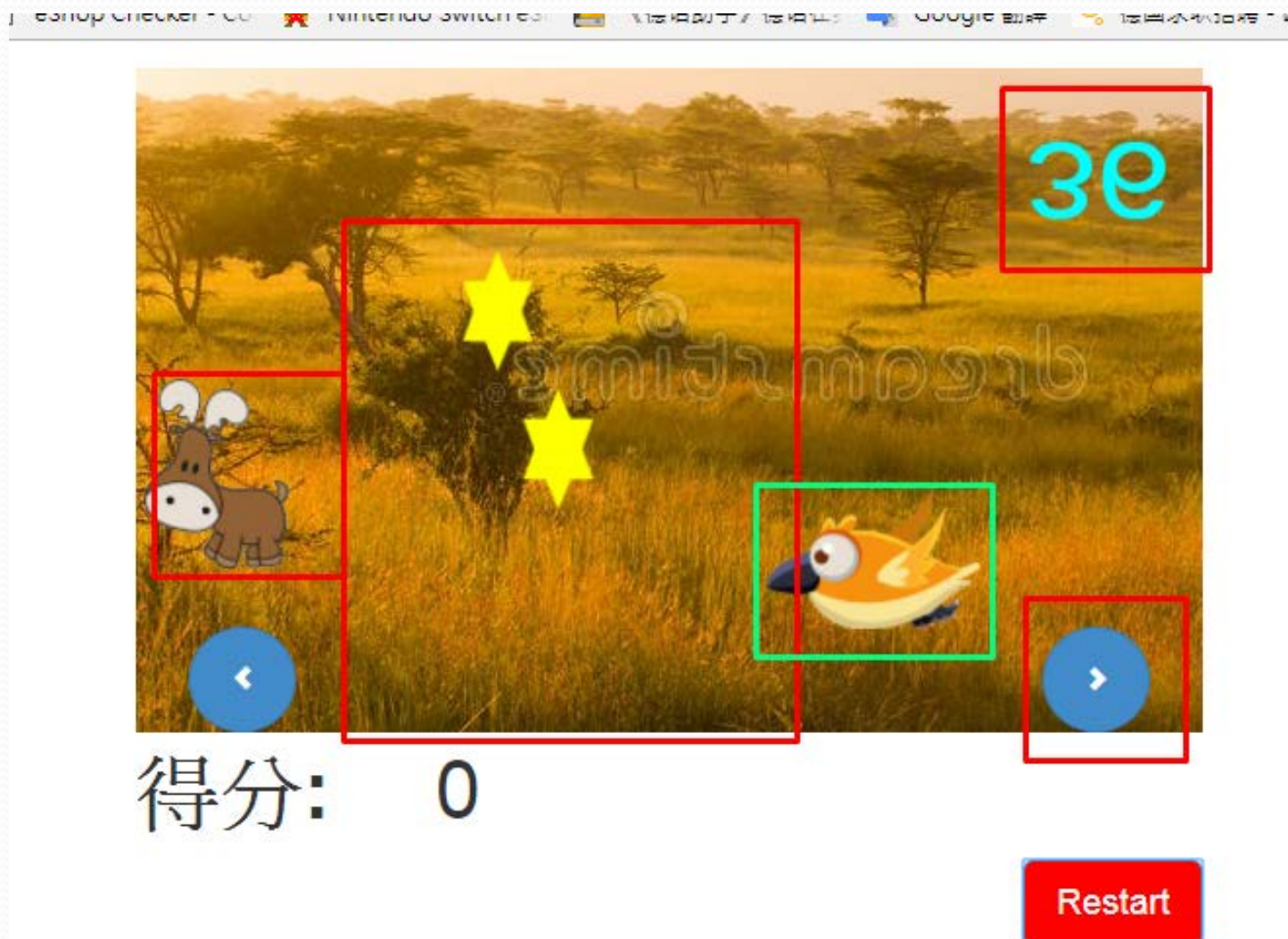# 小專題報告

鄭植諺

2018/04/25

Layout

Display two digits

- timeChar = (gameTime+1000).toString().substr(2,2);

