Software Test Plan with Detailed Explanation

Test plan is one of the documents in test deliverables. Like other test deliverables, the test plan document is also shared with the stakeholders. The stakeholders get to know the scope, approach, objectives, and schedule of software testing to be done.

**How To Prepare Effective Test Plan?**

Some of the measures are to start preparing the test plan early in the STLC, keep the test plan short and simple to understand, and keep the test plan up-to-date

**Who Prepare Test Plan Template?**

Usually, Test Lead prepares Test Plan and Testers involve in the process of preparing test plan document. Once the test plan is well prepared, then the testers write test scenarios and test cases based on test plan document.

**Sections of Test Plan Template:**

1. Test Plan Identifier
2. References
3. Introduction
4. Test Items
5. Features To Be Tested
6. Features Not To Be Tested
7. Approach
8. Pass/Fail Criteria
9. Suspension Criteria
10. Test Deliverables
11. Testing Tasks
12. Environmental Needs
13. Responsibilities
14. Staffing and Training Needs
15. Schedule
16. Risks and Contingencies
17. Approvals

Let’s see each component of the Test Plan Document. We are going to present the Test Plan Document as per IEEE 829 Standards.

**Test Plan Identifier:**

Test Plan Identifier is a unique number to identify the test plan.

Example: ProjectName\_0001

**References:**

This section is to specify all the list of documents that support the test plan which you are currently creating.

Example: SRS (System Requirement Specification), Use Case Documents, Test Strategy, Project Plan, Project Guidelines etc.,

**Introduction:**

Introduction or summary includes the purpose and scope of the project

Example: The objective of this document is to test the functionality of the ‘ProjectName’

**Test Items:**

A list of test items which will be tested

Example: Testing should be done on both front end and back end of the application on the Windows/Linux environments.

**Features To Be Tested:**

In this section, we list out all the features that will be tested within the project.

Example: The features which are to be tested are Login Page, Dashboard, Reports.

**Features Not To Be Tested:**

In this section, we list out the features which are not included in the project.

Example: Payment using PayPal features is above to remove from the application. There is no need to test this feature.

**Approach:**

The overall strategy of how testing will be performed. It contains details such as Methodology, Test types, Test techniques etc.,

Example: We follow Agile Methodology in this project

**Pass/Fail Criteria:**

In this section, we specify the criteria that will be used to determine pass or fail percentage of test items.

Example: All the major functionality of the application should work as intended and the pass percentage of test cases should be more than 95% and there should not be any critical bugs.

**Suspension Criteria:**

In this section, we specify when to stop the testing.

Example: If any of the major functionalities are not functional or system experiences login issues then testing should suspend.

**Test Deliverables:**

List of documents need to be delivered at each phase of testing life cycle. The list of all test artifacts.

Examples: Test Cases, Bug Report

**Testing Tasks:**

In this section, we specify the list of testing tasks we need to complete in the current project.

Example: Test environment should be ready prior to test execution phase. Test summary report needs to be prepared. 

**Environmental Needs:**

List of hardware, software and any other tools that are needed for a test environment.

**Responsibilities:**

We specify the list of roles and responsibilities of each test tasks.

Example: Test plan should be prepared by Test Lead. Preparation and execution of tests should be carried out by testers.

**Staffing and Training Needs:**

Plan training course to improve the skills of resources in the project to achieve the desired goals.

**Schedule:**

Complete details on when to start, finish and how much time each task should take place.

Example: Perform test execution – 120 man-hours, Test Reporting – 30 man-hours

**Risks and Contingencies:**

In this section, we specify the probability of risks and contingencies to overcome those risks.

Example: *Risk –*In case of a wrong budget estimation, the cost may overrun. *Contingency Plan –*Establish the scope before beginning the testing tasks and pay attention in the project planning and also track the budget estimates constantly.

**Approvals:**

Who should sign off and approve the testing project

Example: Project manager should agree on completion of the project and determine the steps to proceed further.