

Φύλλο εργασίας για «HTML5 -JavaScript»

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Δημιουργία παιχνιδιού με αντικείμενο που κινείται με το ποντίκι και αντικείμενο που κινείται μόνο του με σχετικά μικρή χρήση τεχνητής νοημοσύνης.

Μέρος 1^ο.



```
<!DOCTYPE html>
<title>default</title>
<body bgcolor="#00FFCC">
<CENTER>
<canvas width="920" height="520" ></canvas>
<script>
var canvas = document.querySelector("canvas");
var ctx = canvas.getContext("2d");

var aclass =
{
x: 0,
y: 0,
width: 50,
height: 60
};

var hero = Object.create(aclass);
hero.x = 80;
hero.y = 210;
hero.width=20;
hero.height=100;
hero.face=true;

var enemy = Object.create(aclass);
enemy.x = 840;
enemy.y = 210;
```

```
enemy.width=20;
enemy.height=100;
enemy.vy=0;
enemy.face=true;
```

```
var ball = Object.create(aClass);
ball.x = 540;
ball.y = 210;
ball.r=10;
ball.vx=-12;
ball.vy=-10;
```

```
canvas.addEventListener("mousemove", mousemoveHandler, false);
function mousemoveHandler(event)
{
```

```
var mouseX = event.pageX - canvas.offsetLeft;
var mouseY = event.pageY - canvas.offsetTop;
```

```
hero.y = mouseY-hero.height/2 ;
hero.x=80;
}
```

```
play();
```

```
function play(){
ctx.fillStyle="blue";
ctx.fillRect(0, 0, canvas.width, canvas.height);
```

```
if(hero.face==true){
ctx.fillStyle="red";
ctx.fillRect(hero.x, hero.y, hero.width, hero.height);}
```

```
if(enemy.face==true){
ctx.fillStyle="green";
ctx.fillRect(enemy.x, enemy.y, enemy.width, enemy.height);}
```

```
ctx.beginPath();
ctx.fillStyle= "black";
ctx.arc(ball.x,ball.y,ball.r,2*Math.PI,false);
ctx.fill();
ctx.closePath();
```

```
ball.x=ball.x+ball.vx;
ball.y=ball.y+ball.vy;
```

```
if(ball.y+ball.r>=canvas.height){
ball.vy=-ball.vy;}
```

```
if(ball.x+ball.r>=canvas.width){
ball.vx=-ball.vx;}
```

```
if(ball.y-ball.r<=0){
ball.vy=-ball.vy;}
```

```
if((ball.x-10<=hero.x+hero.width)
&& (ball.y+ball.r>=hero.y) && (ball.y-10<hero.y+20)){
ball.vx=14;
ball.vy=-14;
}
if((ball.x-10<=hero.x+hero.width)
&& (ball.y+ball.r>=hero.y+20) && (ball.y-10<hero.y+40)){
ball.vx=14;
ball.vy=-7;
}
if((ball.x-10<=hero.x+hero.width)
&& (ball.y+ball.r>=hero.y+40) && (ball.y-10<hero.y+60)){
ball.vx=14;
ball.vy=0;
}
if((ball.x-10<=hero.x+hero.width)
&& (ball.y+ball.r>=hero.y+60) && (ball.y-10<hero.y+80)){
ball.vx=14;
ball.vy=7;
}
if((ball.x-10<=hero.x+hero.width)
&& (ball.y+ball.r>=hero.y+80) && (ball.y-10<=hero.y+100)){
ball.vx=14;
ball.vy=14;
}
setTimeout(play, 33);
}
</script>
</body>
</html>
```