

## USER ACCEPTANCE

User acceptance is the confirmation, through testing, that the delivered system meets all requirements, functions according to design parameters, and satisfies all business, technical, and management stakeholders.

Planning for user acceptance testing begins in the Concept Development Phase with the definition of deliverable acceptance criteria, which should include user acceptance criteria by which to test the system during the Test Phase. User acceptance criteria are documented in the Project Scope Statement and are updated later upon completion of the Requirements Analysis Phase. The user acceptance criteria are utilized as part of the requirements traceability to guide the design, development, testing, and acceptance of a system.

Effective user acceptance criteria:

- Are based on functional and non-functional requirements
- Are specific, unambiguous, measurable, attainable, and realistic
- Contain specific pass or fail criteria
- Address all aspects of the system in detail
- Indicate if a requirement is critical or non-critical (i.e., not required for acceptance)
- Identify unacceptable errors

In the Planning Phase, the Planning Team defines, schedules, and estimates the cost for user acceptance testing, which occurs during the Test Phase. Plans for the testing are progressively elaborated in the Requirements Analysis Phase with the development of the Test Master Plan, which addresses planned user acceptance testing in detail.

The execution of user acceptance testing is most successful when:

- Predefined and approved user acceptance criteria exist
- Users of the system perform the tests
- The test environment simulates real-world usage conditions
- Tests are conducted on a completed system that has passed unit testing, integration testing, and system testing
- Tests are conducted utilizing test cases that cover all scenarios. Test cases describe the functionality (scenario) being tested, input, expected result, actual result, pass/fail status and rectification strategy for the problems discovered, test run date and time, name of the person/role who ran the test
- All data has been migrated/converted (if applicable) prior to user acceptance testing
- Test case execution is automated with test scripts (when possible)

Successful completion of user acceptance testing requires verification that the delivered system meets all user acceptance criteria identified earlier in the project.