

Software Studio

軟體設計與實驗

Tilemaps

Hung-Kuo Chu

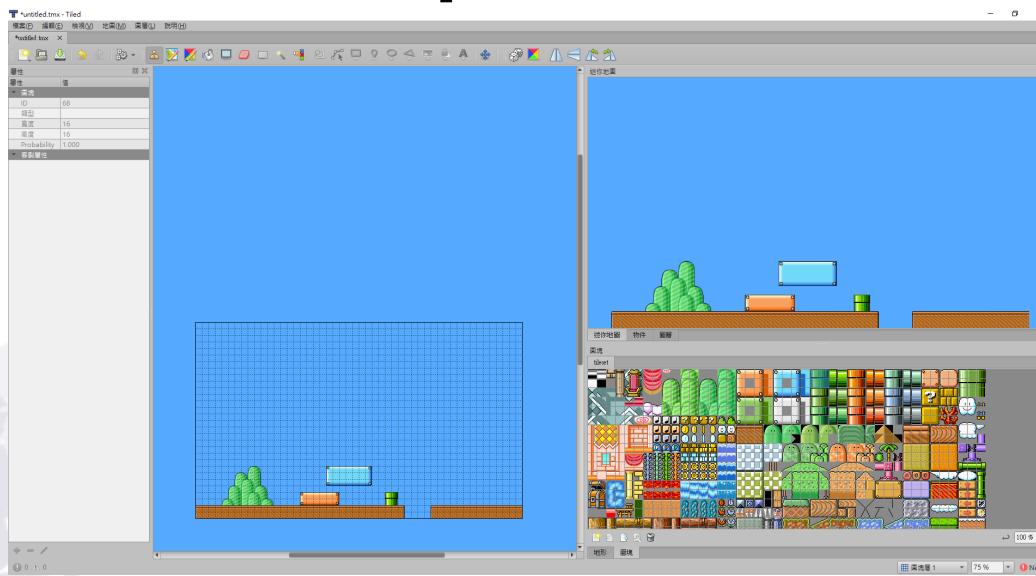
Department of Computer Science
National Tsing Hua University

CS2410



Tilemaps

- In the earlier chapter we created the level manually by adding walls one by one.
- It works, but creating a world can be easier with **tilemaps**.



‘Tiles’, a well known world editor



Tilemaps

- Here are some basic definitions about tilemaps:
 - **Tile**: a small image that represents a tiny part of a level.
 - **Tilesheet**: a spritesheet that contains all the different tiles.
 - **Tilemap**: the level, stored as a 2 dimensional array of tiles.



Tiled: A World Editor

- There are a lot of software available to create tilemaps, '[Tiled](#)' is one of the most popular editor.
- It's free, open source, and cross platform.

A downloadable tool for Windows, macOS, and Linux

[Download Now](#) Name your own price

Tiled Map Editor

<https://www.mapeditor.org/>

Tiled supports editing tile maps in various projections (orthogonal, isometric, hexagonal) and also supports building levels with freely positioned, rotated or scaled images or annotating them with objects of various shapes.

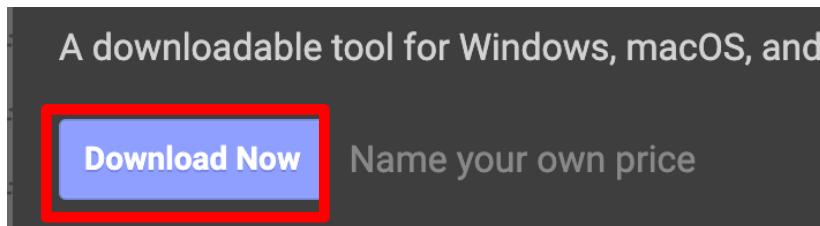
If you are looking for a flexible 2D level editor for your game, be sure to give Tiled a try! Tiled is [supported by a wide range of frameworks](#) and is still in active development!



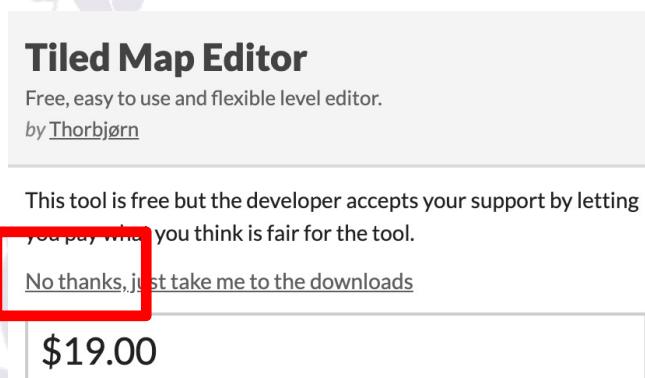
Tiled: A World Editor

- Download Tiled :

1. Click “Download Now”



2. Click “No thanks”



3. Download

Download “Tiled Map Editor”

[← Tool page](#) [Homepage](#) [Source code](#) [Community](#) [Patreon](#)

