

Capstone Project: E-Commerce Application Domain Project Requirements

Project Overview

Project Name: Automation Testing for Nixonex E-commerce

Domain: E-Commerce Application

Project Description: This project aims to automate testing of the <https://www.demoblaze.com/> website using Java programming language and Selenium WebDriver.

The automation will cover functional testing of key user flows to ensure the application behaves as expected across different browsers and platforms.

Objectives:

- Automate testing user workflows on <https://www.demoblaze.com/>
- Verify application functionality across multiple browsers (Chrome, Firefox, and Edge).
- Validate user interface elements for responsiveness.
- Implement test cases for both positive and negative scenarios.

Scope:

In Scope:

- Register Functionality
- Login functionality.
- Navigation through different pages and sections.
- Search functionality.
- Add products to the Shopping Cart.
- Basic UI responsiveness across devices and browsers.

Out of Scope:

- Performance testing.
- Security testing beyond basic input validation.
- Load testing.

Tools and Technologies:

- **Automation Framework:** Selenium WebDriver
- **Programming Language:** Java
- **IDE:** IntelliJ IDEA / Eclipse
- **Build Tool:** Maven
- **Unit Testing Framework:** TestNG

Test Environment:

- **Target Application:** <https://www.demoblaze.com/>
- **Supported Browsers:** Chrome, Firefox, Edge (Any One)
- **Operating Systems:** Windows, macOS, Linux (Any One)

Flow Of the Project:

Home Page:

- User lands on the home page.
- View featured products or promotions.

Product Browsing:

- User navigates to different product categories (e.g., Electronics, Clothing, Home Appliances).
- Filters products based on criteria (e.g., price range, brand).

Product Detail Page:

- User clicks on a product to view details.
- View product images, descriptions, specifications, and customer reviews.
- Adds the product to the cart or wish list.

Shopping Cart:

- User adds products to the shopping cart.
- Adjust quantities or remove items.
- Proceeds to checkout.

Checkout Process:

- User enters shipping address and selects shipping method.
- Enters payment information (credit card, PayPal, etc.).
- Reviews order summary and confirms purchase.

Order Confirmation:

- User receives confirmation of the order.
- Download PDF for the same.

Description of Automation Testing:

1. Create a page Object model for this application and write an automation script for a complete process where the user can register to log in and then search for the product add it to the cart and complete the checkout process.
2. Add an Extent report for the project.
3. Add Screenshots for all modules.
4. Push the project script on GitHub and share the link along with a PDF for the complete Project Work.

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