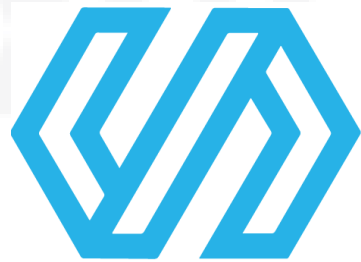


Software Testing Life Cycle



SKILLO

Agenda

1. What is STLC?
2. Requirements analysis/Review
3. Test Planning
4. Test Analysis and Design
5. Test Execution and Implementation
6. Exit criteria evaluation and Reporting
7. Test closure activities

What is STLC?

Sequence of activities conducted to perform Software Testing.

Requirements analysis/Review

Activities:

- ✓ testing team goes through the Requirement document with both Functional and non-functional details in order to identify the testable requirements
- ✓ meeting with the clients and the stakeholders
- ✓ Preparation of Requirement Traceability Matrix
- ✓ Prioritizing the features which need focused testing
- ✓ Identifying the details about the testing environment where actual testing will be performed

Deliverables:

- ✓ Requirement Traceability Matrix (RTM)
- ✓ Automation feasibility report

Test Planning

Activities:

- ✓ Estimation of testing effort
- ✓ Selection of Testing Approach
- ✓ Preparation of Test Plan, Test strategy documents
- ✓ Resource planning, roles assignments and responsibility to them
- ✓ Selection of Testing tool

Deliverables:

- ✓ Test Plan document
- ✓ Test Strategy document
- ✓ Best suited Testing Approach
- ✓ Number of Resources, skills required, their roles and responsibilities
- ✓ Testing tools to be used

Test Planning

Test Strategy Document

- ✓ Scope and Objectives
- ✓ Roles and responsibilities
- ✓ Communication and status reporting
- ✓ Industry standards to follow
- ✓ Test automation and tools
- ✓ Testing measurements and metrics
- ✓ Risks and mitigation
- ✓ Defect reporting and tracking
- ✓ Change and configuration management

Test Planning

Test Plan Document

- ✓ Test Plan ID
- ✓ Introduction
- ✓ Features to be tested
- ✓ Features not to be tested
- ✓ Test techniques and test types
- ✓ Testing tasks
- ✓ Suspension criteria

Test Planning

Test Plan Document

- ✓ Features pass or fail criteria
- ✓ Test environment
- ✓ Test deliverables - Test cases Documents, Test Plan, Testing Strategy, Test Scripts, Test Data, Exit criteria, Entry Criteria, Coverage Criteria
- ✓ Staff and training needs
- ✓ Responsibilities
- ✓ Schedule

Test Analysis and Design

Activities:

- ✓ test cases are prepared by the test team
- ✓ procedures on how the test should be executed and the expected results
- ✓ Preparing test data
- ✓ Environments setup

Deliverables:

- ✓ Test Cases
- ✓ Test Data
- ✓ Test Environment Setup

Test Execution and Implementation

Activities:

- ✓ Automation of test cases
- ✓ Prioritization of test cases
- ✓ Identify which tests will be a part of a regression suite
- ✓ Execution of the test cases
- ✓ Log bugs
- ✓ Retest fixed bugs
- ✓ Fill traceability matrix or update coverage

Deliverables:

- ✓ Completed RTM with execution status
- ✓ Test cases updated with results
- ✓ Defect reports

Exit criteria evaluation and Reporting

Activities:

- ✓ Compare Exit Criteria
 - Exit criteria can be defined for:
 - Test Requirement Coverage
 - Test Coverage
 - Defect Detection Metric
 - Performance satisfactory
 - Budget used
- ✓ Write reports with test execution results

Deliverables:

- ✓ Test execution report
- ✓ Coverage report
- ✓ Bug report

Test closure activities

Activities:

- ✓ Document learned from the project
- ✓ Analyzing test results report and bug report

Deliverables:

- ✓ Documentation with what we have done, what we need to improve

Q & A

THANK YOU