PRODIGY\_WD\_02

HTML CODE

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" />

  <title>Stopwatch</title>

  <link rel="stylesheet" href="style.css" />

</head>

<body>

  <main class="container">

    <section class="stopwatch-section">

      <h1>⏱️ Smart Stopwatch</h1>

      <div class="stopwatch">

        <p id="display">00:00:00</p>

        <div class="buttons">

          <button onclick="start()">Start</button>

          <button onclick="pause()">Pause</button>

          <button onclick="stop()">Stop</button>

          <button onclick="reset()">Reset</button>

          <button onclick="lap()">Lap</button>

        </div>

        <ul id="laps"></ul>

      </div>

    </section>

  </main>

  <script src="script.js"></script>

</body>

</html>

CSS CODE

\* {

  margin: 0;

  padding: 0;

  box-sizing: border-box;

}

body {

  font-family: 'Segoe UI', sans-serif;

  background: #f2f2f2;

  color: #333;

}

.container {

  padding: 60px 20px;

  display: flex;

  justify-content: center;

}

.stopwatch-section {

  text-align: center;

}

.stopwatch {

  background: #fff;

  border-radius: 20px;

  padding: 40px;

  box-shadow: 0 4px 20px rgba(0,0,0,0.1);

  display: inline-block;

  max-width: 400px;

}

#display {

  font-size: 3rem;

  font-weight: bold;

  margin-bottom: 20px;

}

.buttons button {

  padding: 10px 20px;

  margin: 8px;

  font-size: 16px;

  font-weight: 600;

  border: none;

  background: #007BFF;

  color: white;

  border-radius: 6px;

  transition: background 0.3s ease;

  cursor: pointer;

}

.buttons button:hover {

  background: #0056b3;

}

#laps {

  margin-top: 20px;

  list-style: none;

  max-height: 200px;

  overflow-y: auto;

  text-align: left;

  padding-left: 0;

}

#laps li {

  padding: 5px 10px;

  border-bottom: 1px solid #ddd;

  font-size: 14px;

}

JAVA CODE

let startTime, updatedTime, difference, timerInterval;

let running = false;

let pausedTime = 0;

const display = document.getElementById("display");

const laps = document.getElementById("laps");

function updateTime() {

  updatedTime = new Date().getTime();

  difference = updatedTime - startTime + pausedTime;

  let hours = Math.floor(difference / (1000 \* 60 \* 60));

  let minutes = Math.floor((difference % (1000 \* 60 \* 60)) / (1000 \* 60));

  let seconds = Math.floor((difference % (1000 \* 60)) / 1000);

  display.textContent =

    (hours < 10 ? "0" : "") + hours + ":" +

    (minutes < 10 ? "0" : "") + minutes + ":" +

    (seconds < 10 ? "0" : "") + seconds;

}

function start() {

  if (!running) {

    startTime = new Date().getTime();

    timerInterval = setInterval(updateTime, 1000);

    running = true;

  }

}

function pause() {

  if (running) {

    clearInterval(timerInterval);

    pausedTime += new Date().getTime() - startTime;

    running = false;

  }

}

function stop() {

  clearInterval(timerInterval);

  display.textContent = "00:00:00";

  running = false;

  pausedTime = 0;

}

function reset() {

  clearInterval(timerInterval);

  display.textContent = "00:00:00";

  laps.innerHTML = "";

  running = false;

  pausedTime = 0;

}

function lap() {

  if (running) {

    const li = document.createElement("li");

    const now = new Date();

    const timestamp = now.toLocaleTimeString();

    li.textContent = `${display.textContent} — ${timestamp}`;

    laps.appendChild(li);

  }

}

OUTPUT

