What is the Purpose of testing?

Checking product and documentation in order to determine how far the needs or requirements are met, to find defects, to measure quality and risk, to establish confidence and to prevent defects.

which a system or components are compared against requirements and specifications through testing.

What is a Test Plan?

A TEST PLAN is document describing software testing scope and activities.

A Test Plan is a detailed document that describes the test strategy, objectives, schedule, estimation, deliverables, and resources required to perform testing for a software product.

What are the different sections in Test Plan?

Master Test Plan

Master Test Plan is a type of test plan that has multiple levels of testing. It includes a complete test strategy.

Phase Test Plan

A phase test plan is a type of test plan that addresses any one phase of the testing strategy. For example, a list of tools, a list of test cases, etc.

Specific Test Plans

Specific test plan designed for major types of testing like security testing, load testing, performance testing, etc. In other words, a specific test plan designed for non-functional testing.

• What is software testing life cycle (STLC)?

Software Testing Life Cycle (STLC) is a process used to test software and ensure that quality standards are met.

The procedure of software testing is also known as STLC (Software Testing Life Cycle) which includes phases of the testing process. The testing process is executed in a well-planned and systematic manner. All activities are done to improve the quality of the software product.

STLC is a sequence of different activities performed by the testing team to ensure the quality of the software or the product.

What is requirement traceability matrix (RTM)?

Requirement Traceability Matrix (RTM) is a document that maps and traces user requirement with test cases.

The Requirements Traceability Matrix (RTM) is a document that links requirements throughout the validation process.

What is the a test cases?

A test case is a set of actions performed on a system to determine if it satisfies software requirements and functions correctly.

What are the different types of test cases?

It can be functional, integration or system test cases or positive and negative test cases.

• Give 10 Examples of test cases?

- 1. All mandatory fields should be validated and indicated by an asterisk (*) symbol.
- 2. Validation error messages should be displayed properly and in the correct position.
- 3. All error messages should be displayed in the same CSS style (**For Example**, using red color)
- 4. General confirmation messages should be displayed using CSS style other than error message style (**For Example**, using green color)
- 5. Tooltips text should be meaningful.
- 6. Drop-down fields should have the first entry as blank or text like "Select".
- 7. 'Delete functionality' for any record on the page should ask for a confirmation.
- 8. Select/deselect all records option should be provided if page supports record add/delete/update functionality
- 9. Amount values should be displayed with the correct currency symbols.
- 10. Default page sorting should be provided.
- 11. Reset button functionality should set default values for all fields.
- 12. All numeric values should be formatted properly.
- 13. Input fields should be checked for the max field value. Input

values greater than the specified max limit should not be accepted or stored in the database.

- 14. Check all input fields for special characters.
- 15. Field labels should be standard e.g., the field accepting the user's first name should be labeled properly as 'First Name'.
- 16. Check page sorting functionality after add/edit/delete operations on any record.
- 17. Check for timeout functionality. Timeout values should be configurable. Check application behaviour after the operation timeout.
- 18. Check the cookies used in the application.
- 19. Check if the downloadable files are pointing to the correct file path.
- 20. All resource keys should be configurable in config files or databases instead of hard coding.
- 21. Standard conventions should be followed throughout for naming resource keys.
- 22. Validate markups for all web pages (validate HTML and CSS for syntax errors) to make sure they are compliant with the standards.
- 23. Application crashes or unavailable pages should be redirected to the error page.
- 24. Check the text on all pages for spelling and grammatical errors.
- 25. Check numeric input fields with character input values. A proper validation message should appear.
- 26. Check for negative numbers if allowed for numeric fields.
- 27. Check the number of fields with decimal number values.
- 28. Check the functionality of buttons available on all pages.
- 29. The user should not be able to submit a page twice by pressing the submit button in quick succession.
- 30. Divide by zero errors should be handled for any calculations.
- 31. Input data with the first and last position blank should be handled correctly.

What is the meaning of test objective ?

Test Objective is the overall goal and achievement of the test execution.

• What is the meaning of pre-conditions?

