

Test Plan For NopCommerce.com Website Based On Agile

ChangeLog

| Version | Change Date | By | Description |
|----------------|----------------|---------------------------------|-----------------------------------|
| version number | Date of Change | Name of person who made changes | Description of the changes made |
| 1.0 | 28-Aug-2025 | QA Team | Initial Test Plan for nopCommerce |
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1. Introduction

1.1 Scope

1.1.1 Scope

- User Registration & Login
- UI Functionality Testing (search, navigation, categories)
- Product Browsing (Apparel, Books, Jewellery, Computers, Electronics)
- Sorting & Filtering (price, rating, name)
- Cart & Checkout Flow (add to cart, quantity updates)
- Gift Cards & Digital Downloads (sorting, display per page, keyword search)
- Cross-browser testing (Chrome, Firefox, Edge)

1.1.2 Out Scope

- Payment gateway integration
- Performance/Load Testing
- Penetration/Security Testing
- Backend/Database validations

1.2 Quality Objective

- Validate all core ecommerce functionalities
- Ensure that core e-commerce functionalities such as user registration, login, product browsing, cart management, and checkout work as expected.
- Validate that product categories (Apparel, Books, Jewellery, Computers, Electronics, Gift) and their associated features like sorting, filtering, and pagination perform correctly.
- Confirm that search functionality returns relevant results for keywords and categories.
- Ensure that the UI/UX is consistent and responsive across supported browsers (Chrome, Firefox, Edge).
- Detect and report defects early in each sprint to prevent defect leakage.
- Deliver a stable, bug-free online store experience before go-live.

1.3 Roles and Responsibility

| Role | Name | Responsibility |
|------------------|----------|--|
| Test Engineer | Tester A | Testing plan, assigns tasks |
| Test Engineer | Tester B | Reviews test cases, monitors execution. |
| Test Engineer | Tester E | Write and execute test cases. |
| | | |
| Business Analyst | BA E | Shares requirement validates test coverage |
| Developer | Dev D | Fixes bugs, support testing |

2. Test Methodology

2.1 Overview

Agile Scrum Based Testing Process for
demo.nopcommerce.com(Ecommerce Website)

- Requirement Analysis
- Test Planning
- Test Case Design
- Test Environment Setup
- Execution & Defect Reporting
- Daily Stand-ups & Sprint Review

2.2 Test Levels

- Smoke Testing – 1 day
- Functional Testing – 3–4 days
- Regression Testing – 2 days
- UAT Support – 1 day

Schedule

- Sprint Duration: 2 weeks
- Test Planning: Day 1
- Test Design: Day 2–3
- Execution: Day 4–9
- Review & Retrospective: Day 10

2.3 Bug Triage

- A bug triage meeting will be conducted daily during active testing phases.
- Participants include QA Lead, Developer Lead, Business Analyst, and Product Owner.

- All reported defects are reviewed and prioritized based on severity and business impact.
- Bugs are categorized as Critical, Major, Minor, or Trivial and assigned to respective owners.
- Critical bugs are addressed immediately and re-tested as a priority.
- Defect status (Open, In Progress, Re-test, Closed) is updated in Jira during triage.
- Triage decisions and action items are documented and shared with all stakeholders.

| Severity | Example Issue | Action |
|----------|-----------------------------|----------------------------|
| Critical | Checkout button not working | Immediate fix |
| Major | Login fails for valid user | Sprint bug fix |
| Minor | Product images misaligned | Logged, fix as time allows |
| Trivial | Typo in error message | Fixed in future sprint |

2.4 Suspension criteria and Resumption Requirements

Suspend if:

- Login/Register fails completely
- Product categories don't load
- Checkout/cart broken
- Test environment unstable

Resume if:

- Critical/Major issues resolved
- Stable build deployed
- Test data ready

2.5 Test Completeness

- 1.1- 100% of the test cases mentioned in the test plan are executed.
- 1.2 - All critical and major bugs are resolved and retested.
- 1.3 - All functional requirements are validated through testing
- 1.4 - All requirements are mapped to respective test cases.

