

Software Requirements Specification

Project – Evaluation Component 01- Version 1.0

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Guidelines for Preparing Software Requirement Specification (SRS)

SRS document should satisfy the following properties.

1. SRS document should elaborate the details with respect to the analysis phase of the software.
2. SRS should be able to use as a high-level software validation tool and the developed software shall confirm the details specified in the SRS directly.

SRS should contain following:

1. Project Scope
2. Functional requirements
3. Non-functional Requirements
4. ER diagram
5. Hardware Design (if available)
6. Approval

Introduction to the contents to be organization in SRS

1. Project Scope

Project scope covers following topics;

- Use case diagram
- Brief description about actors and use cases
- Use case scenarios and alternative scenarios
- Business rules applied for each use case
- Activity diagrams to describe overall business process for each use case.

2. Functional Requirements

Organize the functional requirements using the following table format.

Priority Number	
Function Name	
Description	
Input	
Process	
Output	

Input: list the input(s) with type and initial state.

Output: list the output with type and the state.

Assumption/ Constraints: List assumptions and constrains if exist.

3 Non-functional Requirements

Note that you have to state the aspects of the expected features of your software and how to measure each of them clearly in the final product.

Use following categories or other suitable categories to organize non-functional requirements

- Product requirements
 - Usability requirement
 - Efficiency requirement
 - Performance requirement
 - Space requirement
 - Reliability requirement
 - Portability requirement

- Organizational Requirements
 - Delivery requirement
 - Implementation requirement
 - Standard requirement

- External requirements
 - Interoperability requirement
 - Ethical requirement
 - Legislative requirements
 - Privacy requirements
 - Safety requirements

4. Data Design

Model the Enhanced Entity Relationship Diagram (E-ER), if your problem relates with data management. You have to use a Computer Aided Software Engineering (CASE) Tool for modeling the diagram. Clearly indicate the primary keys, participation constraints and cardinality clearly.

5. Hardware Design

Model the Hardware Design, if your problem relates with an embedded application development. You have to use a suitable CASE tool for modeling the diagram. Clearly indicate the components and signal/message communication on it.

You can organize this section based on the following guidelines:

1. Introduction about the hardware design: purpose, planned hardware design component in the overall project.
2. Draft schematic of the proposed hardware design.
3. Brief explanation about the draft schematic.
4. Resource requirements: necessary hardware components such as sensors, processors, microcontrollers, etc., and development kits.

6. Approval

You have to submit your SRS upon the recommendation of your respective supervisor(s). In this endeavor, your supervisor(s) is considered as the client of your software to be developed.

Signature of the team members:

Registration Number	Index Number	Name	Signature

Date:

Approval of the supervisor(s)

I agree / disagree with the scope stipulated in this Software Requirements Specification

Name:

Department/ Organization:

Signature:

Important Note

Use a suitable standard SRS template to compile your final SRS version to be submitted.