

What is SRS?

Objectives

- To Understand Software Requirement Specification(SRS).

Theory:

Software Requirement Specification (SRS) document usually contains a software vendor's understanding of a customer's software requirements. This document ensures that the software vendor and the customer are in agreement as to the features required in the software system being built. SRS is created after the initial requirement elicitation phase in which Software vendor interacts with the customer to understand the software needs. Usually SRS documentation is prepared by a business analyst who has some technical background.

An SRS is written in precise, clear and plain language so that it can be reviewed by a business analyst or customer representative with minimal technical expertise. However it also contains analytical models (use case diagrams, entity relationship diagrams, data dictionary etc.) which can be used for the detailed design and the development of the software system. SRS is one of the most critical pieces of software development since it acts as the bridge between the software developers and business analysts. An incomplete or incorrect SRS can have disastrous effects on a software project.

In this article I explain the major sections of a typical Software Requirement Specification document. I also provide a generic SRS template which can be customized for your project needs.

What is the need for an SRS document?

Software Requirements Specification is usually the first deliverable for any software project. As they say, first impression is the best impression!, and you should ensure that even the first draft of an SRS is of high quality.

The benefits of a good SRS are,

- A contract between the customer and the software vendor – A good SRS document specifies all the features required in the final system including technical requirements and interface requirements. SRS document is used by the customer to determine whether the software vendor has provided all the features in the delivered software system. To the Software vendor it provides a solid foundation to fix the scope of the software system.
- Enables costing and pricing of the project – A well defined SRS enables software developers to accurately estimate the amount of effort required to build the software product. Function point analysis and SMC are some the techniques adopted for estimating effort.

- Input for detailed design – A good SRS enables experienced developers to convert the requirements directly to a technical design. For example, a well defined data dictionary can be easily converted to a database specification.
- Management of customer expectations – Since SRS precisely defines project scope, it ensures that customer expectations don't change during software development. If they do, SRS can be modified and costing/pricing can be done again on the changes required.

What are the contents of an effective SRS document?

There is no single precise template for writing good Software Requirement Specifications. The contents of an SRS document depends on the software product being developed and also on the expertise of the people doing the requirement elicitation. Different business/technology domains in a company usually have their own customized version of SRS template. Still a good Software Requirement Specification (SRS) usually contains project scope section, functional requirements, requirement analysis models, external interface requirements and non functional requirements.