ACCEPTANCE TESTING

UAT EXECUTION&REPORT SUBMISSION

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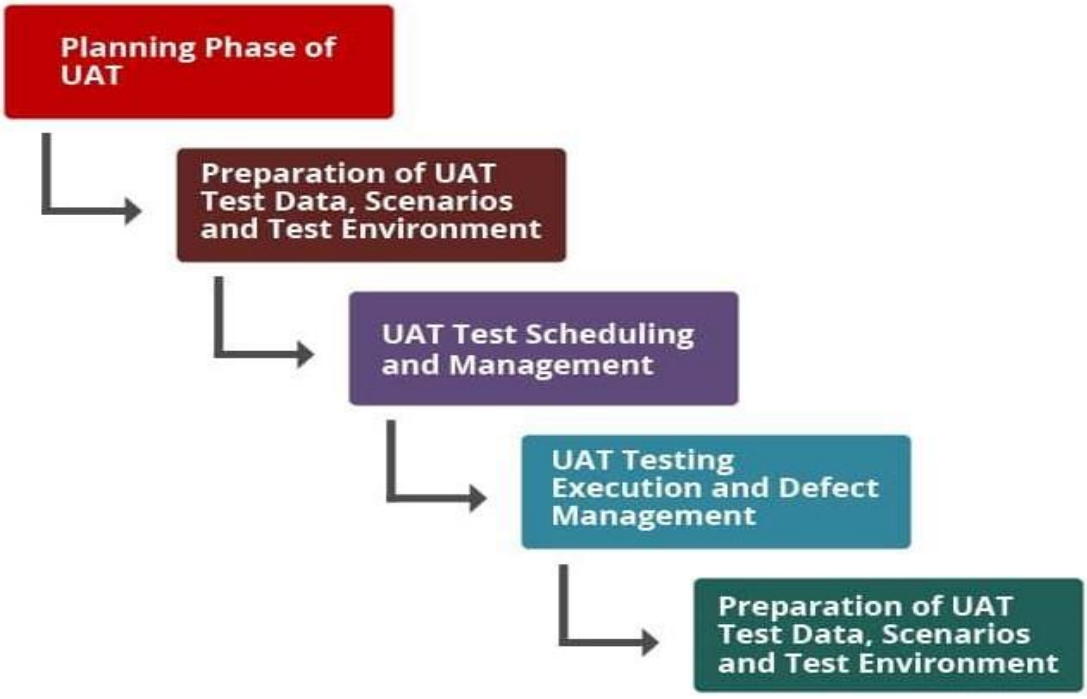
Team ID	PNT2022TMID43265
Project Name	Efficient water quality analysis & predicition using machine learing
Maximum Marks	8 Marks

INTRODUCTION

In the software product development process, software testing plays an important role as it ensures and upholds the software product quality. The various phases of this software testing are Unit testing, Integration testing, System testing, Acceptance testing and interestingly, the last phase of software testing, which is named UAT or User Acceptance Testing. It has a significant



1. Planning Phase of UAT:

Assigning a UAT Test Manager to oversee the entire process of UAT is essentially done in this stage. Proper planning and execution strategy are outlined here. Identification of critical resources is done and preparation of a critical resource plan is done.

2. Preparation of UAT Test Data, Scenarios and Test Environment:

UAT readiness is ensured in this phase as the UAT test environment is set up, preparation of test management plan along with test data, interfaces, data, authorization along with scenario readiness is done here.

3. UAT Test Scheduling and Management:

Proper action plans with UAT priorities are done in this phase. A triage process is kept in place to prioritize the assessments of defects blocking if any. An effective mechanism to track test scenarios and test scripts based on the requirements defined is taken up.

4. UAT Testing Execution and Defect Management:

This is an important phase and proper identification of priority defects is taken up and more focus is placed on performing root cause analysis assessments. A trial run of UAT processes is done to validate execution and defects assignment and assessment is taken up for proper and quick resolution.

5. UAT, Sign-off, and Reporting:

In this final phase of UAT, accurate defect and testing status reports and defect reporting is generated from the test management system. Finally, a sign-off when all bugs have been fixed indicates the acceptance of the software. This final phase ensures and validates that the application developed meets the user requirements and is ready to be moved to production.

Following are the 5 UAT testing best practices:

1. Find Users:

User identification is the first step. Selecting a group of users (who are interested in the product) is essential for conducting UAT. These users are none other than the end-users of the product. These users can be from the company or from outside or both.

