ENSE 374 – Software Engineering Management

Project Assessment Rubric

	Exceeds Expectations	Meets Expectations	Marginal	Below Expectations
Problem definition	• Problem and design requirements are clear • Requirements and objectives within realistic constraints of product development are identified and considered with a focus on regulations, environmental, social, ethical and safety aspects, etc.	• Problem and design requirements are clear • Requirements and objectives within realistic constraints of product development are identified and considered	• Problem and design requirements are enough for the initial investigation • Requirements and objectives within realistic constraints of product development are vaguely identified or superficially considered	• Problem and design requirements are not clear • Requirements and objectives within realistic constraints of product development are not identified or considered

Design selection	• Multiple design concepts are considered by applying formal decision-making methods to assist in choosing between alternative conceptual designs iteratively, and a novel solution is prompted from it • Metrics for design selection are clear and aligned with requirements and constraints. The choice of metrics is also justified. • Data is used after proposer investigation to support design selection objectively.	• Multiple design concepts are considered by applying formal decision-making methods to assist in choosing between alternative conceptual designs iteratively • Metrics for design selection are clear and aligned with requirements and constraints • Data is used after proper investigation to support design selection	• Multiple design concepts are considered without applying formal decision-making methods to assist in choosing between alternative conceptual designs iteratively • Metrics for design selection are vaguely defined • Data is used in an inefficient way to support design selection	• Only a single design concept is considered without applying formal decision-making methods to assist in choosing between alternative conceptual designs iteratively • Metrics for design selection are not clear • No data is collected to support design selection

Iterative Engineering Design process	• The engineering design process is followed and effective iterative modifications are made to meet desired needs/requirements within realistic constraints of architecture with a focus on regulations, environmental, social, ethical and safety aspects, etc.	• The engineering design process is followed and iterative modifications are made to meet desired needs/requirements within realistic constraints of architecture with a focus on regulations, environmental, social, ethical and safety aspects, etc.	• The engineering design process is superficially followed and superficial iterative modifications and made to meet desired needs/requirements within realistic constraints of architecture with a focus on regulations, environmental, social, ethical and safety aspects, etc.	• The engineering design process is not followed and no iterative modifications are made to meet desired needs/requirements within realistic constraints of architecture with a focus on regulations, environmental, social, ethical and safety aspects, etc.
Prototype development	• Developed a prototype design that satisfied all of the constraints. • The prototype demonstrated exceptional functionality of detailed final design.	• Developed a prototype design that satisfied all of the constraints. • The prototype demonstrated the basic functionality of detailed final design	• Developed a prototype design that satisfied most of the constraints. • The prototype marginally demonstrated the basic functionality of detailed final design.	• Developed a prototype design that satisfied few of the constraints. • The prototype did not demonstrate the basic functionality of detailed final design.

Design Communication and teamwork	• Demonstrated skillful ability to work collaboratively in teams and communicate effectively using oral, written, and graphical forms. • Documentation is well-organized and well-written • All necessary information is provided	• Demonstrated an acceptable ability to work collaboratively in teams and communicate effectively using oral, written, and graphical forms. • Documentation is well-organized and contains no errors • All necessary information is provided	• Demonstrated some ability to work collaboratively in teams and communicate effectively using oral, written, and graphical forms. • Documentation is readable but contains some errors • Most important information is provided	• Demonstrated no ability to work collaboratively in teams and communicate effectively using oral, written, and graphical forms. • Documentation requires significant editing and/or formatting • Crucial information is missing