

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>game1</title>
```

```
<script src="simpleGame_1_0.js">
```

```
</script>
```

```
<script src = "crimeCars.js">
```

```
</script>
```

```
<!--Linking the external file where we have the constructor for new Rcar objects which we'll use as  
"enemy cars --
```

```
function Rcar()
```

```
{
```

```
rcar = new Sprite(scene, "rogueCar.png", 45,25);
```

```
rcar.setSpeed(5);
```

```
rcar.setPosition(100,500);
```

```
rcar.turn = function()
```

```
{
```

```
var newDir;
```

```
newDir = (Math.random()* 10 -5);
```

```
if (newDir <= -4.9)
```

```
{
```

```
newDir = 90;
```

```
}
```

```
if (newDir >= 4.9)
```

```
{
```

```
newDir = -90;
```

```
}
```

```
else
```

```
{
```

```
newDir = 0
```

```
}
```

```
this.changeAngleBy(newDir);
```

```
}
```

```
return rcar;
```

```
<script>
```

```
var scene;
```

```
var car;
```

```
var house;
```

```
var house2;
```

```
var speed;
```

```
var crashSound;
var crimecars; // A new variable for the array of new Rcars
var bullet;
var carEngine;
var pistolSound;
```

```
function init()
{
scene = new Scene();
scene.setSize(1200,600);
scene.setBG("#36d");
scene.hideCursor();//
```

```
//sounds
crashSound = new Sound("crash.mp3");
carEngine = new Sound("carEngine.mp3");
pistolSound = new Sound("pistolSound.mp3");
```

```
car = new Sprite(scene, "car.png", 60,30);
car.setAngle(270);
car.setSpeed(0);
```

```
car.setBoundAction(BOUNCE);
```

```
setupCrimecars();
```

```
//Calling the function setupCrimecars which you see later in this code
```

```
//Bullet and fire function
```

```
bullet = new Sprite(scene, "bullet.png", 20, 15);
bullet.hide();
```

```
bullet.fire = function()
{
/*when you point to object itself (bullet here) inside a function, use word "this"*/
this.setPosition(car.x, car.y);
this.setAngle(car.getImgAngle());
this.show();
this.setSpeed(15);
this.setBoundAction(DIE);
```

```
}
```

```
house = new Sprite(scene, "house.png", 150, 100);  
house.setAngle(90);  
house.setSpeed(0);  
house.setPosition(600, 400);
```

```
house2 = new Sprite(scene, "house.png", 150, 100);  
house2.setAngle(90);  
house2.setSpeed(0);  
house2.setPosition(100, 400);
```

```
scene.start();  
}
```

```
function update()  
{  
scene.clear();
```

```
//check keys  
speed = car.speed;  
if (keysDown[K_LEFT])  
{  
car.changeAngleBy(-5);  
}
```

```
if (keysDown[K_RIGHT])  
{  
car.changeAngleBy(5);  
}
```

```
if (keysDown[K_UP])  
{  
carEngine.play();  
if (speed < 10)  
{
```

```
car.changeSpeedBy(1);
```

```
}  
}
```

```
if (keysDown[K_DOWN])  
{  
//max speed on reverse too  
if (speed > -2)  
{
```

```
car.changeSpeedBy(-1);
}
}
```

```
if (keysDown[K_SPACE])
{
bullet.fire();
pistolSound.play();
}
```

```
car.update();
house.update();
house2.update();
bullet.update();
checkCollisions();
```

*/*Update crimecars and use Rcar's turn method which we created in the constructor. The crimecars are new Rcar objects so they have inherited that method from Rcar */*

```
for (i = 0; i < 5; i++)
{
crimecars[i].turn();
crimecars[i].update();
}
}
```

// Using an array and a loop to create many new Rcars at once

```
function setupCrimecars()
{
crimecars = new Array();

for (i = 0; i < 5; i++)
{
crimecars[i] = new Rcar();
}
}
```

```
function checkCollisions()
{
if (car.collidesWith(house)|| car.collidesWith(house2))

if(car.speed >0)
{
car.setSpeed(-5);

crashSound.play();

}
```

```
// if the car hits a house on reverse it will bump forward

else if (car.speed <= 0)
{
car.setSpeed(4);
crashSound.play();

}
/* This is not in use now since we don't use the rogueCar anymore*/

if (bullet.collidesWith(rogueCar))
{
rogueCar.setSpeed(0);
rogueCar.setAngle(0);
rogueCar.setImage("rogueCarWreck.png");
}
*/
}

</script>
</head>

<body onload="init()">

<h2>Game</h2>

</body>
</html>
```