**CHARACTERISTICS OF SRS**

A good SRS document has certain characteristics that must be present. The

characteristics are:

1. **Correctness.** An SRS is correct if every requirement included in the SRS

represents something required in the final system.

2. **Completeness.** An SRS is complete when it is documented after:

(*i*) The involvement of all types of concerned personnel.

(*ii*) Focusing on all problems, goals, and objectives, and not only on functions

and features.

(*iii*) Correct definition of scope and boundaries of the software and system.

3. **Unambiguous.** An SRS is unambiguous if and only if every requirement

stated has one and only one interpretation. Requirements are often written in

a natural language. The SRS writer has to be especially careful to ensure that

there are no ambiguities. One way to avoid ambiguities is to use some formal

requirements specification language. The major disadvantage of using formal

languages is the large effort required to write an SRS, the high cost of doing

so, and the increased difficulty of reading and understanding formally stated

requirements (particularly by the users and clients).

4. **Verifiable.** An SRS is verifiable if and only if there exists some cost-effective

process that can check whether the final product meets the requirements.

5. **Modifiable.** An SRS is modifiable if its structure and style are such that any

necessary change can be made easily while preserving completeness and

consistency. The presence of redundancy is a major hindrance to modifiability,

as it can easily lead to errors. For example, assume that a requirement is

stated in two places and that the requirement later needs to be changed. If

only one occurrence of the requirement is modified, the resulting SRS will be

inconsistent.

6. **Traceable.** The SRS is traceable if the origin of each of the requirements is clear

and if it facilitates the referencing of each requirement in future development

or enhancement documentation. Two types of traceability are recommended:

(*i*) *Backward traceability*. This depends upon each requirement explicitly

referencing its source in earlier documents.

(*ii*) *Forward traceability*. This depends upon each requirement in the SRS

having a unique name or reference number.

7. **Consistency.** Consistency in the SRS is essential to achieve correct results

across the system. This is achieved by:

(*i*) The use of standard terms and definitions.

(*ii*) The consistent application of business rules in all functionality.

(*iii*) The use of a data dictionary.

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(*iv*) The lack of consistency results in an incorrect SRS and failure in deliverables

to customer.

8. **Testability.** An SRS should be written in such a way that it is possible to create

a test plan to confirm whether specifications can be met and requirements can

be delivered. This is achieved by:

(*i*) Considering functional and non-functional requirements.

(*ii*) Determining features and facilities required for each requirement.

(*iii*) Ensuring that ‘users’ and ‘stakeholders’ freeze the requirement.

9. **Clarity.** An SRS is clear when it has a single interpretation for the author

(analysis), the user, the end user, the stakeholder, the developer, the tester,

and the customer. This is possible if the language of the SRS is unambiguous.

Clarity can be ascertained after reviewing the SRS by a third party. It can be

enhanced if the SRS includes diagrams, models, and charts.

10. **Feasibility.** RDD-SRS needs to be confirmed on technical and operational

feasibility. The SRS often assumes the use of technology and tools based on

the information given by their vendors. It needs to be confirmed whether

the technology is capable enough to deliver what is expected in the SRS. The

operational feasibility must be checked through environment checking. It is

assumed that sources of data, user capability, system culture, work culture,

and other such aspects satisfy the expectation of the developer. These must be

confirmed before development launch.