

Group 3 Little Sacred Dragon

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1 Brief Description

2 Technically Challenging

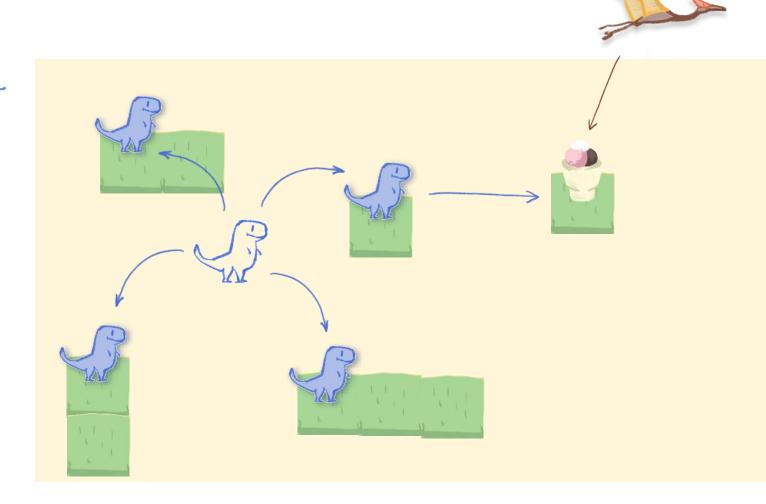
3 Complexity of the whole program

4 Some Tips

Brief Description

The game play

- Survive in 2 minutes
- Eat ice cream as quick as you can
- Use WSAD, Space and J to control



Challenges & Solutions

Demand: Judge whether player is on the grass

Purpose: To judge whether player is died or not

Solution:

1. Use index to store the position of each square

2. Get the position of the player and change it into index

Time complexity: O(1)

Space complexity: O(nm)

n stands for the index of x-axis

m stands for the index of y-axis($0 \le n \le 10$, $0 \le m \le 10$)

Challenges & Solutions

Demand: Ice-cream has multiple State

Purpose: To avoid redundancy

Solution: Use FSM

Demand: Player must jump

Purpose: Otherwise this game makes no sense

Solution: Just coding (instead of using RigidBody)

Complexity



Time complexity: O(mn)

To check whether the ice-cream is being eaten

To check the fireball can be hit by the trap

Space complexity: O(mn)

To store the index of the map, coco, ice-cream

Range: $0 \le n \le 10, 0 \le m \le 10$ Scale: 10^2

Coding complexity: The most complex system I have ever made

(Lines of coding is up to 1000+, which is big enough for me)

However, we manage it!

Some Tips



- 1. You can try any keys you like, but be cautious for the key ZXC and G
- 2. The way of operating is a little bit hardcore, but we try to make you feel comfortable
- 3. Haha(Player) can be knocked by the falling ice-cream.

Try it



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