

❖ Roles and responsibilities of Test Engineer:

1. SRS or User stories analysis
2. Test scenario identification
3. Test case design
4. Test case review
5. Traceability matrix
6. Test case execution
7. Defect log and reporting
8. Test Summary Report
9. Client interaction in UAT

❖ Test case review:

After the completion of test case design we have to focus on test case review. Review is the process of checking our own work/document. There are four different types of the test case review.

1. **Self Review:** This review is done by test engineer by self.
2. **Peer Review:** This review is done by our colleague.
3. **Internal Review:** Generally peer review is not done in large organizations. So we use internal review. This review is done by the all project team member.

For V Model: People included in this review are BA (6) + Development team (20-15) + Testing team (10-12). Testing team sends mail to all other project team members. In subject field they may write: Test case review for the release 2103.

For Agile: product owner (1) + development team (2 to 3) + testing team (2). Testing team sends mail to all other project team members. In subject field they may write: Test case review for the release 2103.

4. **External Review:** Client is involved in this review during the UAT. In this review Client + Product owner + development team + testing team is involved. If sometimes project is critical (More defects found in UAT, we can't go forward) then SIT team also involved.

Chairperson of SIT Team which help in UAT.

For V model: Team Leader

For Agile: Sr. Test Engineer

In front of Client, SIT team executes the test cases. This meeting continues for two days 4 to 8 hrs per day. This meeting is also called as walkthrough or inspection. In this meeting product owner prepares one document called as Minutes of Meeting (MOM).

❖ Traceability matrix:

Traceability Matrix is used to check whether any test case missing or not. It is a mapping between the prepared test cases and business requirement is called as Traceability matrix. There are two types of traceability matrix:

1. **Forward Traceability Matrix:** It is mapping between prepared test cases and clients requirements is called as Forward traceability matrix.

If we use agile and HPALM then: Client requirements are present in the sprint backlog. Sprint backlog consists of multiple user stories. Sometimes it is possible that you don't understand one of the user stories at that time you are not going to stop your work. You will

continue to write test cases for next user stories. But still one story is missing. We are not writing the user story for that. Hence before the execution of test cases, we have to perform mapping on it. In HPALM tool, requirement coverage tab is present from this tab we can done mapping.

If we use agile and Excel then: In this case, we design the test cases in excel sheet. In that sheet have column with name requirement is present. With the help of this column we can map our test case design with client's requirement.

- 2. Reverse Traceability Matrix:** It is a mapping between the defect and client requirement. In this matrix we are going to map which defect is related to which requirements? If we search for particular defect ID then we get requirement related to that defect.

❖ **How to log Defect Using HPALM:**

Click on defect – click on new defect - new pop up window will open – in summary write description for defect (Where & what type of defect is found). You have to fill the details such as detected by, detected date, severity, which developer is going to solve this defect. In description we provide all the details about how we perform testing such as: test environment, URL, Browser, Test data etc.

Steps to get defect:

1. Clear cache & cookies
2. Enter valid URL as tst02.paytm.com
3. Enter mobile number and select desired recharge plan.
4. Login to your account
5. Click on continue
6. Coupon page displayed
7. Apply coupon & click on continue
8. Payment page will be displayed
9. On payment page pay button is not working

Actual result: Payment button is not working in payment page.

Expected result: Pay button in payment page is working

Write all this in description and attach failed test case screenshot and click on submit. Automatically one defect ID will be generated. By default status of new generated defect ID is new.

❖ **Defect life cycle using HPALM:**

When we log the defect for first time then its status of that defect is new. Assigned to tab is present but it is not mandatory as the status of defect is new. This status should be changed by tester. He will change status from new to open. Now assigned to tab becomes mandatory in which tester decides which developer is going to solve this defect. Then developer is going to decides whether the defect is valid or not. If assigned defect is valid, and then he will fixes it. If defect is invalid then developer will reject that defect. There is another defect action called as differed. Differed defect means it is a valid defect, but developer will fix it in next update. Without mentioning comment developer can't change status of defect (Fixed, Rejected, and Differed). After the solving the defect he will send for retesting. Tester will follow the same test data which is present in description and retest it. If defect get solved then, tester change the status of defect to close and attach screenshot as proof. In retest, if defect not get solved then we give comment as

retest failed and make status to reopen. Sometimes if assigned defect is rejected by the developer then it will be bad defect and we have to cancel it.

Q1. If developer continuously rejects your defect then what you do?

Firstly we try to convince developer with strong reasons of defect. Then we share the screenshot of defect. We share the desktop and arrange meeting with developer. Yet developer is rejecting the defect then we can talk with product owner. He will solve 99% problem because he know all the requirements. If product owner has a doubt on that defect, but we are confirm about it, in this situation with the permission of product owner we have to contact to client.

Q2. What are the defect components in HPAML?

Actual fix time, assigned to, close in vacations, closing date, comment, defect id, description, detected by, detected in cycle, detected in release, detected in Version, , detected on date, estimated fix time, priority, project, severity, status, subject, summary, target cycle, target release.