

Test Plan for Amazon Project

1. Test Plan ID: AMZ_ST_TP_001

2. Introduction:

- This is the System Test Plan for the Amazon e-commerce platform, a globally recognized online retail website offering a diverse range of products.
- The application includes key features such as user authentication (Login), product search (ValidateSearchItem), shopping cart management (AddtoCart), and wishlist functionality (AddtoWishlist).

3. Test Items:

- Login
- ValidateSearchItem
- AddtoCart
- AddtoWishlist

4. References:

- Requirements
- Project Plan
- Test Strategy
- Use Cases (if available)
- High-Level Design Documents
- Low-Level Design Documents
- Process Guideline Document
- Prototypes

5. Features to Be Tested:

a) Login:

- Verify successful login with valid credentials:
 - Input valid username and password within the specified character range.
 - Confirm successful user login.
- Verify unsuccessful login with invalid credentials:
 - Input invalid username and password combinations outside the valid range.
 - Confirm appropriate error messages and prevention of unauthorized access.

- Validate forgot password functionality:
 - Click on the "Forgot Password" link.
 - Enter a valid email address within the valid range and verify the initiation of the password reset process.

b) ValidateSearchItem:

- Verify search functionality with valid search terms:
 - Input valid search terms for various product categories within the allowed character range.
 - Confirm the display of relevant search results.
- Verify no results are displayed for invalid search terms:
 - Input invalid search terms or nonsensical characters outside the valid range.
 - Confirm the absence of matching results.
- Validate advanced search options:
 - Use advanced search options such as filters and sorting within the valid range.
 - Confirm refined results based on the selected criteria.

c) AddtoCart:

- Add items to the cart:
 - Select items and add them to the cart.
 - Confirm the appearance of items in the cart with correct details.
- Verify the correct quantity and pricing in the cart:
 - Adjust the quantity of items in the cart within the specified limits.
 - Confirm the correct calculation of the total price.
- Remove items from the cart:
 - Remove items from the cart.
 - Confirm the successful removal of items and the updated cart.

d) AddtoWishlist:

- Add items to the wishlist:
 - Select items and add them to the wishlist.
 - Confirm the appearance of items in the wishlist.
- Verify the presence of added items in the wishlist:
 - Access the wishlist and confirm the display of added items.

- Remove items from the wishlist:
 - Remove items from the wishlist.
 - Confirm the successful removal of items and the updated wishlist.

6. Features Not to Be Tested: NA

7. Approach:

- **Testing Techniques:**
 - **Boundary Value Analysis:**
 - For Login, test with boundary values for the minimum and maximum allowed characters in the username and password fields.
 - For AddtoCart, validate the system's behavior with the minimum and maximum quantity limits.
 - **Equivalence Class Partitioning:**
 - For Login, test with valid and invalid equivalence classes of usernames and passwords.
 - For ValidateSearchItem, test with valid and invalid equivalence classes of search terms.
 - **Random Testing:**
 - Perform random inputs for search terms, quantities in the cart, and wishlist items within the specified range.
 - Verify the system's response to unexpected inputs.
 - **Regression Testing with Values:**
 - Re-run test cases with previous inputs within the valid range to ensure that new changes do not introduce defects.
- Use automated testing tools (Katalon Studio) for test case execution.
- Perform positive and negative testing for each feature.
- Validate user interface elements and backend functionality.

8. Features Pass/Fail Criteria:

- **Login**
 - **Pass Criteria**
 - Enter valid username
 - Enter valid password

- **Fail Criteria**
 - Enter invalid username
 - Enter invalid password

9. Suspension Criteria: Nil

10.Test Environment:

- **Client Side:**
 - Web Browsers
 - Google Chrome - Version 121.0.6167.140
 - Mozilla Firefox Version - Version 122.0
 - Edge Chromium – Version 121.0.2277.106
 - Operating Systems (Windows, macOS)
 - Katalon Studio – Version 7.0 and above

- **AUT Environment:**

WebUI

- Support all front-end frameworks: ReactJS, AngularJS, VueJS
- Cross-browser compatibility: Chrome, Firefox, Safari, Edge

11.Test Deliverables:

- Test Plan
- Test Case Documents
- Test Scenario Documents
- Test Data
- Opened and Closed Defect Reports
- Test Summary Report

12.Test Tasks:

- Create and execute test cases using Katalon Studio.
- Validate test results and report defects.
- Conduct regression testing after bug fixes.

