5.1 Functional Requirements

[This subsection should specify how the software product will react to every possible input situation. It describes all the actions that must take place in the software in response to every input. Pertinent changes in the environment are considered to be inputs.

Care must be taken to avoid dropping into design details. In the user cannot directly experience the effect of a requirement it probably crossed the line into design.

Functional requirements should be logically grouped. Each group should have a short, unique (within the SRS) abbreviation and a number. The word processing section number will probably change as the SRS is developed.

For each identified requirement an optional rationale for that requirement may be given.

Most modern software should provide at least a modicum of user help. For very complex applications in situ help may be supplemented by a user’s manual (or manual page) but for many simple applications comprehensive in situ help is sufficient.]

5.2 Non-Functional Requirements

[This subsection should specify both the static and dynamic numerical requirements placed on the software or human interaction with the software. All the identifiers for requirements in this section should begin with the two letter abbreviation shown below]

5.2.1 Design Constraints (DC)

[Sometimes a client will require certain design constraints, for example the use of a certain system configuration or the use of particular algorithm. Such constraints are described in this subsection.]

5.2.2 Human Factors (HF)

[Not everyone has the same inherent mental and physical capabilities vis-à-vis a given computer application. For example if sound is part of the application, will other clues be given that will enable a hard of hearing user to use the proposed application as well as person with normal hearing; similarly for color blindness. Some these factors have to be defined and validated in specially equipped usability laboratories.]

5.2.3 External Interface Requirements (XI)

5.2.3.1 Hardware (HW)

5.2.3.2 Software (SW)

5.2.3.3 Communications (CM)

5.2.4 Security (SC)

5.2.5 Development Environment (DV)

5.2.6 Standards (ST)

5.2.7 Delivery Environment (DL)

5.2.7.1 Site (SI)

[This subsection should specify any requirements for installation or operation of the software that might change the pre-existing configuration of the user site.]

5.2.7.2 Operations (OP)

[This subsection should specify normal and special operations required by the user to include:

· Various modes of operation within the user organization

· Periods of interactive operations and unattended operations

· Data processing support functions

· Backup and recovery operation.]

5.2.8 Performance (PR)

5.2.9 Deliverable Items, Dates and Conditions (DD)

5.2.10 Cost (CT)

5.2.11 Quality (QL)

5.2.11.1 Reliability (RL)

[Reliability is specified as mean-time-to failure of an operational item. An operational profile must be specified.]

5.2.11.2 Availability (AL)

5.2.11.3 Maintainability (ML)

[Failures can be classified as occurring in either operational or non- operational delivered items Failures in operational items can be classified by the work products that must be changed to eliminate that failure: code only, code and design, code, possibly design, and requirements. For each class of failure what is the maximum estimated effort required to eliminate that failure and what is the rationale for this estimate.]

5.2.11.4 Usability (UB)

5.2.11.5 Enhanceability/Extendibility (EN)

[If the future it might be necessary to change the Functional requirements in specified ways, what is the maximum estimated effort required to make such changes and what is the rationale for this estimate?]

5.2.11.6 Portability (PT)

[If in the future it might be necessary to change the above Development or Delivery Environments (DV or DL) to other specified environments, what is the maximum estimated effort required to implement such changes and what is the rationale for this estimate]

5.2.12 V&V Activities (VV)

5.2.13 Database (DB)

[This optional subsection that specifies requirements for any database to be developed as part of the product. The information in this section will include:

· Types of information to be stored

· Table attributes (queried, supporting, updated)

· Frequency of access

· Accessing capabilities and requirements

· Data elements and file descriptors

· Retention requirements for data.]

Care must be taken here to avoid design details. Unless so requested by the client this section should only contain as much information about saved data as is necessary to fully document any of the requirements given above. Since this is the last Non-functional sub-section this sub-section would not appear in the document if the requirements did not involve any data bases information.]

5.2.14 Adaptability (AD)

[If it is specified that in the future it might be necessary to change any of the above Non-Functional requirements, what is the maximum estimated effort required to implement such changes and what is the rationale for this estimate.]

5.3 Requirements Models

[This optional subsection, if present, provides models of the functional requirements to aid in clarifying and validating these requirements. A Z language specification is a good example. This sub-section may be skipped entirely if this SRS does not use any requirements models.]