ENGR 122 Smart Product Evaluation

Presenters: _____

Judge Team:____ Judge Name: _____ Course Instructor:_____

Please circle your affiliation:

Student:	High school	Freshman	Sophomore	Junior	Senior	Graduate
Faculty/Staff:	Engineering	Comp. Science	Mathematics	Business	Education	Other Discipline
External:	Engineer	K12 Educator	Financial	Retail	Technical	Medical

Other:_____

		Poor	Inadequate	Fair	Good	Excellent
Technical Content	**Complexity** (Difficulty of design problem; number of sensors / devices employed)					
	Formulation of a robust solution (Quality and depth of technical approach)					
	Successfully solved the problem (Quality and functionality of prototype)					
	Applied STEM principles (Extent that science, tech., engineering, and math principles utilized)					
Communication	**Visual quality of prototype display** (Appropriate font size; good mix of text, photos, diagrams & hardware)					
	Oral communication of design concept (Organization, clarity, eye contact, professional attire)					
Broader Issues	**Design solution considers public health, safety & welfare** (Sensitivity to global, cultural, social, environmental & economic factors)					
	Ethical and professional responsibilities (Team recognizes their responsibility to society & our planet)					
Teamwork	**Individual leadership** (Job split to allow team members to provide leadership & contributions)					
	Respect & inclusion (All team members speak and respect one another)					
	Team planning & execution (Team established goals, planned tasks & met objectives)					

Comments:

Judges Instructions:

- Please allow teams 10 minutes to present their work.
- It's OK to interrupt for clarification, but please let the teams speak for the first 10 minutes.
- Judges will have 5 minutes for questions.
- A 5-minute intermission will occur between judging sessions to allow for extra questions and time to complete the evaluation form.
- We will have audio and visual signals to keep judging on track.

Examples of what students may discuss (students have some flexibility here):

- Product demonstration
- Design alternatives
- Hardware components (sensors, motors, controller, etc.)
- Software and programming
- Capabilities and limitations of the product
- Broader impacts (safety, environmental, social, and cultural issues)
- Economic viability analysis (part & labor costs, unit cost of product, suggested retail price)
- Future development plans
- Lessons learned

FOR ABET PURPOSES ONLY

ABET Student Outcome	Category	Evaluation	
1	Technical Content	Complexity Formulation of a robust solution	Successfully solved the problem Applied STEM principles
2	Broader Issues	Design solution considers public health, safety, & welfare	
3	Communication	Visual quality and prototype display	Oral communication of design concept
4	Broader Issues	Ethical and professional responsibilities	
5	Teamwork	Individual leadership Respect & inclusion	Team planning & execution