Digits Turn Animation

- Add and remove with different setInterval()

```css
.digitTurn{
    animation:turn 1s linear ;

}

@keyframes turn{
    from {transform:rotateX(0deg); }
    to {  transform:rotateX(360deg); }
}
```

```javascript
var timeChar;
var time2 = setInterval(function() {

    timeChar = (gameTime+1000).toString().substr(2,2);
    $("#timer").html(timeChar);

    $("#countDown").addClass("digitTurn");

    if (gameTime == 0) {
        clearAllInterval();
    }

    if(pointCounter%3 ==1){
        setStarAndDraw();

    }else{
        ctx.clearRect(0,0,c.width,c.height);

    }

    gameTime--;
}, 1000);


setInterval(function() {

    $("#countDown").removeClass("digitTurn");
},2000);
```

- https://www.youtube.com/watch?v=9bOlAFoFyoA

Background image Button

```css
#bannerImage {
    position: absolute;

    top:0px;

    width: 3000%;
    height: 90%;
    background-color:red;
    background-image: url('images/grass2.jpg');
    background-repeat: repeat-x;

    left: -1000%;

    transition: all 0.5s linear;
}
```



```javascript
var time3;
$("#turnRightButton").bind({

    'mouseenter': function(){
        time3 = setInterval(function(){
            // backgroundImageXLocation= backgroundImageXLocation%200;
            //alert(backgroundImageXLocation);
            $("#bannerImage").attr("style","left: -"+backgroundImageXLocation+"%" );
            backgroundImageXLocation+=5;
        },300)

    },
    'mouseleave': function(){
        clearInterval(time3);
    }
```

Direction detection for once

- Otherwise, accumulation speeding-> use fire

```
var fired = false;      //flag for press once detection
var time4;
document.onkeydown = function(evt) {
    if(!fired && evt.keyCode==39) {              //if excute as fire==false
        fired = true;
        // do something
        time4 = setInterval(function(){
        $("#bannerImage").attr("style","left: -"+backgroundImageXLocation+"%" );
        backgroundImageXLocation+=3;
        },300);
    }else if(!fired && evt.keyCode==37){

        fired = true;
        // do something
        time4 = setInterval(function(){
        $("#bannerImage").attr("style","left: -"+backgroundImageXLocation+"%" );
        backgroundImageXLocation-=3;
        },300);

    }
};

document.onkeyup = function() {
        if(evt.keyCode==39 || evt.keyCode==37){       //without this would cause trigger by all the keybotton
            fired = false;
        }
```

clear all the setInterval()

```
function clearAllInterval() {

    var highestIntervalId = setInterval(";");

    for (var i = 0; i < highestIntervalId; i++) {
        clearInterval(i);
    }

}
```

Selector with MultiSelector

```
$("#startButton, #restartButton").click(function() {
    clearAllInterval();
    pointCounter = 0;
    $("#pointBoard").text(pointCounter);
    var gameTime = 60;

    var time2 = setInterval(function() {

        $("#timer").html(gameTime);
        if (gameTime == 0) {
            clearAllInterval();
        }
        gameTime--;
    }, 1000);
```

Class   function Star(){}


```
Star.all=[];

function Star(x, y, r, p, m,starColor,ctx){
    this.x = x;
    this.y = y;
    this.r = r;
    this.p = p;
    this.m = m;
    this.starColor = starColor;
    this.ctx = ctx;
    this.checkclicked=false;
    Star.all.push(this);


    this.draw = function (){
            this.ctx.save();
            this.ctx.beginPath();
            this.ctx.translate(this.x, this.y);
            this.ctx.fillStyle=starColor;
            this.ctx.moveTo(0,0-this.r);
            for (var i = 0; i < this.p; i++)
            {
                this.ctx.rotate(Math.PI / this.p);
                this.ctx.lineTo(0, 0 - (this.r*this.m));
                this.ctx.rotate(Math.PI / this.p);
                this.ctx.lineTo(0, 0 - this.r);
            }
            this.ctx.fill();
            this.ctx.restore();

        };

    this.remove = function(){
            Star.all.splice(Star.all.indexOf(this), 1);
            }

}
```

