## **Test Strategy – Demo Web Shop**

**Project Name:** Demo Web Shop – E-Commerce Website Testing  
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### 1. Introduction

The Demo Web Shop is an e-commerce web application that enables users to register, log in, browse products, search and filter items, add them to a shopping cart, proceed through checkout, make payments, and track orders. This Test Strategy outlines the Agile Scrum-based approach for validating all functionalities, focusing on delivering high-quality increments in each sprint through collaborative planning, continuous integration, automated regression testing, and early defect detection to ensure a smooth, reliable, and user-friendly online shopping experience.

### 1.1 Purpose

The purpose of this Test Strategy is to establish a clear and structured approach for testing the Demo Web Shop website, outlining the scope, roles, responsibilities, and tools to ensure thorough quality validation and on-time delivery of a reliable, high-performing application.

### 2. Test Items

| Module | Description | Testing Type |
| --- | --- | --- |
| User Authentication | Account Creation,  login,password recovery | Functional, Negative |
| Product Catalog | Keyword search, category filter, price sorting | Functional, Usability |
| Shopping Cart | Add/Remove Products, Update Quantity, Price Calculation | Functional, Regression |
| Checkout | Address entry, payment gateway integration | Functional, Integration |
| Order Management | Order History, Order Details | Functional, UI |
| Wishlist | Add/Remove products to wishlist | Functional |

### 5. Approach

Testing will follow **Agile Scrum methodology**:

* Testing is performed within the sprint in which the feature is developed.
* Test cases are linked to user stories in Jira.
* Automation is implemented for regression using Selenium WebDriver.
* Continuous Integration with Jenkins for automatic test execution after each build.
* Daily stand-ups for test progress and defect updates.

### 5.1 Entry Criteria

* User stories are refined and accepted in sprint planning.
* Acceptance criteria are clearly defined and approved.
* Test environment is ready with the latest stable build.

### 5.2 Exit Criteria

* All acceptance criteria met.
* No open critical/high severity defects.
* 100% execution of committed test cases.

### 6. Metrics & Measures

| Metric | Description |
| --- | --- |
| Test Case Execution Rate | % of executed test cases vs planned |
| Defect Density | Defects per module or story point |
| Pass Percentage | (Passed test cases / Executed test cases) × 100 |
| Defect Reopen Rate | % of reopened defects after fix verification |

### 6. Pass/Fail Criteria:

| Criteria | Pass | Fail |
| --- | --- | --- |
| Critical Test Cases | All pass | Any fail |
| High Severity Defects | 0 open | >0 open |
| Acceptance Criteria | 100% met | <100% met |

### 10. Test Deliverables

| Deliverable | Description |
| --- | --- |
| Test Plan | Sprint-specific testing scope |
| Test Cases | Manual & automated test cases |
| Daily Execution Report | Test execution status |
| Defect Reports | Logged in Jira |
| Test Summary Report | Final sprint test results |

### 9. Environmental Needs

* Browsers: Chrome (latest), Firefox (latest), Edge.
* OS: Windows 10/11.
* Payment Test Data: Sandbox credit card numbers
* User Data: Dummy accounts for login tests

### 12. Tools & Technology Stack

| Category | Tool | Usage |
| --- | --- | --- |
| Test Management | Jira | User story-based test case management |
| Automation | Selenium WebDriver (Java) | Regression test automation |
| CI/CD | Jenkins | Automated execution after build |
| Defect Tracking | Jira | Bug logging and tracking |
| Collaboration | Confluence, Slack | Documentation & team communication |

### 13. Notification & Escalation Path

| Level | Contact Person | Role |
| --- | --- | --- |
| Level 1 | Test Manager | First escalation for QA issues |
| Level 2 | Project Manager | For critical delays or blockers |
| Level 3 | Product Owner | Final decision on release/block |