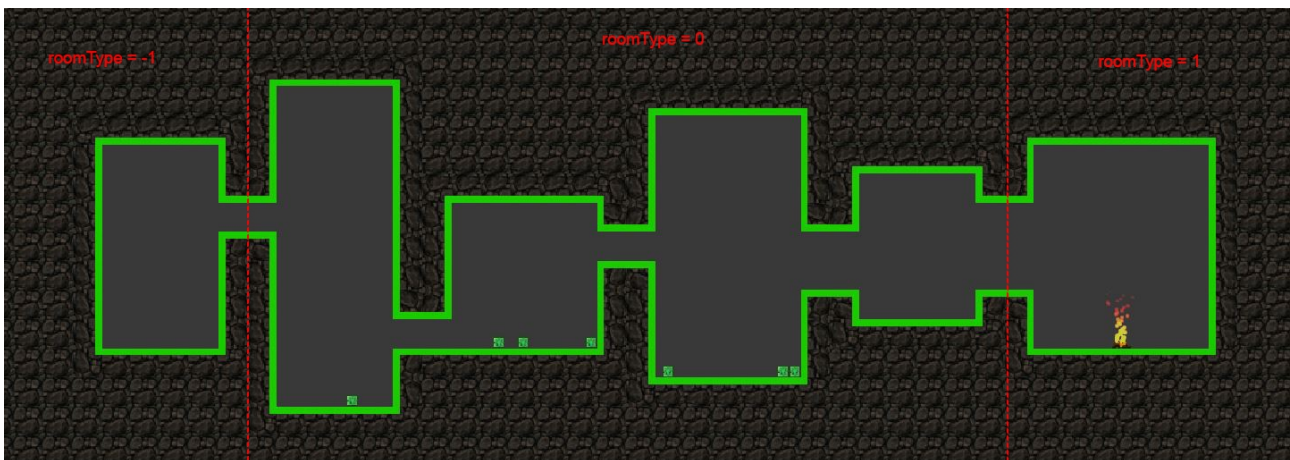


2D Simple Cave Generator

Basic Information:

This Cave Generator is made for 2D Games. Its a Script attached to an Empty. The Cave is being build in rooms. There are three Types of Rooms which are defined by an Integer. -1 is the First Room; 0 all the Rooms in the middle and 1 is the last room.



How to use:

1. You can either drag the prefab „2DSimpleWorldGenrator“ into the position where your first room is going to start, or create a new GameObject which holds the script „CaveGenerator“ in it.
2. Adjust the Values you need. In this example we have the Basic CaveGenerator with its possible values.

The Spawners Size defines the amount of object Types you want to spawn in your cave and once you have decided how many types of objects you want to spawn you can define what you want to spawn. As an example we will use a GreenSlime in the second element (Element 1). There you can adjust values to get more control over the spawn algorithm.

| Property | Value |
|-----------------------|--------------------------|
| Size | 2 |
| Element 0 | |
| Rooms | |
| Size | 1 |
| Element 0 | |
| Thing | Campfire |
| Spawn Pos Xin Percent | 50 |
| Random X Pos | 0 |
| Spawn Pos Yin Percent | 0 |
| Random Y Pos | 0 |
| Count | 1 |
| Add Random Count | 0 |
| Element 1 | |
| Rooms | |
| Size | 1 |
| Element 0 | |
| Thing | Green Slime |
| Spawn Pos Xin Percent | 50 |
| Random X Pos | 40 |
| Spawn Pos Yin Percent | 0 |
| Random Y Pos | 0 |
| Count | 0 |
| Add Random Count | 3 |
| Env Stone_Standard | CaveStandardMark |
| Env Stone_Edge | CaveEdgeMark |
| Env Stone_Corner | CaveCornerMark |
| Env Stone_Inner | CaveInnerMark |
| Rw Min | 5 |
| Rw Max | 8 |
| Rh Min | 5 |
| Rh Max | 10 |
| Block Size | 2.5 |
| Fillrate | 10 |
| Max Entrance Size | 3 |
| Destroy When Done | <input type="checkbox"/> |

You can also adjust the size of the cave and of what type of GameObjects it will be build of. Additionally if you have not completely dark cave surroundings, i suggest you use the Fillrate to fill the area around the cave.

Don't forget to set the size of your blocks, otherwise your generator will do messed up things.

I will now explain the different meanings behind the variables you can adjust.

- Spawners(Size): Determines the different types of things you want to spawn and allows you to spawn different things with different algorithms
 - Rooms asks for a count of the roomtypes used and then you have to type in the value of each roomtype in which the object will spawn. -1 = first room; 0 = all rooms between the first and the last; 1 = the last room.
 - Thing asks for a GameObject which will be spawned. I suggest you use a prefab.
 - Spawn Pos X in Percent is the place in the room on the X axis (in percent) where the „Thing“ is going to spawn. This can be randomized through Random X Pos which is going to set the position of the spawn +- the value you type in(in percent). Don't set the value higher then the Spawn Pos.
 - Spawn Pos Y in Percent is the same as Spawn Pos X in percent only for the Y Axis.
 - Count defines the Amount of „Things“ which will be spawned in the room. This can be randomized through Add Random Count which will be added to the Count.
- Env Stone_Standard is the Prefab for the wall, ceiling and the floor of the cave. It should have a collision box applied if you don't want your Player to fall through the floor.
- Env Stone_Edge is a convex type of corner. Needs collision.
- Env Stone_Corner is a concave type of corner. Collision is not necessary.
- Env Stone_Inner is the prefab which will be used to fill the area around the cave. Doesn't need collision.
- RC min is the minimum amount of rooms. (not shown on Picture)
- RC max is the maximum amount of rooms. (not shown on Picture)
- Rw min (Room width minimum) is the minimum length of the room.
- Rw max (Room width maximum) is the maximum length of the room.
- Rh min (Room height minimum) is the minimum height of the room.
- Rh max (Room height maximum) is the maximum height of the room.
- Block Size is the size of your Env Blocks used to build the cave. If this value is not set right your cave will have a lot of holes.
- Fillrate is the thickness of Env Cave_Inner blocks around the cave. Use it if your background doesn't match the colour of the lower End of your other Env Blocks.
- Max Entrance Size is the maximum height of the connection between the rooms.
- Destroy when Done will destroy the World Generator after it has been created.

3. Run your game and the CaveGenerator will generate the cave depending your input values. Have fun!

If you want to report any Bugs or have any questions, send me a message to grasbock@gmail.com!