

# Test Plan Document

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## Tricentis Demo Web Shop

**Document Version:** 1.0

**Prepared By:** Lakindu De Silva

**Date:** December 15, 2025

**Project:** Software Quality Engineering Coursework

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## 1. Document Information

Field	Value
Project Name	Tricentis Demo Web Shop Testing
Application URL	<a href="https://demowebshop.tricentis.com/">https://demowebshop.tricentis.com/</a>
Test Plan Version	1.0
Created By	Lakindu De Silva
Creation Date	December 15, 2025
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## 2. Introduction

### 2.1 Purpose

This Test Plan document describes the testing approach, objectives, scope, and schedule for testing the Tricentis Demo Web Shop e-commerce application. It identifies the items to be tested, features to be tested, testing tasks, personnel responsible, and associated risks.

### 2.2 Background

The Tricentis Demo Web Shop is an e-commerce demonstration website built on the nopCommerce platform. It provides full e-commerce functionality including product browsing, shopping cart, user accounts, and checkout processes.

### 2.3 Objectives

1. Verify all core e-commerce functionalities work correctly
  2. Validate user interface and user experience
  3. Test form validations and error handling
  4. Identify and document any defects
  5. Automate critical test scenarios
  6. Provide quality assessment and release recommendation
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### 3. Scope

#### 3.1 Features to be Tested

Module	Features	Test Cases
<b>User Management</b>	Registration, Login, Logout, Password Recovery	8
<b>Product Browsing</b>	Categories, Search, Filters, Sorting	6
<b>Product Details</b>	Images, Price, Description, Reviews, Options	5
<b>Shopping Cart</b>	Add, Update, Remove, Calculations	6
<b>Wishlist</b>	Add, View, Remove, Move to Cart	3
<b>Checkout</b>	Billing, Shipping, Payment, Confirmation	4
<b>Forms &amp; Validation</b>	Contact, Newsletter, Error Messages	4
<b>UI/UX</b>	Layout, Navigation, Responsiveness	4
<b>Total</b>		<b>40</b>

#### 3.2 Features NOT to be Tested

Feature	Reason
Payment Processing	Demo environment (no real transactions)
Email Delivery	External service
Admin Panel	Out of scope
Mobile App	Not applicable
API Endpoints	Out of scope
Performance	Not in requirements

### 4. Test Scenarios Overview

#### 4.1 Functional Test Scenarios (20 Test Cases)

##### **User Management (8 TCs)**

- TC001: Valid user registration
- TC002: Registration with existing email (negative)
- TC003: Registration with invalid email format (negative)
- TC004: Registration with mismatched passwords (negative)
- TC005: Valid user login
- TC006: Login with invalid credentials (negative)
- TC007: Login with empty fields (negative)
- TC008: Logout functionality

## Product & Cart (12 TCs)

- TC009: Search for existing product
- TC010: Search with no results (negative)
- TC011: Browse category products
- TC012: Filter products by price
- TC013: Sort products by name/price
- TC014: View product details
- TC015: Add simple product to cart
- TC016: Add configurable product to cart
- TC017: Update product quantity in cart
- TC018: Remove product from cart
- TC019: Apply discount code
- TC020: Proceed to checkout

## 4.2 Usability Test Scenarios (6 Test Cases)

- TC021: Navigation menu accessibility
- TC022: Breadcrumb navigation
- TC023: Search box accessibility
- TC024: Cart mini-preview functionality
- TC025: Error message clarity
- TC026: Form field labels and placeholders

## 4.3 UI/UX Test Scenarios (6 Test Cases)

- TC027: Homepage layout verification
- TC028: Product image display
- TC029: Price display format
- TC030: Button styling and states
- TC031: Footer links verification
- TC032: Header elements alignment

## 4.4 Boundary/Negative Test Scenarios (8 Test Cases)

- TC033: Quantity field with zero value
- TC034: Quantity field with negative value
- TC035: Quantity field with max value
- TC036: Password with minimum length (boundary)
- TC037: Password with special characters only
- TC038: Email with maximum length
- TC039: Empty cart checkout attempt
- TC040: Gift card without required fields

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## 5. Test Automation Plan

### 5.1 Automated Test Cases

TC ID	Scenario	Priority	Reason for Automation
AT-001	User Registration	Critical	Regression, Data-driven
AT-002	User Login	Critical	High frequency use
AT-003	Add to Cart	Critical	Core e-commerce function
AT-004	E2E: Browse → Cart → Checkout	Critical	Business critical path

