

Reverse Engineering Report Grading Rubric

Criteria	Rating Scale			Score
	3	2	1	
Manual: Device Description	Description of the device is provided. Sketch(es) helps explain each part and its function.	Some description of the device is provided. Sketch(es) helps explain either the part or its function.	No description of the device is provided. Sketch(es) does not help explain each part and its function.	
Manual: Bill of Materials	A list of parts found in the process of taking apart the technology. Parts are listed along with part #, name, quantity, dimension, function, cost, interactions and website source.	Two parts were missing from the BoM. Lacked parts description.	More than two parts were missing and parts' descriptions were incomplete.	
Manual: Sketches	Sketches are dimensioned, labeled and numbered (related to BoM). Each part is sketched (orthogonally/isometrically) with an overall sketch.	Some sketches are not dimensioned, labeled and numbered (related to BoM). Most parts were not sketched (orthogonally/isometrically) with an overall sketch.	Sketches are not dimensioned, labeled and numbered (related to BoM). Each part was not sketched (orthogonally/isometrically) with an overall sketch.	
Manual: Procedures	Step-by-step description of how to work the device AND how to put the device together (if it did not come assembled).	No detailed description of how to work the device and/or how to put the device together.	No detailed description of any how-to instructions.	
Manual: Overall	Manual included: table of contents, page numbers, header of device and names.	Manual included: table of contents, page numbers, header of device OR names.	Manual did not include: table of contents, page numbers, header of device AND names.	
Engineering Design Process	The group completed the process to find the best, improved design solution to the selected device (this includes documentation of the entire process with sketching, reasoning, decision-making, descriptions, etc.)	The group has somewhat undergone the re-design process including documentation of the process with sketching, reasoning, descriptions, decision-making, etc.	The group did not undergo the complete process or present documentation of the process.	
Teamwork and Communication	The team worked well together and was able to present its project results.	The team was somewhat able to work together and present its project results.	Students on the team were unable to set aside their differences and communicate effectively.	
Wrap-Up Report	Concluded the data and results. What went well, what didn't. Changes and/or improvements for next-time AND device with sketches (how to make it better).	Somewhat concluded the data and results. What went well, what didn't. Changes and/or improvements for next-time.	Did not conclude the data and results at all.	
Timely Completion	Report completed on time.	NA	Report not completed on time.	
TOTAL				

Comments:

Reverse Engineering Oral Presentation Grading Rubric

Criteria	Rating Scale			Score
	3	2	1	
Manual: Device Description	Provided a thorough yet brief description and explained the device purpose.	The device was somewhat described and explained.	The device was poorly explained or not at all.	
Manual: Sketches	Showed and explained isometric and orthographic sketches of the device.	Sketches are either explained or shown.	No sketches were shown or explained.	
Engineering Design Process	Students briefly yet clearly explained their new idea for the device.	Students did not do a great job in explaining their new idea for the device.	Students did not explain their new idea for the device.	
Wrap-Up	Provided a conclusion that summarized what went well, what didn't and showed the device improvements with sketches (how to make it better).	Somewhat concluded the results: what went well, what didn't or device improvements.	Did not conclude the results at all.	
Presentation	Made a professional and concise PowerPoint® presentation. Students spoke slowly, clearly and at an audible volume.	The students were not clear in explaining the project.	The students did not present at all.	
Total:				

Comments: