CS-350 Emerging System Architecture & Technology

Module 5-1: Milestone Three: Morse Code

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03 APR 2022

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

The timer’s callback function is a method used to be called repeatedly at a given interval. When a timer object is incorporated, it won’t start until the start timer method is called and won’t stop until the stop timer method is called, or the object has been removed/deleted. The callback will check the status of each period in the interval.

* What does period mean in this context?

The period is referring to the time between continuous task executions. In this case the time is in milliseconds.

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

The above example is used when a continuous timer is needed. The enumerator is a non-blocking call will continue execution. This enumerator automatically restarts and continues until the timer\_stop() is called.

* What is gpioButtonFxn0() used for?

The above method is a callback function for the GPIO interrupt. The GPIO which stands for General Purpose I/O (Input/Outputs). This module allows you to manage these pins through simple API’s. The callback function is used for the config\_gpio\_button0.

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

The purpose of the above function is for the GPIO interrupt on a falling edge. The falling edge is the transition from high to low.

References

Texas Instruments. (n.d.). *Overview*. Timer.h File Reference. Retrieved from <https://software-dl.ti.com/simplelink/esd/simplelink_msp432_sdk/3.30.00.13/docs/tidrivers/doxygen/html/_timer_8h.html>