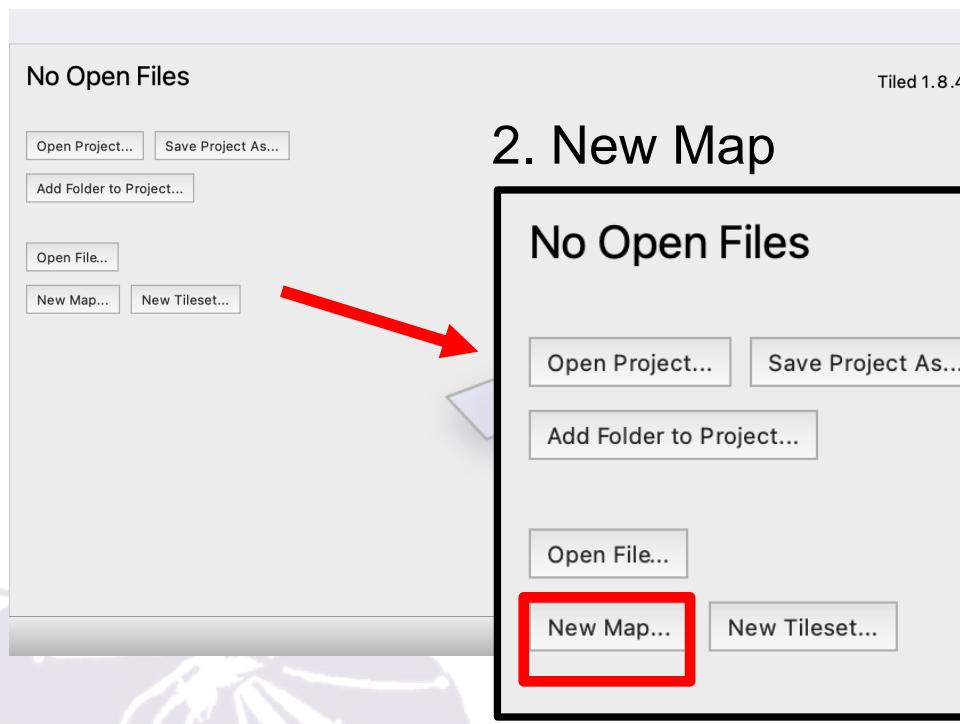
| | | |
|--------------------------|---|---------------|
| Download | Tiled installer for Windows (64-bit) 27 MB | |
| | Version 1.8.4 | 🕒 34 days ago |
| Download | Tiled installer for Windows (32-bit) 27 MB | |
| | Version 1.8.4 | 🕒 34 days ago |
| Download | Tiled installer for Windows XP (32-bit) 23 MB | |
| | Version 1.8.4 | 🕒 34 days ago |
| Download | Tiled for macOS 16 MB | |
| | Version 1.8.4 | 🕒 34 days ago |
| Download | Tiled for Linux 38 MB | |
| | Version 1.8.4 | 🕒 34 days ago |



Tiled: A World Editor

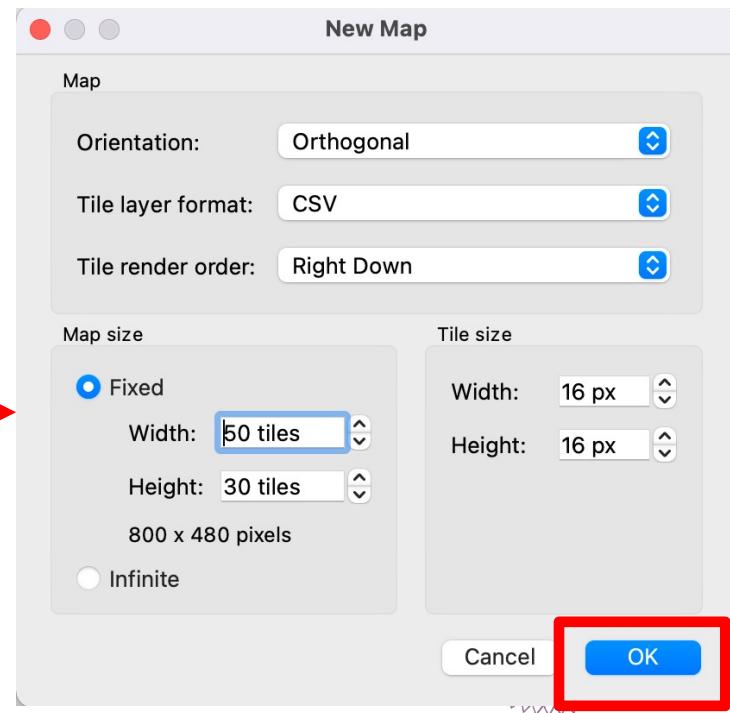
- Open Tiled, do New Map, and fill the form like this to create an empty tilemap.

