Team Instrumentation PDR Presentation

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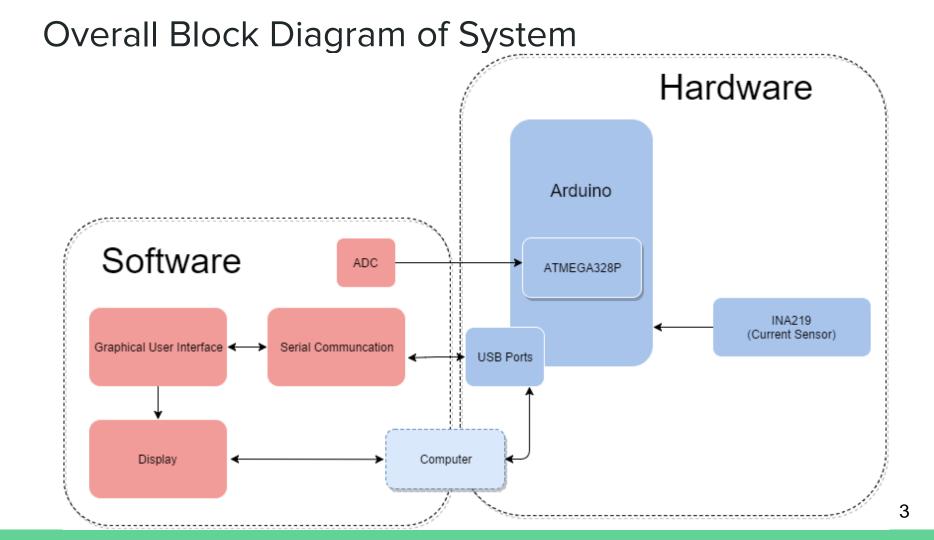
Overview

Overall Block Diagram

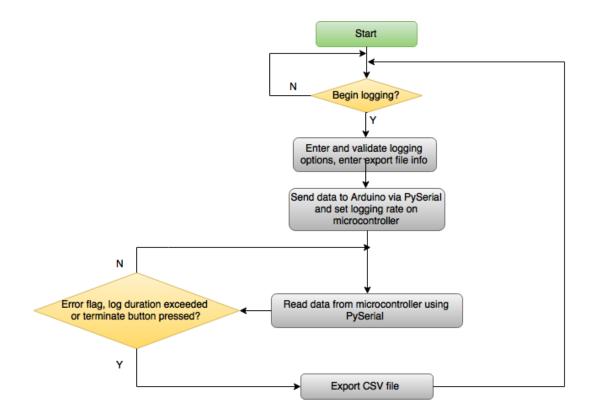
Problems and Issues

Team's Progress

What's next?



User Interface State Diagram



Problems and Issues

Hardware:

Testing with current sensor Verification of values

Software:

Data entries using XML file PyQT

Firmware

PySerial Library Formatting output data

Team's Progress

Hardware:

Tutorials completed

Sensor testing/verification

Specifications of our device finalized

Software:

Specifications for GUI

Basic GUI using Python script/XML

Researched other GUI building tools

Firmware:

- Send/Receive data through serial
- Writing serial data to file

Review of GANTT Chart

		Project														
	(Gantt Chart)															
Week	1	2	3	4	5	6	7	8	Spring Break	9	10	11	12	13	14	15
Date	1/25/2016	2/1/2016	2/8/2016	2/15/2016	2/22/2016	2/29/2016	3/7/2016	3/14/2016	3/21/2016	3/28/2016	4/4/2016	4/11/2016	4/18/2016	4/25/2016	5/2/2016	5/9/2016
Presentations																
Proposal																
Design Review																
Critical Design Review																
Demonstration/Final Presentatio																
Training																
Git/GitHub																
Arduino/Bare Arduino																
Eagle																
Hardware																
Research Options																
Access to FabLab/Project Room																
Block Diagram																
Prototyping with just the Arduino																
Design PCB																
Print Out PCB																
Test PCB/Verfication																
Refine hardware design																
Software																
Research GUI building tools																
GUI (Glade)																
Firmware																
Optimize and debug																
System Integration																
Test																
Software Verification																
Hardware Verfication																
Debug entire system																
Percente																
Reports																
Final Report																

What's next?

PCB Design

Creating a functional GUI using PyQT

Real-time data display

Data export settings

Integrating serial communications into GUI

Thank you! Any questions?