PRODIGY INFOTECH INTERNSHIP

TASK-2(STOP WATCH)

Html code:-

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width,
initial-scale=1.0">
  <title>Circular Stopwatch</title>
  <link rel="stylesheet" href="stopwatch.css">
</head>
<body>
    <h1>Stop Watch</h1>
  <div class="stopwatch-container">
    <div class="stopwatch">
      <div id="display">00:00:00</div>
    </div>
    <div class="buttons">
      <button id="startStop"
onclick="startStop()">Start</button>
      <button id="lapReset"
onclick="lapReset()">lapReset</button>
    </div>
  </div>
  <ul id="laps"></ul>
  <script src="stopwatch.js"></script>
</body>
</html>
```

Css code:-

```css
body {
    font-family: Arial, sans-serif;
    text-align: center;
    background-color:aquamarine ;
    display: flex;
    justify-content:center;
    align-items: center;
    background: linear-gradient(to
right,pink,hotpink);
  }

  .stopwatch-container {
    color: aqua;
    text-align: center;
    padding: 20px;
    border-radius: 10px;
    position: relative;
    margin-top: 50px;
  }

  .stopwatch {
    position: relative;
    width: 200px;
    height: 200px;
    border: 10px solid #333;
    border-radius: 50%;
    display: flex;
    justify-content: center;
    align-items: center;
    margin: 0 auto;
    font-size: 24px;
    background-color: crimson;
  }
```

```css
.buttons {
  margin-top: 20px;
}

.buttons button {
  padding: 10px 20px;
  margin: 0 10px;
  background-color: #3a46cb;
  border: none;
  color: white;
  font-size: 16px;
  border-radius: 8px;
  cursor: pointer;
}

.buttons button:hover {
  background-color: #4571a0;
}

.buttons button:active {
  background-color: #4571a0;
}
```

JavaScript code:-

```javascript
let timer; // Timer variable
let isRunning = false; // Variable to track if the
stopwatch is running
let startTime; // Variable to store the start time
let lapStartTime; // Variable to store the start time
of the current lap
```

```
// Function to start or stop the stopwatch
function startStop() {
  if (isRunning) {
    clearInterval(timer); // Stop the timer if it's
running
    document.getElementById("startStop").innerText =
"Start"; // Change button text to "Start"
  } else {
    startTime = Date.now() - (lapStartTime || 0); //
Calculate start time, consider lap time if exists
    timer = setInterval(updateDisplay, 1000); // Start
the timer
    document.getElementById("startStop").innerText =
"Stop"; // Change button text to "Stop"
  }
  isRunning = !isRunning; // Toggle running state
}

// Function to record lap time or reset the stopwatch
function lapReset() {
  if (isRunning) {
    let lapTime = (Date.now() - startTime) / 1000; //
Calculate lap time
    let formattedTime = formatTime(lapTime); // Format
lap time
    let lapItem = document.createElement("li"); //
Create list item for lap
    lapItem.innerText = formattedTime; // Set lap time
text

document.getElementById("laps").appendChild(lapItem);
// Append lap time to the laps list
    lapStartTime = Date.now() - startTime; // Update
lap start time
```

```
  } else {
    clearInterval(timer); // Stop the timer if it's
running
    document.getElementById("display").innerText =
"00:00:00"; // Reset display
    document.getElementById("startStop").innerText =
"Start"; // Reset button text to "Start"
    document.getElementById("laps").innerHTML = ""; //
Clear laps list
    isRunning = false; // Reset running state
  }
}

// Function to update the stopwatch display
function updateDisplay() {
  let elapsedTime = (Date.now() - startTime) / 1000;
// Calculate elapsed time
  let formattedTime = formatTime(elapsedTime); //
Format elapsed time
  document.getElementById("display").innerText =
formattedTime; // Update display with formatted time
}

// Function to format time as HH:MM:SS
function formatTime(seconds) {
  let hours = Math.floor(seconds / 3600);
  let minutes = Math.floor((seconds % 3600) / 60);
  let remainingSeconds = Math.floor(seconds % 60);
  return (
    pad(hours) + ":" + pad(minutes) + ":" +
pad(remainingSeconds)
  );
}
```

```
function pad(number) {
  if (number < 10) {
    return "0" + number;
  }
  return number;
}
```