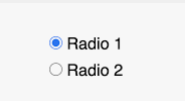
Functionality Testing:-

Functionality testing is performed to test the functionality of software whether it is working as per customer requirement or not.

There are different coverages in functionality testing:-

1) Behavioral coverage – To check objects (button, checkbox, radio button, links, drop down, etc.) property.

E.g. - Radio Button (On/Off)



2) Input Domain coverage -To check size and type of input. This will be applicable only for text fields.

There are 2 techniques;

a.      Boundary Value Analysis.

b.      Equivalence Class Partitioning

a) Boundary Value Analysis --

In this we check size of input.

E.g. – Saving account in bank has different rate of interest depending upon balance in account therefore rate of interest for balance between $1 to $100 will be 3%, $100 to $1000 will be 5% and above $1000 is 7%.

So Boundary value analysis is based on testing at boundaries between partitions.

Considering above example Boundary Values can be

$ 1.01-$100.00  $100.01-$999.99  $1000.01

b) Equivalence Class Partitioning --

It is also black box system testing technique.

In this technique input is divided into a set of test conditions or groups.

In the Equivalence Class Partitioning technique, we need to test only one condition from each partition because we can assume all conditions in one partition will be treated the same way.

|  |  |  |  |
| --- | --- | --- | --- |
| Invalid | 3% | 5% | 7% |
| -$1 | $10 | $150 | $1050 |

For phone recharge following will be eg,

|  |  |
| --- | --- |
| Valid | Invalid |
| 0-9 | A-z, Alphanumeric  Special characters |

3) Error Handling Coverage --

To check behavior of applications with incorrect operations i.e. negative testing.

4) Backend Coverage --

To check impact of front end screen operation on backend tables (Database Testing).

5) Service Level Coverage --

To check order of functionality i.e. correct sequence.

6) Calculation Based Coverage --

To check the outcome of arithmetic operations.

Steps for Performing Functionality Testing --

1.      Determine the functionality of software features.

2.      Create test data for functionality to be tested as per requirement specification.

3.      Determine expected output.

4.      Execute the prepared test cases.

5.      Compare the expected and actual result.

 Example test scenario and test case of airtel recharge,

TS 1:

To verify prepaid recharge of valid mobile number.

TC 1:

To verify prepaid recharge of a valid 10 digit mobile number with a plan of Rs. 10 using payment of valid credit card.