

COSE321 Computer Systems Design

Assignment #7

No late turn-in accepted

You want to design a digital watch using **interrupt from the private timer**. Write the code with ARM assembly and C. Make your own decision on the language selection (Assembly and C). The followings are the coding requirements:

- Every second, the time information (**hour : minute : second**) should be sent to the UART terminal on PC.
 - The time starts from 00: 00: 00
 - Use some special ASCII characters to return back the cursor to the first column, when you display a new time. (That is, you don't want to use the next line to display a new time)
- The private timer interrupt should be used to inform each second to CPU.

What and How to submit:

1. Upload **your assembly and C programs** to Blackboard.
2. Upload **video clip (3-min?)** to Blackboard. Your video clip should have **at least** the following contents:
 - Your smiling face
 - Understandable explanation of your code
 - Demo on Zedboard

Note: This is an individual assignment. You are welcome to discuss, but **DO NOT COPY** solutions. If you are found to copy solutions from others or slightly modify the solutions from others, both of you will be given 0 credits.