Project 2: Basic GPIO Programming in Assembly

TOTAL: 50

Project Assignment

Write a Keil uVision 5 project in Assembly language that allows a user to do the following task when it is compiled and loaded on the STM32L476 Discovery Board that we use:

- toggle both onboard LEDs when the up button of the joystick is pushed.

Project Submission.

1. Zip your whole project folder and submit it on Blackboard.
   If your submission does not contain the whole project, 50% of the total points will be deducted.
   If your code cannot be compiled or built successfully, 50% of the total points will be deducted.
2. Write a README document (in PDF format) to briefly
   a. describe the basic structure of your project,
   b. explain how to test your project to demonstrate that it works correctly,
   c. describe your test procedure and results and use some pictures to show your test. (optionally, you can make a video to demonstrate how you have tested your project.)

Grading Rubric

(10 pts) for README document.
(10 pts) for basic project structure and the basic logic flow of your main.s file.
(30 pts) for the code to implement the task.