Verification Testing:

* It is the process of checking that a software achieves its goal without any bugs.
* It verifies the requirement document, design documents and test plan.
* It is from the developer point of view.
* It can be verified without executing the code.

Validation Testing:

* It is the process of checking whether the software product is up to the mark or in other words product has high level requirements.
* It validate the final product.
* It is from the customer point of view,
* It can be validated by executing the code.

Example – Consider a login form

The steps should be done in Verification Testing are:

* First step is the design of login form like how much width and height.
* Fields like username and password rules for it.
* Coding for the login form includes correct field labels, proper input validation.
* Authentication logic

The steps involved in validation testing are

* It meets the end user requirement or not.
* And if logging has done it moves to other page or not and gather feedback from end user.
* Testers validate for successful login in with valid credentials and handling error message.

**Types of Testing:**

**Unit Testing:**

Unit testing is the process of testing small, isolated portions of a software application called units. Unit testing is a method of testing small pieces of a software application without relying on a third-party system.

Unit tests primarily test isolated components during the product’s early development phase.

**Integration Testing:**

It is to validate that different software components, subsystems, or applications work together as a system to achieve the desired functionality and performance.

Integration testing helps to identify and resolve any issues that may arise when components are combined, such as compatibility issues, performance problems, incorrect communication, or data corruption.

**Functional Testing:**

Functional testing is a type of software testing that verifies the functionality of a software system or application.

It focuses on ensuring that the system behaves according to the specified functional requirements and meets the intended business needs.

The goal of functional testing is to validate the system’s features, capabilities, and interactions with different components.

It involves testing the software’s input and output, data manipulation, user interactions, and the system’s response to various scenarios and conditions.

**Acceptance Testing:**

It is a black-box testing process where the functionality is verified to ensure the software product meets the acceptance criteria.

It’s the last phase of the software testing process, and it’s important before making the software available for actual use.

Once you have performed the system testing, fixed most of the bugs, and verified and closed them, it’s time for acceptance testing.