1. Watch Dog Timer (WDT)

A timing device set for a predefined interval of time for occurrence of an event is known as watch dog timer. The device generates the time-out signal if no event occurs in the specified interval of time.

For instance, consider that a set of events must occur within a time period of 100 ms. If the task is accomplished in the specified time, the WDT (Watch Dog Timer) gets disabled and stops counting. On the other hand, if the system fails to accomplish its tasks the WDT (Watch Dog Timer) generates interrupts after predefined time (i.e., 100 ms) and executes a routine that runs.

1. Watch-dog timer can be either a programmed software task or a microcontroller.
2. In mobile phones, WDTs save power when there is no GUI interaction within a specified time it turnoffs the display. An interval is set to turnoff the display is 15,20 or 25 sec in a mobile phone.
3. In case of temperature control systems, if the controller fails to switch off the current in a given time, the current automatically gets switched off and a warning signal is issued by indicating failure of the controller.
4. In mobile phones, beep sound is used to attract attention of user when menu is not selected with in a specified time interval.