

Functional and Non- Functional Requirements

Some of the problems that arise during the requirements engineering process are a result of failing to make a clear separation between different levels of descriptions. Distinguish between descriptions by using the term 'user requirements' to mean the high-level abstract requirements and 'system requirements' to mean the detailed description of what the system should do can be easy and worth for use.

User requirements and system requirements can be defined as follows:

1. User Requirements are statements, in a natural language plus diagrams, of what services the system is expected to provide to system users and the constraints under which it must operate. These are written from use

2. System Requirements are more detailed descriptions of the software system's functions, services, and operational constraints. The system requirements document (sometimes called a functional specification) should define exactly what is to be implemented. It may be part of the contract between the system buyer and the software developers.

User Requirements

- Client Managers
- System End-Users
- Client Engineers
- Contractor Managers
- System Architects

System Requirements

- System End-Users
- Client Engineers
- System Architects
- Software Developers

Software system requirements are often classified as functional requirements or non-functional requirements:

1. Functional requirements

These are statements of services the system should provide, how the system should react to particular inputs, and how the system

2. Non-functional requirements

These are constraints on the services or functions offered by the system. They include timing constraints, constraints on the development process, and constraints imposed by standards. Non-functional requirements often apply to the system as a whole, rather than individual system features or services.

Functional Requirements

The functional requirements for a system describe what the system should do. These requirements depend on the type of software being developed, the expected users of the software, and the general approach taken by the organisation when writing requirements.

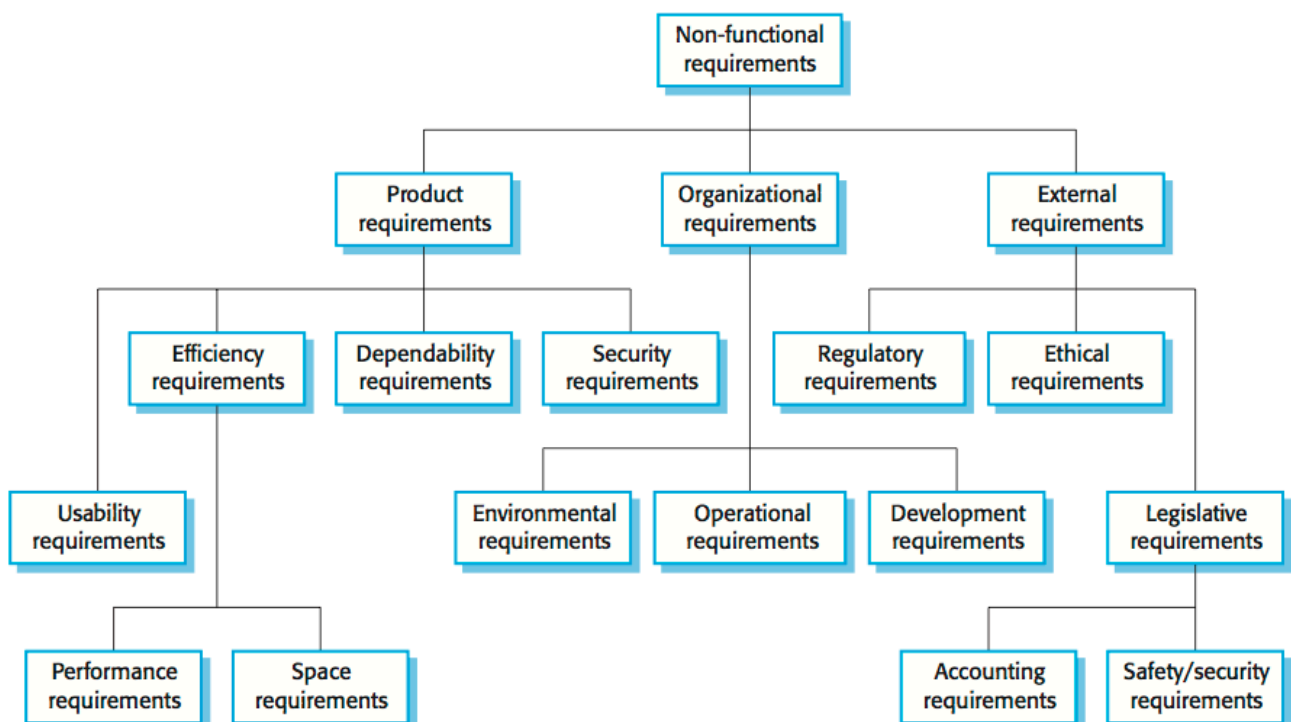
Non- Functional Requirements

Non-functional requirements, as the name suggests, are requirements that are not directly concerned with the specific services delivered by the system to its users. They may relate to emergent system properties such as reliability, response time, and store occupancy.

The implementation of these requirements may be diffused throughout the system. There are two reasons for this:

1. Non-functional requirements may affect the overall architecture of a system rather than the individual components. For example, in order to ensure that performance requirements are met, you may have to organise the system to minimise communications between components.
2. A single non-functional requirement, such as a security requirement, may generate a number of related functional requirements that define new system services that are required. In addition, it may also generate requirements that restrict existing requirements.

Types of Non-Functional Requirement



Examples for Functional Requirements

Below are few of the sample Functional requirements which need to be consider at the development of Web based Social Network Application

1. Function Name: Creates account in the system.

Description: User should create social media account first.

2. Function Name: Performs authentication over the password.

Description: In log in page user should enter login details.

3. Function Name: Adds post to the system.

Description: User shall add posts to social network feed.

4. Function Name: Show posts to the user.

Description: Selected post should shows to the user by the system

5. Function Name: Puts likes for the system.

Description: After reading the posts user can react to those posts.

6. Function Name: Puts comments for the system.

Description: User can give comments to posts after going through them.

Examples for Non Functional Requirements

Below are few of the sample Non - Functional requirements which need to be consider at the development of Web based Social Network Application .

1. Allow users to use either the keyboard or mouse (flexible)

2. Allow users to change focus (interruptible)

3. Display descriptive messages and text (Helpful)

4. Provide immediate and reversible actions, and feedback (forgiving)

5. Provide meaningful paths and exits (navigable)

6. Accommodate users with different skill levels (accessible)

7. Allow users to perform actions in minimum time (efficiency)