Test Strategy Document

Introduction:

This document outlines the test strategy for the e-commerce platform Saucedemo.com. It includes a detailed analysis of key features and sub-features to create a test plan that ensures a thorough evaluation of the application's functionality and user experience.

Chosen feature by priority for testing purposes:

The test strategy will focus on the key features and their associated functionalities:

- **Login**:
  - <u>Critical</u>: Essential for user access. A non-functional login prevents any user action.

- **Inventory**:
  - <u>Critical</u>: Adding to the cart is critical as it's a direct step to the purchase.

  - <u>Less Critical</u>: Features like *sorting*, *viewing item details*, and *removing items from the cart* are helpful for user experience but not essential for completing a transaction.

- **Cart**:
  - <u>Critical</u>: Reviewing selected items and proceeding to checkout key features for a complete transaction.

  - <u>Less Critical</u>: *Removing items* and *continuing shopping* are important but not as critical.

- **Checkout**:
  - <u>Critical</u>: The checkout process, especially payment, is a high-stakes step with direct impact on revenue and legal compliance.

  - <u>Less Critical</u>: All aspects of checkout are important since they potentially affect revenue.But features such as *coupon application* or *gift options* are secondary to the payment transactions.

Reasoning behind the feature prioritization:

Main reasons of the decided features and respective functionalities, have been taken into consideration user impact on the application usage and the business objectives.

<u>Focus being</u>:
- Features that enable the user to fulfill purchases.
- Features that might have several integrations between themselves.
- Features that might prevent application workflow.

Test Strategy Document

Test Scenarios:

- **Checkout Feature (High Priority)**
  - Payment Processing: Confirm the successful processing of payments and proper handling of payment failures.
  - Transaction Completion: Verify that transactions are completed correctly and that confirmation is provided to the user.
- **Login Feature (High Priority)**
  - Successful Login: Test that users can log in using valid credentials and access the platform.
  - Invalid Login Handling: Ensure the system securely handles invalid login attempts.
- **Inventory Feature (Medium Priority)**
  - Add to Cart: Validate that users can add items to their shopping cart without issues.
- **Cart Feature (Medium Priority)**
  - Review and Checkout: Ensure users can review their cart items and initiate the checkout process.
  - Item Removal: Test that users can remove items from the cart, recognizing it as less critical than checkout.
- **Inventory Feature (Lower Priority)**
  - Product Details View: Test that detailed product information is viewable, even though it's a less critical action.
- **Checkout Feature (Lower Priority)**
  - Apply Coupon Code: Check that coupon codes can be applied and that discounts are correctly calculated.
  - Gift Options: Test the functionality of selecting gift options, when available, during the checkout process.

Test Data:
- Valid and invalid user credentials for login scenarios.
- A diverse set of products to cover various inventory scenarios.

Test Environment:
- Staging/QA environment replicating the production setup.
- Cross-browser testing on Chrome, Firefox, and Edge..
- Compatibility testing on desktop and mobile devices (iOS and Android).

Assumptions and Constraints:
- The staging environment is assumed to be an accurate representation of the production environment.
- Payment gateway testing will use mock services due to the inability to perform real transactions.
- Testing is constrained by the availability of the staging environment and test data setup.

Test Strategy Document

Risk Evaluation:

Feature	Probability (1-5)	Impact (1-5)	Risk Level
Login (1)			
- Successful login	5	5	25
- Account lockout	4	5	20
- Problem reporting	3	4	12
Burger Menu (2)			
- Redirect to inv.	2	3	6
- Redirect to web	2	2	4
- Logout	3	5	15
- Reset app state	2	3	6
Inventory (3)			
- View products	3	5	15
- Add to cart	3	4	12
- Remove from cart	3	3	9
- Sort A to Z	3	3	9
- Sort Z to A	3	3	9
- Sort Low to High	3	3	9
- Sort High to Low	3	3	9
- View item details	3	4	12
- Add to cart (det)	3	4	12
- Remove from cart	3	4	12
Cart (4)			
- Display grid	3	3	9
- Remove from cart	3	4	12
- Continue shopping	2	3	12
- Proceed to checkout	4	5	20
Checkout (5)			
- Provide info	4	5	20
- Checkout overview	4	5	20
- Enter payment info	3	5	15
- Display totals	3	4	12
- Finish order	4	5	20
- Cancel checkout	2	3	6
- Return to homepage	2	3	6