CS 303 Software Engineering Lab

#### Intro

- Software Requirement Specification Document.
- It is a detailed description of how a product should work and how the product development team should implement it.
- SRS are usually written by product managers or bussiness analysts, who directly communicate with clients or who do user research and gather future products' requirements.
- A good SRS is not solely technical, as it also covers business goals, metrics, user problems, etc.

#### **Reasons for Documentation**

- Visibility (it is needed for project plan)
- Formalisation leads to better clarity when expressed in writing
- Standard guide for product developers support
- Serves as a communication point
- Maintenance and evolution

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#### Introduction

It sets the expectation of the product you are building.

## Overall Description

 Its overall purpose is to consider determining elements that influence the requirements.

## External Interface Requirements

• It tells how our product will interface with other components - user, hardware, software, communication.

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#### System Features

• Functional requirements are sorts of system features. These are features that a system must have in order to work.

### Other Non-functional requirements

• The system attributes such as security, reliability, performance, maintainability, scalability, usability are defined here.

### Other Requirements

 The requirements barring functional and non-functional requirements are mentioned here.

## Functional and Non-functional requirements

## FUNCTIONAL vs NONFUNCTIONAL REQUIREMENTS

	Functional requirements	Nonfunctional requirements
Objective	Describe what the product does	Describe how the product works
End result	Define product features	Define product properties
Focus	Focus on user requirements	Focus on user expectations
Documentation	Captured in use case	Captured as a quality attribute
Essentiality	They are mandatory	They are not mandatory, but desirable
Origin type	Usually defined by user	Usually defined by developers or other tech experts
Testing	Component, API, UI testing, etc. Tested before nonfunctional testing	Performance, usability, security testing, etc. Tested after functional testing
Types	External interface, authentication, authorization levels, business rules, etc.	Usability, reliability, scalability, performance, etc.



# How to write a good SRS document? Read this article

## SRS Documentation template can be found here