User Acceptance Testing

Introduction

User Acceptance Testing (UAT) is a type of black box testing that is performed at the final stage before the application is rolled out to customer. It is accomplished to ensure the system meets all the requirements specified in **User Requirements Specifications**.

When is it Done?

It is done when the application is fully developed and ready for operational use. Before approaching UAT, various levels of testing such as System Test/ Integrated System Tests are done to uncover most of the bugs at the early stage.

Fig 1: User Acceptance Testing Phase

Who is Involved?

Usually a large number of entities are involved in User Acceptance Testing. Their various roles and key areas are listed below:

Development	Testing	Coordination	Support	Owner
Developers	UAT Testers	UAT Test Coordinator	Test Analyst	Project Sponsor/ Customer
Development / Environment Manager	SMEs	Test Manager	Test Lead	-
-	Business Users/ End Users	Test Lead	UAT Test Lead	-
-	-	Legal or Regulatory	UAT Test	-

Development	Testing	Coordination	Support	Owner
		Authority	Coordinator	
-	-	-	SMEs	-

Table 1: Different Entities involved in UAT cycle and their roles

Objectives

The main objectives of UAT are:

1. Confirm that the design / enhancements have been correctly implemented as specified in the User Requirements

2. Confirm the business can operate the solution successfully

3. Confirm that if there are risks, they are accepted by the business with well prepared risk mitigation procedures in place

4. Test the whole solution end-to-end and Identify any errors

5. Confirm the whole solution meets reasonable business expectations

6. Confirm that the solution is in an appropriate state to move to next phase

7. Support Business sign off

Key Deliverables

UAT focusses mainly on functionality and usability of the application rather than technical aspects. It is carried out in an environment that closely resembles to production environment. The following are the key deliverables from UAT perspective:

- **User acceptance test plan**

- **Test Conditions / Cases / Scenarios**

- **Test Execution Schedule, including any batch processing**

- **Defect log**

- **Updated Traceability Matrix**

- **UAT Test Closure Report/ Sign Off**

Where does it fit?

The place of UAT testing in the development process and lifecycle is critical. UAT focuses on usability and User requirements issues and tends to happen before actual release of the system. Figure 2 shows the place of UAT in V model:
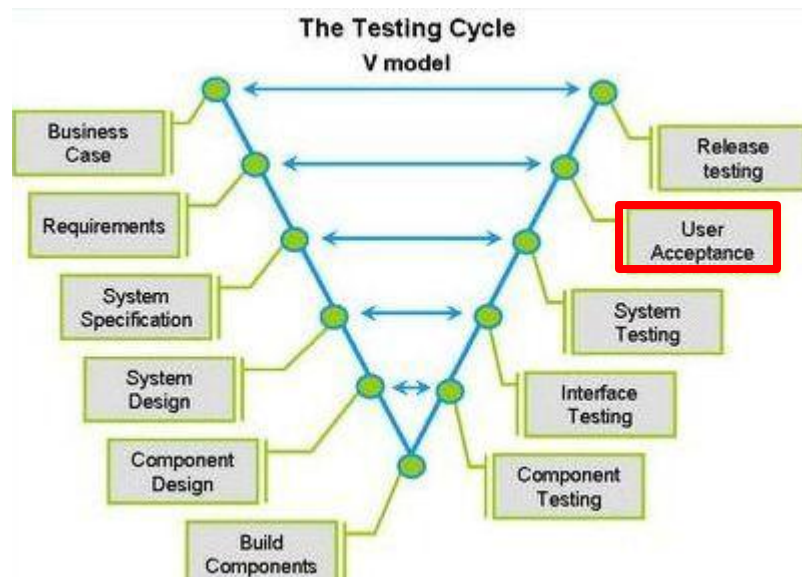

Fig 2: User Acceptance Testing Phase