// Game variables

const canvas = document.getElementById('gameCanvas');

const ctx = canvas.getContext('2d');

canvas.width = 800;

canvas.height = 600;

// Player properties

let player = {

x: 50,

y: canvas.height - 100,

width: 50,

height: 50,

color: 'orange',

dx: 5,

dy: 0,

gravity: 0.5,

jumpPower: -10,

isJumping: false

};

// Key handling

let keys = {

left: false,

right: false,

up: false

};

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

if (e.key === 'ArrowLeft') keys.left = true;

if (e.key === 'ArrowRight') keys.right = true;

if (e.key === 'ArrowUp') keys.up = true;

});

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

if (e.key === 'ArrowLeft') keys.left = false;

if (e.key === 'ArrowRight') keys.right = false;

if (e.key === 'ArrowUp') keys.up = false;

});

// Game loop

function gameLoop() {

ctx.clearRect(0, 0, canvas.width, canvas.height);

// Move player left/right

if (keys.left) player.x -= player.dx;

if (keys.right) player.x += player.dx;

// Jumping

if (keys.up && !player.isJumping) {

player.dy = player.jumpPower;

player.isJumping = true;

}

// Gravity

player.dy += player.gravity;

player.y += player.dy;

// Ground collision

if (player.y + player.height > canvas.height) {

player.y = canvas.height - player.height;

player.dy = 0;

player.isJumping = false;

}

// Draw player

ctx.fillStyle = player.color;

ctx.fillRect(player.x, player.y, player.width, player.height);

requestAnimationFrame(gameLoop);

}

gameLoop();