# **Sensor Platform**

# PSU Capstone Project

# WPR

Last Week: 1/23 – 1/29

Next Week: 1/30 – 2/6

# Colten Nye

## Last week:

* Met with Steve to discuss the project.
  + Agreed on using a chrome application instead of Java form.
    - Chrome is more known than Java, users will be more familiar with installing Chrome than JRE.
    - Able to easily access cloud repository of sensor definitions.
  + Agreed on using In-App-Programming instead of config file for sensor config programming.
    - Avoid dealing with SDIO partitioning and user visibility.
* Met with Dr. Zurk.
  + Documentation needs improvement.
  + Weekly Progress Reports.
    - Be more descriptive and specific. Use full sentences.
    - Deliver each Friday by email.
    - Associate a person to each entry.
  + Project Proposal Presentation should have been delivered already.
    - Will prioritize and deliver ASAP.

## Next week:

* Become familiar with Chrome Extension programming.
* Flesh out Project Proposal.
* Compose Functional Requirements Document.
  + Get approval from Sponsors.
* Create WPR template and distribute to team members.

## Issues:

* Cannot clone Github repository to local machine.
  + Likely has to do with invalid character in the repository name.
    - Will ask Mike to rename the repo.

# Steve Peirce

## This week:

* Decided on STM32F205 IC:
  + Smaller package (64 vs 100).
  + Less expensive.
  + No need for DCMI, ethernet at this point.
* Received development board.
* Decided on browser based application via CHROME.
* Built "Hello World" Google Chrome App.
* Researched/began testing on accessing USB devices (HID, etc.) via App.
* Configured Development Environment:
  + Installed GCC ARM Toolchains, CooCox IDE.
  + Installed OpenOCD/Olimex drivers for JTAG.
  + Wrote scripts for debugging via JTAG over OpenOCD.
* Met with Capstone advisor:
  + Immediate improvement in documentation needed.
  + Proposal presentation granted extension.

## Next Week:

* Complete (at minimum) "Blink" type program on STM32.
* Begin final software outline:
  + Modules required for JTAG ICP (in circuit programming)
  + Modules required for USB IAP (in application programming)
  + Modules required for embedded program
  + Interface requirements between applications outlined
* Begin building Wiki outline.
* Compose Proposal, Requirements doc, Test Plan, etc.

## Issues:

* Proposal presentation must be completed and practiced ASAP.
* Documentation almost completely lacking thus far.
* Communication between team members needs improvement.
* Distinct jobs need to be established.
* Team meeting schedule needs to be established.
* Single "point of contact" person now established:
  + Correspondence to be reviewed prior to sending
  + Schedule of correspondence to be established
* No running code thus far
* Final Bill of Materials needs to be established, priced, reviewed and approved.
* Schematics need to be started.

# Golriz Sedaghat

## Last week:

* Worked on the project schedule and prepared the preliminary one.

## Next week:

* Study the STM32 datasheet.
* Create the preliminary main board design.
* Revise and complete the project proposal.

## Issues:

* None.