S.R.S

(Software Requirement Specification)

* A **software requirements specification** (SRS) is a detailed description of a software system to be developed with its functional and non-functional requirements.
* A document uses to describe the behavior of the software system, functionally, non-functional requirement of the software system.
* The SRS is developed based the agreement between customer and contractors.
* It may include the use cases of how user is going to interact with software system. The software requirement specification document consistent of all necessary requirements required for project development.
* To develop the software system, we should have clear understanding of Software system. To achieve this, we need to continuous communication with customers to gather all requirements.
* A good SRS defines the how Software System will interact with all internal modules, hardware, communication with other programs and human user interactions with wide range of real-life scenarios.
* Using the *Software requirements specification* (SRS) document on QA lead, managers create test plan.
* It is very important that testers must be cleared with every detail specified in this document in order to avoid faults in test cases and its expected results.
* There are some users of the SRS:

1. Development team
2. Maintenance team
3. Clients
4. Technical writer

* Development: development team who make the software so they are the users of these SRS because they know very well that how the system behave.
* Maintenance team: when software is totally completed and there is some problem occur in some stage so before repair these problem we know how the actual behavior of these system. What kind of work is doing? What are the functional and non-functional requirements of these? So that’s the reason Maintenance team is also a user of SRS.
* Clients : clients tell you what kind of software he want and what type of work the software doing so we understand the things and develop the software and then we show to the client that this is the software which he want so for this process we also need SRS which we show to the client that is the reason that client is also user of SRS.
* Technical writer: when we make software we also do documentation of that software. So that time some technical writer is also involved, and they get the base for documentation through the SRS because in this documentation it describes that how the system behaves and what is the functional and non-functional requirements
* Content of the SRS:

1. Category: what kind of your software is e.g. desktop application, web application, android application.
2. Purpose: Describe what is the purpose of making the system.
3. Scope: what is the area it is covering, what is its range, to what limits it will help you.
4. Introduction: define the existing system and proposed system.
5. External interface requirements: It is divided in three parts

* User interface: e.g. if display terminal used, specify required screen formats, menus, report layouts, function keys.
* Hardware interface: characterize of the interface between the software product and hardware componets of the systems.
* Software interfaces: specify the use of other software products e.g. operating system, DBMS and other software packages.

1. Advantages: define the advantages of the system.

* Qualities of SRS:

1.Correct

2.Unambiguous

3.Complete

4.Consistent

5.Ranked for importance and/or stability

6.Verifiable

* Modifiable
* Traceable