

# Ordering Sprites

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# Ordering Sprites



**Blit** -> Background

**Blit** -> character

**Blit** -> items

**Blit** -> foreground

**Blit** -> etc...

# Problems

## Overlapping



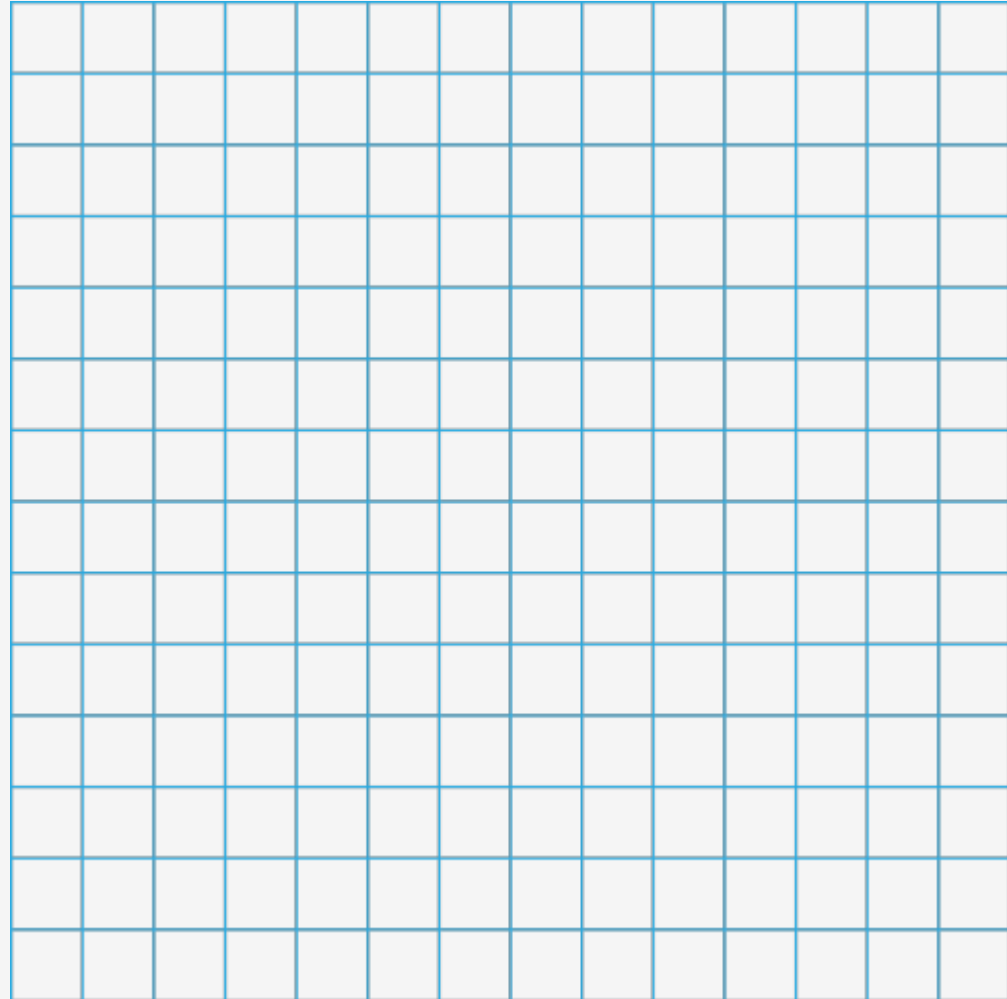
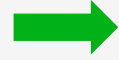
Solution

