Class: EE3501

Assignment: Lab 6

Professor: Craig A. Chin

Student: Goran Novakovic

Pre-Lab:

Text

Description automatically generated

Figure 1: Code success compile

Video recorded and added to the file.

Lab Results:

Text

Description automatically generated

Figure 2: Led on and of with button press down and release.

Video recorded and added to the file.

Text

Description automatically generated

Figure 3: Wait timer for led off included

Video recorded and added to the file.

Discussion:

1. Describe the terms interrupt and interrupt service routine (ISR)

An ISR (also called an interrupt handler) is a software process invoked by an interrupt request from a hardware device. It handles the request and sends it to the CPU, interrupting the active process.

1. Explain the difference between a Timeout and a Ticker object and explain how to configure a Ticker object to issue interrupts at 10 second intervals.

A timeout will only wait for the time duration to pass and then activate the function, while a ticker will repeat the function every time the designated time runs out. Timeout only runs once while ticker is a reoccurring event in the code.

flipper.attach(&flip, 10.0); // the address of the function to be attached (flip) and the interval (10 seconds)