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

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
Opertaing System	Windows 11, Linux
Browser	Chrome, FireFox, etc
Application Url	https://demo.nopcommerce.com/
Test Data	Dummy users, policies
Tool Installed	Selenium, Jira, Apachae 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.