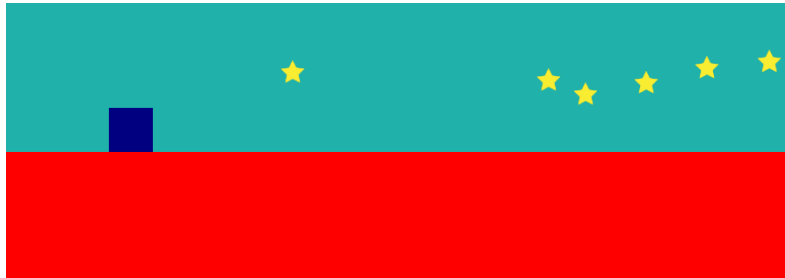


Φύλλο εργασίας για «HTML5 -JavaScript»

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Κίνηση αντικειμένου με πλήκτρα σε διαφορετικά επίπεδα



```
<!doctype html>
<meta charset="utf-8" />
<title>gamenam</title>
<center>
<canvas width="900" height="320" ></canvas>
<script src="requestAnimationFramePolyfill.js"></script>
<script>
var canvas = document.querySelector("canvas");
var ctx = canvas.getContext("2d");

var aObject =
{
  x: 0,
  y: 0,
  width: 100,
  height: 40
};

var shape = Object.create(aObject);
shape.x = 120;
shape.y = 270;
shape.width=50;
shape.height=50;
shape.vx=3;
shape.vy=0;
shape.isOnGround=true;
shape.jumpForce= -12;

var shape2 = Object.create(aObject);
shape2.x = 500;
shape2.y = 170;
```

```

shape2.width=200;
shape2.height=150;

var shape3 = Object.create(aObject);
shape3.x = 1500;
shape3.y = 170;
shape3.width=1200;
shape3.height=150;

var shape4 = Object.create(aObject);
shape4.x = 3200;
shape4.y = 220;
shape4.width=2000;
shape4.height=100;

var ystar=new Array
for(i=1;i<=50;i++){
    ystar[i] = Object.create(aObject);
        ystar[i].x=Math.floor(Math.random()*9200)+700;
        ystar[i].y = Math.floor(Math.random()*70)+30;
        ystar[i].width=30;
        ystar[i].height=30;
}

im1=new Image();
im1.src="img/star1.png";

var RIGHT = 39;
var LEFT = 37;
var SPACE=32;

var moveLeft = false;
var moveRight = false;
var jump=false;

window.addEventListener("keydown", function(event)
{
    switch(event.keyCode)
    {
        case LEFT:
            moveLeft = true;
            break;
        case RIGHT:
            moveRight = true;
            break;
        case SPACE:
            jump= true;
            break;
    }
}

```

```

    }
    }, false);

window.addEventListener("keyup", function(event)
{
    switch(event.keyCode)
    {

        case LEFT:
            moveLeft = false;
            break;
        case RIGHT:
            moveRight = false;
            break;
        case SPACE:
            jump= false;
            break
    }
    }, false);

update();

function update() {
    requestAnimationFrame(update, canvas);

    if(moveLeft==true && moveRight==false)
    {
        shape.vx = -3;
    }

    if(moveRight==true && moveLeft==false)
    {
        shape.vx = 3;
    }

    if(moveLeft==false && moveRight==false)
    {
        shape.vx = 0;
        shape.gravity = 0.3;
    }

    if(jump==true && shape.isOnGround==true)
    {
        shape.vy += shape.jumpForce;
        shape.isOnGround = false;
    }

    shape.x=shape.x+shape.vx;
    shape.y=shape.y+shape.vy;

```

```
if(shape.isOnGround==false){  
    shape.vy+=shape.gravity;}  

```

```
if(shape.x<0){  
    shape.x=0;  
}
```

```
if(shape.y+shape.height>canvas.height){  
    shape.y=canvas.height-shape.height;  
    shape.isOnGround = true;  
    shape.vy=0;  
}
```

```
if(shape.y+shape.height>shape2.y && shape.y<250 && shape.x+shape.width>shape2.x  
&& shape.x<shape2.x+shape2.width){  
    shape.y=canvas.height-shape.height-shape2.height;  
    shape.isOnGround = true;  
    shape.vy=0;  
    if(!jump==true){  
        shape.vy+=12;}  
}
```

```
if(shape.y+shape.height>shape3.y && shape.y<250 && shape.x+shape.width>shape3.x  
&& shape.x<shape3.x+shape3.width){  
    shape.y=canvas.height-shape.height-shape3.height;  
    shape.isOnGround = true;  
    shape.vy=0;  
    if(!jump==true){  
        shape.vy+=12;}  
}
```

```
if(shape.y+shape.height>shape4.y && shape.y<250 && shape.x+shape.width>shape4.x  
&& shape.x<shape4.x+shape4.width){  
    shape.y=canvas.height-shape.height-shape4.height;  
    shape.isOnGround = true;  
    shape.vy=0;  
    if(!jump==true){  
        shape.vy+=12;}  
}
```

```
if((shape.x+shape.width>=shape2.x) && (shape.x<=shape2.x+shape2.width)  
&& (shape.y+shape.height>shape2.y)){  
    shape.x=shape.x-shape.vx;  
    shape.vx=0;  
}
```

```
if((shape.x+shape.width>=shape3.x) && (shape.x<=shape3.x+shape3.width)  
&& (shape.y+shape.height>shape3.y)){  
    shape.x=shape.x-shape.vx;  
    shape.vx=0;  
}
```

```
if((shape.x+shape.width>=shape4.x) && (shape.x<=shape4.x+shape4.width)
&& (shape.y+shape.height>shape4.y)){
shape.x=shape.x-shape.vx;
shape.vx=0;
}

ctx.fillStyle="#20B2AA";
ctx.fillRect(0, 0, 10000, canvas.height);
ctx.translate(-shape.vx,0)

ctx.fillStyle= "blue";
ctx.fillRect(shape2.x,shape2.y,shape2.width,shape2.height);

ctx.fillStyle= "red";
ctx.fillRect(shape3.x,shape3.y,shape3.width,shape3.height);

ctx.fillStyle= "blue";
ctx.fillRect(shape4.x,shape4.y,shape4.width,shape4.height);

ctx.fillStyle= "#000080";
ctx.fillRect(shape.x,shape.y,shape.width,shape.height);

for(i=1;i<=50;i++){
ctx.drawImage(im1,ystar[i].x,ystar[i].y,ystar[i].width,ystar[i].height);
}

}

</script>
</html>
```