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CS 350

Module Three - Milestone 3 Answers

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**What is the purpose of the timerCallback() function?**

The code within the timerCallback function will be executed when the timer period finishes. In the case of my code, this is 500,000 microseconds, or .5 seconds.

**What does period mean in this context?**

The period is the amount of time between events of the timer. Since the Timer\_CONTINUOUS\_CALLBACK parameter is selected, the period will call the callback function at the end of each period.

**How does the Timer\_CONTINUOUS\_CALLBACK parameter impact the driver?**

The Timer\_CONTINUOUS\_CALLBACK parameter will call the callback function once per period. The other options are timer\_ONESHOT\_CALLBACK, timer\_ONESHOT\_BLOCKING, and Timer\_FREE\_RUNNING. The first 2 will call the callback function once, and the last one will call the function each period but will not interrupt.

**What is gpioButtonFxn0() used for?**

The gpioButtonFxn0 function is a callback function that is used when the button0 is pressed. This is set by the line GPIO\_setCallback(CONFIG\_GPIO\_BUTTON\_0, gpioButtonFxn0), which ties the action of button 0 press to the callback function gpioButtonFxn0.

**What is the purpose of GPIO\_CFG\_IN\_INT\_FALLING?**

The GPIO\_CFG\_IN\_INT\_FALLING command is used to tell the embedded system whether the button interrupt should happen on the rising or falling portion of the signal. In this case, it is setting it on the falling edge, which is tied to when the button is released. The rising edge will be called when the button is initially pressed.