Star Draw

- Call the function every sec. and update every ten sec.

```
var gameTime = 60;
var timeChar;

var time2 = setInterval(function() {

    timeChar = (gameTime+1000).toString().substr(2,2);
    $("#timer").html(timeChar);

    $("#countDown").addClass("digitTurn");

    if (gameTime == 0) {
        clearAllInterval();
    }

    setStarAndDraw();

    if(gameTime%10 ==5){

        ctx.clearRect(0,0,c.width,c.height);
        var counter=Star.all.length;
        while(counter--)
        {
            Star.all[counter].remove();
        }

    }

    gameTime--;
}, 1000);
```

```
function setStarAndDraw() {
    ctx.clearRect(0,0,c.width,c.height);

    //var counter=Star.all.length;

    while(Star.all.length < starNumber){

        var randomStarX = Math.floor(Math.random()*c.width);
        var randomStarY = Math.floor(Math.random()*c.height);

        while(randomStarX > 0.6*c.width) {
            randomStarX = Math.floor(Math.random()*c.width);
        }

        while(randomStarY > 0.6*c.height) {
            randomStarY = Math.floor(Math.random()*c.height);
        }

        var star =new Star(randomStarX+30,randomStarY+30,20,6,0.6,"y

    }


    Star.drawAll();
}
```

```
Star.drawAll=function(){


    for(var i =0; i <Star.all.length;i++)
    {

        if(Star.all[i].checkclicked==false){
            Star.all[i].draw();
```

Star Click Event Detection

```javascript
document.onclick= checkStarClick;

function checkStarClick(event){


    var mouseY=event.clientY;
    var mouseX=event.clientX;
    var counter=Star.all.length;

    function StarPos(){
        this.x;
        this.y}


    while(counter--){
    try{

        var rect = c.getBoundingClientRect();
        var starPos= new StarPos();
        starPos.x=rect.left + Star.all[counter].x;//get actual P
        starPos.y=rect.top + Star.all[counter].y;

        if(Math.sqrt((starPos.x-mouseX)*(starPos.x-mouseX)+
                     (starPos.y-mouseY)*(starPos.y-mouseY)
                     ) < 30){

            if(!Star.all[counter].checkclicked){

                Star.all[counter].checkclicked=true;
                starAudio.play();
                pointCounter++;
                $("#pointBoard").text(pointCounter);
        //  starNow.x=-500;
        //  starNow.y=-500;
                }
            }

    }catch(e){
    //do nothing
```
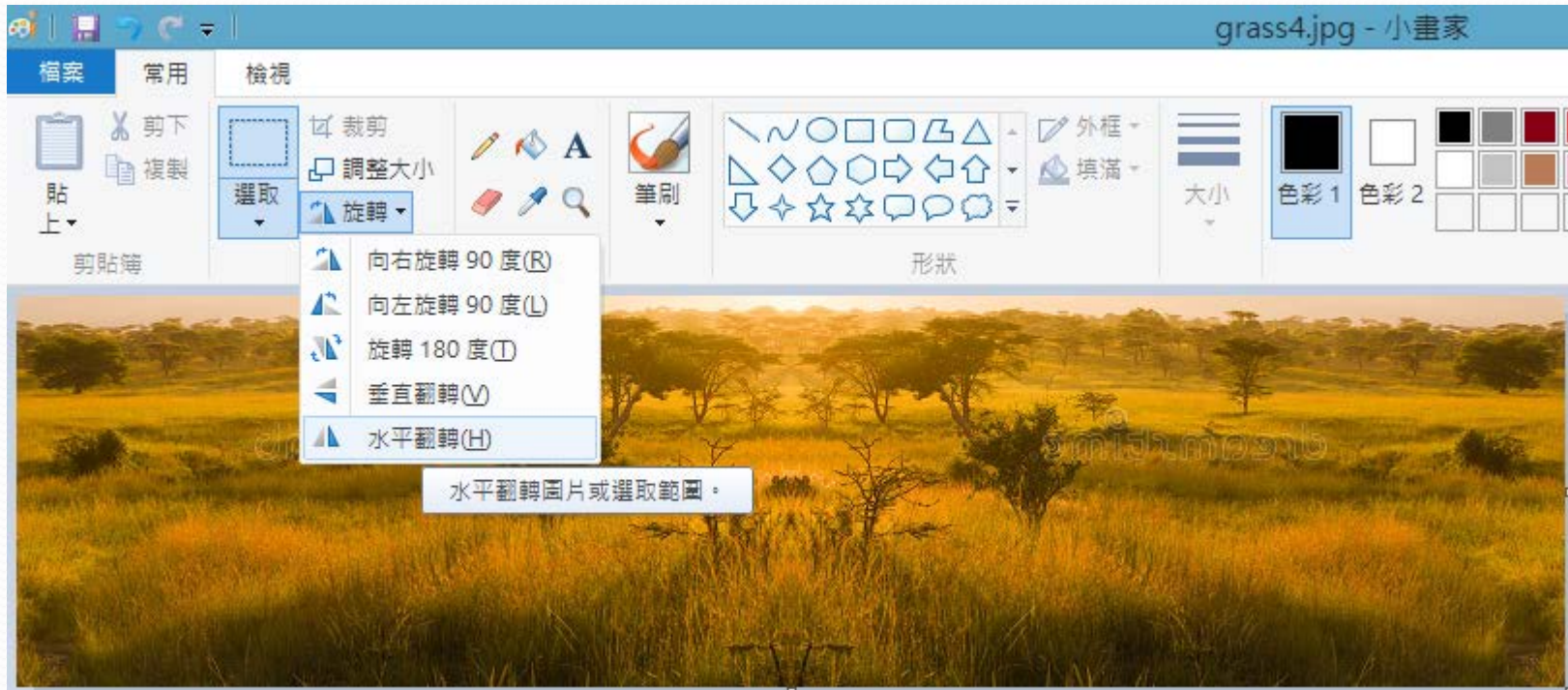
Background image

