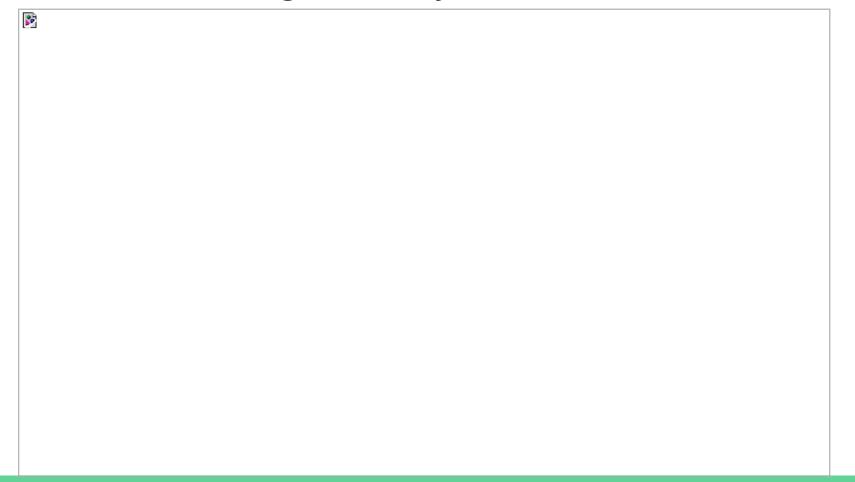
Team Instrumentation PDR Presentation

Timothy Byers, Cristina Felicitas and Allie Kim March 5, 2016

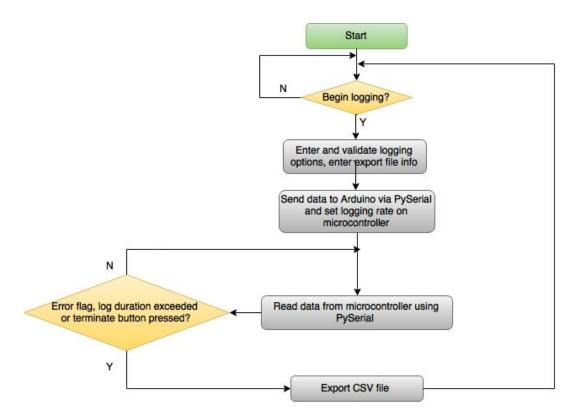
Overview

- Overall Block Diagram
- Problems and Issues
- Team's Progress
- What's next?

Overall Block Diagram of System



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		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									a				. 0			
Proposal			35						9				8	-		
Design Review																
Critical Design Review		1														
Demonstration/Final Presentatio		, j														
Training																
Git/GitHub										Į.						
Arduino/Bare Arduino		I	× /						y							
Eagle									. !							
Hardware			*										8	-		
Research Options			2													
Access to FabLab/Project Room		Ü							i ii				[]			
Block Diagram		1														
Prototyping with just the Arduino		j)							i ii)					
Design PCB		1)								1						
Print Out PCB			10													
Test PCB/Verfication			N						4							
Refine hardware design			5						9				4	-		
									* ***		· ·					
Software													1			
Research GUI building tools																
GUI (Glade)																
Firmware			4						. 0							
Optimize and debug			g													
			52													
System Integration		- 4														
		-	E :						-							
Test													2			
Software Verification																
Hardware Verfication														_		
Debug entire system			2													
Power de										2						
Reports														-		
Final Report													L J			

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?