# Source Code

<!DOCTYPE html>

<html>

<head>

<title>JavaScript DOM</title>

<style>

.box{

position: absolute;

left:0;

top:0;

width:30px;

height:30px;

border: 1px solid black;

border-radius: 50%;

}

.output{

width:400px;

height:400px;

border: 1px solid red;

}

</style>

</head>

<body>

<div class="output">

</div>

<script src="dom10.js"></script>

</body>

</html>

const output = document.querySelector('.output');

const game = {x:50,y:50,speed:5,ele:{}}

game.ele = maker();

const keyz = {ArrowRight:false,ArrowLeft:false,ArrowUp:false,ArrowDown:false};

let move = window.requestAnimationFrame(updatePostion);

document.addEventListener('keydown',(e)=>{

if(e.code in keyz){keyz[e.code] = true;}

})

document.addEventListener('keyup',(e)=>{

if(e.code in keyz){keyz[e.code] = false;}

})

function updatePostion(){

const domRect = output.getBoundingClientRect();

console.log(domRect);

if(keyz.ArrowRight && game.x < (domRect.right -30) ){

game.x += game.speed;

}

if(keyz.ArrowLeft && game.x > domRect.left ){

game.x -= game.speed;

}

if(keyz.ArrowUp && game.y > domRect.top ){

game.y -= game.speed;

}

if(keyz.ArrowDown && game.y < (domRect.bottom -30) ){

game.y += game.speed;

}

game.ele.style.left = game.x + 'px';

game.ele.style.top = game.y + 'px';

move = window.requestAnimationFrame(updatePostion);

}

function maker(){

const el = document.createElement('div');

output.append(el);

el.style.left = game.x + 'px';

el.style.top = game.y + 'px';

el.classList.add('box');

el.style.backgroundColor = '#'+Math.random().toString(16).substr(2,6);

el.addEventListener('click',(e)=>{

game.ele = maker();

},{once:true})

return el;

}