Assignment 5 – Touch Driver

EMBSYS 105 Winter 2020

Released Week 5, due Sunday before Lecture 7, 11:59 PM

Before starting this assignment read the Project Assignment document to find out how to set up your hardware.

For this assignment you will get the touch driver working in the MP3Player and modify it to conform to an existing driver framework.

This involves the following:

1. Turn on the I2C1 interface on the board. The touch panel hardware will use I2C1 to transmit touch data from the touch panel to RAM. This code is in bspI2c.c with some TODOs for you. You can figure it out from the STM manuals or you may want to search github for sample I2C code for STM32F4 to help you get it going. If you use some code from the web, be sure to reference your source.
2. Explore tasks.c. There you will find some TODOs where you need to fill in code to start using the touch driver once the I2C interface has been enabled.
3. The third part is to write an I2C driver that conforms to the PJDF framework and have the Adafruit_FT6206 driver use your new driver. The steps will be covered in the lectures. See PjdfI2c.zip for skeleton code.

Submitting your work:

- Clean your project (remove "Debug" and "settings" folders) and zip it into a file named MP3PlayerDriver_<YourUWNetId>.zip
- Submit by the due date.