

Use Case U1S2: Manage Countdown Time Events

Scope: Timer

Level: User Goal

Primary Actor: User

Scenario: Stop the Countdown Timer

Related Use Cases: N/A

Stakeholders and Interests:

- User: Wants to stop the Countdown Timer to ensure the time is accurate

Preconditions: The Countdown Timer is up and Running: (See *Use Case 1S4: User Enters the Countdown Time*).

Success Guaranties (Postconditions): The Countdown Timer is stopped, the countdown time (when stopped), is displayed (accuracy within one second).

Main Success Scenario:

User	System
1. Indicates to stop the timing count-down.	
	2. Stops the countdown.
	3. Displays the latest countdown time.

Alternative Flows:

2a. If the Countdown Timer is at 0, then the Countdown Timer stops automatically, and without User intervention.

3a. If the Countdown Timer is at 0, then the Countdown Timer displays the current time of 0, and does not continue (see Alternative Flow **2a**).

Technology and Variations List:

2b-3b. The Actual accuracy of the timer is dependant and will vary based on the task schedulers of both the Operating System and the language used for implementation.

Frequency of Occurrence: Multiple Countdown Timers as needed.

Multiple Countdown stops per a single Countdown Timer as the User desires.

Open Issues:

- What is the resolution of the Countdown Timer? One Second? A tenth of a Second?
- What happens if the Countdown Timer stops “mid-resolution”? I.E. if the Countdown Timer has a 1-second resolution, and the User stops the Countdown Timer *between* that resolution (the Countdown Timer is between seconds, and the User stops the countdown), how is that countdown time displayed?

- If the Countdown Timer has one second resolution, and the user stops say between 8 and 9 seconds, what is displayed? 8 seconds, 9 seconds, 8.323 seconds (time with some type of *higher* resolution)???