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In this project, I mainly worked on stage designs. I used Tile Palette and Rule Tile in these designs. In one of the main levels, I designed our blocks with a rule tile. Rule tile provides us great convenience in stage design.


First of all, I added a new 2d object to our scene. I added this object as 2d Object>Sprites>Square. I used 2 different Sprites in the scenes I designed. These are Foreground and Midground. We have our blocks in the Midground layer. The character moves on these blocks. Foreground has stairs and doors. Thanks to this layer, the character can interact with the objects in the Foreground, such as climbing the stairs, going down the stairs, and passing through the doors to other scenes.

As the name suggests, Rule Tile allows us to automatically shape the whole block according to the rule we set while adding blocks. That's why I used it with roulette in the project. First of all, in order to use it with roulette, we need to add a package offered by unity to our project as an extra. This package is the 2d-extras package. Thanks to this package, we can use the rule tile.

Rule tile has a very simple logic. First we need to choose a default sprite. I chose the upper-left corner as the default sprite, as usually choosing one of the corners as default gives a better result. Then I added all the vertices and edges to the rule tile in order. If I give an example over 1 Sprite, for example, sprites added near the upper left corner cannot go left or up, but can go right and down. In this way, I created our rule tile by defining rules for all edges and corners. Then I created a new Tile Palette and added this Rule Tile to the Tile Palette. After that, our blocks are created automatically, depending on the rule. Finally, I added Tilemap Collider 2d to our blocks and made them composite. I am attaching a sample image of the rule tile I used below.

Inspector

Tile Palette

Block Rule Tile (Rule Tile)


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Open

Default Sprite



Select

Default GameObject

None (Game Object)

⊙

Default Collider

Sprite

Number of Tiling Rule

7

Tiling Rules

Extend Neighbor

GameObject

Collider

Output

None (Game Object)

Sprite

Single

⬅

⬆

⬇

⬆


⬆

⬆

⬆

⬆

⬆



Select

GameObject

Collider

Output

None (Game Object)

Sprite

Single

⬅

⬆

⬇

⬆


⬆

⬆

⬆

⬆

⬆



Select

GameObject

Collider

Output

None (Game Object)

Sprite

Single

⬅

⬆

⬇

⬆


⬆

⬆

⬆

⬆

⬆



Select

GameObject

Collider

Output

None (Game Object)

Sprite

Single

⬅

⬆

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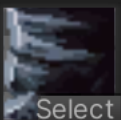
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Select

GameObject

Collider

Output

None (Game Object)

Sprite

Single

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Select

BlockRuleTile

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