**Stablsh Priority**

based on  
**position**

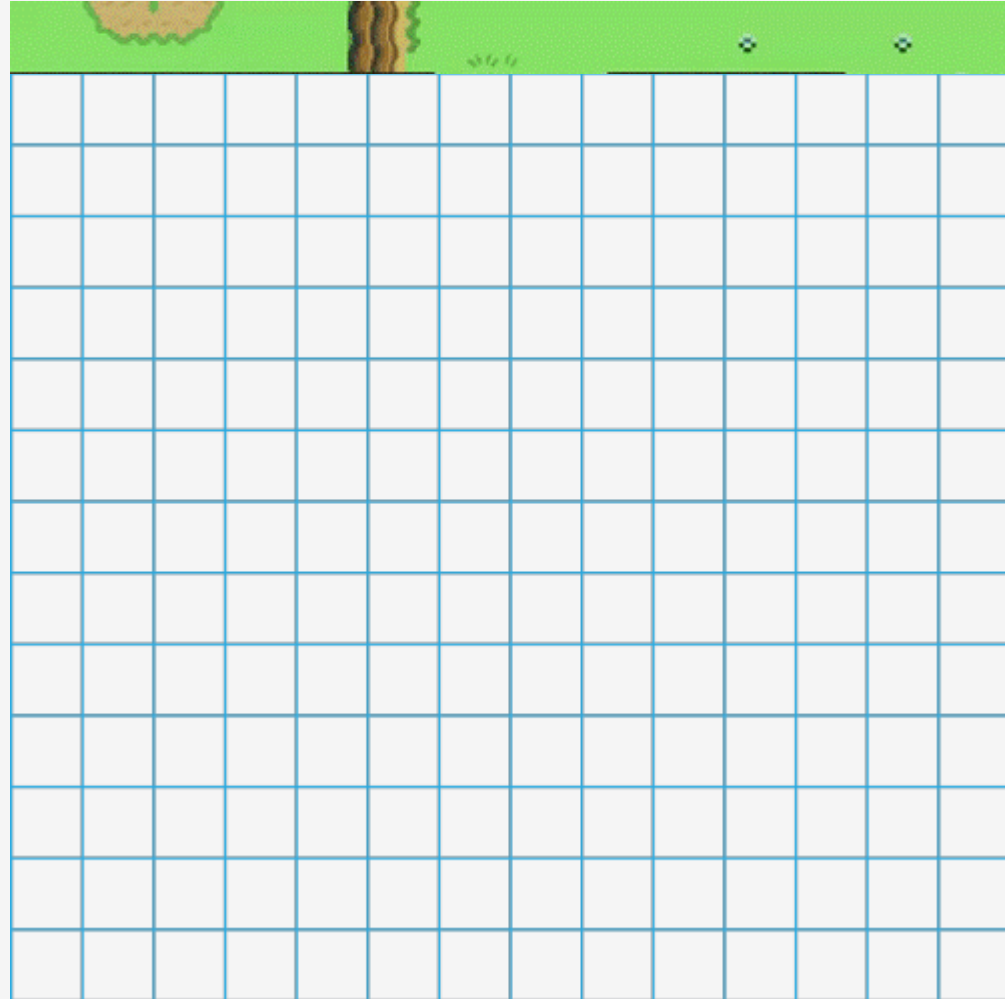
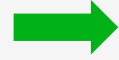
# Solution