- http://www.dreamstime.com/royalty-free-stock-photography-african-savannah-misty-morning-light-serengeti-national-park-tanzania-image67663867

音效

```
<audio id="audio" src="sound/fireSound.ogg"></audio>
```

```
var audio = document.getElementById('audio');
```

```
audio.play();
```

- 來源
- http://tw.yisell.com/(槍聲)
- http://forums.wasabistudio.ca/viewtopic.php?f=70&t=35276(馬利)

- 剪輯 https://mp3cut.net/tw/
- Note: 用.mp3有時候只會撥一次，後來用.ogg(https://www.online-convert.com/)

圖檔來源

- http://bpic.588ku.com/element_origin_min_pic/17/11/30/0c098cf1f0efb94bcec9e03298ee0b6d.jpg
- http://588ku.com/sucai/7522351.html

- https://cn.dreamstime.com/%E5%BA%93%E5%AD%98%E7%85%A7%E7%89%87-%E5%9C%A8%E6%9C%89%E8%96%84%E9%9B%BE%E7%9A%84%E6%97%A9%E6%99%A8%E5%85%89%E7%9A%84%E9%9D%9E-%E5%A4%A7%E8%8D%89%E5%8E%9F-image67663867

線上去背

- https://pixlr.com/editor/

Q&A

謝 謝 大 家

- http://sheep0222.pixnet.net/blog/post/55814811-%5Bjavascript%5D%E5%8F%96%E5%BE%97%E6%8C%89%E4%B8%8B%E9%8D%B5%E7%9B%A4%E4%BA%8B%E4%BB%B6

[javascript]取得按下鍵盤事件

分享:

今天幫人家找取得按下鍵盤某鍵後的事件，

找了一下順便記錄起來，

本來只有用event.which，

後來還說IE沒作用，又再找了一下，

加了event.keyCode就好了，

IE跟Chrome都能用。

LocalStorage for Username

```javascript
firstUserName = $("#userNameTextBox").val();
if(!localStorage["firstUserName"])
{
    localStorage.setItem("firstUserName", firstUserName);
    if(!localStorage["firstUserName"]){
        localStorage.setItem("firstUserName", "Unknown");

    }

}

document.getElementById("userNameTextBoxRestart").value = localStorage["firstUserName"];
document.getElementById("userNameTextBoxRestart").onkeyup = doChange;

if(!localStorage["firstUserName"])
{
    localStorage.setItem("firstUserName", "Unknown");
}

function doChange() {
    localStorage.setItem("firstUserName", this.value);
}
```