Functional Testing:

● Functional testing is a type of black box testing.

● It is a type of software testing which is used to verify the functionality of the software application, whether the function is working according to the requirement specification

● In functional testing, each function tested by giving the value, determining the output, and verifying the actual output with the expected value.

● Functional testing performed as black-box testing which is presented to confirm that the functionality of an application or system behaves as we are expecting.

● It is done to verify the functionality of the application.

What do you test in Functional Testing?

1.Behvioral Coverage:

● In this we check the property and behaviour of object.

Example:
Text Field
Property of text field:Accept user input
Behaviour: Focus and Unfocus
Checkbox:
Property of checkbox is do tick when user click
Behaviour is Check/Uncheck

2.Input Domain Coverage:

● It check type and size of input

● Type means data type of input

● Size means if mobile number field is there then size is 10

● In input domain coverage we have to maintain Boundary Value analysis and Equivalence Class Partitioning.

Boundary Value Analysis:

● Boundary Value Analysis (BVA) is a Black-Box testing technique used to check the errors at the boundaries of an input domain.

● More application **errors occur at the boundaries** of the input domain. 'Boundary Value Analysis' Testing technique is used to identify errors at boundaries rather than finding those that exist in the center of the input domain.

● Formula:{Min,Max,Min-1,Min+1,Max-1,Max+1}

Example:

Age field accept 1 to 18 value

Min:1(Valid)

Max:18(Valid)

Min-1:0(Invalid)

Min+1:2(Valid)

Max+1:19(Invalid)

Max-1:17(Valid)

Equivalence Class Partitioning:

● Equivalence Partitioning also called as equivalence class partitioning.

● It is abbreviated as ECP.

● It is a software testing technique that divides the input test data of the application under test into each partition at least once of equivalent data from which test cases can be derived.

● An advantage of this approach is it reduces the time required for performing testing of a software due to less number of test cases.

Example:

Age field accept 1 to 18 value

Invalid:Less than 1

Valid: 1 to 18

Invalid:Greater than 18

3)Error Handling Coverage:

● Error handling coverage includes checking whether the system should show an error message or not.
● Example:If customer requirement is for 10 digit and user entered only 9 digit then it will highlight the mobile number text field with red border and show error message like" Please enter 10 digit mobile number"
● So this is the process of validation whether the system shows an error message or not.

4)Backend Coverage:

● Backend coverage is nothing but database coverage
● In backend coverage we check whether the entered information from user get stored in database or not
● We also check whether data is fetched from the database or not.

5)Calculation Base Coverage:

● Calculation base coverage check arithmetic operation