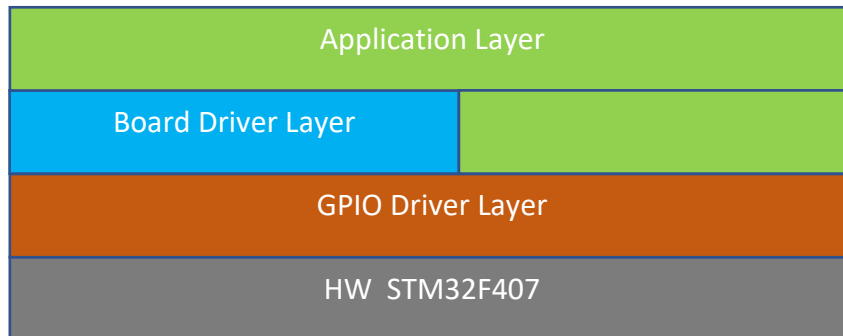# Embedded C Assessment
Target Board STM32f407

Prepared by: Mouadh Dahech

Architecture:

The GPIO Driver layer already developed compose of gpio.c and gpio.h files it can be used by the Board driver layer or/and by the application layer.
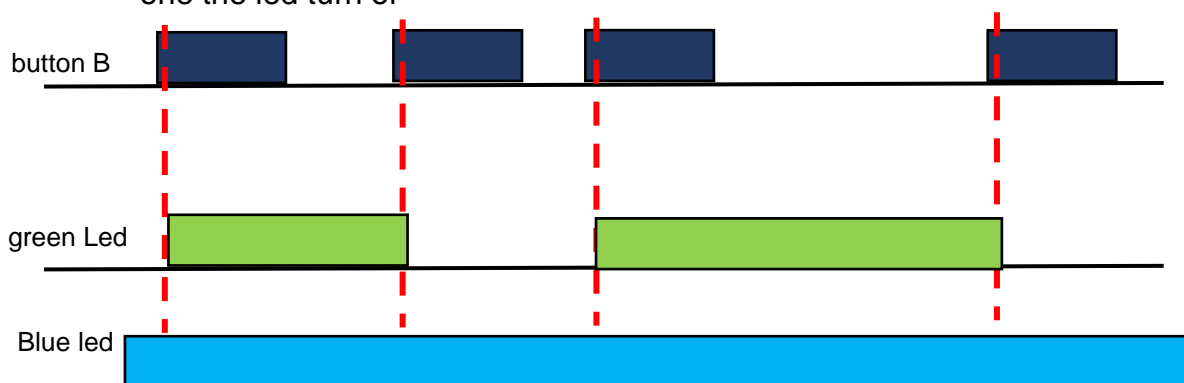
Requirements:

- Develop the Board Driver Layer (led.c and led.h files) and the application layer (main.c file)

Board driver layer:

- The board driver layer provides to the upper layer Two functions InputOutputConfig and ButtonToggleLed
- The InputOutputConfig enable the clock and configure the Input/output needed
- The ButtonToggleLed function should turn on the led L if button B is clicked, at the second click from button **B** the Led **L** should turn off.
  The ButtonToggleLed function can be reimplemented on the upper layer
- Led **L** can be the green, orange, red or blue already mounted at the stm32f407 board
- The Button **B** should be the user button (the blue one at the stm32f407 board)

Application layer:

- Turn on the blue led
- Every time the user button pushed, first click the green led turn on, second one the led turn of

The application timeline