1. Open Tiled



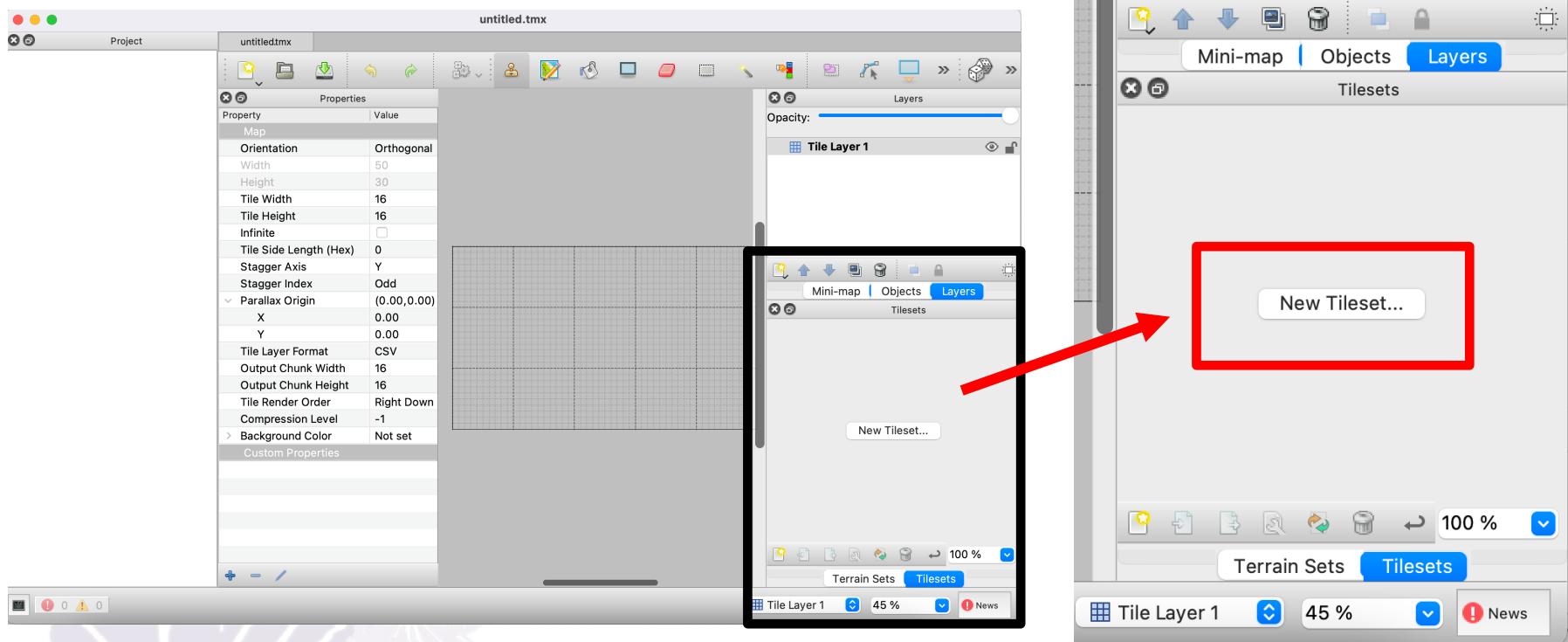
2. New Map

3. Set up tilemap



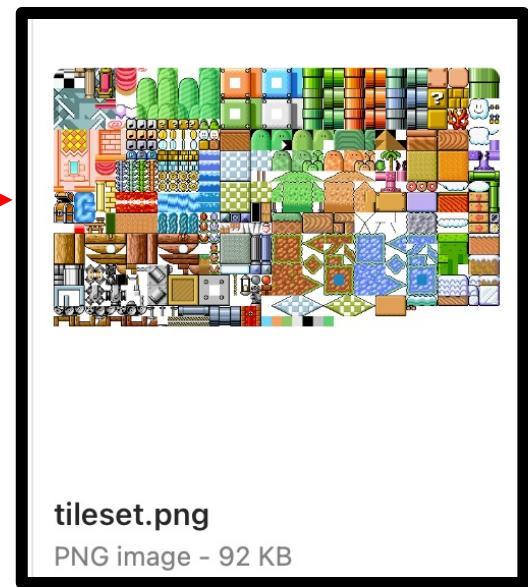
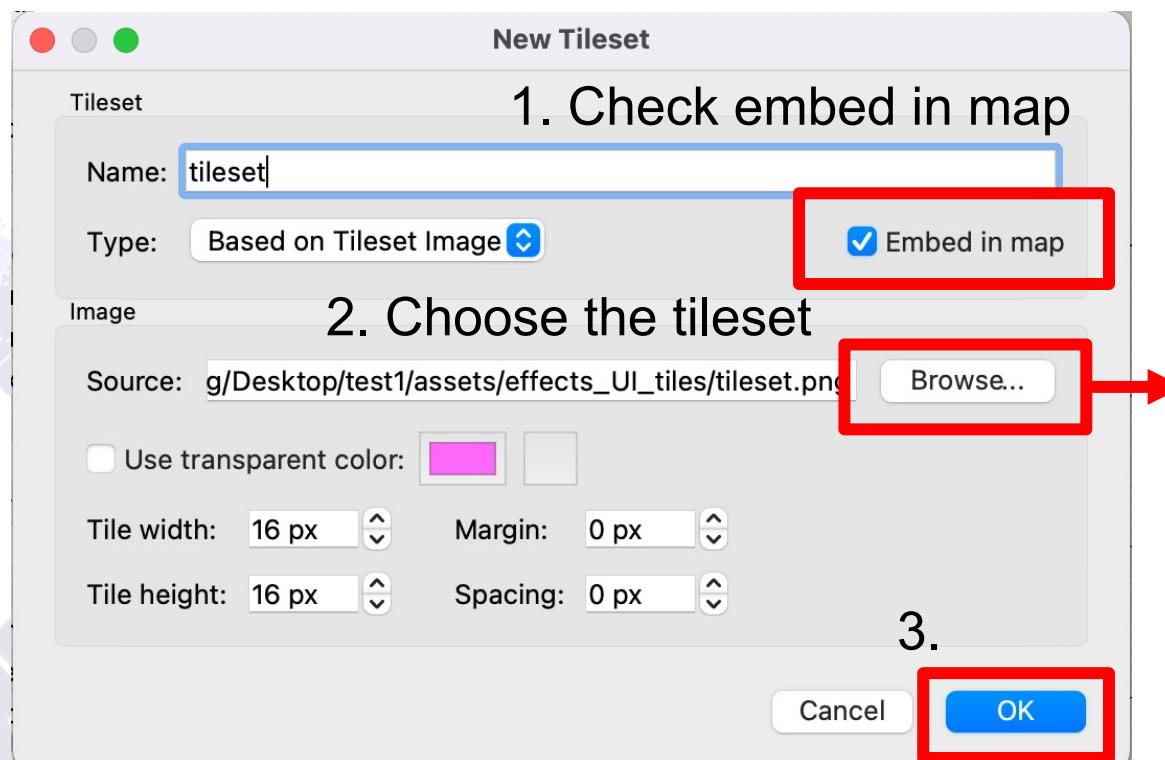
Tiled: A World Editor

