**What is a Test Case?**

A test case template is a document that comes under one of the test artifacts, which allows testers to develop the test cases for a particular test scenario in order to verify whether the features of an application are working as intended or not. Test cases are the set of positive and negative executable steps of a test scenario which has a set of pre-conditions, test data, expected results, post-conditions, and actual results.

Most of the companies are using test case management tools such as Quality Center (HP QC), JIRA, etc., and some of the companies still using excel sheets to write test cases.

For example: Verify the login functionality of the Gmail account.

Assume we need to write test cases for a scenario (Verify the login of the Gmail account).

Here are some test cases.

1. Enter valid User Name and valid Password

2. Enter valid User Name and invalid Password

3. Enter invalid User Name and valid Password

4. Enter invalid User Name and invalid Password

**Who Writes Test Cases?**

It varies from company to company. Assuming that a team contains developers and dedicated testers then it might be something like a joint effort.

* Developers write Unit Tests
* Developers & Testers write Integration Tests
* Testers write Acceptance Tests.

**How To Write Test Cases in Manual Testing**

Follow the below steps to write the test cases.

Step #1 – Test Case ID:

Each test case should be represented by a unique ID. It’s good practice to follow some naming convention for better understanding and discrimination purposes.

Step #2 – Test Case Description:

Pick test cases properly from the test scenarios

Example:

Test scenario: Verify the login of Gmail

Test case: Enter a valid username and valid password

Step #3 – Pre-Conditions:

Conditions that need to meet before executing the test case. Mention if any preconditions are available.

Example: Need a valid Gmail account to do login

Step #4 – Test Steps:

To execute test cases, you need to perform some actions. So write proper test steps. Mention all the test steps in detail and in the order how it could be executed from the end-user’s perspective.

Example:

Enter Username

Enter Password

Click Login button

Step #5 – Test Data:

You need proper test data to execute the test steps. So gather appropriate test data. The data which could be used an input for the test cases.

Example:

Username: rajkumar@softwaretestingmaterial.com

Password: STM

Step #6 – Expected Result:

The result which we expect once the test cases were executed. It might be anything such as Home Page, Relevant screen, Error message, etc.,

Example: Successful login

Step #7 – Post Condition:

Conditions that need to achieve when the test case was successfully executed.

Example: Gmail inbox is shown

Step #8 – Actual Result:

The result which system shows once the test case was executed. Capture the result after the execution. Based on this result and the expected result, we set the status of the test case.

Example: Redirected to Gmail inbox

Step #9 – Status:

Finally set the status as Pass or Fail based on the expected result against the actual result. If the actual and expected results are the same, mention it as Passed. Else make it as Failed. If a test fails, it has to go through the bug life cycle to be fixed.

Example:

Result: Pass

**Other important fields of a test case template:**

**Project Name**: Name of the project the test cases belong to

**Module Name**: Name of the module the test cases belong to

**Reference Document**: Mention the path of the reference documents (if any such as Requirement Document, Test Plan, Test Scenarios, etc.,)

**Created By**: Name of the Tester who created the test cases

**Date of Creation**: When the test cases were created

**Reviewed By**: Name of the Tester who created the test cases

**Date of Review:** When the test cases were reviewed

**Executed By**: Name of the Tester who executed the test case

**Date of Execution**: When the test case was executed

**Comments:** Include value information which helps the team.

**Best Practices To Write Good Test Case**

Characteristics of a good test case are

* Easy to understand and execute
* Create Test Cases with End User’s perspective
* Unique Test case Identifiers must be used. It allows us to track them easily.
* Prerequisites should be listed clearly. Helps to execute the test case without any issues.
* Test data should be defined to evaluate each functional area.
* Test case description should be concise.
* Test Steps should be in detail and clear.
* Specify the exact expected result.
* Position condition should be listed if any.
* Test cases should neither too simple nor too complex.
* Test cases must be distinctive. There should not be no repeated test cases.
* Test cases should be written by following test case design technqiues.
* Test cases must be comprehensible. So that any tester (even a newly appointed testers) can understand them by perusing once.
* Needs to provide clear environment details where we need to execute them.
* Test cases should be reusable & maintainable
* Get peer review.