# Unit 2 Design Evaluation Rubric Section

This is the rubric that will be used for evaluating your Unit 2 design and design documentation

| Dimension | Exceptional Performance (5) | Competent Performance (4) | Acceptable Performance (3) | Developing Performance (2) | Beginning Performance (1) |
|---|---|---|---|---|---|
| **Functional Requirements (20%)** | All functional requirements are clearly covered by the design. | The design appears to cover all functional requirements missing only some traceability. | The design covers most functional requirements with linkage between requirements and design. | The design misses many functional requirements or little tracing from requirements to design. | The design does not appear to have much connection to the functional requirements. |
| **Design Patterns (20%)** | The design uses at least three patterns and gives clear indications of their role in the system. | The design uses at least two patterns and provides justification for their use. | No more than one pattern incorporated or little justification for the use of several patterns. | No clear statement of pattern use, patterns used haphazardly without justification. | No patterns used, or patterns used mostly incorrectly and inappropriately. |
| **Class Interactions (15%)** | Design clearly adheres to OO principles of abstraction low coupling, high cohesion, and modular design. | The design adheres to most OO design principles and provides good evidence of how it does. | The design has good adherence to OO principles and provides some evidence of how this is done. | The design appears to adhere to OO principles but provides little evidence or rationale for how it does. | The design does not adhere to any OO design principles. |
| **Non-functional Requirements (5%)** | Design clearly shows support for the “ilities”, such as maintainability and reuseability | The design adequately covers the non-functional requirements with few aspects missed. | The design has considered the nonfunctional requirements and gives a brief analysis. | Design appears to have considered non-functional requirements but provides little rationale. | The design shows little consideration for nonfunctional needs. |
| **UML Diagrams (20%)** | Class diagrams with significant classes & relationships and correct cardinality. Clearly described interaction diagrams for major features traced through all participants. | Class diagrams show all significant classes and relationships with appropriate cardinality. Interactions diagrams with most major features described. | Class diagrams have incorrect relationships, are missing some important relationships, or missing cardinality. Interaction diagrams show participants and most exchanges. | Class diagrams have many missing relationships, missing some important classes. Interactions diagrams provide little insight into the feature operation. | No UML diagrams or diagrams that only sketch the design. |

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|---|---|---|---|---|---|
| **Design Document [Organization] (10%)** | Document organized as coherent sections and subsections in a logical sequence and hierarchy with clear transitions and diagrams that follow structure. | Document organized as coherent sections and subsections that follow logically in sequence and hierarchy. Diagrams mostly follow structure. | Minor violations of section coherence or logical section sequencing. Some sectioning of class diagrams. | Significant violations of section coherence and/or logical section sequencing. No attempt to breakup class diagram. | Document is completely incoherent, no evidence of any attempt at ordering. |
| **Design Document [Style] (5%)** | Crisp writing in the active voice, clear transitions between topics, no excess verbiage | Few passive constructs, coherent sentence and paragraph structure, no run-on sentences | Several instances of poor sentence structure, run-on sentences, passive constructs, incoherent paragraphs. | Poor sentence structure, incoherent paragraphs and excessive passive voice, run on sentences. | Writing is practically incomprehensible |
| **Design Document [Mechanics] (5%)** | No spelling or grammar errors, excellent formatting, highly readable | Spelling and grammar errors rare, reasonable formatting | Spelling, grammar, and formatting errors appear on many pages and interfere somewhat with readability | Few pages without mechanics errors making reading a chore. Readability a significant problem. | Mechanics errors make it a struggle to decipher meaning. |