ARM Project #3

1. Start from the example project titled "SysTick"
    a. Connect your STM32 Value Line Discovery Evaluation Board
    b. Load the project into the MDK-ARM IDE.
    c. Start by reading the "readme.txt" file to know the purpose of the project.
    d. Compile and load the project into your STM32 Value Line Discovery Evaluation Board and verify that it works as described in the "readme.txt" file.
2. Trace and find the part of the project that initializes the SysTick duration and perform an experiment to measure its actual value using a logic analyzer or a digital oscilloscope.
3. Modify the code such to disable the SysTick interrupt and design an experiment to verify that.
4. Start from the example project titled "EXTI"
    a. Connect your STM32 Value Line Discovery Evaluation Board
    b. Load the project into the MDK-ARM IDE.
    c. Start by reading the "readme.txt" file to know the purpose of the project.
    d. Compile and load the project into your STM32 Value Line Discovery Evaluation Board and verify that it works as described in the "readme.txt" file.
    e. Mask the interrupt line connected to the User Button and verify that no interrupts are generated as before.
5. Modify the code in such a way to allow the time in between User Button presses is measured and stored in a user variable called DeltaTime in units of SysTick. Place a break point in your program and verify that what your program measures is accurate.