

Topics Covered:

- **Requirement testing**
 - Requirements Gathering
 - Business Requirements Definition
 - Types of Requirements
 - Why Requirements Testing?
 - Inputs and Outputs
 - Requirements Testing Criteria



Requirement Gathering

- Clearly what the project does and does not cover
- State the objective of the project and define its scope
- You can use written document, screen diagrams, prototyping or use cases
- The author should understand the client's business and the process of software development
- Reviews are needed as it costs many times more to fix things in testing than in the requirements phase

Business Requirement

- Identify the needs of stakeholder
- List the business goals
- Define the high-level needs of the project
- Define the features of the project
- Focus on the capabilities needed by the target users

Types of requirements

Functional requirements

- Define the functions of the software and its components
- A function is described as a set of inputs, outputs and Behaviors
- Define what a system is supposed to accomplish



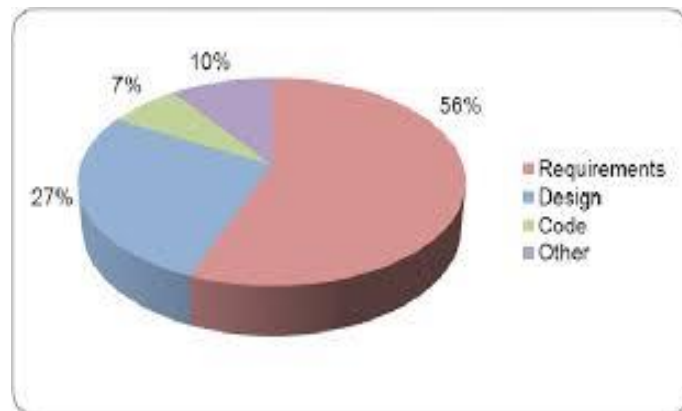
- Specify particular results of the system

Non-Functional requirements

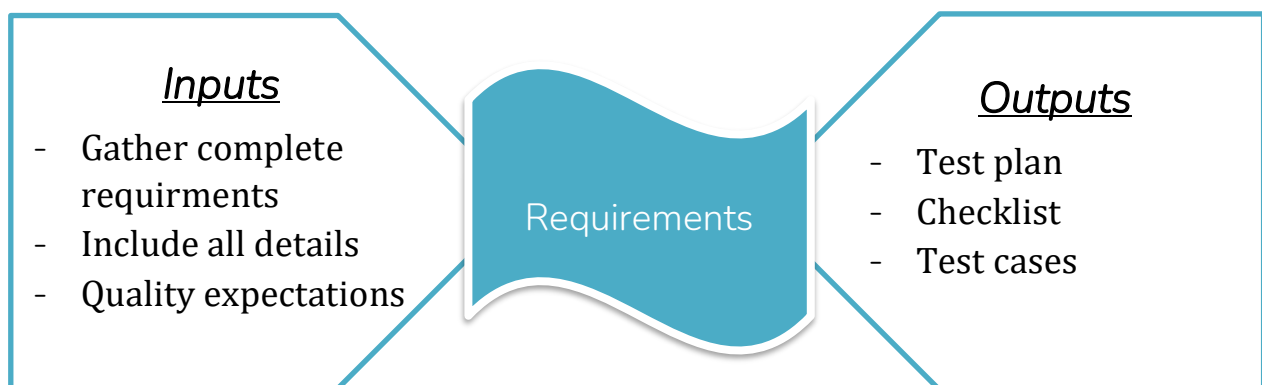
- Specifies criteria that can be used to judge the operation of a system
- Specifies measurements that the software must meet
- Defines how a system is supposed to be
- It's not concerned with specific behavior

Why requirements Test?

- Most of the bugs in software are due to incomplete or inaccurate requirements
- The software code can't do anything if there are ambiguities in requirements
- It's better to catch the requirement issues and fix them in early development life cycle
- Cost of fixing the bug after completion of development or product release is too high



Inputs and outputs



Requirement Test criteria

Technical requirements should be:

- Clear
- Specific
- Consistent
- Measurable
- Testable
- Complete

Examples

Obtain the bug from the following requirements:

1. The application should be able to serve the user requests as early as possible.
2. Mark this check as "Pass" only if the equation result was between "15" and "20". If the result was "15", mark it as "Pass" but if the result was "20", mark it as "Fail".
3. This is a static list of values and will be populated from lookup table in the database. The user can add, edit and delete the values of the list.
4. The website should support suitable number of concurrent users.
5. The search results page will show up to 12 items. The frontend user can select the required number of items to be appeared in the page from dropdown list contains the following values: 5, 10, 15, 20 and 25.
6. Users should be able to define a task within the application that is associated with a specific object on the system.
7. When a task is assigned to user, the user should be notified that he got a new task.
8. Some rights and permissions should be added on the task.
9. If a task is scheduled to be completed by 5 PM GMT, the system must notify user in Egypt by 11 PM (GMT+2, Cairo Time) that the task is finished on time.
10. Customizable reports will be generated through the system.