Click **New Tileset** to create a new tileset



Tiled: A World Editor

And fill the form to create tileset

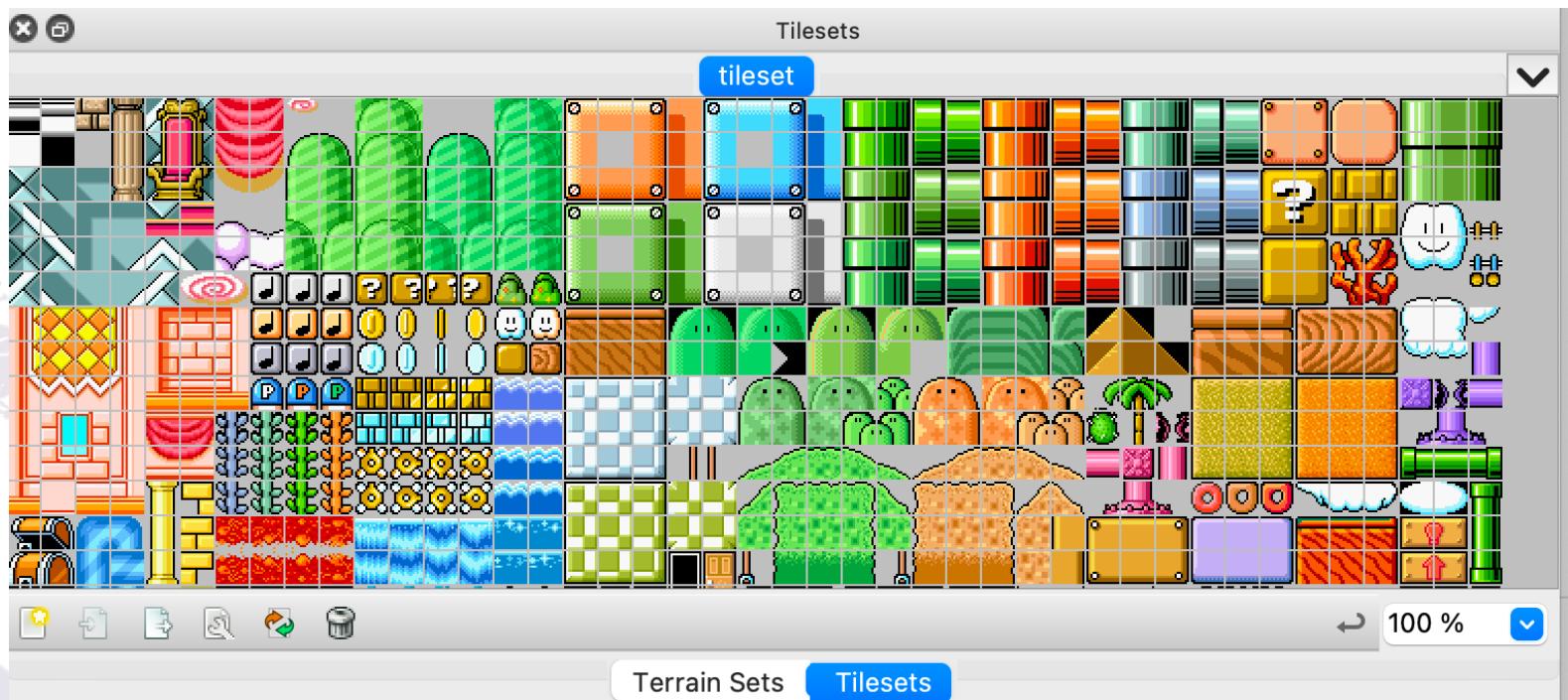


3.



