

**AIM:**

To create a StopClock for understanding events and objects using Javascript

**ALGORITHM:**

Start

1. Create an HTML file with a div for the stopclock, and three buttons for start, stop, and reset.
2. Link an external CSS file for styling and a script tag for the JavaScript code.
3. In the CSS file, style the stopclock display to have six divs for hours, minutes, seconds, and milliseconds, each with a colon in between.
4. In the JavaScript file, declare variables to store the stopclock's time components (hours, minutes, seconds, and milliseconds), a variable to keep track of whether the stopclock is running or not, and a variable to store the interval ID for the setInterval function.
5. Add event listeners to the start, stop, and reset buttons to control the stopclock.
6. Create a function to update the stopclock's time by incrementing the milliseconds by 10, and updating the hours, minutes, seconds, and milliseconds display accordingly.
7. Format the display to show leading zeros for hours, minutes, seconds, and milliseconds when they are less than 10.

Stop

**CODE:****index.html**

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <title>Document</title>
```

```

    <link rel="stylesheet" href="./style.css" />
</head>
<body>
  <div class="box">
    <h3>Stop Clock</h3>
    <div class="frame">
      <div class="hrs">00</div>
      <div class="colon">:</div>
      <div class="min">00</div>
      <div class="colon">:</div>
      <div class="sec">00</div>
      <div class="colon">:</div>
      <div class="ms">00</div>
    </div>
    <div class="buttons">
      <button class="start">Start</button>
      <button class="stop">Stop</button>
      <button class="reset">Reset</button>
    </div>
  </div>
  <script src="./script.js"></script>
</body>
</html>

```

### style.css

```

*{
  margin: 0;
  padding: 0;
  box-sizing: border-box;
  font-family: 'Poppins', sans-serif;
}
body{
  height: 100vh;
  width: 100vw;
  display: flex;
  justify-content: center;
  align-items: center;
}
.box{
  background-color: #fff;
  height: 200px;
  width: 400px;
  border-radius: 5px;
  display: flex;
  justify-content: center;
  align-items: center;
  flex-direction: column;
  user-select: none;
  cursor: pointer;
  box-shadow: rgba(17, 17, 26, 0.05) 0px 1px 0px, rgba(17, 17, 26, 0.1) 0px 0px 8px;
}

```

```
}  
.frame{  
  display: flex;  
  gap: 3px;  
}  
h3{  
  font-weight: 500;  
  color:#130f40;  
  text-transform: uppercase;  
  margin-bottom: 25px;  
}  
.hrs,  
.min,  
.sec,  
.ms,  
.colon{  
width: 50px;  
height: 50px;  
font-size: 50px;  
text-align: center;  
line-height: 50px;  
color: #eb4d4b;  
font-family: 'Digital-7';  
}  
.colon{  
width: 10px;  
height: 50px;  
}  
.buttons{  
  margin-top: 25px;  
}  
.buttons button{  
border: none;  
padding: 5px 20px;  
color:white;  
border-radius: 3px;  
text-transform: uppercase;  
}  
.start{background-color: #6ab04c;}  
.stop{background-color: #30336b;}  
.reset{background-color: #eb4d4b;}  
  
.start-active,  
.stop-active{  
  pointer-events: none;  
  opacity: 0.5;  
}
```

**script.js**

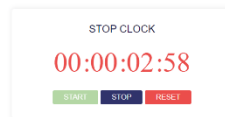
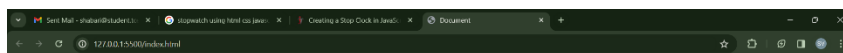
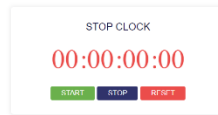
```

const btnStart=document.querySelector('.start');
const btnStop=document.querySelector('.stop');
const btnReset=document.querySelector('.reset');
let hrs=min=sec=ms=0,startTimer;
btnStart.addEventListener('click',()=>{
  btnStart.classList.add('start-active');
  btnStop.classList.remove('stop-active');
  startTimer=setInterval(()=>{
    ms++;//ms=ms+1;
    if(ms==100){
      sec++;
      ms=0;
    }
    if(sec==60){
      min++;
      sec=0;
    }
    if(min==60){
      hrs++;
      min=0;
    }
    updateDisplay();
  },10);
});
btnStop.addEventListener('click',()=>{
  clearInterval(startTimer);
  btnStart.classList.remove('start-active');
  btnStop.classList.add('stop-active');
});
btnReset.addEventListener('click',()=>{
  hrs=min=sec=ms=0;
  clearInterval(startTimer);
  updateDisplay();
  btnStart.classList.remove('start-active');
  btnStop.classList.remove('stop-active');
});
function updateDisplay(){
  //Formatted Display
  phrs=hrs<10?'0'+hrs:hrs;
  pmin=min<10?'0'+min:min;
  psec=sec<10?'0'+sec:sec;
  pms=ms<10?'0'+ms:ms;

  document.querySelector('.hrs').innerText=phrs;
  document.querySelector('.min').innerText=pmin;
  document.querySelector('.sec').innerText=psec;
  document.querySelector('.ms').innerText=pms;
}

```

## STOP CLOCK PAGE SCREEN SHOT



**RESULT:** Thus, we have successfully implemented the stop clock using HTML,CSS,Javascript