2. Document test cases:

There has to be a methodical plan for UAT testers to perform UAT testing productively. As these testers will be going through all the features of the product, their feedback in terms of how they want the product to function should be documented.

3. Prepare the environment:

A test environment is crucial for the success of UAT. Those users who've been selected to perform UAT must have the credentials and data to carry out testing effectively.

4. Remote testing counts:

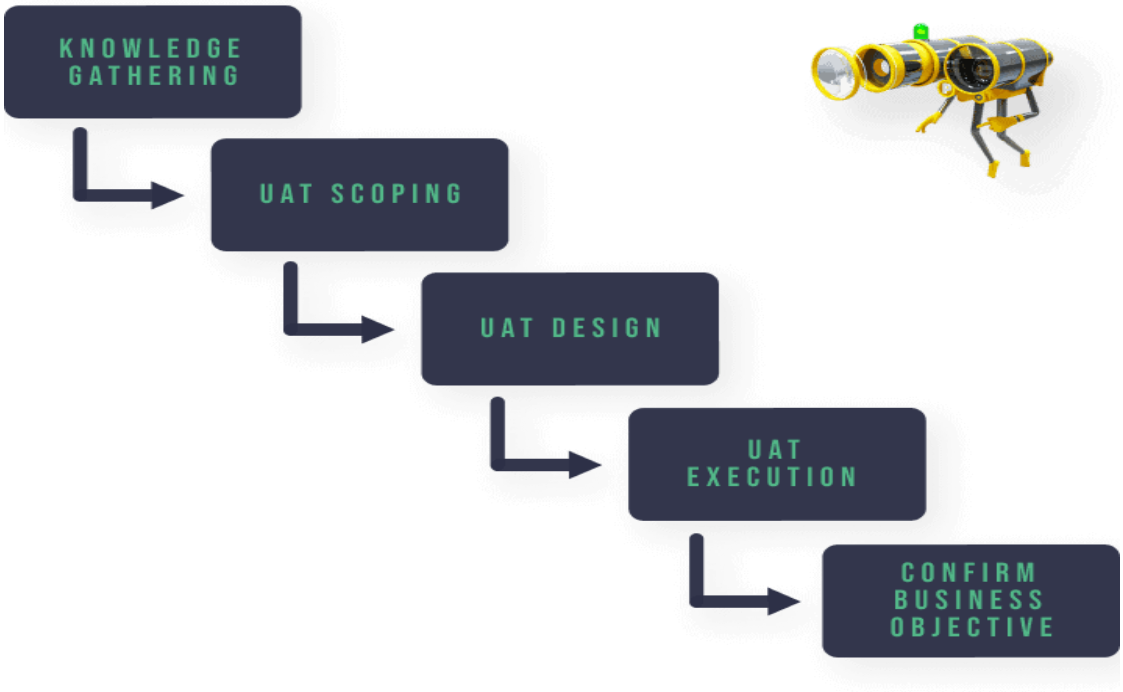
As in certain scenarios, if the users are located at remote locations, it would be wise to schedule a common date and time to carry out UAT. Prior planning in terms of the technicalities involved in performing the testing activity should be clearly informed so that the users are well aware of all the implications.

5. Prioritize to detect and solve bugs:

When the test goes live, there will be issues pertaining to addressing bugs. Let the user track and properly list all the bugs that have been encountered. The concerned team responsible for fixing bugs must prioritize the bugs and then solve it accordingly in a systematic manner.

Types of UAT Testing Businesses Should Know

Pro Tip: The Importance of UAT Documentation



Documentation of your UAT testing strategy and overall plan is indispensable to the outcome of your current and future tests. It should include:

- Out-of-scope situations worth testing
- Expectations for the test
- General agreements about the standards for passing
- How to carry out the test
- Owners and participants
- Scope of work
- Venue used

Challenges of UAT

- Setting up a separate environment for UAT can be time-consuming and costly. This is because it needs to reflect the production (real-world) environment.
- Sometimes the end-users are busy professionals. Therefore it might be difficult to get potential users ready for the testing as well as training.
- If any showstopper or critical bugs are found in the system, resolving those issues might take some time. In this case, either the release is postponed or the system may have to be released with known issues.
- Testers i.e. the end-users may have to spend extra time on training and learning new skills.

Conclusion

To gain maximum benefit from the UAT testing, proper planning is a must. This also includes identifying correct end-users who should have been trained thoroughly.