Project: veyebrations Date: 9/1/2015

Group Members: Dylan Ayrey, Joshua Pueschel, Raymond Dodge

URL: None yet

Milestone chart

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

Description	Date	Responsibility	Modified Date	Comments
Purchase components		JRD		Had to repurchase some parts
Unit test components to verify functionality				
Unit test thermistor	9 - 4 - 15	J		Thermistors are 5% inaccurate.
Unit test proximity sensor	9 - 4 - 15	R		
Unit test amplifier	9 - 4 - 15	D		
Unit test vibrating motor	9 - 4 - 15	J		
Unit test atmega328	9 - 4 - 15	R		
				Discovered new radio module to
Unit test radio module	9 - 4 - 15	D		test
Unit test resistors/switches/buttons/capacitors	9 - 4 - 15	J		
Unit test power regulator	9 - 4 - 15	D		
Write software for components				
Write software for temperature control	9 - 11 - 15	J		
Write software for radio communications	9 - 11 - 15	R		
Write software for vibration control	9 - 11 - 15	D		
Write software for proximity detection	9 - 11 - 15	D		
Write software to integrate components	9 - 18 - 15	JRD		
Create mockup on breadboard	9 -22 -15	JRD		
Integration test mockup and revise	9 -29 -15	JRD		
Tune vibration control algorithm	9 -29 -15	JRD		
Create PCB board				
Design PCB Schematic	10 - 15 - 15	JRD		
Design PCB Layout	10 - 18 - 15	JRD		
Order PCB board	10 - 18 - 15	JRD		

Create Enclosure			
Design Enclosure	11 - 1 - 15	JRD	
Print Enclosure	11 - 1 - 15	J	
Mount components on PCB board			
Mount the surface mount in reflow oven	11 - 8 - 15	JRD	
Cleanup the reflow results	11 - 10 -15	JRD	
Mount dip components and non-surface mount components	11 - 11 - 15	JRD	
Test PCB board	11 - 18 - 15	JRD	
Integration test for enclosure and PCB board			
Test board fits in enclosure securely	12 - 9 -15	JRD	
Test system functions in enclosure	12 - 9 -15	JRD	
Acceptance testing			
Drop test	12 - 9 -15	JRD	
Comfortability Test	12 - 9 -15	JRD	
Polishing	12 - 12 -15	JRD	

Milestones due by next week

- Purchase components
- Unit test components to verify functionality
- Unit test thermistor
- Unit test proximity sensor
- Unit test amplifier
- Unit test vibrating motor
- Unit test atmega328
- Unit test radio module
- Unit test resistors/switches/buttons/capacitors
- Unit test power regulator

Status

Many of the parts were lost or misplaced over the summer, so we needed to review the parts list and reorder. We also discovered new communication options and are exploring the possibility of using an esp8266 module in favor of the radio modules in the design selection. Found libraries to provide an easy way to unit test different modules.

Veyebrations		Start Date:	August 24, 2013	
Task	Start Date	End Date	Duration (days) Percent Complet	v o
			Date: 8/24 8/25 8/	8/25 8/25 8/27 8/28 8/29 8/30 8/31 9/1 9/2 9/3 9/4 9/5 9/5 9/5 9/7 9/8 9/9 9/10 9/11 9/12 9/13 9/14 9/15
1.0 Unit test components to verify functionality	2015-08-24	2015-09-06	14 36.88%	
1.1 Unit test thermistor	2015-08-24	2015-09-06	14 75.00%	
1.2 Unit test proximity sensor	2015-08-24	2015-09-06	14 70.00%	
1.3 Unit test amplifier	2015-08-24	2015-09-06	14 0.00%	
1.4 Unit test vibrating motor	2015-08-24	2015-09-06	14 50.00%	
1.5 Unit test atmega328	2015-08-24	2015-09-06	14 50.00%	
1.6 Unit test radio module	2015-08-24	2015-09-06	14 0.00%	
1.7 Unit test resistors/switches/buttons/capacitors	2015-08-24	2015-09-06	14 0.00%	
1.8 Unit test power regulator	2015-08-24	2015-09-06	14 50.00%	
2.0 Write software for components	2015-09-07	2015-09-13	7 7.50%	
2.1 Write software for temperature control	2015-09-07	2015-09-13	7 30.00%	
2.2 Write software for radio communications	2015-09-07	2015-09-13	7 0.00%	
2.3 Write software for vibration control	2015-09-07	2015-09-13	7 0.00%	
2.4 Write software for proximity detection	2015-09-07	2015-09-13	7 0.00%	