STOPWATCH

1) UI Theme

- *Neumorphism*

2) Technologies Used

- *HTML5*
- *CSS3*
- *Javascript*

3) Functionalities Implemented

- *Start Timer*
- *Stop Timer*
- *Reset Timer*
- *Lap*
- *Animation on Hover and Click*

4) CDNs Used

- *Font Awesome*
- *Animate.css*

5) Links Provided

- *Github link*
- *Pdf file download*
- *Video link*

6) Stopwatch Format

- Minutes : Seconds : Milliseconds
- 00:00:000

7) Code

HTML:

```html
<!DOCTYPE html>

<html>

<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">
```

```html
    <title>Stopwatch</title>

    <link rel="icon" type="image/gif"
href="Images/logo.jpg">

    <link rel="stylesheet"
href="https://use.fontawesome.com/releases/v5.5.0/css/all.cs
s" integrity="sha384-
B4dIYHKNBt8Bc12p+WXckhzcICo0wtJAoU8YZTY5qE0Id1GSseTk6S+L3BlX
eVIU" crossorigin="anonymous">

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

    <link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/animate.css/4.1
.1/animate.min.css"/>

</head>

<body>

    <!-- Lap Container or box to store lap value which is
scrollable -->

    <div class="lap-container">

    </div>

    <!-- Timer Box -->

    <div class="timer-container">

        <div class="stopwatch">00:00:000</div>
```

```html
        </div>

        <!-- Timer control buttons box -->

        <div class="control-box">

            <button class="btn" onclick="start()"><span
class="btn-caption">START</span></button>

            <button class="btn" onclick="stop()"><span
class="btn-caption">STOP</span></button>

            <button class="btn" onclick="lap()"><span
class="btn-caption">LAP</span></button>

            <button class="btn" onclick="reset()"><span
class="btn-caption">RESET</span></button>

        </div>

        <!-- PDF file download button -->

        <div class="button download">

            <a href="pdfFile.pdf" download>

                <!-- Remember to change the pdf file -->

                <!-- Link file after creating it -->

                <i class="fas fa-download"></i>

            </a>

        </div>
```

```html
<!-- Video link button -->

<div class="button video-link">

    <a href="#">

        <i class="fas fa-video"></i>

    </a>

</div>

<!-- Github link button -->

<div class="button github-link">

    <a href="#">

        <i class="fab fa-github"></i>

    </a>

</div>

<!-- External Javascript Link -->

<script src="script.js"></script>
</body>

</html>
```

