use all possible configurations 1-way, 2-way straight, 2-way L-form, 3-way, and 4-way (cross) titles.
3. Tile's prefab should have **MGMazeRoom** component (drag and drop to your prefab from package folder).

Steps of preparation tile prefabs

1. Put an instance of **MazeGenerator** prefab to your scene. You can drag just drag it in.



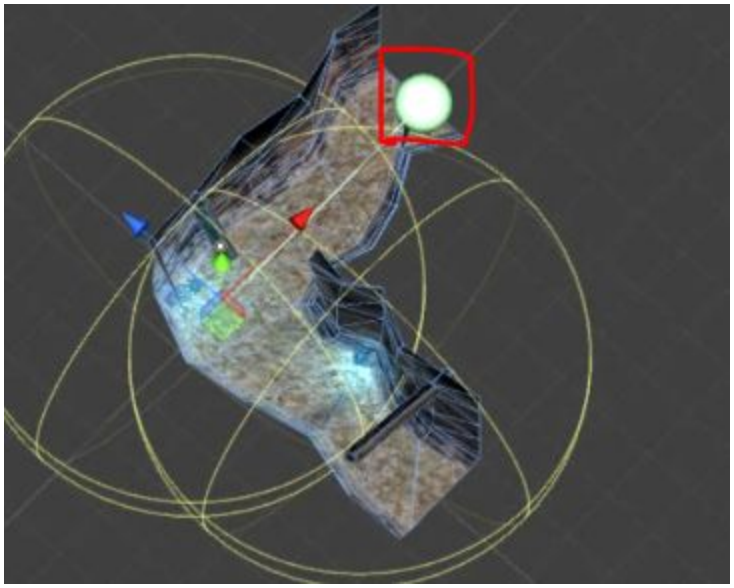
2. Select MazeGenerator object from Hierarchy panel.
3. Set size of your maze tile (**Room Wall Length**).



4. Drag your prefab to scene, add **MGMazeRoom** script component.

5. Set up entrance points.

Entrances will be marked as white-green spheres in scene, like this:



6. Then tile set up is finished, make Prefab from it and save the scene.
7. Repeat steps 4,5,6 for each tile you have.
8. Your tiles are ready for Maze Generator. Enjoy!

Doors

Requirements for doors:

1. Prefab should be placed X or Z axis as generator will rotate them by 0, 90, 180 or 270 degrees during generation of map.
2. Door should have its own controller script as **MazeGenerator** is responsible only for placing prefabs in the right position.
3. Door's prefab should have **MGDoor** component (drag and drop to your prefab from package folder).

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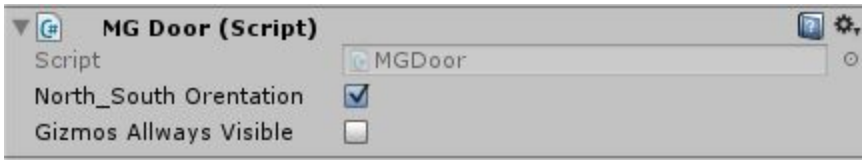
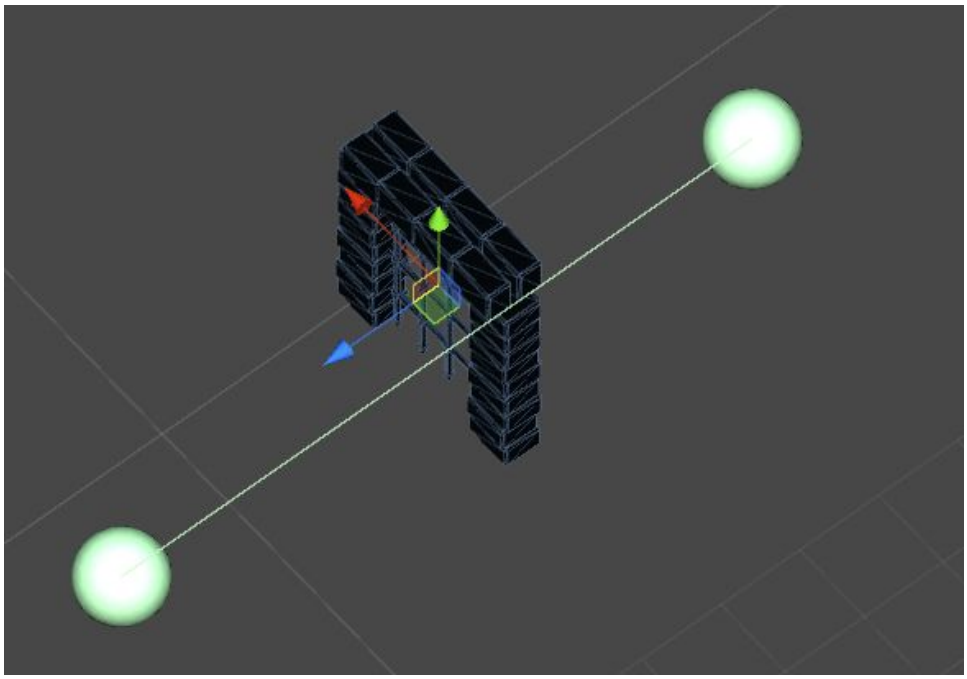
1. Drag your prefab to scene, add **MGDoor** script component.
2. Set up door orientation (**North-South** OR **East-West**).



Entrances will be marked as white-green spheres in scene, like this:



3. Then door set up is finished, make Prefab from it and save the scene.
4. Repeat steps 1,2,3 for each door prefab you have.
5. Your doors are ready for Maze Generator. Enjoy!