

ASSESSMENT 1-PART B BRIEF

Subject Code and Title	SEP401 Software Engineering Principles
Assessment	Problem Analysis
Individual/Group	Individual/Collaborative
Length	10 pages maximum
Learning Outcomes	This assessment addresses the Subject Learning Outcomes outlined at the bottom of this document.
Submission	Due by 11:55pm AEDT Sunday of Module 5 (Week 5).
Weighting	20%
Total Marks	100 marks

Context

In software development, it is important to describe how a product will work entirely from the business stakeholders' view. A Software Requirements Specification (SRS) is used to describe all the capabilities a product must have in order to fulfil the business, stakeholder and user needs. Besides establishing a clear agreement between the software developer and customer on what the completed software must do, the SRS serves as a reference for testing and to address the needs of the operations and maintenance teams.

In Assessment 1 Part A, you were asked to submit a project proposal document describing the **goals**, **objectives** and **plans** for your project.

This assessment will demonstrate your understanding of software requirements analysis and modelling and help develop your business analysis skills as part of the software development team. Please ensure that you incorporate any feedback you were provided from Part A of this assessment.

Instructions

1. Develop a SRS Document that describes your proposed system and defines the inputs, outputs, functions, and attributes of the system, as well as the attributes of the system environment.
2. Use the *Software Requirements Specification Template* provided in Blackboard. You can add/remove items in the template depending on the applicability on your project. *For example, if security and safety is not an issue then that section should be removed.*
3. You can use any drawing tool in creating your requirements modelling diagrams. Refer to the learning materials discussed in Module 3 and 4 for example drawing tools that you can use.
4. You will be assessed on the correctness and completeness of your document:

- a. Introduction and Overall Description
- b. Functional and Non-functional Requirements
- c. Requirements Analysis Model

Submission Instructions

1. Submit your SRS document in pdf format in Turnitin via the Assessment link in the main navigation menu in SEP104 Software Engineering Principles. The Learning Facilitator will provide feedback via the Grade Centre in the LMS portal. Feedback can be viewed in My Grades.

Assessment 1B Rubric

Assessment Attributes	Fail (0-49)	Pass (50-64)	Credit (65-74)	Distinction (75-84)	High Distinction (85-100)
Introduction and Overall Description 10%	<p>Introduction and overall description are inadequate.</p> <p>The document did not introduce the project topic and/or describe the software clearly and/or discuss the factors influencing the software development.</p> <p>Showed unsatisfactory understanding of software development</p> <p>Did not identify stakeholders and their roles.</p>	<p>Introduced the project topic but not clearly presented.</p> <p>Demonstrated limited understanding of context and/or purpose of the software project.</p> <p>Provided a limited description of the software project, limited objectives and factors (e.g., environments and constraints) influencing software development.</p> <p>Identified some of the stakeholders and roles.</p>	<p>Introduced the project topic and explained the significance of the project.</p> <p>Demonstrated consistent understanding of the software project.</p> <p>Described the software project clearly.</p> <p>Discussed the objectives and factors influencing software development.</p> <p>Identified all stakeholders and roles.</p>	<p>Demonstrated an advanced and integrated understanding of the purpose of the software project.</p> <p>The software project description, objectives, and factors influencing software development were described in detail.</p> <p>Described in detail all stakeholders and roles.</p>	<p>Demonstrated a systematic and critical understanding of the software project.</p> <p>Exceptional quality and completeness of presentation of introduction and overall description (e.g., project description, objectives, factors influencing software development).</p>
Functional and Non-functional Requirements 40%	<p>Poor and/or incomplete description of external interface requirements.</p> <p>Poor and/or incomplete identification of software features.</p> <p>Poor and/or incomplete identification of non-functional requirements.</p>	<p>Adequate and somewhat complete description of external interface requirements.</p> <p>Identified minimum standard functional and non-functional requirements.</p> <p>System features were mostly correct but need more detailed description.</p>	<p>Identified most external interface requirements and clearly describes them.</p> <p>Identified appropriate functional and non-functional requirements.</p> <p>System features were correct, mostly complete and clearly described.</p>	<p>Identified the complete external interface requirements and described them in detail.</p> <p>Identified appropriate functional- and non-functional requirements with well-formed requirement descriptions.</p> <p>System features were correct, complete and</p>	<p>Identified the complete external interface requirements and description showed critical analysis of its use in the project.</p> <p>Functional and non-functional requirements show high level understanding of the software project.</p>

		Satisfactory description of non-functional requirements ideas/arguments.	Clear description of non-functional requirements ideas/arguments.	described in detail.	Exceptionally detailed and clear descriptions of the functional and non-functional requirements . System features were correctly and thoroughly identified, presented and described.
Requirements Analysis Model 40%	Unsatisfactory requirements analysis models presented. Did not make use of appropriate analysis models/tools and/or software engineering techniques relevant to the project. Analysis models presented were incomplete.	Satisfactory quality of analysis models presented. Employed some appropriate analysis models/tools and/or software engineering techniques required. Demonstrated some understanding of software analysis models. Identified the minimum required analysis models but some are incorrect.	Good quality of analysis models presented. Employed appropriate analysis models/ tools and/or software engineering techniques acquired in the course of study to the project at hand. Demonstrated understanding of software analysis models. Identified the required analysis models. Analysis models were mostly correct.	High quality of analysis models presented. Competently use appropriate analytical tools and/or software engineering techniques acquired in his course of study to the project at hand. Demonstrated clear understanding of software analysis models. Complete and correct analysis models were presented.	Exemplary analysis models are presented. Exemplary use of appropriate analytical tools and/or software engineering techniques. Clearly demonstrated mastery of software analysis models. Exemplary quality of analysis models was presented.
Clarity and Presentation of the report 10%	Report lacked an overall organization. Reader had to make considerable effort to understand the underlying logic and flow of ideas. Diagrams were absent or inconsistent with the text. Grammatical	Report was organized via topic/flow, but in some areas, it is difficult to follow the flow of ideas. Words can be further improved. Some diagrams were not well explained. Grammatical errors impede the flow of	Report was organized and clearly written for the most part. In some areas, the logic or flow of ideas was difficult to follow. Words were well chosen with some minor improvements needed. Diagrams were consistent	Report is well-organized and clearly written. Logic or flow of ideas was easy to follow. Words were well chosen.	Report was exceptional. The underlying logic was clearly articulated and easy to follow. Words were chosen that precisely express the intended meaning and support reader comprehension.

	and spelling errors make it difficult for the reader to interpret the text in places.	communication.	with the text. Sentences were mostly grammatical and only a few spelling errors were present, but they do not hinder the reader.	Diagrams were consistent with the text. Sentences were grammatically correct and free from spelling errors.	Diagrams or analyses enhanced and clarified presentation of ideas. Sentences were grammatically correct and free from spelling errors.
The following Subject Learning Outcomes are addressed in this assessment					
SLO a)	Demonstrate different software engineering principles and techniques.				
SLO b)	Author documents required for the software development process e.g.: formal specifications, requirements document, test plan.				