Preconditions are the combination of all necessary preparatory steps (program settings, testing environment), needed for executing this test case.

The preconditions for a test case include the state a system and its environment must be before a specific test can be run.

Preconditions specify the setup needed for a test case to be executed successfully.

What is the meaning of test description?

What is the meaning of expected output ?

You have to describe what you consider the normal behaviour of the bug to be = the customer's specification/web standards/your analysis.

What is the meaning of actual output ?

You have to describe what you see on the website or the mobile app = the bug itself.

What is the meaning of test status?

Test Status Reports forms a part of the Project Review Process both during and after completion of the project.

What is a defect?

A defect is an error or a bug, in the application which is created. Tests show the presence not the absence of defects.

When the result of the software application or product does not meet with the end user expectations or the software requirements then it results into a Bug or Defect.

What is the defect life cycle?

New - Potential defect that is raised and yet to be validated.

Assigned - Assigned against a development team to address it but not yet resolved.

Active - The Defect is being addressed by the developer and investigation is under progress. At this stage there are two possible outcomes; viz - Deferred or Rejected.

Test - The Defect is fixed and ready for testing.

Verified - The Defect that is retested and the test has been verified by QA.

Closed - The final state of the defect that can be closed after the QA retesting or can be closed if the defect is duplicate or considered as NOT a defect.

Reopened - When the defect is NOT fixed, QA reopens/reactivates the defect.

Deferred - When a defect cannot be addressed in that particular cycle it is deferred to future release.

Rejected - A defect can be rejected for any of the 3 reasons; viz - duplicate defect, NOT a Defect, Non Reproducible

what is defect severity?

Defect Severity in testing is a degree of impact a bug or a Defect has on the software application under test.

A higher effect of bug/defect on system functionality will lead to a higher severity level.

A Quality Assurance engineer usually determines the severity level of a bug/defect.

How do we know when to stop testing?

Testing Deadlines.

Completion of test case execution.

Completion of functional and code coverage to a certain point.

Bug rate falls below a certain level and no high-priority bugs are identified.

Management decision.

what are the qualities of a good tester?

Excellent Communication. Communication is a critical skill that everyone working in the IT field should possess.

Quick and Continuous Learning.

Strong Analytical Skills.

Creative.

Wise Time Management.

Technical Tools and Technical Knowledge.

Automation Proficiency.

DevOps Awareness.

Bug / Failure / Defect

A mistake in coding is called Error, error found by tester is called Defect.

Accepted by development team then it is called Bug.

Build does not meet the requirements then it Is Failure.

Test Plan

A Test Plan is a detailed document that describes the test strategy, objectives, schedule, estimation, deliverables, and resources required to perform testing for a software product.

Regression

Its running Function and non-function test to ensure that is previously developed whatever issue has been fixed it should work properly. Testing existing software application to make sure that a change or addition hasn't broken an existing functionality.

Retesting

Then the developer fix the bugs and assign it back to the tester for verification is called retesting.

Deferred issue

When a defect cannot be addressed in that particular cycle it is deferred to future release.

Defect bug life cycle

Defect life cycle, also known as Bug Life cycle is the journey of a defect cycle, which a defect goes through during its lifetime.

Test templates

A test case template is a document containing an organized list of test cases for different test scenarios that check whether or not the software has the intended functionality.

Test Scenario

The test scenario is a detailed document of test cases that cover end to end functionality of a software application in liner statements.

Test cases

Test cases define how to test a system, software or an application.

Unit testing

Unit testing is a software development process in which the smallest testable parts of an application, called units, are individually and independently scrutinized for proper operation.

Integration testing

Integration testing -- also known as integration and testing (I&T) -- is a type of software testing in which the different units, modules or components of a software application are tested as a combined entity.

System testing

System Testing is a type of software testing that is performed on a complete integrated system to evaluate the compliance of the system with the corresponding requirements.

User acceptance testing

User Acceptance Testing (UAT) is a type of testing performed by the end user or the client to verify/accept the software system before moving the software application to the production environment.