**Manual Testing**

**Manual Testing** is a type of software testing in which test cases are

executed manually by a tester without using any automated tools.

The purpose of Manual Testing is to identify the bugs, issues, and defects in the software application.

Manual software testing is the most primitive technique of all testing types and it helps to find critical bugs in the software application.

## Black Box Testing

**Black Box Testing** is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths.

Black Box Testing mainly focuses on input and output of software applications and it is entirely based on software requirements and specifications. It is also known as Behavioral Testing.

## White Box Testing

**White Box Testing** is a testing technique in which software’s internal structure, design, and coding are tested to verify input-output flow and improve design, usability, and security.

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It is White box testing in software engineering is based on the inner workings of an application and revolves around internal testing.

### What is Unit Testing?

**Unit Testing** is a type of software testing where individual units or components of a software are tested.

The purpose is to validate that each unit of the software code performs as expected. Unit Testing is done during the development (coding phase) of an application by the developers.

Unit Tests isolate a section of code and verify its correctness. A unit may be an individual function, method, procedure, module, or object.

## What is Integration Testing?

**Integration Testing** is defined as a type of testing where software modules are integrated logically and tested as a group.

A typical software project consists of multiple software modules, coded by different programmers.

The purpose of this level of testing is to expose defects in the interaction between these software modules when they are integrated

## What is System Testing?

**System Testing** is a level of testing that validates the complete and fully integrated software product

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The purpose of a system test is to evaluate the end-to-end system specifications.

Usually, the software is only one element of a larger computer-based system.

Ultimately, the software is interfaced with other software/hardware systems.

System Testing is defined as a series of different tests whose sole purpose is to exercise the full computer-based system.

## What is UAT?

**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.

UAT is done in the final phase of testing after functional, integration and system testing is done.

### What is Smoke Testing

**Smoke Testing** is a software testing process that determines whether the deployed software build is stable or not. Smoke testing is a confirmation for QA team to proceed with further software testing. It consists of a minimal set of tests run on each build to test software functionalities. Smoke testing is also known as “Build Verification Testing” or “Confidence Testing.”

In simple terms, smoke tests means verifying the important features are working and there are no showstoppers in the build that is under testing. It is a mini and rapid regression test of major functionality. It is a simple test that shows the product is ready for testing. This helps determine if the build is flawed as to make any further testing a waste of time and resources.