

What is Test case?

It means mostly how to test.

A test case is a document, which has a set of test data, preconditions, expected results etc, against a specific requirement/scenarios.

The test case is an in-details document that includes **all possible inputs** such as **positive and negative**, and **the navigation steps**. These are implemented during the testing process to check whether the software application is fulfilling all the requirements or not.

The test case is defined as a group of conditions under which a tester determines whether a software application is working as per the customer's requirements or not.

Test cases can be use in the future at the time of regression testing,sanity testing.

How your test case be like or which kind of test case is good test case?

- Test case should cover all functionality
- Test case should be understandable
- Test case should be simple and easy.

We can write test case in 2 ways-

- In JIRA
- Excel sheet

Test case template

The primary purpose of writing a test case is to achieve the quality and complete functionality of the application.

Test case contains below sections-

- Header
- Body

Header

Test Case Name/ID :-Release - Version - Application Name - Module

Requirement Number:-

Module:-

Priority:- Critical/Major/Minor

Status:-

Release:-

Version:-

Pre-condition:-

Test Data:-

Summary:-

Body

Step No.	Descri- ption	Inputs	Expected Result	Actual Reasult	Status	Comments
...
...

Header and body section from the excel format of test case-
Header-

LOGIN PAGE AND FORGOT PASSWORD	
PROJECT NAME-ORANGE HRM	TC Design/Created BY -
FEATURE/MODULE:LOGIN PAGE AND FORGOT PASSWORED	TC DESIGN/created DATE -
TEST TITLE/submodule/Test case name-LOGIN PAGE	Executed by:
PRE-CONDITION:Build/URL,USER NAME AND PASSWORD	Executed date:
	Reviewed By:QA team

Body-

SL NO/TC NO	TEST DESCRIPTION	TEST STEPS	TEST DATA	PRIORITY	EXPECTED RESULT	ACTUAL RESULT	Status	Remark
TC1	Verify login page Functionality	1.URL open 2.Enter proper credentials. 3.Click on login button	UN-Admin PW-admin123	P1	Login should happen only if the username/password is correct.	Login not happening if the username/password is correct.	Fail	

As we know, the **actual result** is written after the test case execution, and most of the time, it would be same as the **expected result**.

But if the test case will fail, then we mark the status as Fail and then log a bug. We can comment bug id in the remark column.

Template can be different for some company but, for testing one application, all the test engineers should follow a usual template, which is 99% is like same.

The test case should be written in simple language so that a new test engineer can also understand and execute the same.

In the above sample template, the header contains the following:

Step number/TC number

It is also essential because if step number 20 is failing, we can document the bug report and hence prioritize the bug.

Release

One release can contain many versions of the release. This can be get from developer.

Pre-condition

These are the necessary conditions that need to be satisfied by every test engineer before starting the test execution process. Or it is the data that needs to be created for the testing.

Example-build url or username or password needed.

Test data

These are the values or the input we need to create as per the per-condition.

For example, Username-admin, Password,-admin1234 and account number-xyz of the users.

The test lead may be given the test data like username or password to test the application, or the test engineer may themselves generate the username and password.

NOTE-Severity and priority already given on BLC document.

What is Test Scenarios?

This is mostly what to test.

It covers **end to end functionality** of a software application in liner statements.

The test scenario is a high-level classification of testable requirements.

If we have requirements and desired output then how to achieve it, we have different different ways, those ways are called scenarios.

Suppose we have to purchase AC from flipkart or amazon.

Then we have some ways for payment-

Product (AC)-----Credit Card-----Purchase (Way1)

Product (AC)-----Debit Card-----Purchase (Way2)

Product (AC)-----Internet Banking-----Purchase (Way3)

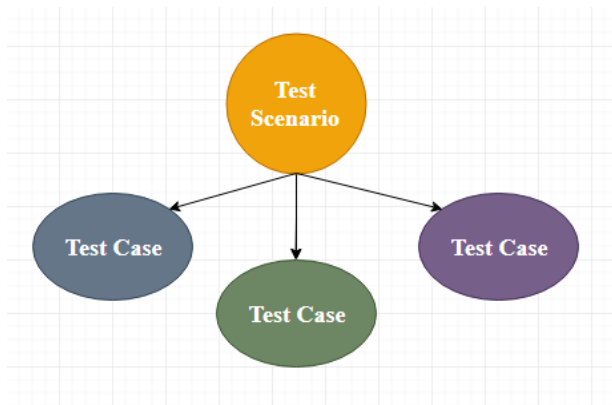
Now,

Requirement is for payment and product purchase.