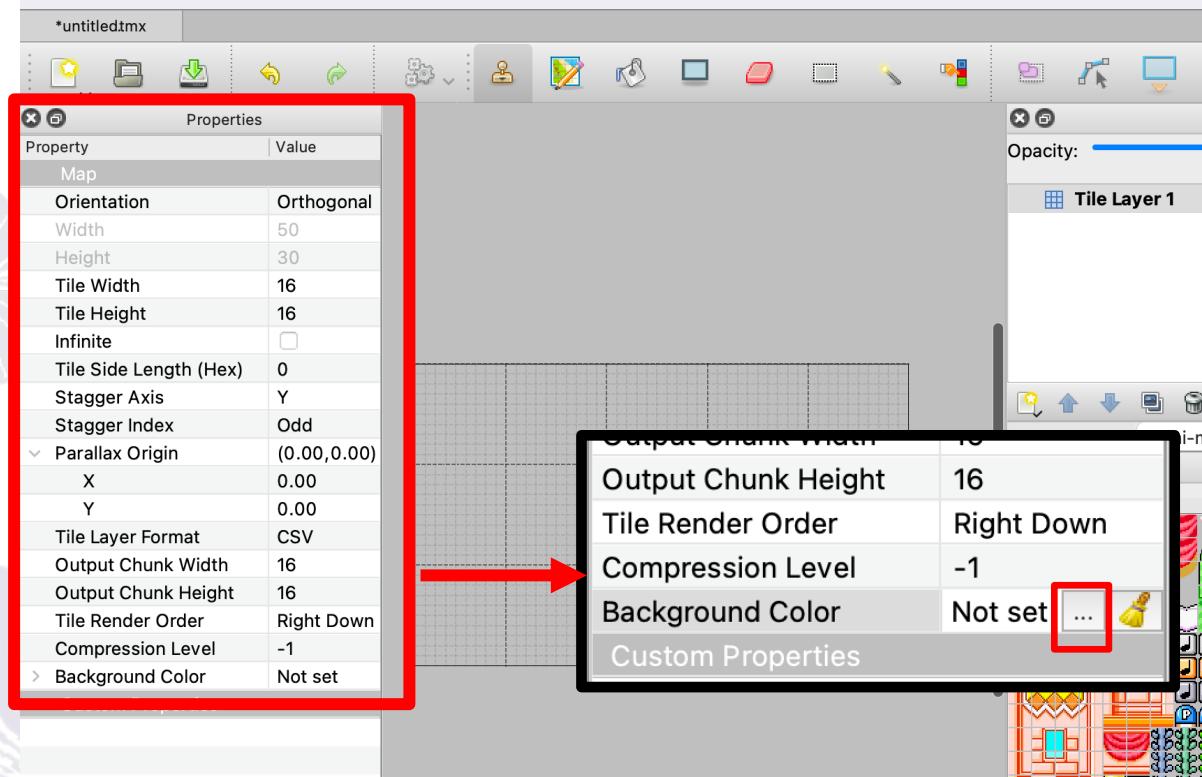
Tiled: A World Editor

Now we can see our tileset



Tiled: A World Editor

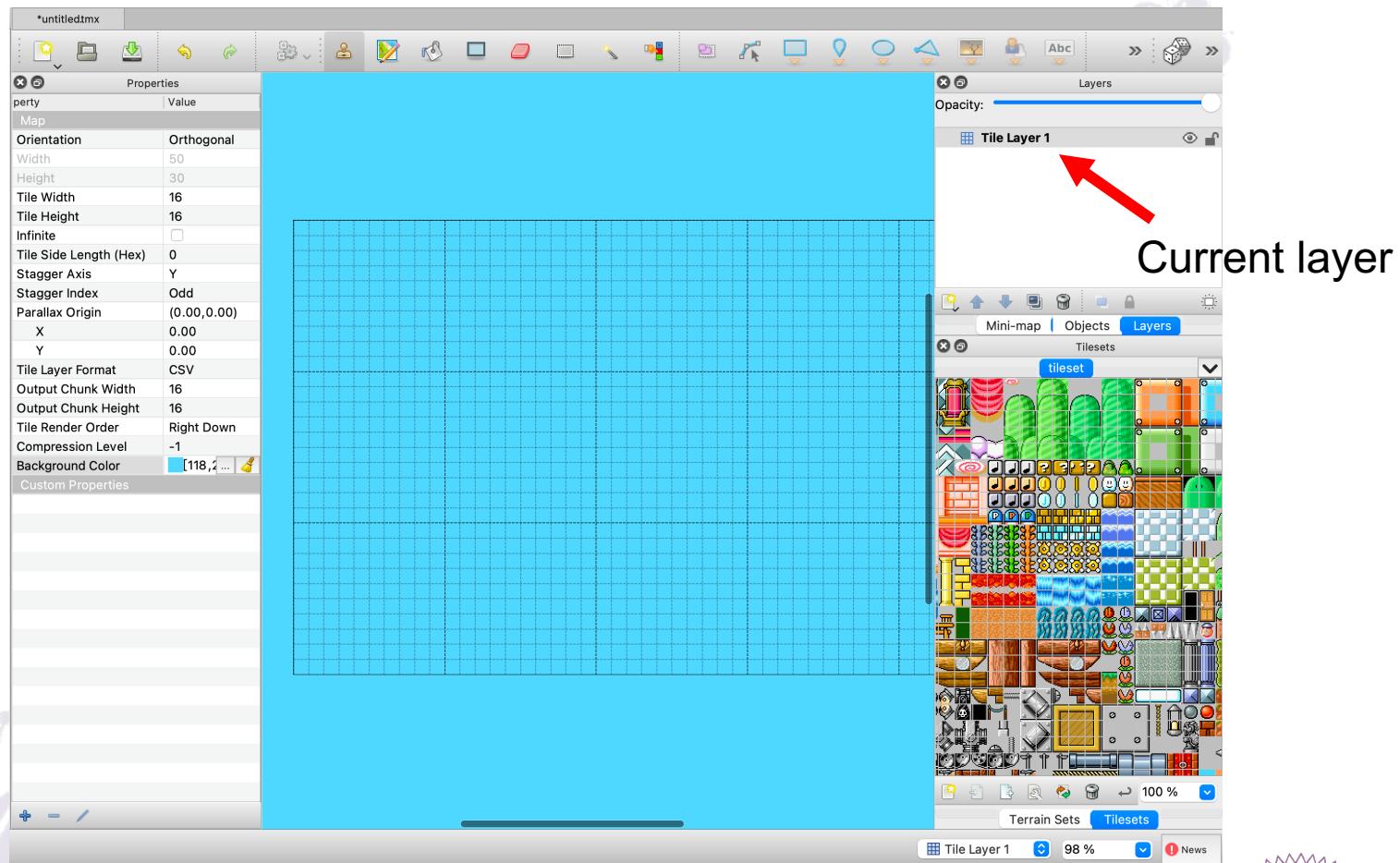
Set background color with
“map → map properties”



