Documentation – Tilemap-Editor

https://webtools.sebastianboettcher.net/tilemapeditor

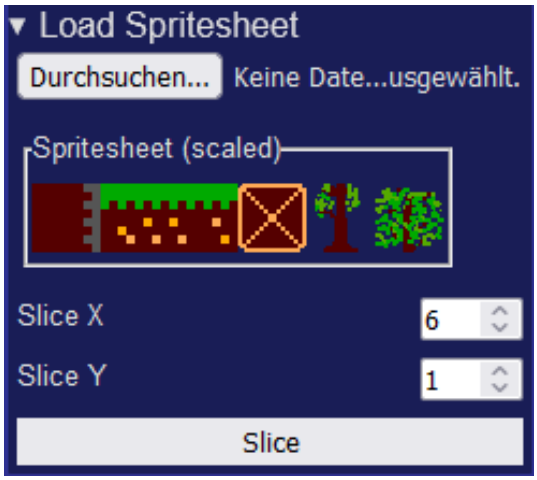
Note: This web tool is still under development. As far as I know, it works well. The tool is intended for the PC, not for mobile devices.

If you notice any issues, please let me know here.

1. Prepare Project

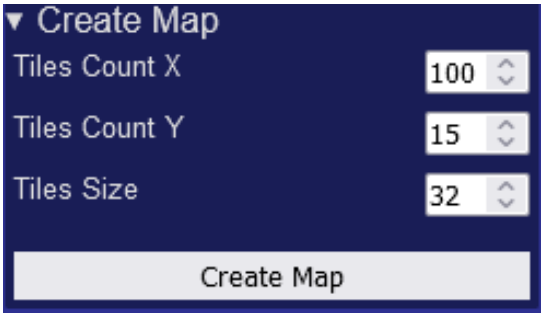
A project is created in the following way:

➔ Load a sprite sheet and then choose the number of rows and columns.



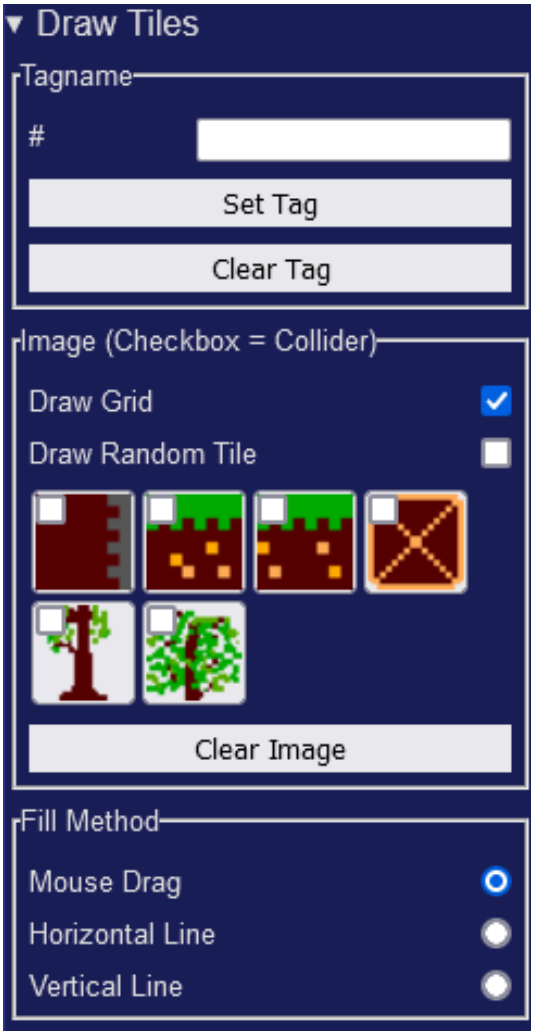
➔ Press "Splice".

➔ Choose the number of tiles in X and Y direction and the size of the tiles.



➔ Press „Create Map“.

2. Draw Tiles

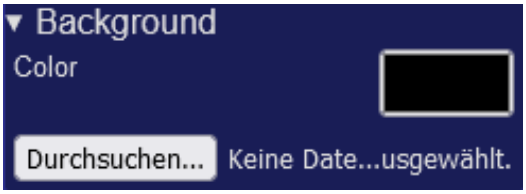


➔ Here you can assign or delete tag names. This allows you, for example, to specify the location at which opponents or enemies should be spawned.

➔ You can randomly draw multiple tiles if selected. To do this, click the checkbox and then select the necessary tiles one after the other.