13. Entry Criteria:

a) Test Design:

- Team formation, Responsibilities,schedule,requirements,test case template
- Training on domain, on automation tools

b) Test Execution

Readiness of test tab

Readiness of AUT

Requirements

Test case Documents

Test data

Defect Report Template

Etc....

14. Exit Criteria:

All possible test cases executed

Maximum defect fixed, final regression performed successfully

Confidence on test process

Time limitations

Budget limitations

15.Responsibilities:

S.NO	NAME	ROLE	RESPONSIBILITIES	REMARKS
1	Lingeshwaran	Test Lead	Test planning, guidance, Monitoring and test control	
2	Lingeshwaran	Sr. Tester	Test data collection, Generating test scenarios	
3	Lingeshwaran	Tester	Test case documentation, testexecution, defect reporting and tracking for login module	
4	Lingeshwaran	Tester	Test case documentation, testexecution, defect reporting and tracking for amazon application module	
5	Lingeshwaran	Tester	Test case documentation, testexecution, defect reporting and tracking for amazon application module	
6	Lingeshwaran	Automation Lead	Lead the automation efforts, design automation test scripts, and coordinate with the testing team for execution.	
7	Lingeshwaran	Performance Tester	Design and execute performance tests to evaluate the system's responsiveness and scalability.	

16.Schedule

SNO	TASK	DAYS	DURATION	REMARKS
1	Understanding and Analyzing requirements	4	4 th Jan to 7 th Jan	
2	Review meeting	1	8 th Jan	
3	Generating Test scenarios	3	11 th Jan to 13 th Jan	
4	Reviews	2	14 th Jan to 15 th Jan	
5	Test case Documentation	3	17 th Jan to 19 th Jan	

6	Reviews	2	20 th Jan to 21 th Jan	
7	Test data collection	2	22 nd Jan to 23 rd Jan	
8	Reviews	1	24 th Jan	
9	Verifying Test Environment Setup	1	25 th Jan	
10	Create Test Batches	2	26 th Jan to 27 th Jan	
11	Sanity Testing	1	28 th Jan	
12	Comprehensive testing	2	29 th Jan to 30 th Jan	
13	Sanity Testing	1	3 rd October	
14	Selecting Test Cases	2	4 th and 5 th October	
15	Regressing Testing	2	31 st Jan to 1 st Feb	
16	Sanity Testing	1	2 nd Feb	
17	Selecting Test Cases	1	3 rd Feb	
18	Regression Testing cycle -2	2	4 th Feb to 5 th Feb	
19	.			
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28	Final Regression	8	6 th Feb	
29	Evaluating Exit Criteria	1 or 2	6 th Feb	
30	Collecting all artifacts	2	6 th Feb to 7 th Feb	
31	Test Summary Report	1	8 th Feb	

17.Training (Dec 5 – Jan 5):

- a. Training program on Amazon application.
- b. Test Automation Training Using Katalon Studio tool.

18.Risks and Mitigations: Nil

19.Approvals:

S.No	Task/Document	Author/Role	Date& Signature
1	TestPlan Documentation	Lingeshwaran (Test Lead)	[Date& Signature]
2	Review	Lingeshwaran(Quality Analyst)	[Date& Signature]
3	Approval	Lingeshwaran(Project Manager)	[Date& Signature]

20.Glossary:

- a. AUT: Application Under Test
- b. RTM: Requirements Traceability Matrix
- c. Jira: Bug Tracking Tool