const canvas = document.getElementById('clock-canvas');

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

// Get the digital time display element

const digitalTimeDisplay = document.querySelector('.digital-time');

// Set the canvas dimensions

canvas.width = 400;

canvas.height = 400;

// Define the clock properties

const clock = {

radius: canvas.width / 2 - 20,

centerX: canvas.width / 2,

centerY: canvas.height / 2,

hours: 0,

minutes: 0,

seconds: 0,

};

// Draw the clock face

function drawClockFace() {

ctx.beginPath();

ctx.arc(clock.centerX, clock.centerY, clock.radius, 0, 2 \* Math.PI);

ctx.lineWidth = 2;

ctx.strokeStyle = '#333';

ctx.stroke();

}

// Draw the clock hands

function drawClockHands() {

// Draw the hour hand

ctx.beginPath();

ctx.moveTo(clock.centerX, clock.centerY);

ctx.lineTo(

clock.centerX + (clock.radius \* 0.5) \* Math.sin((clock.hours + clock.minutes / 60) \* Math.PI / 6),

clock.centerY - (clock.radius \* 0.5) \* Math.cos((clock.hours + clock.minutes / 60) \* Math.PI / 6)

);

ctx.lineWidth = 4;

ctx.strokeStyle = '#333';

ctx.stroke();

// Draw the minute hand

ctx.beginPath();

ctx.moveTo(clock.centerX, clock.centerY);

ctx.lineTo(

clock.centerX + (clock.radius \* 0.8) \* Math.sin((clock.minutes + clock.seconds / 60) \* Math.PI / 30),

clock.centerY - (clock.radius \* 0.8) \* Math.cos((clock.minutes + clock.seconds / 60) \* Math.PI / 30)

);

ctx.lineWidth = 2;

ctx.strokeStyle = '#333';

ctx.stroke();

// Draw the second hand

ctx.beginPath();

ctx.moveTo(clock.centerX, clock.centerY);

ctx.lineTo(

clock.centerX + (clock.radius \* 0.9) \* Math.sin((clock.seconds) \* Math.PI / 30),

clock.centerY - (clock.radius \* 0.9) \* Math.cos((clock.seconds) \* Math.PI / 30)

);

ctx.lineWidth = 1;

ctx.strokeStyle = '#ff0000';

ctx.stroke();

}

// Update the clock time

function updateClockTime() {

const date = new Date();

clock.hours = date.getHours();

clock.minutes = date.getMinutes();

clock.seconds = date.getSeconds();

digitalTimeDisplay.textContent = `${clock.hours.toString().padStart(2, '0')}:${clock.minutes.toString().padStart(2, '0')}:${clock.seconds.toString().padStart(2, '0')}`;

}

// Draw the clock

function drawClock() {

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

drawClockFace();

drawClockHands();

}

// Update the clock every second

setInterval(() => {

updateClockTime();

drawClock();

}, 1000);

// Initialize the clock

updateClockTime();

drawClock();