

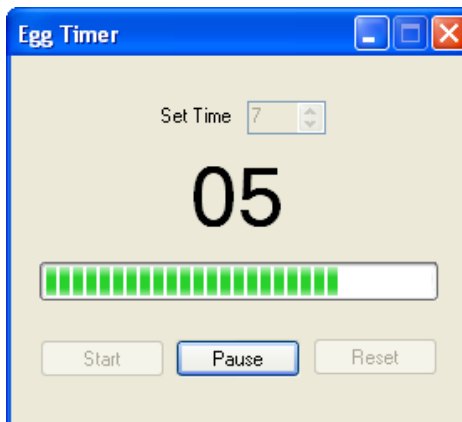
CMPE1600 – ICA6

In this ICA, you will learn to use timers, as well as the progress bar. You will create a Windows application consisting of a single form, as shown below. The form should be fixed in size. Add the controls shown below, and set the tab order such that the numeric up down control is first, and the Start button is second.



Initially, when the application starts, the numeric up down control will have the focus, and the initial time value will be 1 second. The Start button will be enabled, and the Pause and Reset buttons will be disabled. The range of the numeric up down control will 00 to 99 seconds.

When the numeric up down control is used to select a new time, the output label contents will be adjusted to show the same value. When the Start button is pressed, the Pause will be enabled, and the numeric up down and the Start button will be disabled. A timer will start ticking at the rate of once per second. The progress bar will be filled as shown below:



After each second, the time value and the progress bar will be adjusted to count down towards zero. When 00 is reached, both the Start and the Pause buttons

should be disabled, and the Reset button will be enabled and the focus set to it. A timer will be used to cause a beep of duration of 0.1 second to occur every 0.5 of a second, for a maximum of 10 beeps. The Console.Beep method can be used to generate the beeps.



When the Reset button is pressed, the beeping will stop. The Start button and the numeric up down controls will be enabled, and the output time will be adjusted to be the same as the numeric up down control. The Pause and Reset buttons will be disabled.

Grading

Requirement	Grade
Starting time is set by the numeric up/down.	20
Counts down once per second.	20
Beeps correctly stopped by the Reset button.	20
Buttons enabled/disabled correctly.	20
All controls are named correctly.	20