Project: veyebrations
Date: 9/27/2015
Group Members: Dylan Ayrey, Joshua Pueschel, Raymond Dodge
URL: None yet

Updated Milestone chart

J - Joshua Pueschel, R - Raymond Dodge, D - Dylan Ayrey

Description	Original Completion Date	Who does it	Modified Completion Date	Comments	Done	Due next week
Purchase components		JRD	9 - 11 - 15	Had to repurchase some parts	✓	
Unit test components to verify functionality	--	--				
Unit test thermistor	9 - 4 - 15	J	9 - 2 - 15	Thermistors are 5% inaccurate.	✓	
Unit test proximity sensor	9 - 4 - 15	R	9 - 2 - 15	Accurate to 15 feet	✓	
Unit test amplifier	9 - 4 - 15	D	9 - 11 - 15	Delayed due to shipping	✓	
Unit test vibrating motor	9 - 4 - 15	J	9 - 2 - 15	Pulls .06mA at max voltage	✓	
Unit test atmega328	9 - 4 - 15	R	9 - 2 - 15	Functions as intended	✓	
Unit test radio module	9 - 4 - 15	D	9 - 11 - 15	Need to order level shifter. Testing is delayed	✓	
Unit test resistors/switches/buttons/capacitors	9 - 4 - 15	J	9 - 2 - 15	Accurate to within 5%	✓	
Unit test power regulator	9 - 4 - 15	D	9 - 2 - 15	Correct voltages demonstrated	✓	
Write software for components	--	--				
Write software for temperature control	9 - 11 - 15	J	9 - 2 - 15	Complete and tested. Accurate and responsive	✓	
Write software for radio communications	9 - 11 - 15	R		Not complete yet	✓	
Write software for vibration control	9 - 11 - 15	D		Completed	✓	
Write software for proximity detection	9 - 11 - 15	D	9 - 2 - 15	Complete and tested. Delay is	✓	

				around 50ms for 15 feet.		
Write software to integrate components	9 - 18 - 15	JRD	09-19-2015		✓	
Create mockup on breadboard	9 -22 -15	JRD	09-20-2015		✓	
Integration test mockup and revise	9 -29 -15	JRD	09-27-2015		✓	
Tune vibration control algorithm	9 -29 -15	JRD	09-27-2015	Algorithm is running smoothly according to updated specifications.	✓	
Create PCB board	--	--		Started to create PCB.		
Design PCB Schematic	10 - 15 - 15	JRD	10-11-2015			✓
Design PCB Layout	10 - 18 - 15	JRD	10-17-2015			
Order PCB board	10 - 18 - 15	JRD	10-17-2015			
Create Enclosure	--	--		Started to design enclosure.		
Design Enclosure	11 - 1 - 15	JRD	11-07-2015			✓
Print Enclosure	11 - 1 - 15	J	11-07-2015			
Mount components on PCB board	--	--				
Mount the surface mount in reflow oven	11 - 8 - 15	JRD	10 - 24 - 2015			
Cleanup the reflow results	11 - 10 -15	JRD	11 - 11 - 2015			
Mount dip components and non-surface mount components	11 - 11 - 15	JRD	11 - 13 - 2015			
Test PCB board	11 - 18 - 15	JRD	11 - 25 - 2015			
Integration test for enclosure and PCB board	--	--				
Test board fits in enclosure securely	12 - 9 -15	JRD	11 - 25 - 2015			
Test system functions in enclosure	12 - 9 -15	JRD	11 - 25 - 2015			
Acceptance testing	--	--				
Drop test	12 - 9 -15	JRD	11 - 25 - 2015			

Comfortability Test	12 - 9 -15	JRD	11 - 25 - 2015			
Polishing	12 - 12 -15	JRD	11 - 25 - 2015			

Status

Completed the breadboard mockup with the atmega328. Testing of two sonar devices yielded that interference will not be an issue. For this reason, the wifi module is no longer a top priority and can be an optional include. Started on PCB and Enclosure Design. The website has also been started and can be viewed on the github: https://github.com/dxa4481/Veyebrations_website