CSS:

```css
*{

    padding: 0;

    margin: 0;

}

body{

    background-color: #ececec;

    font-size: 16px;

    height: 100vh;

}

/* LAPS */

/* Container in which laps will store/show */

.lap-container{

    position: absolute;

    height: 30rem;

    width: 15rem;

    left: 6rem;

    top: 8rem;

    display: flex;

    flex-direction: column;
```

```css
    text-align: center;

    overflow-y: scroll;

    -ms-overflow-style: none;

    scrollbar-width: none;

    background-color: #ececec;

    box-shadow: -10px -10px 15px rgba(255, 255, 255, 0.5),

            10px 10px 15px rgba(70, 70, 70, 0.12);

    border-radius: 20px;

}

.lap-container::-webkit-scrollbar {

    display: none;

}

/* Watch */

.timer-container{

    position: absolute;

    height: 20rem;

    width: 30rem;

    left: 35rem;

    top: 8rem;
```

```css
    display: flex;

    flex-direction: column;

    justify-content: center;

    align-items: center;

    box-shadow: -10px -10px 15px rgba(255, 255, 255, 0.5),

            10px 10px 15px rgba(70, 70, 70, 0.12);

    border-radius: 20px;

}

.timer-container .stopwatch{

    font-size: 6rem;

    color: #9f95d8;

}

.timer-container .stopwatch:hover{

    animation: rubberBand;

    animation-duration: 1s;

}
/* Controls */

.control-box{

    position: absolute;
```

```css
    height: 140px;

    width: 700px;

    top: 32rem;

    left: 28rem;

    display: flex;

    flex-direction: row;

    justify-content: center;

    align-items: center;

    box-shadow: -10px -10px 15px rgba(255, 255, 255, 0.5),

             10px 10px 15px rgba(70, 70, 70, 0.12);

    border-radius: 20px;
}
/* Buttons in Controls */
.btn{

    height: 40px;

    width: 100px;

    box-shadow: -10px -10px 15px rgba(255, 255, 255, 0.5),

             10px 10px 15px rgba(70, 70, 70, 0.12);

    border: 2px solid #ececec;
```

```css
    outline: none;

    display: flex;

    flex-direction: column;

    align-items: center;

    justify-content: center;

    cursor: pointer;

    margin: 1rem;

    border-radius: 20px;
}

.btn .btn-caption{

    font-size: 15px;

    color: #7a7a7a;

    font-weight: 700;

    padding: 10px;
}

.btn:hover .btn-caption{

    animation: rubberBand;

    animation-duration: 1s;
}
```

```css
.btn:active{

    box-shadow: -10px -10px 15px rgba(255, 255, 255, 0.5),

            10px 10px 15px rgba(70, 70, 70, 0.12),

            inset -10px -10px 15px rgba(255, 255, 255, 0.5),

            inset 10px 10px 15px rgba(70, 70, 70, 0.12);

}

.btn:active .btn-caption{

    color: #9f95d8;

}

/* Link Buttons */

.button{

    position: absolute;

    height: 100px;

    width: 100px;

    box-shadow: -10px -10px 15px rgba(255, 255, 255, 0.5),

            10px 10px 15px rgba(70, 70, 70, 0.12);

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

    border-radius: 50%;

    border: 8px solid #ececec;
```

```css
        outline: none;

        display: flex;

        flex-direction: column;

        align-items: center;

        justify-content: center;

        cursor: pointer;

}

.download{

    top: 12rem;

    left: 80rem;

}

.video-link{

    top: 25rem;

    left: 80rem;

}

.github-link{

    top: 38rem;

    left: 80rem;

}
```

```css
.button a{

    text-decoration: none;

    font-size: 30px;

    color: #7a7a7a;

    font-weight: 700;

}

.button:hover a{

    animation: rubberBand;

    animation-duration: 1s;

}

.button:active{

    box-shadow: -10px -10px 15px rgba(255, 255, 255, 0.5),

          10px 10px 15px rgba(70, 70, 70, 0.12),

          inset -10px -10px 15px rgba(255, 255, 255, 0.5),

          inset 10px 10px 15px rgba(70, 70, 70, 0.12);

}

.button:active a{

    color: #9f95d8;

}
```

```css
/* Responsive */

/* Only for zoom in-out from 100% to 125% */

@media only screen and (zoom: 1) {

  html {

    max-height: 70vh;

    max-width: 70vw;

  }

}

@media only screen and (zoom: 1.1) {

  html {

    max-height: 80vh;

    max-width: 80vw;

  }

}

@media only screen and (zoom: 1.25) {

  html {

    max-height: 100vh;

    max-width: 100vw;

  }
```

```
  }
```

Javascript:

```javascript
var ms = 0, s = 0, m = 0;

var timer;

var flag = 0;

var stopwatchEl =
document.querySelector('.stopwatch');

var lapsContainer =
document.querySelector('.lap-container');
// Start button function

function start() {

    flag = 1;

    if(!timer) {

        timer = setInterval(run, 10);

    }

}

function run() {

    stopwatchEl.textContent = getTimer();
```

```
        ms+=10;

        if(ms == 1000) {

            ms = 0;

            s++;

        }

        if(s == 60) {

            s = 0;

            m++;

        }

    }

// Stop button function

function stop() {

    stopTimer();

}

// Reset button function

function reset() {

    stopTimer();

    animation();

    lapsContainer.innerHTML = '';
```

```javascript
    ms = 0;

    s = 0;

    m = 0;

    flag = 0;

    stopwatchEl.textContent = getTimer();

}

function animation(){

    stopwatchEl.style.animation = "hinge";

    stopwatchEl.style.animationDuration =
"2s";

}

function stopTimer() {

    clearInterval(timer);

    timer = false;

}

function getTimer() {

    var min;

    var sec;

    var milSec;
```

```javascript
if(m < 10){
    min = "0" + m;
}else{
    min = m;
}


if(s < 10){
    sec = "0" + s;
}else{
    sec = s;
}


if(ms < 10){
    milSec = "00" + ms;
}else if(ms < 100){
```

```javascript
            milSec = "0" + ms;
        }else{
            milSec = ms;
        }


    return (min) + ":" + (sec) + ":" +
(milSec);
}

// Laps creation function
function lap() {
    if(timer || flag == 1) {
        var li =
document.createElement('li');
        li.innerText = getTimer();
        li.style.listStyle = "none";
        li.style.margin = "0.5rem";
        li.style.fontSize = "2rem";
        li.style.color = "#9f95d8";
```

```
      lapsContainer.appendChild(li);
   }

}
```