- 1.5- Final test summary report is prepared and reviewed.
- 1.6- Test results are reviewed and approved by stakeholders.

Daily/Weekly Reporting Includes:

- Total test cases executed
- Pass/fail count
- Blocked tests (due to environment or bugs)
- Defect summary by severity
- Recommendations

3. Test Deliverables

| Deliverables | Description |
|---------------------------------------|---|
| Test plan | Detailed plan outlining test strategy, scope, schedule, and resources |
| Test Scenarios & Test Cases | Documented test conditions and step-by-step test cases for all functionalities. |
| Requirement Traceability Matrix (RTM) | Mapping of requirements to test cases ensuring coverage |
| Test Data | Input data sets required to execute test cases |
| Defect Report | Logs of identified bugs with severity, status, and resolution details. |

4.Resources and Environment Needs

4.1 Testing Tool And Framework

| Tool Name | Purpose | Usage Phase |
|---------------------|---|---|
| Selenium | Web application automation testing | System Testing, Regression Testing |
| Cucumber(Framework) | Supports BDD (Behavior Driven Development) by writing test cases in | Test Case Design, Test Execution, Reporting |

| | | |
|--------------|--|---|
| | plain English (Gherkin syntax) | |
| Jira | Bug/defect tracking and management | Entire Testing Lifecycle |
| Apache Maven | Build automation tool that manages project dependencies (Selenium, TestNG, Cucumber libraries) And Standardizes project structure (POM.xml). | Build & Dependency Management – Downloading and maintaining required libraries & Test Execution |
| MS Excel | Used for test data management (e.g., login credentials, product details, search keywords) | Test Data Preparation – Input values for different test cases. |

4.2 Test Environment

| Component | Description |
|------------------|---|
| Operating System | Windows 11, Linux |
| Browser | Chrome, FireFox, etc |
| Application Url | https://demo.nopcommerce.com/ |
| Test Data | Dummy users, policies |
| Tool Installed | Selenium, Jira, Apache Maven |
| Network | Secure Internal LAN or VPN |

5. Basic Positive and Negative Test Scenarios

5.1. User Registration & Login

| Test Scenario | Type |
|-----------------------------|----------|
| Register with valid details | Positive |

| Test Scenario | Type |
|--------------------------------------|----------|
| Register with invalid email/password | Negative |
| Login with correct credentials | Positive |
| Login with incorrect password | Negative |

5.2. Product Browsing

| Test Scenario | Type |
|----------------------------|----------|
| View apparels and shoes | Positive |
| Invalid category selection | Negative |

5.3. Sorting & Filtering

| Test Scenario | Type |
|-----------------------------------|----------|
| Sort books by Name, Price, Rating | Positive |
| Sort gift cards incorrectly | Negative |

5.4. Cart & Checkout

| Test Scenario | Type |
|-----------------------------|----------|
| Add product to cart | Positive |
| Empty cart checkout attempt | Negative |

5.5. Search

| Test Scenario | Type |
|----------------------------------|----------|
| Search by valid keyword 'Laptop' | Positive |
| Search by invalid keyword 'XYZ' | Negative |

6.Terms/Acronym

| Term | Definition |
|------|---|
| QA | Process to ensure product quality via defined procedures |
| AUT | Application under test |
| QC | Activities like testing to identify defect |
| STD | Software Test Document:Describes test cases, inputs, and Expected results |

This test plan has been created to ensure all key features of nopCommerce (demo.nopcommerce.com) are tested properly under the Agile process. It covers test scope, responsibilities, tools, environments, and scenarios for both positive and negative flows. With proper planning, sprint-based execution, and continuous updates, the QA team is confident in delivering a stable, secure, and high-quality e-commerce platform.