Namal University, Mianwali
Department of Computer Science

CSC-225 – Software Engineering
Complex Computing Problem – Milestone 2

Submission Deadline: 28th November, 2025 This milestone is worth **<3%>** of total marks

Instructions:
You have to work in your pre-defined groups, however marks will be assigned individually based on understanding.

Use of AI tools is allowed for understanding and ideas generation. SRS must be written by yourselves and should not be generated by AI tool.

Objective

The purpose of Milestone 2 is to develop a comprehensive Software Requirements Specification (SRS) document for your assigned project. This milestone ensures that you thoroughly define and document the functional and non-functional requirements, providing a foundation for subsequent design and development phases. The SRS must follow the IEEE Standard 830-1984 guidelines to maintain consistency and professional quality.

Task Overview

In this milestone, you will:

1. Continue meeting with their Requirement Provider to refine requirements, clarify ambiguities, and validate assumptions. Hold at least two meetings with the RP.
2. Develop a comprehensive SRS document using the IEEE template (IEEE 830/29148 outline).
3. Incorporate functional and non-functional requirements, constraints, assumptions, and all necessary sections of the standard.
4. Include required modeling elements as appendices: Use Case Diagram and Context Diagram
5. Maintain updated meeting minutes in the shared Google Sheet.
6. Commit all work to the group GitHub repository in an organized manner.

Submission Guidelines:

- The GitHub repository should be maintained by the group lead, with all members contributing regularly.
- Upload all project materials to this repository in an organized manner.
- In the folder named “Meeting Minutes”, upload all meeting records there.
- In the folder named “Meeting Videos”, upload all recorded meetings there.

- Write the SRS using LaTeX and upload both the .tex and .pdf files to the repository.
- Include a README file containing the project summary, group details, meeting minutes link, and video link.
- Submit the link to your GitHub repository on QOBE for evaluation.

Evaluation Rubric

	Excellent 1.0	Good 0.7-0.9	Satisfactory 0.5-0.6	Unsatisfactory 0.2-0.4	Poor 0.0-0.1
Viva	Answered all questions correctly	Answered most questions correctly	Answered some questions correctly	Answered very few questions correctly	Answered no questions correctly

		Weight	Excellent 90% - 100%	Good 70% - 89%	Satisfactory 50% - 69%	Unsatisfactory 20% - 49%	Poor < 20%
Software Requirements Specification (CLO 2) 70 marks	RP Engagement & Minutes	5	≥2 meetings held; minutes are complete, reflect requirements refinement/validation, and are uploaded correctly to GitHub.	≥2 meetings held; minutes provided but missing minor details or lacking strong evidence.	≥1 meeting held; basic meeting records available but lack structure or depth to show requirements evolution.	Less than 1 meeting held or evidence is vague; minutes are incomplete or poorly documented.	No evidence of RP interaction or meeting minutes missing.
	Submission Quality (LaTeX & GitHub)	5	SRS is written in LaTeX; repository is highly organized, contains all required files (.tex, .pdf, minutes, videos), and has a professional README.	LaTeX used correctly with minor formatting issues; repository is well-structured but missing minor elements	Adequate LaTeX structure with some inconsistencies; repository is created but lacks clear organization.	Limited use of LaTeX features; document presentation is poor; repository is incomplete or disorganized.	Poorly formatted document or not written in LaTeX; no valid repository submitted.
	Overall SRS Compliance	5	Document strictly adheres to the mandated IEEE 830/29148 outline with excellent presentation, consistency, and numbering.	Document generally follows the IEEE outline, but has minor deviations in section naming or ordering.	Document attempts to follow the outline but is missing one major required section.	Document structure is vague or disorganized; does not adhere to the general IEEE standard.	Missing or irrelevant document structure.

	Introduction	5	Purpose, Scope, Definitions, References, and Overview are complete, clear, and establish the project's boundaries and terminology precisely.	Introduction sections are present and mostly clear, but the Scope or Definitions may be slightly ambiguous or incomplete.	Introduction is present but one major subsection is missing, or the scope/purpose is poorly defined.	Introduction is incomplete; fails to clearly state the purpose or scope of the product.	Introduction is missing
	Overall Description	5	Product Perspective, Functions, User Characteristics, Constraints, Assumptions, and Dependencies are thoroughly documented and consistent with the project's context.	Overall Description sections are present and mostly detailed, but one area is vaguely defined.	Overall Description is basic; missing one or two key elements like Assumptions or clear User Characteristics.	This section is brief and lacks critical information necessary to understand the system context.	Overall Description is missing
	Functional Requirements	20	Functional requirements are complete, unambiguous, traceable (unique ID used), and written consistently using the "The system shall..." format.	Functional requirements are mostly clear and complete but have minor ambiguities or inconsistencies in format or ID usage.	Requirements are listed but are vague, incomplete, or lack a consistent, verifiable structure.	Too few requirements are defined, or the requirements are written in a way that does not describes he function.	Missing or irrelevant Functional Requirements.
	External Interfaces	5	User, Hardware, Software, and Communications Interfaces are all explicitly identified and detailed, even if some are noted as 'none'.	Interface requirements are present, but one type of interface is detailed minimally or is confusingly described.	Only the User Interface is addressed; other interface types are ignored or assumed.	Interface definitions are missing or are too vague to be useful for design.	Missing External Interface section.

	Non-Functional Requirements	10	Critical NFRs (e.g., Performance, Security, Reliability, Usability) are well-defined, specific, and measurable using quantifiable metrics.	NFRs are defined, but one or two key areas are vague, non-measurable, or lack specific metrics.	NFRs are listed but lack specificity or are missing in critical areas like security or performance.	NFRs are too general (e.g., "The system shall be fast") or are mostly missing.	Missing or irrelevant Non-Functional Requirements.
	Context Diagram	5	Diagram clearly defines the system boundary and accurately shows all external entities/terminators that interact with the system (as defined in Section 2 & 3).	Diagram is provided and clearly shows the system boundary, but one minor external entity may be missing or incorrectly placed.	Diagram is included but the system boundary is unclear, or it incorrectly mixes internal components.	Diagram is poorly drawn, conceptually incorrect, or missing entirely.	Missing Context Diagram.
	Use Case Diagram	5	Diagram is correctly modeled, complete, and accurately reflects all key functional requirements and actors defined in the SRS.	Diagram is provided and mostly correct, but contains minor errors or is slightly inconsistent with the SRS text.	Diagram is included but contains significant modeling errors, or it fails to cover all major functional areas.	Diagram is poorly drawn, incorrect, or missing entirely.	Missing Use Case Diagram.

***All marks will be scaled based on Viva/ Understanding**