

Software Requirements

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What are the software requirements?

According to the generating Software Requirements Specification (IEEE Std. 830 1998) document, Software Requirements Specification – shortly named (**SRS**) is a document, which describes features, functionalities, use resources, performance and behavior of target system. SRS provide the expectations of stakeholders from software product (Tutorials Point, 2018). The main goal of creation this document is clarify and translate the view stakeholders to the developers (Joka, 2009).

The cycle of creation software product contains from many clue tasks. Generally, there are such things as planning, creating architecture, creating SRS, creating a design and etc.

Creating SRS

Mainly to create good quality SRS usually do requirement research or engineering which contains basic four steps (Tutorials Point, 2018):

- Feasibility Study
- Requirement Gathering
- Software Requirement Specifications
- Software Requirement Validation

Feasibility Study

Generally, it is focused on goals of the stakeholders and analyzes whether the software product can be released in terms of implementation, usability, productivity, integration ability, costs, values and objectives of the stakeholders (Tutorials Point, 2018).

Requirement Gathering

This is process to gather information from many sources like (Tutorials Point, 2018):

- Interviews
- Surveys
- Questionnaires
- Task Analysis
- Brainstorming
- Prototyping
- Observation

Structure SRS

According to Joka (Joka, 2009), SRS should contain following sections.

Introduction	Stimulus/Response Sequences
Purpose	Functional Requirements
Document Conventions	External Interface Requirements
Intended Audience and Reading Suggestions	User interfaces
Project Scope	Software Interfaces

References	Hardware Interfaces
Overall Descriptions	Communication Interfaces
Product Perspectives	Descriptions and priority
Product Features	Non-Functional Requirements
User classes and characteristics	Performance Requirements
Operating Environment	Safety Requirements
Design and implementation constraints	Software Quality Attributes
User Documentation	Security Requirements
Assumptions and dependences	Other Requirements
System Features	

Basic requirements for all SRS sections must be

Following the Tutorials Point (Tutorials Point, 2018), each section should respond to this list of requirements:

Clear	Verifiable
Correct	Prioritized
Consistent	Unambiguous
Coherent	Traceable
Comprehensive	Credible Source
Modifiable	

Software Requirement Validation

When SRS document are created, it should be validated or checked by following conditions (Tutorials Point, 2018):

- If they can be practically released
- If they are valid and correspond to the described functionality
- If there are any ambiguities
- If there are complete
- If they can be displayed

References

Works Cited

Joka. (2009). *Rules to create Software requirements specification*. Retrieved 2018, from <https://habr.com/post/52681/>

Tutorials Point. (2018). *Software Requirements*. Retrieved from https://www.tutorialspoint.com/software_engineering/software_requirements.htm