## 5.2 Automation Tool

**Playwright** - Modern end-to-end testing framework

## 5.3 Automation Deliverables

- Automated test scripts in `/automation` folder
  - HTML test report
  - Screenshots on failure
  - Test execution logs
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## 6. Test Environment

### 6.1 Environment Details

Component	Specification
URL	<a href="https://demowebshop.tricentis.com/">https://demowebshop.tricentis.com/</a>
Environment Type	Demo/Test
Browser	Google Chrome (Latest)
Operating System	Windows 10/11
Screen Resolution	1920x1080

### 6.2 Test Tools

Tool	Purpose
Playwright	Test automation
VS Code	Script development
Chrome DevTools	Debugging
Windows Snipping Tool	Screenshots
Git	Version control

## 7. Test Data

## 7.1 User Registration Data

<b>Scenario</b>	<b>First Name</b>	<b>Last Name</b>	<b>Email</b>	<b>Password</b>
Valid	Lakindu	DeSilva	lakindu.test@email.com	Test@123
Invalid Email	Test	User	invalid-email	Test@123
Weak Password	Test	User	test@email.com	123
Duplicate	Lakindu	DeSilva	lakindu.test@email.com	Test@123

## 7.2 Product Test Data

<b>Product Type</b>	<b>Product Name</b>	<b>Expected Behavior</b>
Simple	Computing and Internet (Book)	Direct add to cart
Configurable	Build your own computer	Requires option selection
Gift Card	\$25 Virtual Gift Card	Requires recipient info

## 8. Entry and Exit Criteria

### 8.1 Entry Criteria

<b>Criteria</b>	<b>Status</b>
Test environment accessible	<input type="checkbox"/>
Test plan approved	<input type="checkbox"/>
Test cases documented	<input type="checkbox"/>
Test data prepared	<input type="checkbox"/>
Automation scripts ready	<input type="checkbox"/>

### 8.2 Exit Criteria

<b>Criteria</b>	<b>Target</b>
Test case execution	100%
Pass rate	≥90%
Critical defects	0 open
High defects	0 open
Automation pass rate	100%

## 9. Test Execution Schedule

## Phase 1: Documentation (30 minutes)

- Create Testing Requirements
- Create Test Strategy
- Create Test Plan
- Create Test Cases (40)
- Create Templates

## Phase 2: Automation (45 minutes)

- Setup Playwright project
- Write registration test
- Write login test
- Write add-to-cart test
- Write E2E checkout test
- Execute and verify

## Phase 3: Manual Testing & Reporting (2-3 hours)

- Execute manual test cases
  - Capture screenshots
  - Log defects
  - Generate reports
  - Create final documentation
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# 10. Defect Management

## 10.1 Defect Tracking

All defects will be logged in the Defect Report document with:

- Unique Defect ID
- Summary
- Steps to reproduce
- Expected vs Actual result
- Severity and Priority
- Screenshot evidence
- Linked Test Case ID

## 10.2 Severity Definitions

Severity	Definition
Critical	System crash, data loss, complete feature failure
High	Major feature not working, significant impact
Medium	Feature partially working, workaround exists
Low	Minor/cosmetic issue

## 11. Risks and Mitigations

Risk	Impact	Probability	Mitigation
Website downtime	High	Low	Take screenshots early, use recordings
Time constraints	High	Medium	Prioritize critical test cases
Test data conflicts	Medium	Medium	Use unique identifiers (timestamps)
Flaky automation	Medium	Medium	Add proper waits, retry logic
Browser compatibility	Low	Low	Focus on primary browser

## 12. Deliverables Checklist

Deliverable	Status
Testing Requirements Document	<input checked="" type="checkbox"/>
Test Strategy Document	<input checked="" type="checkbox"/>
Test Plan Document	<input checked="" type="checkbox"/>
Test Cases Document (40 TCs)	<input type="checkbox"/>
Playwright Automation Scripts	<input type="checkbox"/>
Defect Report	<input type="checkbox"/>
Test Coverage Report	<input type="checkbox"/>
Final Report	<input type="checkbox"/>
Presentation Slides	<input type="checkbox"/>

## 13. Approval

Role	Name	Signature	Date
QA Engineer	Lakindu De Silva	-	-
Project Lead	-	-	-

## 14. Document History

Version	Date	Author	Changes
1.0	Dec 15, 2025	Lakindu De Silva	Initial version