**ELET 3425 Embedded Systems: Project Report Rubric**

| **Attribute** | **1****Not acceptable** | **2****Below expectations**  | **3****Meets expectations** | **4****Exceeds expectations** | **Score** |
| --- | --- | --- | --- | --- | --- |
| **Content** |
| Purpose | The purpose is not clear or not explicitly stated. | The purpose of the laboratory is only partially clear which obscures whether the objectives make sense. | The purpose of the laboratory activity is clearly and logically stated in mostly general terms. | The purpose of the laboratory activities are clearly and logically stated in appropriate technical language. | /4 |
| Technical Content | There are major misunderstandings of the technical content demonstrates by the description of concepts, skills, and tools. There is no indication that the student has a clear understanding of the majority of the relevant material. | There are some major misunderstandings of the technical content demonstrated by the description of concepts, skills, and tools. The student may have some understanding of the relevant materials but it is clear there are some significant knowledge shortcomings. | The report is mostly accurate in its description of concepts, skills, and tools. There may be some minor misunderstandings. However, student demonstrates general understanding of these areas. | The report accurately describes concepts, skills, and tools. It is clear that the student understands the content area. | /4 |
| Methodology | There is no clear logic to the methodology presented. It is obvious that there are several major technical and conceptual misunderstandings which will severely compromise the results of the tests. | There are a few significant flaws in the logic of the methodology. These may stem from misunderstandings of some of the technical components or underlying concepts. The flaws in the methodology are large enough that the results will be severely compromised. | The methodology for the project is generally sound. Although, there may be some minor issues that will not impact the overall usefulness of the results in evaluating the prototype. There may be some minor misunderstanding of some of the tools or relevant concepts and how they fit into the overall implementation plan. However, the plan for testing the prototype will provide appropriate results. | The methodology for the project is clearly and accurately explained to the audience. The steps for development and implementation are logical and demonstrate understanding of the key concepts. The explanation of how different tools are used demonstrates a clear understanding of their functionality. The plan for testing the prototype is sound and will provide appropriate results. | /4 |
| Analysis | There are major flaws in the data collection procedures. The analysis of the data is flawed and does not reflect the best approach to understanding the data. The student is unable to clearly explain the meaning of the results. | There are some clear flaws in the way the data were collected and compiled based on the descriptions. The explanation of the results is either impacted by the inaccurate results or reflects a misunderstanding of what the results mean. | The analysis demonstrates a mostly clear understanding of how to collect and compile data for analysis. The student may not have the most efficient way of collecting or compiling data but the overall process is effective. Student is mostly accurate in explanation of results although there may be some minor misunderstandings. | The analysis demonstrates a clear understanding of how to collect and compile data for analysis. The explanation of results is an accurate representation of the data and is easy to understand. | /4 |
| Conclusions | The conclusions drawn from the data are completely flawed and do not reflect a clear grasp of what the results mean. | The student draws partially flawed conclusions from the data demonstrating some conceptual misunderstandings. | The student is able to draw logical conclusions from the data. | The student draws logical conclusions from the data and clearly spells out the greater implications of the results. | /4 |
| Coding | The student is not able to demonstrate functional code. The coding scheme may only be partially modular or not be modular at all. The documentation is either incomplete or missing. | The student is not able to demonstrate functional code. The coding scheme may be partially or fully modular. The documentation is incomplete. | The student is able to demonstrate functional code. The coding scheme is only partially modular. The documentation outlines the basic coding process. | The student is able to demonstrate functional code. The coding scheme is full modular. The documentation greatly enhances understanding of the coding process. | /4 |
| References | There are few references and/or the references may not be relevant to the project and simply serve as filler. Most if not all of the references fall short of the IEEE formatting standards. | References are mostly not credible or relevant to the project. Some references are cited in the text. Few references comply with IEEE formatting standards. | References are mostly credible and relevant to the project. There may be one or two references where the credibility is unclear. Most references are cited in the text. The references mostly comply with IEEE formatting standards. There may be one or two that fall short of the standard. | References are credible and relevant to the project. References are cited in the text. The references are fully comply with IEEE formatting standards. | 4/ |
| **Report Mechanic and Format** |
| Writing | At this level the quality of the writing is such that it is not clear whether a student does not understand content or simply lacks the skill to articulate his/her knowledge in writing. The document is filled with spelling and/or grammatical errors that distract from the report. Sentences are structured awkwardly. The language of the report does not help the reader understand activities in the laboratory. | The writing generally conveys the information. However, the style and organization may at times be a hindrance to understanding the content. There are several noticeable spelling and/or grammatical errors that distract from the report. Several sentences are structured awkwardly and cause reader to reread certain sections. The report uses general language that only partially describes the relevant laboratory activities, procedures, and results. | The writing mostly contributes to the understanding of the report content. The style and organization of the report mostly enhances the flow of the document. There may one or two instances that cause the reader to pause. There are few spelling or grammatical errors although they may be distracting. There may be one or two sentences that cause reader pause to gain understanding. The report uses general language to clearly describe the relevant laboratory activities, procedures, and results. | The writing contributes to the understanding of the report content. The style and organization of the report enhances the flow of the document. There are few if any spelling or grammatical errors. There are no glaring issues with awkward sentences that distract from the document. The report accurately uses discipline-specific terminology to clearly describe relevant laboratory activities, procedures, and results. | /4 |
| Formatting | The document does not adhere to the assignment formatting requirements or formatting distracts from understanding what has been documented. | The document only partially adheres to the assignment formatting requirements. | The document generally adheres to the assignment formatting requirements. | In addition to adhering to the general format requirements, elements of the formatting serve to enhance the content of the document by making it easier to follow and understand. | /4 |
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