Requirements Specification — SauceDemo Website

1. Overview

The SauceDemo website is an e-commerce demo application that enables users to authenticate, browse products, add items to a shopping cart, and complete a checkout process. The application supports product sorting, order review, and multiple test-specific user behaviors.

2. User Roles

Role	Description
Guest	Can access the login page only; authentication is required to use the site
Standard User	Can browse products, add items to the cart, and complete checkout
Locked Out User	Cannot log in and receives a locked-out error message
Problem User	Can log in but encounters UI and data inconsistencies (test user)
Performance User	Can log in but may experience slower system performance (test user)

3. Functional Requirements

🔓 3.1 Authentication

- The system must provide a login form with username and password fields.
- Only valid credentials should allow successful login.
- Invalid login attempts must display a clear and descriptive error message.
- Locked-out users must be prevented from logging in.
- The password field must mask user input.

Acceptance Criteria

- Given valid credentials, the user is redirected to the product dashboard.
- Given invalid credentials, an error message is displayed.

🛍️ 3.2 Product Catalog

- Upon successful login, users must see a list of available products.
- Each product must display:
  - Product name

- Price
- Product image
- "Add to Cart" button
- Users must be able to sort products (e.g., by name or price in ascending/descending order).

Acceptance Criteria

- When the user selects "Price: Low to High," the products are reordered correctly.

🛒 3.3 Shopping Cart

- Added products must appear on the Cart page.
- Users must be able to remove items from the cart.
- The cart must display the total number of items and the total price.

Acceptance Criteria

- Clicking the cart icon displays all selected items with correct prices.
- Removing an item updates both the cart count and total price.

🧾 3.4 Checkout Process

The checkout process consists of three steps:

1. **Information** – User enters first name, last name, and postal code
2. **Overview** – User reviews items and pricing
3. **Complete** – Final confirmation is displayed

- All required fields must be completed to proceed.

Acceptance Criteria

- If required checkout information is missing, the user cannot proceed and receives an error message.

4. Non-Functional Requirements

⚡ 4.1 Performance

- Home and dashboard pages must load within 3 seconds under average network conditions.
- Sorting and cart actions must respond within 1 second.

📱 4.2 Usability

- The UI must be intuitive and easy to navigate.
- Buttons and forms must have clear labels and consistent styling.
- Validation and error messages must be informative and user-friendly.

🔒 4.3 Security

- Passwords must never be displayed or stored in plaintext.
- Authentication must provide basic protection against brute-force attempts.

🧪 4.4 Testability

- All core user flows (login, add to cart, checkout) must be fully automatable using UI-based tests.

5. Edge Cases & Constraints

- Locked-out users must receive a specific locked-out message.
- Problem users may experience intentional UI or data defects for testing purposes.
- Simulated network latency must not break critical user flows.

6. Sample User Stories

ID	User Story	Acceptance Criteria
US001	As a user, I want to log in so that I can access products	Valid login redirects to product page
US002	As a user, I want to sort products by price	Product list is sorted correctly
US003	As a user, I want to add items to my cart	Cart count and total update correctly
US004	As a user, I want to complete checkout	Confirmation page is displayed

7. Example UI Flow (Text)

Login → Product List → Add Items → Cart → Checkout Info → Overview → Complete

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Test Credentials
Username: prabhakaranSankar