

Project Title	Countdown Timer
Technologies	HTML, CSS, JavaScript
Project Difficulties level	Hard

Project Description:

Objective: The goal of this project is to create a countdown timer web application using HTML, CSS, and JavaScript. This timer will allow users to set a specific date and time in the future, and then it will count down to that moment, displaying the remaining time in days, hours, minutes, and seconds.

Step 1: HTML Structure Create the basic HTML structure for the countdown timer. Include the following elements:

- A title or heading for the timer.
- Input fields for users to set the target date and time.
- A "Start" button to initiate the countdown.
- An area to display the remaining time in days, hours, minutes, and seconds.

Step 2: CSS Styling Apply CSS styles to make the countdown timer visually appealing. You can customize fonts, colors, and layout to enhance the user interface.

Step 3: JavaScript Functionality Implement the timer functionality using JavaScript. Here are the steps to achieve this:

- When the "Start" button is clicked, get the user's input for the target date and time.
- Calculate the time remaining from the current time to the target time.
- Update the display with the remaining time in days, hours, minutes, and seconds.
- Use JavaScript's `setInterval()` function to update the countdown in real-time.

- When the target time is reached, display a message to inform the user.

Step 4: Optional Enhancements You can encourage students to enhance the project by adding the following features:

- Allow users to set multiple countdowns on the same page.
- Provide sound or visual effects when the timer reaches zero.
- Customize the appearance of the timer further using CSS animations.

Submission Guidelines:

- Students should submit a zip file containing all project files, including HTML, CSS, and JavaScript.
- Include a brief documentation file describing how the project works and any additional features implemented.

Grading Criteria: Students will be assessed based on the following criteria:

- Correct functionality: Does the timer accurately count down to the specified date and time?
- User interface: Is the timer visually appealing and easy to use?
- Code quality: Is the code well-organized and commented?
- Optional enhancements: Are any additional features implemented successfully?

Note:

- This project aims to test your understanding of HTML, CSS, and JavaScript.
- Students should submit their completed projects within the assigned deadline.