

Tutorial: Requirement Engineering

Note: In the literature, the following two terms: Software Requirements Specification (SRS) and Software Requirements Document (SRD) are often used interchangeably. In this module, we will use SRD.

1. What is software specification in the context of software engineering? How is software specification different from requirements engineering?
2. In a normal circumstance, system requirements could be part of a software contract. Explain why system requirements are better candidate compared to user requirements to be expressed in the contract.
3. List the differences between functional requirements and non-functional requirements.
4. Re-write the following non-functional requirement into a testable requirement.
 - The patient registration system in the hospital must be reliable.
 - The self-service ticketing system in the cinema must be fast and responsive.
5. What would happen if the SRD for a mission critical system is missing out important details?
6. Express the iterative process of the requirements engineering in the form of spiral view.
7. What is requirements validation?
8. What are the aspects that the requirements validation covers?

An additional note:

“Contrary to popular belief, the SRD does not detail specific solutions with regards to design or technology. The software requirements do, however, need to include enough

information to allow the development team to come up with an effective design, without getting into technical jargon so as to alienate the customer.”