

# Understanding Software Requirements Specification (SRS)

[S M Asiful Islam Saky]

**FIRST OF ALL:**

**KNOW YOUR  
REQUIREMENTS!**

makeameme.org

## Customer

## Programmer



# WHOA!

*This is*

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*Mentor, STEAM AIU CLUB*



sakysemicolon



## [ Agenda ]

1. What is SRS?
2. Purpose of SRS
3. Role of SRS
4. SRS Format
5. Readers of SRS
6. Characteristics of SRS
7. Benefits of SRS
8. Case Study
9. Q & A



# What is SRS?

- \* SRS is a guide for developers, telling them what to build for a system.
- \* It explains in detail how the system should behave and what users expect from it.
- \* SRS includes both what users need (user requirements) and how the system should work (system requirements).
- \* It describes everything the software will do and how well it should perform.

# Purpose of 'SRS' {

01

The SRS document tells exactly what the software will do.

02

It helps to understand all the things needed to make the software and to plan how it will look and work.

03

It also lets the customer give their thoughts and opinions on the software.

}

# Role of 'SRS'

1 < /1 > {



< Software Requirements Specification (SRS)  
needs to accurately describe all the things  
the software must do.

>

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8 < /2 > {



< A requirement can be needed because of the  
job the software needs to do or because of a  
unique part of the project. >

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## [SRS Format]

< Detailed Description of  
writing an SRS; Template >

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# Characteristics of 'SRS' {

## Correct

Every requirement given in SRS is a requirement of the software.

## Complete

Includes all functional, performance, design, external interface requirements; definition of the response of the software to all inputs.

## Unambiguous

Every requirement has exactly one interpretation.

## Consistent

Internal consistency.

## Ranked importance

Essential vs. desirable

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## Title Page

Project title  
Version number  
Date  
Author(s)  
Contact information

## History

Revision History  
Review History  
Approval History

## Table of Contents

List of sections and subsections with page numbers

## Introduction

Purpose of the document  
Scope of the software system  
Definitions, acronyms, and abbreviations

## Overall Description

Product perspective  
User classes and characteristics  
Operating environment  
Design and implementation constraints  
Assumptions and dependencies

## Functional Requirements

Identify and detail the product's design specifications, graphical specifications, requirements for operating systems, and any limitations or constraints.

## External Interface Requirements

- User interfaces
- Hardware interfaces
- Software interfaces
- Communication interfaces

## Non-functional Requirements

- Security
- Capacity
- Compatibility
- Reliability
- Scalability
- Maintainability
- Usability
- Other non-functional requirements

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## System Feature

System Feature 1  
System Feature 2 and so on...

## System Models

Use case diagram  
State diagram

## References and supporting documents

# Readers of SRS {

- \* **Business Stakeholders**
- \* **Project Managers**
- \* **Developers**
- \* **Designers**
- \* **Testers**
- \* **Regulatory Compliance Officers**
- \* **Documentation Teams**

}



## Benefits of 'SRS' {

- Establish the basis for agreement between the customers and the suppliers on what the software product is to do.
- Reduce the development effort.
- Provide a basis for estimating costs and schedules.
- Provide a baseline for validation and verification.
- Serve as a basis for enhancement.



# SRS Acceptance {

```
status= "accepted";
```

```
< SRS acceptance marks a pivotal  
agreement point, ensuring alignment among  
stakeholders and setting the foundation  
for successful software development. >
```

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Any  
Question? {

```
Ask=  
"asiful.saky@student.aiu.edu.my"  
Follow =  
"www.instagram.com/saky.aiu"  
Connect =  
"www.linkedin.com/in/sakysemicol  
on"
```

}

