1 Introduction

- 1.1 Purpose
  - Purpose of the whole document.
- 1.2 Scope
  - What aspects of the application this document is intended to cover.
- 1.3 Definitions, acronyms, and abbreviations
- 1.4 References
- 1.5 Overview

2 Overall Description

- This section of the SRS describes the general factors that affect the product and its requirements. It does not state specific requirements; it only makes those requirements easier to understand. Make this general enough so that it is unlikely to change much in future versions.
- 2.1 Product perspective
  - This subsection should not prescribe specific design solutions or design constraints on the solution. Rather it needs to explain why certain design constraints are specified in Section 3. E.g.:
    - What is the project from the customer's point of view? What niche does it fill?
    - Is the product self-contained? (Standalone?)
    - Is it part of a larger system? (Which one?)
    - Give high-level overview of the fundamental external interfaces (User interface, hardware interface, software interfaces, communications, etc).
    - Note any known hardware/software to be used.
    - What are the concepts involved? How do they relate?

- 2.2 Product functions
  - This subsection provides a summary of the functions that the software will perform. It will discuss major functional areas without mentioning any of the large amounts of detail that goes with those areas. The functions need to be organised so that the customer will understand them.
    - High level summary of functions to be performed (less detailed than Section 3). (In Assignment 2 use cases are an appropriate manner in which to specify the overall functionality.)
    - Data flow diagrams (DFD-0)
    - Reasons for specific requirements (relate them to the business processes that they support)

- 2.3 User characteristics
• This subsection describes the general characteristics of the users that will influence the SRS. Indicate what kind of people the typical users are likely to be.

- Experience (novice? software professionals? accountant with 10 years of computer usage, etc.)
- Technical Expertise
- Operational Environment (frequency of use: constant? occasional? other expectations).

2.4 Constraints
• This subsection gives a general description of any other items that will limit the developer’s design options. This can originate from many sources.

- Regulatory policies.
- Hardware/system software resource limitations (i.e. memory, disk space, OS, thread count, etc).
- External interfaces.
- Audit requirements.
- Communications protocols.
- Application criticality / Real time constraints
- Operations (i.e. unattended operation or supervised?).
- Anything else...

2.5 Assumptions and dependencies
• Define assumed factors that would cause the SRS to change should the assumption be incorrect. The successful operation of the system is dependant upon the following assumptions and dependencies. Acceptance of this specification means acceptance of the risks associated with these issues. Any assumptions being made, e.g., future hardware.

- Hardware Availability
- Behaviour and interface of external systems

2.6 Apportioning of requirements
• This subsection is used to describe which requirements are intended to be included in the project at the current date. It should also specify when (if ever) the remaining requirements will be implemented. Since this document typically constitutes a contract between developer and customer, you also need to specify the procedure and justification that will allow modification of the requirements.

- Which requirements will be left until later?
- When are they expected to be added?
- When are requirements-adjustments allowed?
- Through what process will they be negotiated?

3 Specific requirements

• This section contains a description, in final detail, of all requirements that must be satisfied by the software. (Very detailed, well illustrated exposition of the requirements from the developer’s point of view.)

3.1 External Interfaces
• What are the interfaces to your project? How will it be interacted with? Can it be interacted with? This subsection describes every manner through which entities (users, software, and foreign systems) may interact with your system.
- User interfaces
Section 2.1 in the SRS shows only sketches of user interfaces in order to provide product perspective. It lacks details and should not be regarded as the last word. This is less important for our assignments.

- Hardware interfaces
The hardware that the software application deals with.

- Software interfaces
Other software with which the software must interface.

- Communications Interfaces

  o 3.2 Functions
  - This section describes, in final detail, all functional requirements of the system. They should be organized into a logical manner that facilitates easy reading. They should also be well-illustrated via Use-case/Data-flow/System-sequence diagrams.

  o 3.3 Performance Requirements

  o 3.4 Logical database requirements
  - ERD

  o 3.5 Design constraints

  o 3.6 Software system attributes
  - Reliability **E.g., the software shall fail no more than once in ...**
  - Availability **E.g., the software shall be available on any PC running Linux only (i.e., no other application simultaneously).**
  - ....

- Appendixes
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