Software Requirements Specification

For the Software Engineering course

Version 1.1 approved

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Revision History

Name	Date	Reason For Changes	Version
Group C	27.11.2021	Initial SRS version	1.1
Group C	22.10.2021	Vision and Scope	1.0

1. Introduction

This section gives a scope description and overview of everything included in this SRS document. Also, the purpose for this document is described and a list of abbreviations and definitions is provided.

1.1. Purpose

The purpose of this document is to give a detailed description of the requirements for the system. It will illustrate the purpose and complete declaration for the development of the system.

This document is intended for anyone included in the stakeholder, development or administration of this application. Which includes software developers, team managers, clients and users.

1.2. Scope

This subsection should

- a) Identify the software product(s) to be produced by name (e.g., Host DBMS, Report Generator, etc.);
- b) Explain what the software product(s) will, and, if necessary, will not do;
- c) Describe the application of the software being specified, including relevant benefits, objectives, and goals;
- d) Be consistent with similar statements in higher-level specifications (e.g., the system requirements specification), if they exist.

1.3. Definitions, acronyms, and abbreviations

Table 1 - Definitions

Term	Definition
SWE	Software Engineer.
SRS	Software Requirements Specification.
User	Anyone who uses the website.
Admin/Administr ator	The system administrator whose given specific permission for managing and controlling the system.
Stakeholder	Any person who has interaction with the system who not a developer.
Database	Collection of all the information monitored by this system.

1.4. References

1.4.1. IEEE. IEEE Std 830–1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

1.5. Overview

The remainder of this document includes two chapters. The second one provides an overview of the system functionality and system interaction with other systems. This chapter also introduces different types of stakeholders and their interaction with the system. Further, the chapter also mentions the system assumptions about the product.

The third chapter provides the requirements specification in detailed terms and a description of the different system interfaces. Different specification techniques are used in order to specify the requirements more precisely for different audiences.

2. Overall Description

This section will give an overview of the system, It will mention its basic functionality. It will also describe what type of stakeholders will use the system and what functionality is available for each type. At last, the assumptions and dependencies for the system will be presented.

2.1. Product Perspective

This subsection of the SRS should put the product into perspective with other related products. If the product is independent and totally self-contained, it should be so stated here. If the SRS defines a product that is a component of a larger system, as frequently occurs, then this subsection should relate the requirements of that larger system to the functionality of the software and should identify interfaces between that system and the software.

A block diagram showing the major components of the larger system, interconnections, and external interfaces can be helpful.

This subsection should also describe how the software operates inside various constraints. For example,

these constraints could include

- a) System interfaces;
- b) User interfaces;
- c) Hardware interfaces;
- d) Software interfaces:
- e) Communications interfaces;
- f) Memory;
- g) Operations;
- h) Site adaptation requirements.

2.2. Product Functions

We divided our function due to the access.

This subsection of the SRS should provide a summary of the major functions that the software will perform.

For example, an SRS for an accounting program may use this part to address customer account maintenance, customer statement, and invoice preparation without mentioning the vast amount of detail that each of those

functions requires.

Sometimes the function summary that is necessary for this part can be taken directly from the section of the higher-level specification (if one exists) that allocates particular functions to the software product. Note that for the sake of clarity

- a) The functions should be organized in a way that makes the list of functions understandable to the customer or to anyone else reading the document for the first time.
- b) Textual or graphical methods can be used to show the different functions and their relationships.

Such a diagram is not intended to show a design of a product, but simply shows the logical relationships among variables.

2.3. User Classes and Characteristics

This subsection of the SRS should describe those general characteristics of the intended users of the product including educational level, experience, and technical expertise. It should not be used to state-specific requirements, but rather should provide the reasons why certain specific requirements are later specified in Section 3 of the SRS.

2.4. Assumptions and Dependencies

This subsection of the SRS should list each of the factors that affect the requirements stated in the SRS. These factors are not design constraints on the software but are, rather, any changes to them that can affect the requirements in the SRS. For example, an assumption may be that a specific operating system will be available on the hardware designated for the software product. If, in fact, the operating system is not available, the SRS would then have to change accordingly.

3. Specific requirements

This section contains all of the functional and quality requirements of the system. It gives a detailed description of the system and all its features.

3.1. Functional requirements

This section includes the requirements that specify all the fundamental actions of the software system. Split the functional requirement into user class, each user class includes its functional requirements

- 3.2. Use case
 - 3.2.1. Use case diagram
 - 3.2.2. Use case documentation
- 3.3. Other Nonfunctional Requirements
- 3.4. System models