# **Sensor Platform**

# PSU Capstone Project

# WPR

Last Week: 3/21 – 3/27

Next Week: 3/28 – 4/3

# Colten Nye

## Last week:

* Added save and load functions to GUI.
* Added GUI function to delete a sensor.
* Researched need for USB-Uart bridge on main board and component options.
* Began the process of defining a sensor description language.

## Next week:

* Confirm which sensor user parameters are required.
* Continue the process of defining a sensor description language.
* Compose two detailed use cases:
  + One for designing a sensor.
  + One for using the system.
* Update task list and review with all.
* Implement serial functionality in GUI.

## Issues:

* Boards have been sent to fab without team review, and are missing a crucial component (USB-UART bridge). We can use a special cable that implements this function external to the board for testing purposes.

# Golriz Sedaghat

## Last week:

* Based on Andrew’s feedback, made the final revision on the PCB’s and schematics
* Sent the boards to fab
* Sent Mike the carts of our components to make the purchase
* Will meet with Steve today to talk about the next steps

## Next week:

* Hopefully, by the next week we’ll have the boards back from fab, and also we will have the components arrived, then we can start building the boards
* In the meanwhile, I’ll be working on some of the documents
* Also, we’ll work on debugging if Steve or Colten want me to do that

## Issues:

* None

# Steve Peirce

## Last week:

* Continued research on FatFS and SDIO libraries.
* Modified and verified SDIO connections for 4 wire SD card setup.
* Sent board layout to fabrication at OSH Park.
* Consulted with Mike at Erebus Labs on VOC sensor.
* Ordered VOC sensors (2).
* Ordered parts to populate fabricated boards.
* Met with Golriz to strategize on next steps and review progress.

## Next week:

* Solidify Serial comm protocol for programming via GUI.
* Complete SDIO data-logging ability.
* Complete Accelerometer I2C library.
* Continue working on USART comm protocol, (ideally, complete).
* Create test plan for software.
* Create test plan for hardware.
* Reassess job dispersion with teammates.
* Port code from STM32F207 to STM32F205 in prepararion for fabbed boards.

## Issues:

* No updates on GUI progress.
* Team schedules not aligning.
* Job dispersion remains unclear.
* Job schedule incomplete.
* SDIO incomplete.
* USART serial incomplete.
* GUI comm protocol still not solidifed.