Simple Digital Countdown timer using 7-seg display

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A very simple Digital countdown timer using 8051 and 7 segment displays. A perfect project for microcontroller starters.

Author has used BCD to 7-segment decoder for driving displays. each segment has its own decoder. so there is no multiplexing included for displays. Additionally there are 2 control switches one to **Start/Pause** and second to **Reset** the timer. There is a Buzzer added to indicate timer has expired.

The code for this project is written in assembly language. Timer 0 is used for 1 second timer delay. Code is written for a hardcode 10 minutes timer. So there is a lot of scope to expand this project according to your needs. You can take this project as a reference if you want to develop more on it.

The zip file includes code, schematic and proteus simulation file incase you want to try project before building it. Complete list of files in given below:

File List information:
1. Timer.asm - Assembly code for project.
2. timer.hex - Pre-assembled hex file.
3. Digital Countdown Timer.png - Schematic/circuit diagram
4. Digital Countdown Timer.DSN - Proteus simulation file
5. timersimulation.png - Simulation screenshot

Incase you have any doubts regarding this project please make use of forum: Rickey's World forum

Thanks to Prasad.K.Wagh (Kartikceleb) and his team for this contribution.

If you want to contribute your projects to website please email me at: contact[at]rickeyworld[dot]info