Milestone 3: Lab Guide Answers

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

The *timerCallback()* function is purposed to initiate the code scripted in the function whenever a timer interrupt triggers. If the *timerCallback()* function toggles an LED, whenever the timer interrupt is triggered the function will be called back to and the LED will be toggled.

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

Period in this case refers to how long the timer will run of its own accord. In this project, the period is set as 1,000,000 microseconds (µs), which is equivalent to one second.

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

The *Timer\_CONTINUOUS\_CALLBACK* parameter adjusts the timer to run in a sort of continuous mode. When the timer’s timer callback function is called, the timer will automatically restart itself and this cycle will continue until *Timer\_stop()* is called to stop the timer and cease automatic restarts.

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

The *gpioButtonFxn0()* function is meant as an interrupt for the timer that “controls” repeated LED illumination. In other words, this function can be called to change the consistent LED illumination specified by the timer and its respective callback function.

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

*GPIO\_CFG\_IN\_INT\_FALLING* essentially tells the system, if utilized in this way, to read a button falling as a trigger for a timer interrupt. This is a way to specify a button press from a button release, which is referred to as “rising.”