

Engineering Journal 2024

- Additions compared to the 2023 version are highlighted in **red**
- ~~Crossed-out red~~ key elements are removed and will not be graded

Overall Document				
Key Elements	0	1-2	3-4	5-6
Organized information allowing easy lookup		Dated logs, but lack of attempt to allow easy lookup.	Dated logs, and somewhat informative for allowing easy lookup. Table of contents may be there, but not very useful. Figures and tables labeled and captioned	Excellent table of contents, dated logs, informative and resourceful appendix allowing quick lookup and extended learning. Figures and tables labeled, captioned and well referenced
Informative – allow others to learn from		Shows basic attempt to present and illustrate progress, but sloppy and hard to follow.	Show good attempt to provide clear illustration of progress: issues → possible solutions, etc.	Show clear, well-organized, and supportive information, good flow of illustration of progress: issues → solutions.

Log specific				
Key Elements	0	1-2	3-4	5-6
Problems & potential solutions		Relevance, context, and some problems/issues are mentioned, but confusing. Lack of illustration on possible solutions.	Problems/issues are specifically defined, but solutions are not well-defined. Missing or very little indication of in-depth investigation/research.	Problem/issues are specifically defined in clear context, and criteria for possible solutions are also well-defined. External investigation/research included.
Short term planning and task overview		Little sign of upfront planning. Do the work as it comes.	Shows good attempt to have a plan upfront, but unfortunately, not followed through.	Sound project planning. Tasks are clearly designated with dates, goals, decisions, and accomplishments.

Test data acquisition and documentation	Shows initial tests on sensors, actuators, and software tasks. Descriptions of basic testing procedures and observed results. Initial observations on design issues and performance.	Documentation includes varied sensor and actuator tests. Records of different software algorithms tested for specific challenges. Somewhat detailed accounts of testing procedures and findings, with emphasis on design revisions.	In-depth documentation of extensive hardware tests, including innovative approaches. Detailed records of advanced software testing, exploring various algorithms. Documentation of iterative testing and design refinement.
Illustration with diagrams - tables, flowcharts, UMLs, schematics, CADs, etc.	Only simple diagrams and tables. Limited, straightforward flowcharts and schematics. Basic concepts or designs presented with minimal detail and clarity.	Use of varied illustrations, including more detailed diagrams and tables. Integration of flowcharts, UML diagrams, and schematics supporting the process of integration.	Comprehensive use of detailed illustrations, including e.g. CAD designs. Well-structured flowcharts, UML diagrams, and schematics illustrating the engineering process.
Research	Limited research into issues or new ideas with few references. Basic, unsorted links provided.	Moderate research into issues and inspiration sources. Links provided with some organization.	Detailed research on issues with multiple solution approaches. Shows inspiration sources; a comprehensive listing and organization of relevant links.
Provide data from tests on sensors, actuators, and different situation tasks to support hardware design			
Provide data from tests on different situation tasks to support software design*			
Show tests for issues & performance			