

SPIDER RUNNER

UPDATE :: 02 OCT 2020

LAST WEEK



อุปสรรค

- ยังหาวิธีทำให้ตัวละครกระโดดไม่สำเร็จ

NEXT WEEK >>

- ตัวละครกระโดดได้
- คำนวณเคลื่อนที่
- รับค่าจาก keyboard

THIS WEEK UPDATED

- ตัวละครกระโดดได้
- รับค่าจากคีย์บอร์ดได้แล้ว

```
let control = {
  up:false,
  down:false,
  open_full:false,
  close_full:false,
  keyListener:function (event) {
    var key_state = (event.type == "keydown"?true:false;
    switch (event.keyCode) {

      case 38: // arrow up
        control.up = key_state;
        break;
      case 40: // arrow down
        control.down = key_state;
        break;
      case 33:
        control.open_full = key_state;
        break;
      case 27:
        control.close_full = key_state;
        break;
    }
  }
}
```

```
function Player (x, y, width, height) {
  context.fillStyle = 'green';
  context.fillRect(x, y, width, height);
}
```

```
let spider = {

  x:50,
  y:0,
  width:80,
  height:80,
  jumping:true,
  y_dist:0
}
```

```
////////// PART OF ENEMY //////////  
function RandInt(start, end) {  
    return Math.floor(Math.random() * (end - start) ) + start;  
}  
  
let enemy = {  
  
    x:0,  
    y:0,  
    width:80,  
    height:80,  
    enemy_speed:0  
  
}
```

```
function DrawObstacle (x, y, width, height) {  
    context.fillStyle = 'red';  
    context.fillRect(x, y, width, height);  
}  
  
let obstacles = [];  
function Obstacle () {  
    enemy.x = RandInt(canvas.width + enemy.width, 100);  
    enemy.y = RandInt(100, canvas.height - enemy.height);  
    obstacles.push(DrawObstacle(enemy.x, enemy.y, enemy.width, enemy.height));  
}
```

```
var Movement;  
var element = document.documentElement;  
Movement = function () {  
  
    if (control.up && spider.jumping == false) {  
        spider.y_dist -= 60;  
        spider.jumping = true;  
    }  
  
    spider.y_dist += 3.0;  
    spider.y += spider.y_dist;  
    spider.y_dist *= 0.9;  
  
    if (spider.y > 500 - 40 - 80) {  
        spider.jumping = false;  
        spider.y = 500 - 40 - 80;  
        spider.y_dist = 0;  
    }  
}
```

```
        if (control.open_full) {  
            element.requestFullscreen();  
        } else if (control.close_full) {  
            document.exitFullscreen();  
        }  
  
        context.fillStyle = '#202020';  
        context.fillRect(0, 0, canvas.width, canvas.height);  
  
        Player(spider.x, spider.y, spider.width, spider.height);  
  
        window.requestAnimationFrame(Movement);  
    }  
  
    window.addEventListener("keydown", control.keyListener);  
    window.addEventListener("keyup", control.keyListener);  
    window.requestAnimationFrame(Movement);
```

← → ↻ 🏠 🔒 github.com/pothonprogramming/pothonprogramming.github.io/blob/master/content/control/control.js ☆ 📄

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👤 frankarendpoth better tile ✓ Latest commit 50bc113 on 10 May 🕒 History

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116 lines (79 sloc) | 2.34 KB Raw Blame 🖨️ ✎ 🗑️

```
1 // Frank Poth 08/13/2017
2
3 var context, controller, rectangle, loop;
4
5 context = document.querySelector("canvas").getContext("2d");
6
7 context.canvas.height = 180;
8 context.canvas.width = 320;
9
10 rectangle = {
11
```

Ref : <https://github.com/pothonprogramming/pothonprogramming.github.io/tree/master/content/control>

WHAT'S `window.requestAnimationFrame` ?

“Animation in JavaScript”

1. `setInterval()`
2. `requestAnimationFrame`

WHAT'S

`window.requestAnimationFrame`

?

“setInterval”

เป็นการคำนวณให้ animation ที่เราสร้าง มี “เวลา” ที่เท่ากันทุกเฟรม ซึ่งทำให้เกิดภาพเคลื่อนไหวที่ไม่ลื่นไหล ต้องกำหนด fps เอง

<https://medium.com/@kawisara.asma/%E0%B8%97%E0%B8%B3%E0%B9%81%E0%B8%AD%E0%B8%99%E0%B8%99%E0%B8%B4%E0%B9%80%E0%B8%A1%E0%B8%8A%E0%B8%B1%E0%B9%88%E0%B8%99%E0%B8%88%E0%B8%B0%E0%B9%83%E0%B8%8A%E0%B9%89-setinterval-%E0%B8%AB%E0%B8%A3%E0%B8%B7%E0%B8%AD-requestanimationframe-%E0%B8%94%E0%B8%B5%E0%B8%81%E0%B8%A7%E0%B9%88%E0%B8%B2%E0%B8%81%E0%B8%B1%E0%B8%99-69164460e59e>

WHAT'S

`window.requestAnimationFrame`

?

“requestAnimationFrame”

จะรีเฟรช fps ตาม web browsers จะไม่ทำงานถ้าหาก tab หรือ window นั้นไม่ได้ใช้งานอยู่ (inactive tab) นั่นก็หมายความว่า จะไม่มีการใช้งาน CPU, GPU และ Memory

<https://www.imoooh.com/using-requestanimationframe-for-javascript-animation>



WHAT'S

`window.addEventListener`

?