Click and
choose a
color



Tiled: A World Editor



This is our current empty map



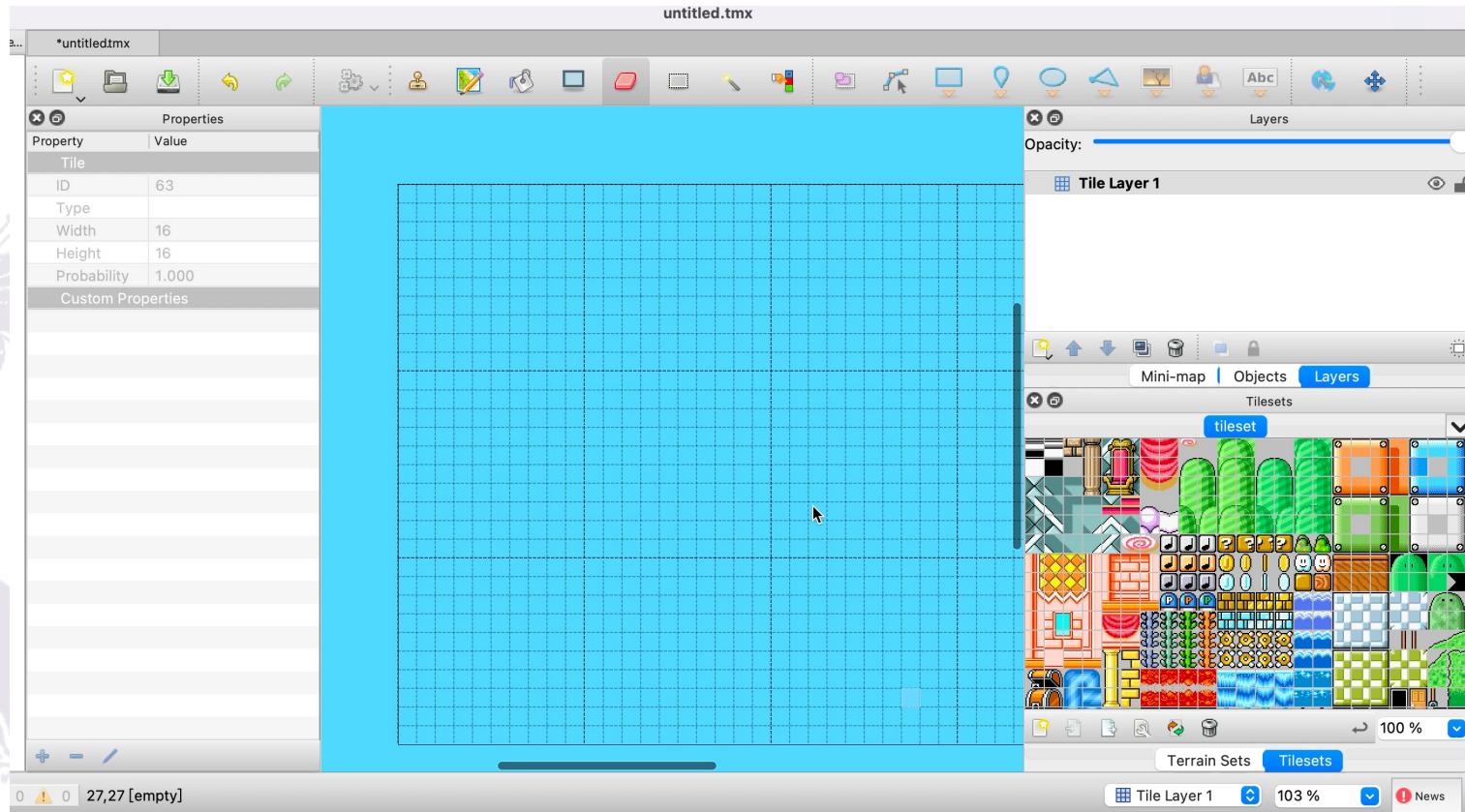
Tiled: A World Editor

- The empty tilemap is now properly set up, the next step is to design the level.
- For this we will need 2 tools: the **stamp** to draw tiles on the map and the **eraser** to remove tiles.



