

Design Requirement Form

Date:	10/10/17	
Design Project Title:	Wireless Sensor Network	
Team Name:	N.W.A (No Wires Allowed)	
Team Advisor	Dr. Hassan Salmani	
Team Assistant		
Project's Long Term Goal	Develop wireless network system schematic for recording and analyzing signals from a temperature sensor	
Project's 2017-2018 Academic Year Goal	Implement system in regards to managing the temperature in a room and demonstrate.	
Team Members (Design Class)	Sean Grant, Kolby Lacy	
Team Members (Others)		
Requirements	Descriptions	Source
Background (NEED)	Wireless system is needed to dynamically manage the temp. in a room based on measurements from temp. sensors.	_____
Objective (Problem)	Resources are wasted when not managing	central air system.
Performance	<ul style="list-style-type: none"> - Perform diagnostics to check the operation of each node periodically - Offer rerouting capabilities if a node malfunctions - Offer security features to protect against hacking. - Issue alerts when irregular temp fluctuations occur in a room 	_____
Cost	<ul style="list-style-type: none"> - Five microcontrollers w/ temp (provided) - Central database (provided) - Must cost less than \$75 to be installed 	_____
Safety		

Compliance	SAE Environmental Practices for Electronic Equipment: J1455	SAE International
Driver-Vehicle Interface	N/A	N/A
Energy, Power, and Environment	Should meet the environmental requirements stated in the SAE standard J1455 regarding environmental practices for electronic equipment.	SAE International
Intellectual Property	- Must not infringe on Honeywell International Inc. patent	Patent # US20070200004-A1
Size and Weight	Each node: 4 lb max, Central Processor: 10 lb max	
Deliverables	Prototype of a system that solves the need	
Others		
Others		