

```
let startTime = 0;
```

```
let elapsedTime = 0;
```

```
let isRunning = false;
```

```
let lapTimes = [];
```

```
const displayElement = document.getElementById('display');
```

```
const startButton = document.getElementById('start-button');
```

```
const stopButton = document.getElementById('stop-button');
```

```
const resetButton = document.getElementById('reset-button');
```

```
const lapButton = document.getElementById('lap-button');
```

```
const lapsElement = document.getElementById('laps');
```

```
startButton.addEventListener('click', startStopwatch);
```

```
stopButton.addEventListener('click', stopStopwatch);
```

```
resetButton.addEventListener('click', resetStopwatch);
```

```
lapButton.addEventListener('click', recordLapTime);
```

```
function startStopwatch() {
```

```
    startTime = new Date().getTime();
```

```
    isRunning = true;
```

```
    startButton.disabled = true;
```

```
    stopButton.disabled = false;
```

```
    updateDisplay();
```

```
    setInterval(updateDisplay, 10);
```

```
}
```

```
function stopStopwatch() {
```

```
    elapsedTime += new Date().getTime() - startTime;
```

```
    isRunning = false;

    startButton.disabled = false;
    stopButton.disabled = true;
}
```

```
function resetStopwatch() {

    startTime = 0;
    elapsedTime = 0;
    isRunning = false;
    lapTimes = [];

    startButton.disabled = false;
    stopButton.disabled = true;

    updateDisplay();
}
```

```
function recordLapTime() {

    const lapTime = elapsedTime + (new Date().getTime() - startTime);

    lapTimes.push(lapTime);

    updateDisplay();
}
```

```
function updateDisplay() {

    const currentTime = formatTime(elapsedTime + (isRunning ? new Date().getTime() -
    startTime : 0));

    displayElement.textContent = currentTime;

    const lapTimeString = lapTimes.map((time, index) => `Lap ${index + 1}:
    ${formatTime(time)} `).join('<br>');

    lapsElement.innerHTML = lapTimeString;
}
```

```
function formatTime(time) {  
    const hours = Math.floor(time / 3600000);  
    const minutes = Math.floor((time % 3600000) / 60000);  
    const seconds = Math.floor((time % 60000) / 1000);  
    const milliseconds = time % 1000;  
  
    return  
    `${padZero(hours)}:${padZero(minutes)}:${padZero(seconds)}:${padZero(milliseconds)}  
    `;  
}
```

```
function padZero(number) {  
    return (number < 10 ? '0' : '') + number;  
}
```