**Software Requirements**

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#### What is the software requirements?

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

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 is contains basic four steps:

1. Feasibility Study
2. Requirement Gathering
3. Software Requirement Specifications
4. 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.

#### RequirementGathering

This is process to gather information from many sources like:

1. Interviews
2. Surveys
3. Questionnaires
4. Task Analysis
5. Brainstorming
6. Prototyping
7. Observation

#### Structure SRS

|  |  |
| --- | --- |
| 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 |
| Designandimplementationconstrains | Software Quality Attributes |
| User Documentation | Security Requirements |
| Assumptions and dependences | Other Requirements |
| System Features |  |

#### Basic requirements for all SRS sections must be

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

#### Software Requirement Validation

Validation of SRSmust be checked by the following conditions:

1. If they can be practically released
2. If they are valid and correspond to the described functionality
3. If there are any ambiguities
4. If there are complete
5. If they can be displayed

Reference:

This research contains information from webresources:

1. [www.tutorialspoint.com](http://www.tutorialspoint.com)
2. [habr.com](https://habr.com)
3. cengproject.cankaya.edu.tr