Test Plan, Design & Strategy for AutomationExercise.com

1. Introduction

This document outlines the test plan, design, and strategy for testing the website AutomationExercise.com. The website consists of various views and user flows, each serving different purposes and functionalities. The goal of this test plan is to ensure that all parts of the website are thoroughly tested for functionality, usability, and performance.

2. Scope

The scope of testing includes:

- Testing all views (Home screen, Product details, Cart & cart summary, Account creation & sign in, Address, Payment, and Order confirmation).
- Testing all user flows as described in the user flows section.

3. Test Environment

The test environment will consist of:

- Testing framework: Cypress
- Browser compatibility: Chrome, Firefox, Safari
- Devices: Desktop

4. Test Strategy

a. Views Testing

- Each view will be tested individually to ensure that all elements and functionalities are working as expected.
- Automated tests will cover basic functionality and usability aspects.
- Manual testing will be performed for visual and cross-browser testing.

b. User Flows Testing

- Each user flow will be tested end-to-end to ensure that the expected sequence of actions leads to the desired outcome.
- Automated tests will simulate user interactions and verify the expected behavior at each step.
- Manual testing will be performed to verify edge cases, error handling, and usability aspects.

5. Test Scenarios

a. Home Screen

1. Verify that all available products are displayed on the home screen.
2. Verify that scrolling halfway down the page scrolls the page to the expected position.

b. Product Details

1. Verify that clicking on "View product" under the picture of a product navigates to the product details page.
2. Verify that the quantity box can be personalized and accepts input.

c. Cart & Cart Summary

1. Verify that added products are displayed in the cart.
2. Verify that clicking on "Proceed to Checkout" navigates to the checkout page.
3. Verify that the cart summary displays the correct information about the added items.

d. Account Creation & Sign In

1. Verify that the user can create an account and fill in personal details.
2. Verify that the user can sign in with existing credentials.

e. Address

1. Verify that the user can review and edit the address.
2. Verify that the user can include a comment before proceeding to payment.

f. Payment

1. Verify that the user can enter credit card details.
2. Verify that clicking on "Pay and Confirm Order" completes the payment process.

g. Order Confirmation

1. Verify that the order confirmation page displays the final details of the order.
2. Verify that clicking on "Continue" redirects to the home screen.

h. User Flows

1. Perform the entire user flow described in the user flows section, ensuring that each step leads to the expected outcome.

6. Test Execution

a. Automated Testing

- Automated tests will be written using Cypress to cover the majority of functional test cases.
- Tests will be organized into test suites corresponding to each view and user flow.
- Tests will be run in headless mode for faster execution.

b. Manual Testing

- Manual testing will be performed for visual testing, cross-browser testing, and usability testing.
- Testers will use various devices and browsers to ensure compatibility and responsiveness.
- Testers will also verify error handling, edge cases, and user experience aspects.

7. Reporting and Documentation

- Test results will be recorded in test management tools like TestRail Test Case Lab...
- Detailed test reports will be generated after each test cycle, including information about test coverage, test execution results, and any issues found.
- Documentation will be updated with any changes or enhancements to the test plan, design, or strategy.

8. Conclusion

This test plan outlines the approach for testing AutomationExercise.com, covering all views and user flows to ensure the website's functionality, usability, and performance. By following this plan and strategy, we aim to identify and address any issues or defects and deliver a high-quality product to end users.