

```
[-----]
[Editors Note:  This log file has been edited to keep it readable]
[There are more WDT_HANDLER:  Tickle, Tickle messages          ]
[and many more WDT_HANDLER: First Timeout occurred... messages  ]
[before the inevitable crash.  The FATAL ERROR: Watchdog Timer  ]
[expired message is from my application's recovery code.  I'm   ]
[sure you can all do better than me.                            ]
[                      - Roy   (2/14/2015)                      ]
[-----]
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ECE 544 Project 3 Application for the Digilent Nexys 4 board
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This Xilkernel based application reads the buttons and switches on the FPGA development board and displays them on the LEDs. Even though the application is simple it uses several of the synchronization and interprocess communication capabilities offered in the Xilkernel

To demonstrate, press any of the buttons and/or flip switches on the board. The current state of the buttons and switches should be displayed on the LEDs

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MASTER: Master Thread Starting.
MASTER: Button press semaphore has been initialized
MASTER: Interrupts have been enabled
MASTER: Watchdog timer has been started
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[-----]
[NOTE TO READER:  THE MISMASH BELOW IS CAUSED BECAUSE THREE TASKS ARE TRYING TO WRITE TO THE CONSOLE AT]
[THE SAME TIME.  LIKE WITH OTHER SHARED RESOURCES, THERE SHOULD BE A SINGLE WRITER OR ACCESS TO THE    ]
[CONSOLE SHOULD BE CONTROLLED WITH A SEMAPHORE OR VIA A MESSAGE QUEUE.  -Roy                        ]
[-----]
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BUTTON THREAD:  BSWITCHES TLEDS THREAutton ThrHREAD:  SwD:  LED Thead has sitches Thread has started
ead has statarted
LErted
DS THREAD: New LEDs State is 20
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MASTER THREAD: ForceCrash state changed: no
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LEDS THREAD: New LEDs State is 00
WDT_HANDLER: Tickle, Tickle
LEDS THREAD: New LEDs State is 80
LEDS THREAD: New LEDs State is 00
WDT_HANDLER: Tickle, Tickle
LEDS THREAD: New LEDs State is 01
LEDS THREAD: New LEDs State is 03
WDT_HANDLER: Tickle, Tickle
LEDS THREAD: New LEDs State is 43
LEDS THREAD: New LEDs State is 63
WDT_HANDLER: Tickle, Tickle
LEDS THREAD: New LEDs State is 43
LEDS THREAD: New LEDs State is 03
LEDS THREAD: New LEDs State is 83
MASTER THREAD: ForceCrash state changed: yes
WDT_HANDLER: First Timeout occurred, will reset CPU on next timeout
WDT_HANDLER: First Timeout occurred, will reset CPU on next timeout
WDT_HANDLER: First Timeout occurred, will reset CPU on next timeout
WDT_HANDLER: First Timeout occurred, will reset CPU on next timeout
...
WDT_HANDLER: First Timeout occurred, will reset CPU on next timeout
WDT_HANDLER: First Timeout occurred, will reset CPU on next timeout
WäFATAL ERROR: Could not initialize the peripherals
Please power cycle or reset the system