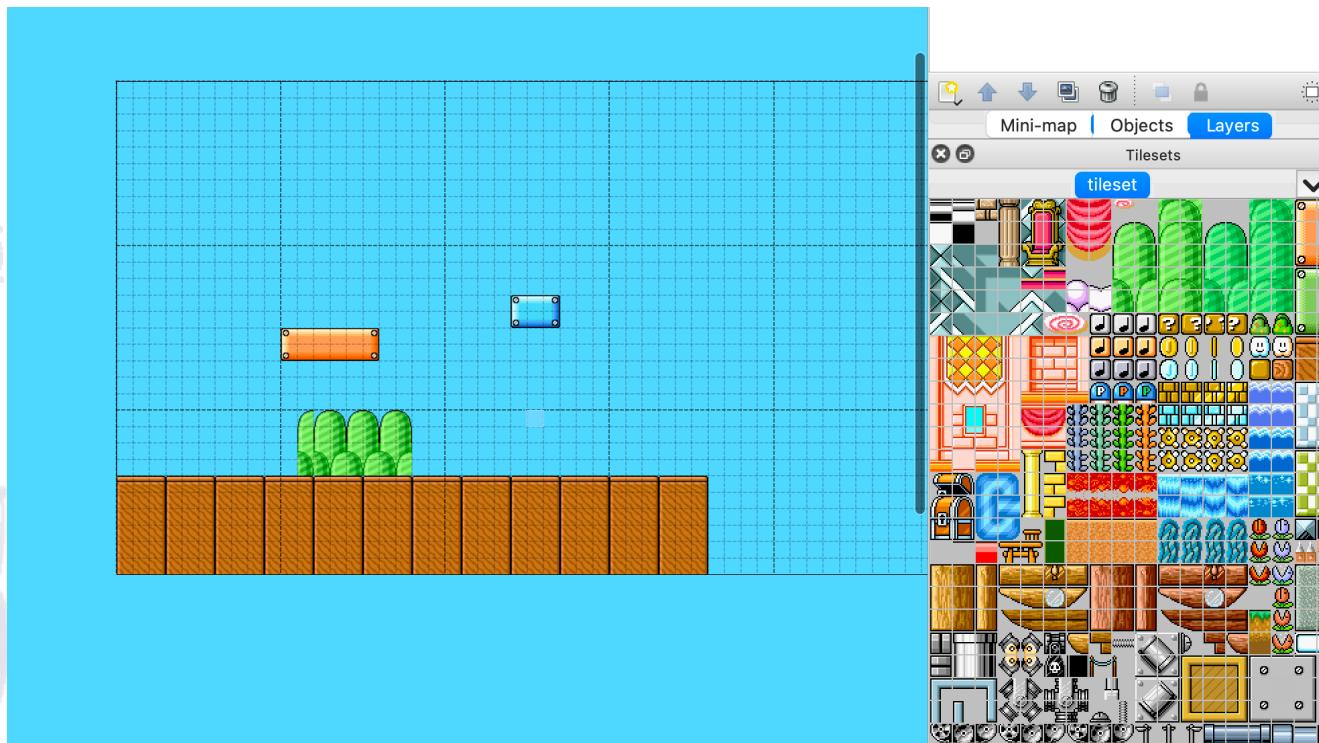
Tiled: A World Editor

- And now simply draw a level using the tileset in the bottom right corner.



