

Manual Testing Tutorial Refert Learn Automation Online YT

How is Software developed? → SDLC (Waterfall, Agile)

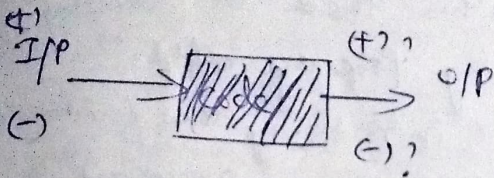
SDLC

- Requirement Analysis
- Design
- Code
- Test → STLC
- Deploy
- Maintenance

STLC

- Requirement analysis
- Test Planning
- Test Case Development
- Test Environment Setup
- Test Execution
- Bug reporting
- Retesting
- Regression
- Test cycle closure

Black Box Testing - Ex: Buying a bulb from shop by testing it
99% QA team comes under Black Box Testing



Testing without knowing the internal code or implementations

Functional
Non-Functional
Regression } - Black Box Testing

White Box Testing - internal structure, design & coding of software are tested to verify flow of input-output and to improve design, usability and security

- It is mostly done by developers
- also called Unit Testing

- Testing the functionality of the application is Functional Testing the components of the browser

- Non functional Testing - Meaning the performance
Ex: Measuring the performance of website while ~~accessing~~ 1000 members access at same time

- Smoke Testing - To find whether the build is stable or not by testing whether the most critical components are working or not.

- To save time and effort

Testing the first critical components and returning if it fails without testing other comp

- also called Tester acceptance Testing or Build acceptance Testing

Sanity Testing - Performed after new build is received
this new build could be a resultant of inclusion
of new functionality or due to bug fix

Smoke - Critical components is tested, ~~whether it is~~ ^{Stability}
^{of the build}
Sanity - new functionalities & bug fixes are tested, ^{assurance}
(Particular) ^{the Rationality (same)}

- **Regression Testing** - No new issues should be introduced
across the entire system,
Testing end to end fully, whereas
testing only particular functionality is coming

- **Retesting** - to check if the bug has been fixed or not
which has been fixed and given to dev team

Regression - To check whether these ~~is~~ existing
functionalities are working properly after
fixing existing bugs or introducing new functionalities

- **Adhoc Testing** - Done without being planned, organized or
rehearsed, Testing an application randomly by
using logical or illogical scenarios and check
whether the application has bugs or not

Types: Buddy, Pair, Monkey

It is a negative Testing, no documentation process to
be followed.

- **Defect VS Bug**

A deviation b/w actual and expected behaviour of the application.
Bug is raised by the tester and if the bug is accepted by developer
it is named as Defect. If the bug is rejected by dev then it
will direct to Remark.

Bug Life cycle - It is Specific set of states that bug goes through
in its entire life (Diagram - Defect Phone)

Severity - It is a measure, to indicate the impact of a bug
can have on the software product
Categorized into - low, Minor, Major, Critical

Priority - Bug priority refers to how urgently a bug needs
to be fixed.

Levels of bug priority are low, medium, high
Severity and priority are directly proportional in most cases

Entry Criteria - a set of conditions to be set/satisfied before an
activity can begin

Exit Criteria - a set of conditions to be set/satisfied before an
activity can be concluded

Both are applicable for all phases of STLC

Test Scenario - It is a functionality to be Tested

Ex: Check if the user able to put status

check if the user able to make a audio call

2 types - Positive Scenario & Negative Scenario

Test Case - A Step by Step instruction written in a detailed manner with steps to be performed and expected result for any given functionality.

Testcollab - Free tool to Practice Jira (agile software)

Requirement Tracing Matrix (RTM) - It is a document that maps and traces user requirement with test cases. The Main purpose of RTM is to validate all requirements are Tested by atleast one Test case so that no functionality is unchecked during software testing.

- There are seven principles of software testing
Refer Google

Agile Testing Refer Phone Screenshot

Types of Testing - functional, Nonfunctional (performance, security, efficiency)

Levels of Testing - Unit, Integration, System, Acceptance (Alpha, Beta)

What is Agile?

- Agile is an iterative approach to project management & software development that helps teams deliver value to their customers faster, agile team delivers work in small yet consumable, Requirements, Plans & results are evaluated continuously, so teams have a natural mechanism for responding to change quickly

Agile Frameworks

- Scrum
- Kanban
- Extreme programming (XP)
- Scaled Agile Framework (SAFe)

Scrum Overview

Scrum roles

Scrum ceremonies

Scrum values and artifacts