<!DOCTYPE html>

<html>

<head>

<title>Pong Game</title>

<style>

canvas {

display: block;

margin: auto;

background: #000;

}

</style>

</head>

<body>

<canvas id="pongCanvas" width="800" height="400"></canvas>

<script>

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

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

const paddleWidth = 10, paddleHeight = 100;

const ballRadius = 10;

let paddle1Y = canvas.height / 2 - paddleHeight / 2;

let paddle2Y = canvas.height / 2 - paddleHeight / 2;

let ballX = canvas.width / 2, ballY = canvas.height / 2;

let ballDX = 2, ballDY = -2;

const paddleSpeed = 4;

function drawPaddle(x, y) {

ctx.fillStyle = "#FFF";

ctx.fillRect(x, y, paddleWidth, paddleHeight);

}

function drawBall() {

ctx.beginPath();

ctx.arc(ballX, ballY, ballRadius, 0, Math.PI\*2);

ctx.fillStyle = "#FFF";

ctx.fill();

ctx.closePath();

}

function draw() {

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

drawPaddle(0, paddle1Y);

drawPaddle(canvas.width - paddleWidth, paddle2Y);

drawBall();

ballX += ballDX;

ballY += ballDY;

if(ballY + ballDY > canvas.height - ballRadius || ballY + ballDY < ballRadius) {

ballDY = -ballDY;

}

if(ballX + ballDX > canvas.width - ballRadius) {

if(ballY > paddle2Y && ballY < paddle2Y + paddleHeight) {

ballDX = -ballDX;

} else {

ballX = canvas.width / 2;

ballY = canvas.height / 2;

}

} else if(ballX + ballDX < ballRadius) {

if(ballY > paddle1Y && ballY < paddle1Y + paddleHeight) {

ballDX = -ballDX;

} else {

ballX = canvas.width / 2;

ballY = canvas.height / 2;

}

}

document.addEventListener('keydown', function(event) {

if(event.key == 'w' && paddle1Y > 0) paddle1Y -= paddleSpeed;

if(event.key == 's' && paddle1Y < canvas.height - paddleHeight) paddle1Y += paddleSpeed;

if(event.key == 'ArrowUp' && paddle2Y > 0) paddle2Y -= paddleSpeed;

if(event.key == 'ArrowDown' && paddle2Y < canvas.height - paddleHeight) paddle2Y += paddleSpeed;

});

}

setInterval(draw, 10);

</script>

</body>

</html>