Test Plan ID: TP-AMZN-FUNC-001

1. Introduction

* This document outlines the test plan for E-Commerce System (Web Application).
* The purpose of this test plan is to ensure that the website's key functionalities, such as user login, product search, and item selection, work as expected.

3. References

* + IEEE Standard for Software Test Documentation
  + Katalon Studio Documentation
  + Amazon Web Application Requirements Specification

4. Features to Be Tested

* User Registration
* User Login
* Product Search
* Shopping Cart
* Checkout Process
* Order History

5. Features Not to Be Tested

* Non-functional requirements (e.g., performance, security)
* Third-party integrations

7. Approach

Test Levels:

1. Unit testing (individual components)
2. Integration testing (end-to-end workflows)

Test Types:

* 1. Functional testing
  2. UI testing
  3. Cross-browser testing

Test Design

1. Test Case ID
2. Test Description
3. Pre-Conditions
4. Test Steps
5. Expected Results
6. Actual Results

Tools:

1. Katalon Studio for test automation
2. Git for version control
3. Jenkins for CI/CD integration
4. TestCloud for cross-browser testing

8. Item Pass/Fail Criteria:

* + A test case will be marked as ‘Pass’ if the actual result matches the expected result.
  + A test case will be marked as ‘Fail’ if the actual result does not match the expected result or if an error occurs during execution.

9. Suspension Criteria and Resumption Requirements:

1. Suspension Criteria:
   * Critical defects that block further testing
   * Unavailability of the test environment
2. Resumption Requirements:
   * Critical defects are resolved
   * Test environment is restored

10. Test Deliverables:

* + Test plan document
  + Test cases and test scripts
  + Test execution reports
  + Defect reports
  + Integration setup documentation (Git, Jenkins)

11. Test Tasks:

* Define test scenarios and test cases.
* Prepare test data (login credentials, product search terms).
* Develop test scripts in Katalon Studio.
* Execute test scripts and log results.
* Perform cross-browser testing using TestCloud.
* Integrate Katalon with Git and Jenkins.
* Generate and analyze test reports.
* Send test reports via email.

12. Test Environment/Lab:

1. Hardware:

* Windows/macOS machines for test execution
* Stable internet connection

1. Software:
   * Katalon Studio
   * Git
   * Jenkins
   * TestCloud

13. Responsibilities:

**Test Manager:** Oversee the testing process and ensure timely delivery.

**Test Engineers:** Develop and execute test scripts, log defects, and generate reports.

**DevOps Engineer:** Set up Git and Jenkins integration.

14. Staffing and Training Needs:

* + Test engineers should be trained in Katalon Studio, Git, and Jenkins.
  + Training on Amazon's baseline document and requirements.

15. Schedule:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SNO** | **TASK** | **DAYS** | **DURATION** | **REMARKS** |
| 1 | Understanding and Analyzing requirements | 2 | 23rd February to 24th February |  |
| 2 | Generating Test scenarios | 1 | 25th February |  |
| 3 | Test case Documentation | 2 | 26th February to 27th February |  |
| 4 | Test data collection | 1 | 28th February |  |
| 5 | Test script development | 4 | 1st march to 4th march |  |
| 6 | Test execution | 2 | 5th march to 6th march |  |
| 7 | Cross-browser testing | 1 | 7th march |  |
| 8 | Integration with Git and Jenkins | 1 | 8th march |  |
| 9 | Report generation and analysis | 1 | 9th march |  |

16. Risks and Contingencies:

* + Risk: Cross-browser compatibility issues
  + Contingency: Use TestCloud for comprehensive testing
  + Risk: Flaky tests due to dynamic UI elements
  + Contingency: Use robust locators and wait mechanisms
  + Risk: Unavailability of the test environment
  + Contingency: Schedule testing during off-peak hours

17. Approvals:

* + Prepared by: Rahul Kumar Chauhan
  + Reviewed by:
  + Approved by:

18. Glossary:

* + Katalon Studio: A test automation tool
  + TestCloud: A platform for cross-browser testing
  + CI/CD: Continuous Integration/Continuous Deployment