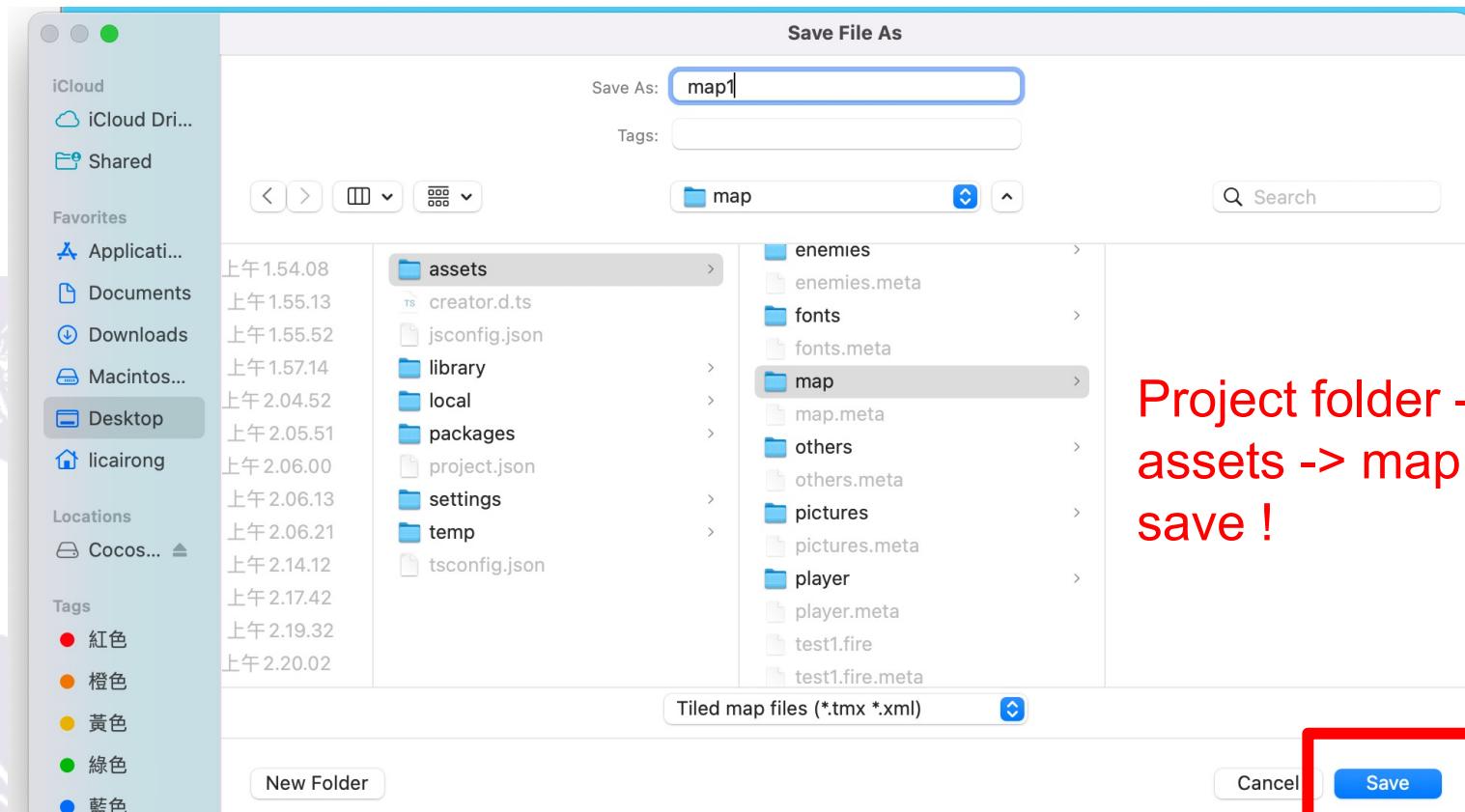
Tiled: A World Editor

- With tileset, you can easily paint your world map.



Save tilemap to Cocos creator

- Save the file to CocosCreator project directly!

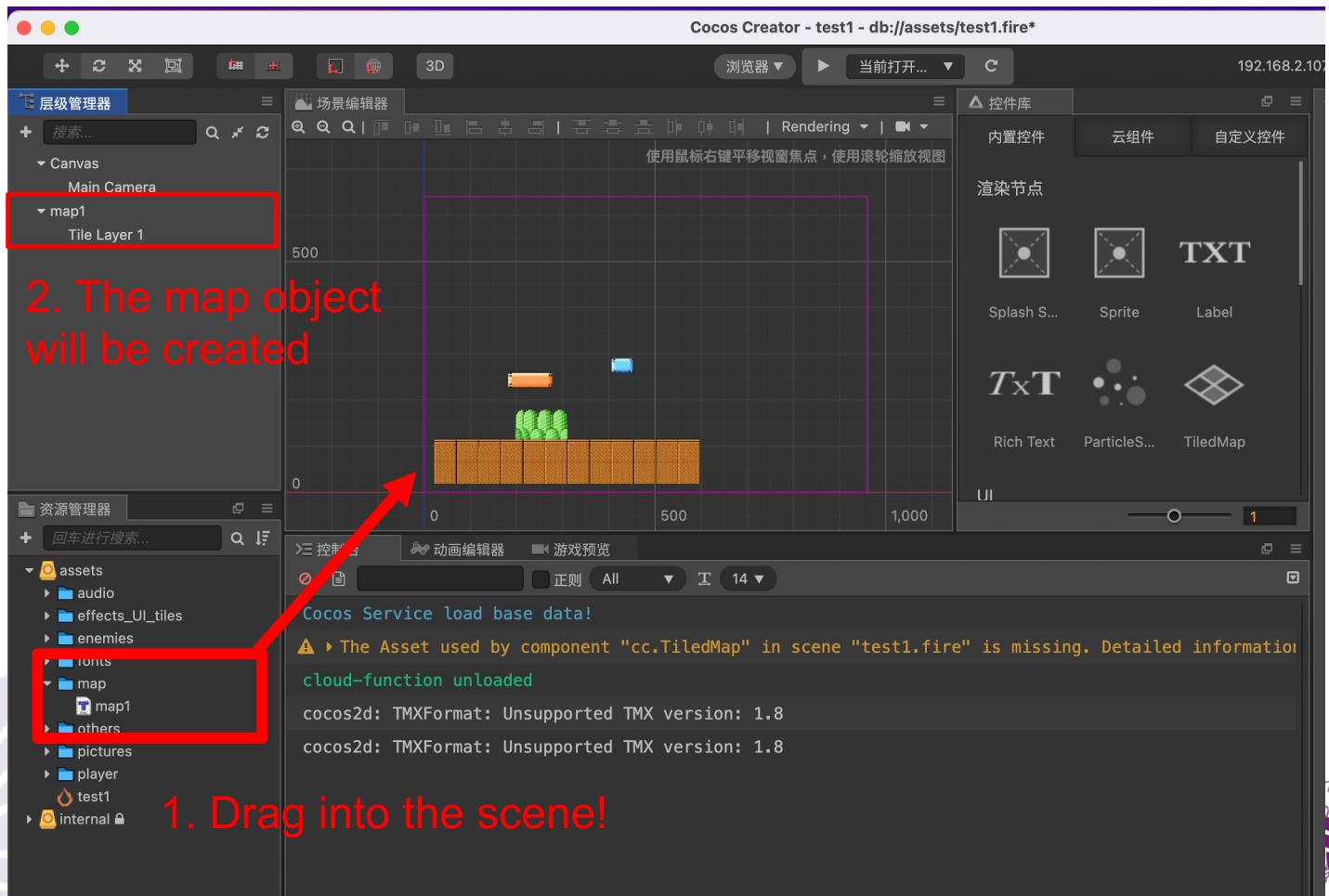


Project folder ->
assets -> map ->
save !



Use your map

- In CocosCreator, use your map by directly drag it into your scene!



thank
you!

Question

?

