

COUNTDOWN TIMER



DHAYANIDI R

IT-A

22IT130

312322205040

INTRODUCTION:

In today's fast-paced world, efficient time management is paramount for achieving productivity and success. Introducing our mini-project: the Countdown Timer. This application serves as a versatile tool, allowing users to set specific time durations and countdown to zero, displaying remaining time in hours, minutes, and seconds. Whether utilized for workouts, cooking, or meeting deadlines, our Countdown Timer offers simplicity and effectiveness. With customizable time settings, real-time updates, user-friendly interface, and alert notifications upon completion, it empowers users across diverse contexts. Designed to enhance time management skills and boost productivity, our Countdown Timer caters to individuals from all walks of life, providing a valuable resource for staying organized and focused. Embrace the power of efficient time management with our intuitive and adaptable Countdown Timer..

ABSTRACT:

The Countdown Timer project offers a practical solution to the challenge of time management by leveraging the combined power of HTML, CSS, and JavaScript to develop a user-friendly countdown timer application. With this tool, users gain the ability to input their desired time durations, spanning hours, minutes, and seconds, and promptly initiate a countdown that dynamically updates to reflect the remaining time. This real-time feedback mechanism ensures users are constantly aware of their time constraints, facilitating better planning and decision-making. The timer's design prioritizes simplicity and effectiveness, featuring intuitive input fields for effortless time entry, clear and prominent countdown displays for easy tracking, and alert notifications upon completion to signify task fulfillment. This application's adaptability extends its utility across a myriad of scenarios, catering to activities ranging from workouts and cooking to meeting deadlines in professional settings. By fostering improved time management skills and bolstering productivity, the Countdown Timer serves as an indispensable tool for individuals seeking to maintain organization and focus across various contexts of daily life.

SOURCE CODE:

HTML:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Countdown Timer</title>
  <link rel="stylesheet" href="countdown.css">
</head>
<body>
  <div class="container">
    <h1>Countdown Timer</h1>
    <div class="timer">
      <input type="number" id="hoursInput" placeholder="Hours">
      <input type="number" id="minutesInput" placeholder="Minutes">
      <input type="number" id="secondsInput" placeholder="Seconds">
      <button id="startBtn">Start</button>
    </div>
    <div id="countdown"></div>
  </div>

  <script src="countdown.js"></script>
</body>
</html>
```

CSS:

```
body {  
  font-family: Arial, sans-serif;  
}  
  
.container {  
  max-width: 400px;  
  margin: 20px auto;  
  text-align: center;  
}  
  
h1 {  
  margin-bottom: 20px;  
}  
  
.timer input {  
  width: 60px;  
  margin: 0 5px;  
  padding: 5px;  
  text-align: center;  
}
```

```
.timer button {  
  padding: 8px 20px;  
  margin-top: 10px;  
  background-color: #007bff;  
  color: #fff;  
  border: none;  
  border-radius: 5px;  
  cursor: pointer;  
}  
  
.timer button:hover {  
  background-color: #0056b3;  
}  
  
#countdown {  
  font-size: 24px;  
  margin-top: 20px;  
}
```

JAVASCRIPT:

```
document.addEventListener('DOMContentLoaded', function() {
    document.getElementById('startBtn').addEventListener('click', startTimer);
});

let countdown;

function startTimer() {
    const hours = parseInt(document.getElementById('hoursInput').value) || 0;
    const minutes = parseInt(document.getElementById('minutesInput').value) || 0;
    const seconds = parseInt(document.getElementById('secondsInput').value) || 0;
    let totalSeconds = hours * 3600 + minutes * 60 + seconds;

    if (totalSeconds <= 0 || isNaN(totalSeconds)) {
        alert('Please enter a valid time.');
        return;
    }

    displayTimeLeft(totalSeconds);

    countdown = setInterval(() => {
        totalSeconds--;

        if (totalSeconds < 0) {
            clearInterval(countdown);
            document.getElementById('countdown').textContent = 'Time is up!';
            return;
        }
    }, 1000);
}
```

```
        displayTimeLeft(totalSeconds);
    }, 1000);
}

function displayTimeLeft(seconds) {
    const hours = Math.floor(seconds / 3600);
    const minutes = Math.floor((seconds % 3600) / 60);
    const remainingSeconds = seconds % 60;