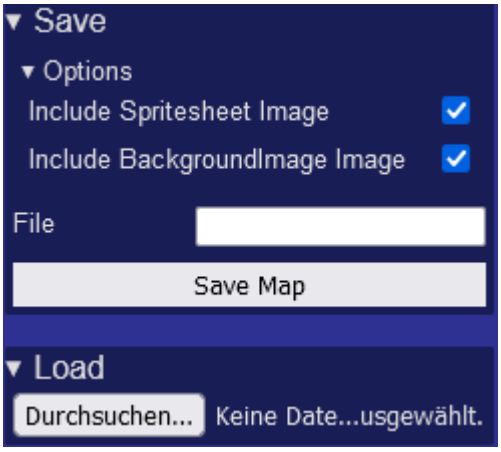
➔ If you want to draw tiles as tiles with collision click the checkbox in the tile button.

➔ You can select several tiles in the map with the mouse or draw entire rows and columns.



➔ Choose a background color or background image for the map.

3. Save and Load Maps



➔ The map can be saved with or without image data. If you save without image data, only the file names will be saved.

➔ **Note:** Only maps with image data can be loaded back into the editor without any problems.

4. The Saved Map File

The map is saved in Json format. Only the tiles actually used are saved, no empty tiles.

Here is the structure with sample data:

➔ General data:

- "mapCount":{"x":100,"y":15} → Size of the map (here 100 x 15 tiles)
- "tileSize":32 → Size of the tiles (here 32 px)
- "spriteCount":{"x":6,"y":1} → Size of the sprite sheet (here 6 x 1 tile)
- "spriteSheetSize":{"x":192,"y":32} → Size of the sprite sheet in px
- "spriteSheetFile":"tileset.png" → File name of the sprite sheet
- "spriteSheetImage":"…“

  → Image data of the sprite sheet as a base64 string (if saved, otherwise empty).
- "backgroundFile":"background_short2.png" → File name of the background image
- "backgroundImage":"…"

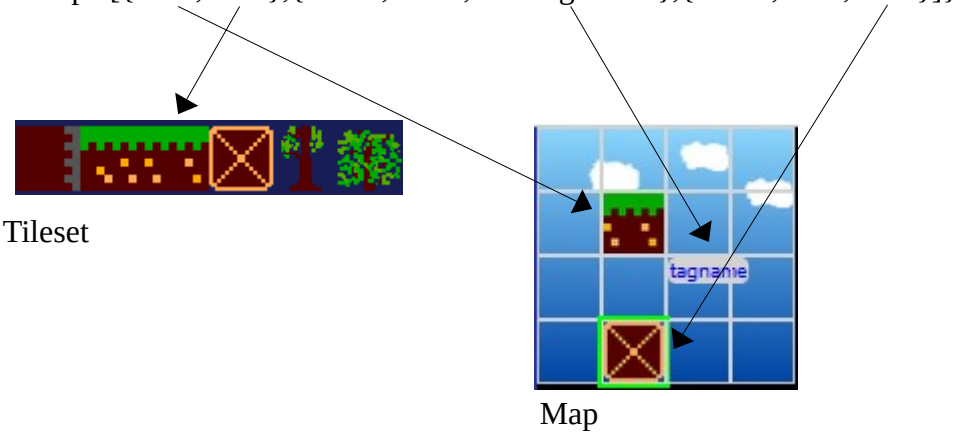
  → Image data of the background as a base64 string (if saved, otherwise empty).
- "backgroundColor":"white" → Background color of the map

The tiles and also the position of the respective sprite used in the sprite sheet are not given as x and y coordinates but as a position number starting with 0 on the top left.

➔ Map data (using an example):

- map.t → Number of the tile in the map
- map.s → Number of the used sprite in the spritesheet
- map.n → Tag name
- map.c → Collider

"map":[{"t":5,"s":2},{"t":10,"s":-1,"n":"tagname"},{"t":13,"s":3,"c":1}]}



Tileset

Map

5. Convert from number to position

Since no coordinates are saved in the file, you must of course convert them into coordinates to generate them. And probably in the game again from coordinates to numbers.

In this way for example:

```
function getTileFromPosition( position ){
   let xCount= Math.round((position.x / data.tileSize));
   let yCount= Math.round((position.y / data.tileSize));

   let tile =  (yCount * data.mapCount.x) + xCount;
   tile = Math.round( tile );

   return tile;
}

function getPositionFromNumber( number, size ){
   const position = {
     x: ( number % data.mapCount.x ) * size,
     y: Math.floor( number / data.mapCount.x ) * size,
   }

   return position;
}
```