Gantt Chart

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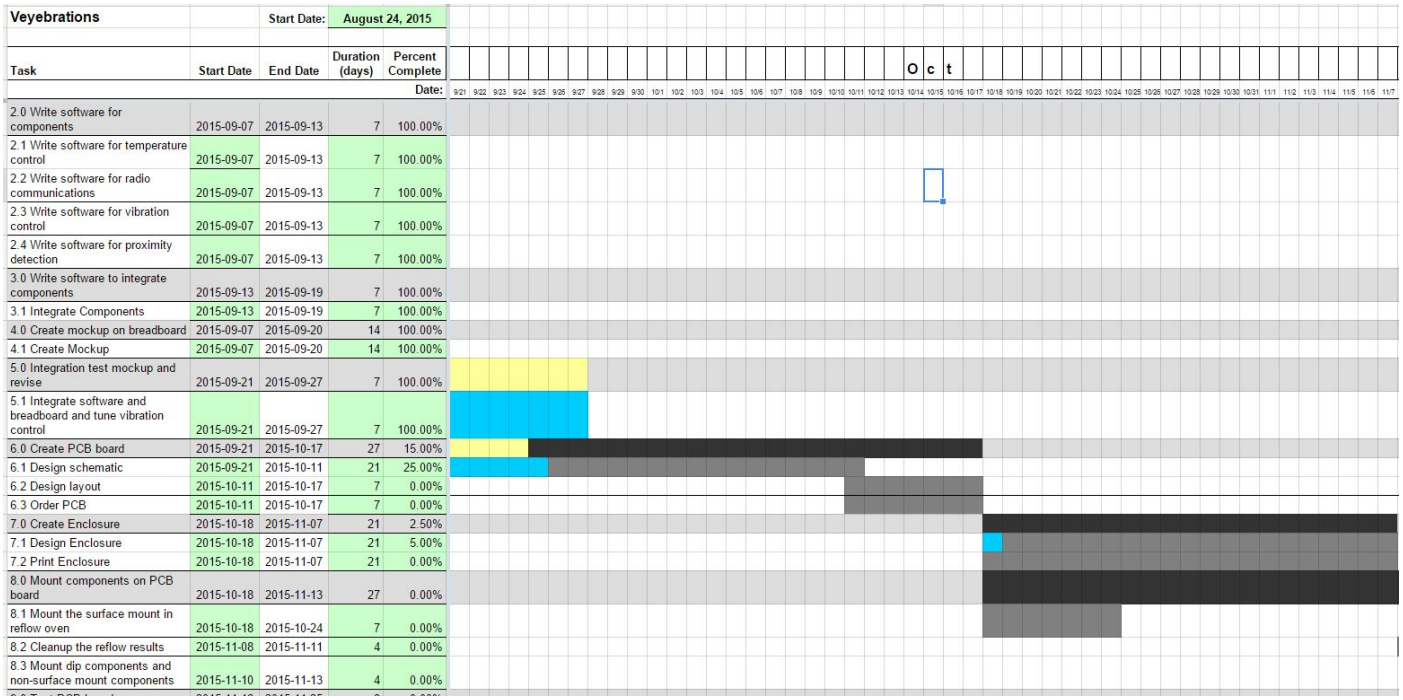

Veyebrations		Start Date:	August 24, 2015	
Task	Start Date	End Date	Duration (days)	Percent Complete
2.0 Write software for components	2015-09-07	2015-09-13	7	100.00%
2.1 Write software for temperature control	2015-09-07	2015-09-13	7	100.00%
2.2 Write software for radio communications	2015-09-07	2015-09-13	7	100.00%
2.3 Write software for vibration control	2015-09-07	2015-09-13	7	100.00%
2.4 Write software for proximity detection	2015-09-07	2015-09-13	7	100.00%
3.0 Write software to integrate components	2015-09-13	2015-09-19	7	100.00%
3.1 Integrate Components	2015-09-13	2015-09-19	7	100.00%
4.0 Create mockup on breadboard	2015-09-07	2015-09-20	14	100.00%
4.1 Create Mockup	2015-09-07	2015-09-20	14	100.00%
5.0 Integration test mockup and revise	2015-09-21	2015-09-27	7	100.00%
5.1 Integrate software and breadboard and tune vibration control	2015-09-21	2015-09-27	7	100.00%
6.0 Create PCB board	2015-09-21	2015-10-17	27	15.00%
6.1 Design schematic	2015-09-21	2015-10-11	21	25.00%
6.2 Design layout	2015-10-11	2015-10-17	7	0.00%
6.3 Order PCB	2015-10-11	2015-10-17	7	0.00%
7.0 Create Enclosure	2015-10-18	2015-11-07	21	2.50%
7.1 Design Enclosure	2015-10-18	2015-11-07	21	5.00%
7.2 Print Enclosure	2015-10-18	2015-11-07	21	0.00%
8.0 Mount components on PCB board	2015-10-18	2015-11-13	27	0.00%
8.1 Mount the surface mount in reflow oven	2015-10-18	2015-10-24	7	0.00%
8.2 Cleanup the reflow results	2015-11-08	2015-11-11	4	0.00%
8.3 Mount dip components and non-surface mount components	2015-11-10	2015-11-13	4	0.00%