    const display = `${hours.toString().padStart(2, '0')}:${minutes.toString().padStart(2, '0')}:${remainingSeconds.toString().padStart(2, '0')}`;
    document.getElementById('countdown').textContent = display;
}
```

RESULT:

C:/Users/Hp/OneDrive/Documents/college/html/countdown.html

Countdown Timer

Hours

Minutes

Second

Start

s/Hp/OneDrive/Documents/college/html/countdown.html

Countdown Timer

1

1

1

Start

01:01:00

PROJECT SCOPE:

1. Objective:

Develop a user-friendly countdown timer application using HTML, CSS, and JavaScript to assist users in managing their time effectively.

2. Features:

- **Time Input:** Users can input desired time durations in hours, minutes, and seconds.
- **Real-Time Countdown:** Initiate a countdown from the inputted time to zero, providing live updates on the remaining time.
- **Intuitive Interface:** Design an interface with clear input fields and countdown displays for ease of use.
- **Alert Notification:** Notify users upon completion of the countdown to signal task fulfillment.

3. Technologies:

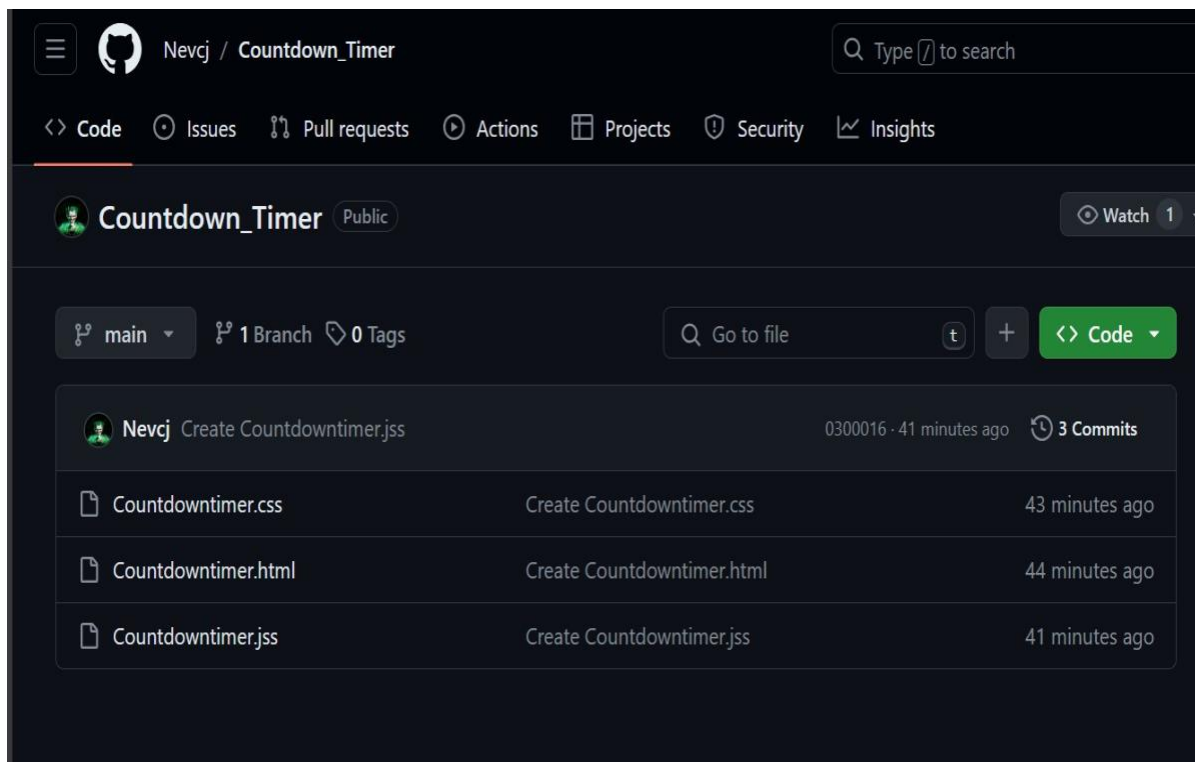
Frontend: HTML, CSS, JavaScript

4. Scope Constraints:

- The application will focus solely on countdown functionality and will not include additional features such as pause/resume or multiple countdowns.
- Design elements will be kept minimal to prioritize functionality and user experience within the given timeframe.
- Compatibility will be ensured across modern web browsers, with limited consideration for legacy browser support.

GITHUB LINK:.

https://github.com/Nevcj/Countdown_Timer.git



CONCLUSION:

In conclusion, the Countdown Timer mini-project represents a pragmatic solution to the ubiquitous challenge of time management. By harnessing the capabilities of HTML, CSS, and JavaScript, we have developed a user-friendly application that empowers users to efficiently track and manage their time. The timer's intuitive interface allows for seamless input of desired time durations, while its real-time countdown feature provides continuous updates on the remaining time. With a focus on simplicity and effectiveness, our Countdown Timer is well-suited for a diverse range of activities, from workouts and cooking to meeting deadlines. As individuals strive to enhance their productivity and organizational skills, this tool serves as a valuable resource, fostering better time management habits and facilitating greater focus and efficiency in daily tasks. With its versatility and functionality, the Countdown Timer stands as a testament to the power of technology in addressing fundamental aspects of modern life.