# Stablsh Priority



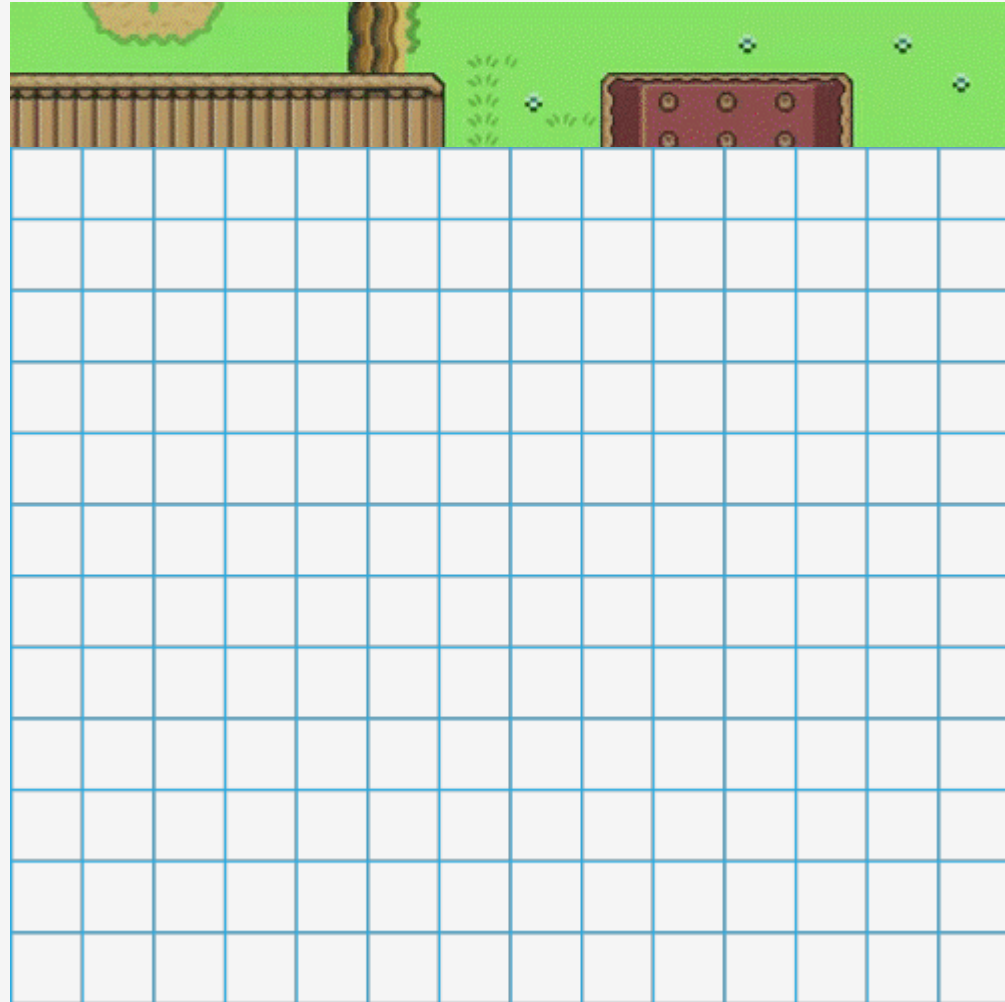
# Solution

# Stablsh Priority



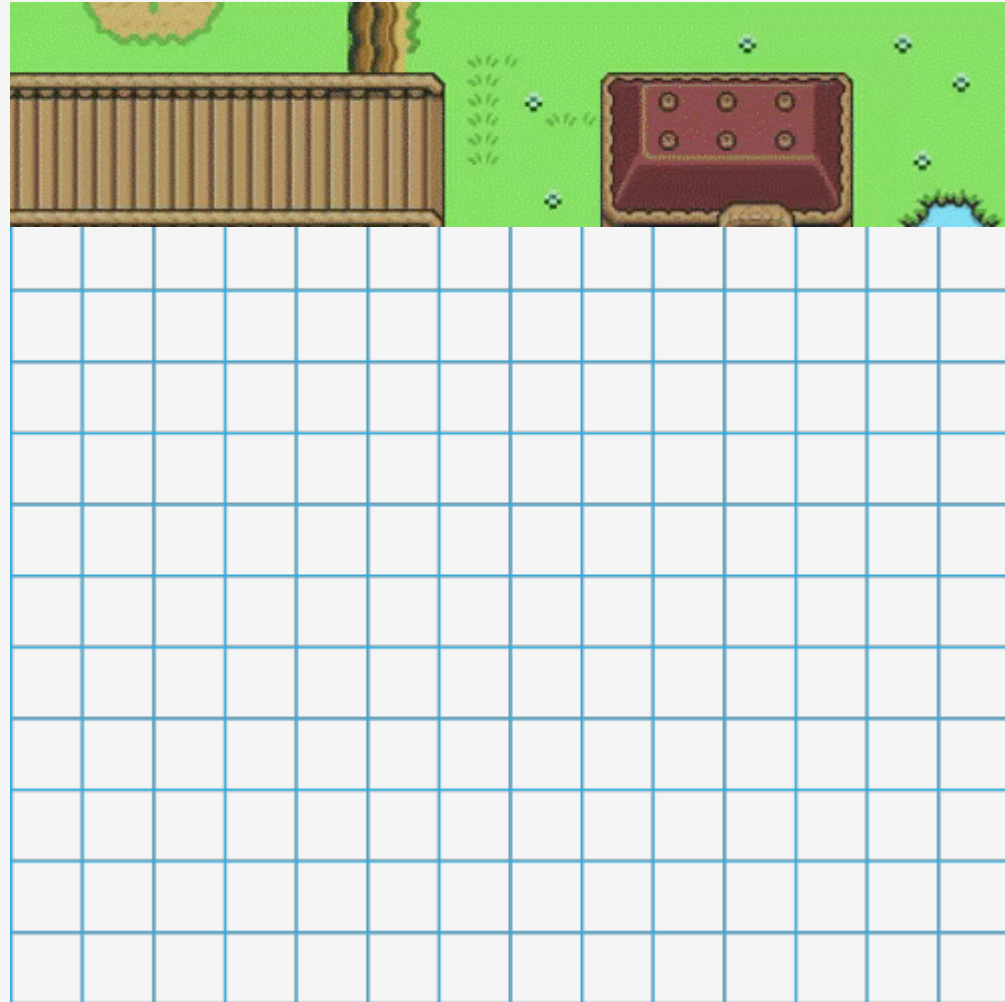
# Solution

# Stablsh Priority



# Solution

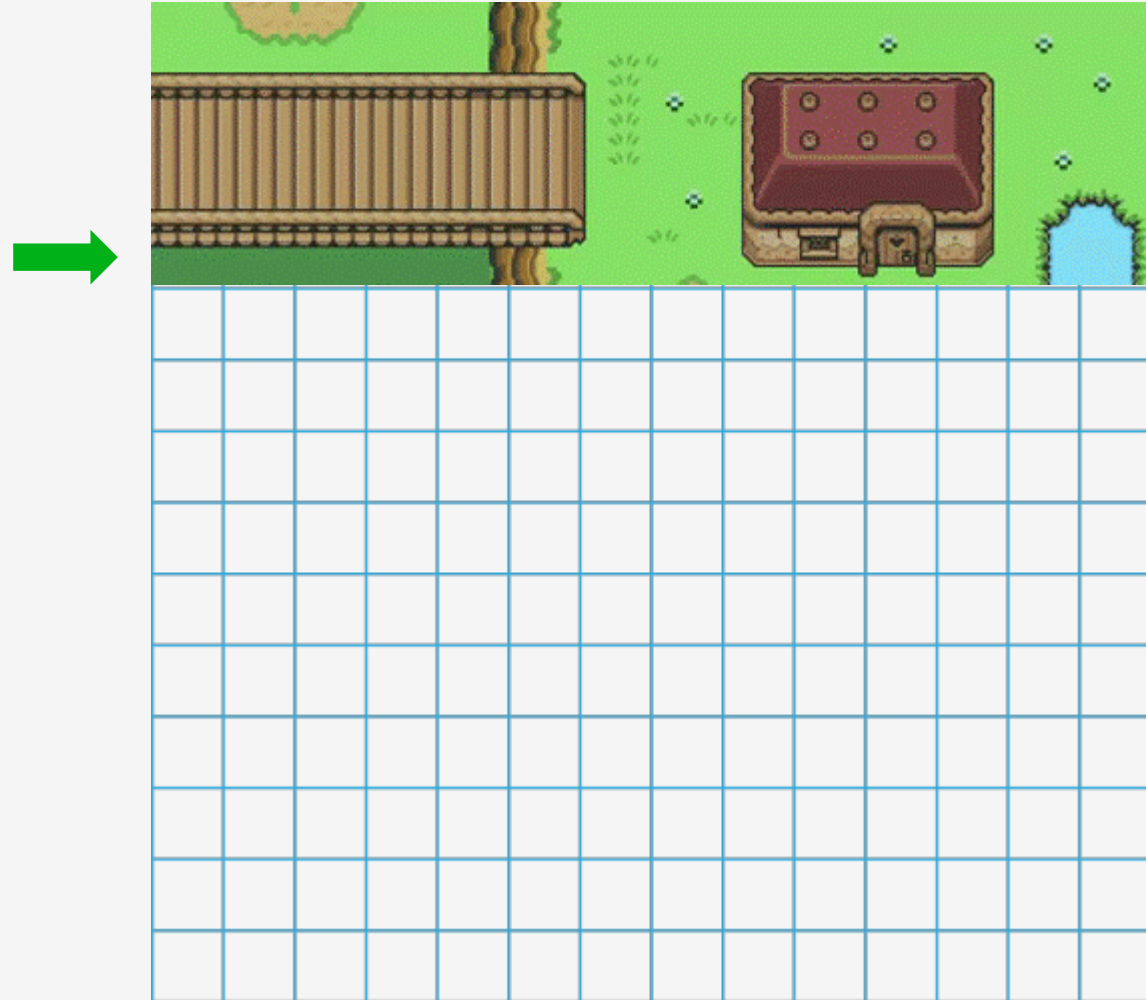
# Stablsh Priority





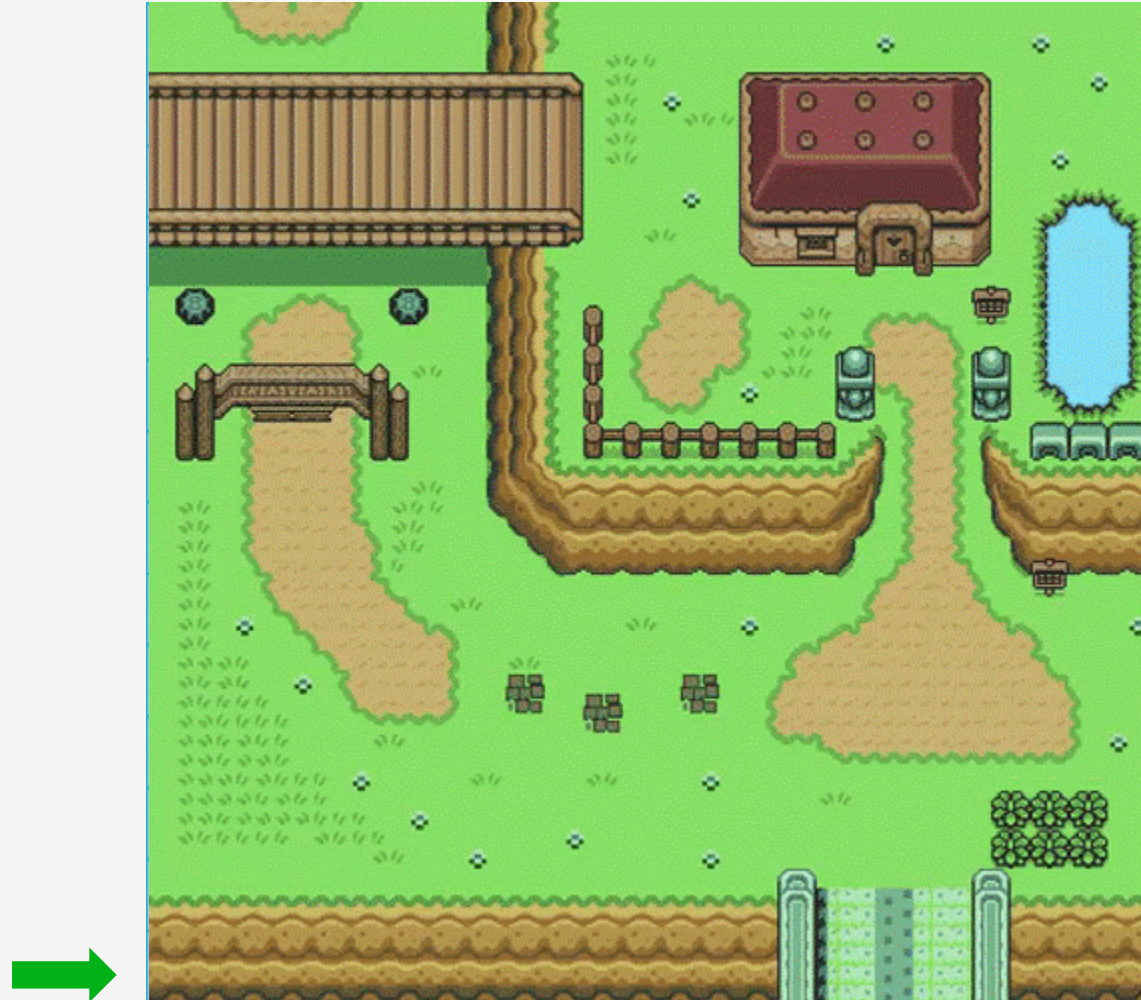
# Solution

# Stablsh Priority



# Solution

# Stablsh Priority



# Process

(What I did)

1- Struct/Class for the Sprites.

2- List / Queue that takes ever sprite. (double ended Queue recommended)

3- Push every sprite into the queue.

4- Reorder the queue following the Priority.

5- Iterate and Blit the queue.

TO DO's  
are back

**TODOS ARE HERE**



# 1

Struct/Class for the Sprites.

-Sprite class.

-Should contain:

- Position
- Priority
- Texture (& rect)

# 2

List / Queue that takes ever sprite.

- Easy one
- queue of Sprite Classes.
- `std::deque` recommended

# 3

Tough one 😞

**Push** every sprite into the queue.

## Todo 3 - Player

### Part 1: Method

Create a **method** that **pushes** player sprites to the queue

Must receive **priority** value.

### Part 2: Call the method

Call the method in the Update of player.

Think of wich priority should have the player.

# 4

**Push** every sprite into the queue.

## Todo 4- Entities

Create a **method** similar to the one of the player that **pushes** Entities sprites to the queue.

Must receive **priority** value aswell.



# 5

Push every sprite into the queue.

Let's see the results!

- Easy one.
- Iterate the queue and blit every element of the queue
- Clean the queue!

You can't do it wrong  
If you can't see the results



# 6

## Set a priority for the entities

- Easy one
- Similar to the priority of the player.
- Iterate the entity list (entities)
- Do it for every entity

# 7

Reorder the queue following the Priority.

- Think of how we did the priority queue last year.
- Iterate the queue.
- SWAP** elements if needed
- Lower->Higher**

Thank you!