Scenario are Way 1, way 2 and way 3

Checking all these functionality in detail (positive and negative cases) is test case.

In test scenarios mostly positive condition taken care and in test case positive and negative both taken care.



Difference Between Scenario and Test cases

Test Case	Test Scenario
The test case is a detailed document, which provides information about the Test summary, steps, preconditions, and expected output.	The test scenarios are came from the requirement and give the one-line information about what to test.
It includes all the positive and negative inputs, navigation steps, Expected results, pre and post condition, etc.	Test scenarios are one-liner statement, but it is connected with several test cases.
These are low-level actions.	These are high-level actions.
The main objective of writing the test case is to verify the test scenario by implementing steps.	Writing the test scenario's main objective is a cover end to end functionality of a software application.
It takes more time as compared to test scenarios.	It takes less time as compared to test cases.
The test cases are hard to maintain.	Test scenarios are easy to maintain as its only in liner statement.
The test case is "How to be tested".	The test is "What to be tested".

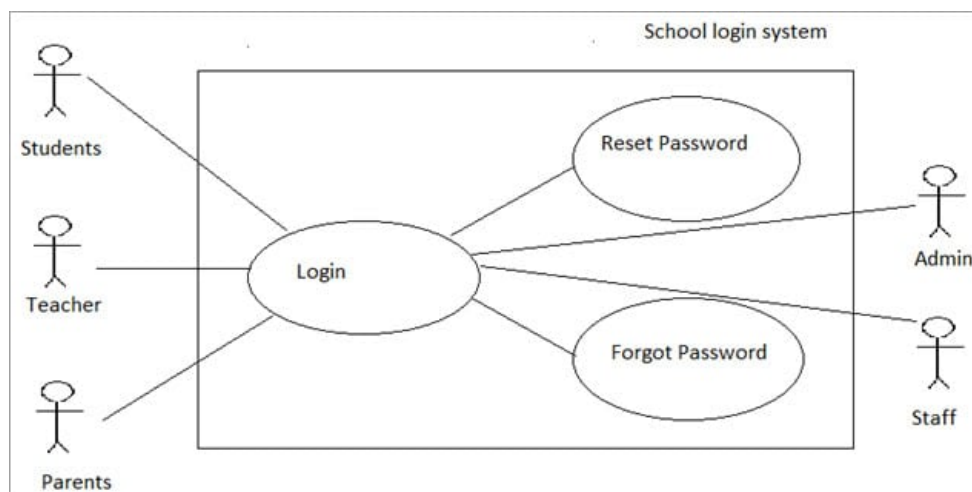
What is Use Case?

- In software testing, a use case is a graphic representation of business needs explaining how the end-user will cooperate with software or an application. And the use cases allow us all the possible techniques of how the end-user uses the application.
- In simple words, we can express that with the help of use cases; we can define how to use the system for executing a precise task.
- The use case is not a part of execution which means that it is only a graphic demonstration of a document that explains how to implement a particular task.
- With the help of the use case, we get to know how the product should work.

This documentation can be used by Software developers, software testers as well as Stakeholders.

Uses of the Documents:

- Developers use the documents for implementing the code and designing it.
- Testers use them for creating the test case
- Business stakeholders use the document for understanding the software requirements.



This is the Use case diagram of 'Login' case. Here, we have more than one actor, they are all placed outside the system. Students, teachers, and

parents are considered primary actors. That is why they all are placed on the left side of the rectangle.

Admin and Staff are considered as secondary actors, so we place them on the right side of the rectangle. Actors can log in to the system, so we connect the actors and login case with a connector.

Other functionality found in the system are Reset Password and Forgot password. They are all related to login case, so we connect them to the connector.

Business analysts are the most likely use case authors