Department of Data Science

Academic Year: 2023-2024   Name of Student:

Semester: V   Student ID:

Class / Branch: TEDS   Date Of Performance:

Subject: WCN   Date Of Submission:

Name of Instructor: Prof. Ashwini Rahude

Experiment No. 4

Aim: Develop web pages using Javascript.

Program:

HTML code:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Analog Clock</title>
    <link rel="stylesheet" href="clock.css">
</head>
<body>
    <div class="clock">
        <div class="clock-face">
            <div class="number number1">1</div>
            <div class="number number2">2</div>
            <div class="number number3">3</div>
            <div class="number number4">4</div>
            <div class="number number5">5</div>
            <div class="number number6">6</div>
            <div class="number number7">7</div>
```

```html
        <div class="number number8">8</div>
        <div class="number number9">9</div>
        <div class="number number10">10</div>
        <div class="number number11">11</div>
        <div class="number number12">12</div>
        <div class="hand hour-hand"></div>
        <div class="hand minute-hand"></div>
        <div class="hand second-hand"></div>
      </div>
    </div>
    <script src="clock.js"></script>
  </body>
</html>
```

CSS code:

```css
body {

    display: flex;

    justify-content: center;

    align-items: center;

    height: 100vh;

    background: #f0f0f0;

    margin: 0;

}


.clock {

    width: 300px;
```

```
        height: 300px;

        border: 20px solid black;

        border-radius: 50%;

        position: relative;

        padding: 20px;

        box-shadow: 0 0 20px rgba(0, 0, 0, 0.2);

        background: white;

}


.clock-face {

        position: relative;

        width: 100%;

        height: 100%;

        transform: translateY(-3px); /* Fix for the hands positioning */

}


.hand {

        width: 50%;

        background: black;

        position: absolute;

        top: 50%;

        transform-origin: 100%;
```

```css
    transform: rotate(90deg);

    transition: all 0.05s;

    transition-timing-function: cubic-bezier(0.1, 2.7, 0.58, 1);

}


.hour-hand {

    height: 6px;

}


.minute-hand {

    height: 4px;

}


.second-hand {

    height: 2px;

    background: red;

}


.number {

    position: absolute;

    font-size: 24px;

    transform: translate(-50%, -50%);
```

}

.number1 { top: 20%; left: 85%; }

.number2 { top: 35%; left: 92%; }

.number3 { top: 50%; left: 97%; }

.number4 { top: 65%; left: 92%; }

.number5 { top: 80%; left: 85%; }

.number6 { top: 85%; left: 50%; }

.number7 { top: 80%; left: 15%; }

.number8 { top: 65%; left: 8%; }

.number9 { top: 50%; left: 3%; }

.number10 { top: 35%; left: 8%; }

.number11 { top: 20%; left: 15%; }

.number12 { top: 15%; left: 50%; }

Javascript Code:

```
// script.js

const hourHand = document.querySelector('.hour-hand');

const minuteHand = document.querySelector('.minute-hand');

const secondHand = document.querySelector('.second-hand');


function setDate() {
```

```
const now = new Date();


const seconds = now.getSeconds();

const secondsDegrees = ((seconds / 60) * 360) + 90;

secondHand.style.transform = `rotate(${secondsDegrees}deg)`;


const minutes = now.getMinutes();

const minutesDegrees = ((minutes / 60) * 360) + ((seconds / 60) * 6) + 90;

minuteHand.style.transform = `rotate(${minutesDegrees}deg)`;


const hours = now.getHours();

const hoursDegrees = ((hours / 12) * 360) + ((minutes / 60) * 30) + 90;

hourHand.style.transform = `rotate(${hoursDegrees}deg)`;
}


setInterval(setDate, 1000);


setDate();
```