

**Use Case U1S1: Time Events****Scope:** Timer**Level:** User Goal**Primary Actor:** User**Scenario:** Start Timing**Related Use Cases:** N/A**Stakeholders and Interests:**

- User: Wants accurate timing

**Preconditions:** The Timer is running, not timing (the is stopped or paused).**Success Guaranties: (Postconditions)** The Timer is started, and accurately timing the event.**Main Success Scenario:**

User	System
1. Indicates to start timing.	
	2. Records the Start time.
	3. Calculates the elapsed time.
	4. Displays the elapsed time in seconds resolution.

**Alternative Flows:**

\*a. If at any time, the System cannot measure the time for the elapsed time, then the System informs the User the Timer has stopped working properly.

**Technology and Variations List:**

2b-4b. 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 timers as needed.**Open Issues:**

- Is the accuracy dependant on the Operating System?
- Is the accuracy dependant on the Hardware?
- Multitasking issues?
- Multithreading issues?
- How does language affect the accuracy of the Timer?
- How does a “fully loaded System” affect the accuracy of the Timer?