

Software Requirements Specification (SRS)

A Software Requirements Specification (SRS) is a comprehensive document that outlines the *functional and non-functional requirements of a software system*. It serves as a **blueprint** for the development team, providing a clear understanding of what needs to be developed. Here are the typical details included in an SRS:

1. Introduction:

- Purpose of the document
- Scope of the project
- Objectives
- Definitions, acronyms, and abbreviations
- References

2. Overall Description:

- Product perspective
- System interfaces
- User interfaces
- Hardware interfaces
- Software interfaces
- Communications interfaces
- Constraints
- Assumptions and dependencies

3. Specific Requirements:

- Functional requirements: Detailed descriptions of each feature and its functionality
- Non-functional requirements: Constraints, performance requirements, reliability, availability, maintainability, security, and other quality attributes
- External interface requirements: Input and output requirements, user interfaces
- System features: Detailed descriptions of features and how they should work
- Data requirements: Data models, data sources, data storage, and data retrieval
- Use cases: Detailed descriptions of how users will interact with the system
- Dependencies: Any dependencies on other systems or components

- Safety and security requirements: If applicable, details on how to ensure the software is secure and safe to use
- Quality attributes: Descriptions of the desired qualities of the software (e.g., usability, performance, reliability)

4. System Evolution:

- Planned enhancements or changes to the system in the future

5. Appendix:

- Supporting information, such as diagrams, charts, or additional documentation

6. Review and Approval:

- Signatures and dates of stakeholders who have reviewed and approved the document