

Exploratory Testing for the Basic Functions of Juice Shop

URL: <https://juice-shop.herokuapp.com/#/>

Objective:

To perform exploratory testing on the Juice Shop application to verify the basic functionality, identify potential defects, and evaluate the overall user experience.

Test Environment:

- **Browser:** Google Chrome: 131.0.6778.205
- **Operating System:** macOS and Linux
- **Internet Connection:** Stable connection 5G
- **Test Account Details:** None

Scope of Testing

The Exploratory tests will focus on the following functionalities

- User Registration and Login
- Product Browsing and Searching
- Adding to Cart and Managing the Cart
- Placing an Order
- Contacting Support (Feedback Form)

Test Scenarios and Observations

1. User Registration and Login

- **Sign Up**
 - Register a new user account with valid inputs(emails, Password, Repeat Password, Security Question and Answer)
 - Test invalid scenarios:
 - Missing mandatory fields.
 - Invalid email format (e.g. akram@akram or empty string).
 - Weak passwords (e.g., 1234).
 - Duplicate email addresses.
 - **Expected Result:** User registration should succeed with valid inputs and fail gracefully with invalid inputs.
- **Login**
 - Login with valid credentials.
 - Test invalid scenarios:
 - Incorrect password.
 - Non-existent email.
 - Empty fields.

- Verify the "Remember Me" functionality.
- **Expected Result:** Successful login with correct credentials; proper error handling for invalid scenarios.
- **Password Recovery**
 - Trigger the "Forgot your Password" process with valid and invalid emails.
 - **Expected Result:** Password recovery instructions sent to valid emails, error messages for invalid entries.

2. Product Browsing and Searching

- **Browse Products**
 - Navigate through product categories and verify correct display of products, including name, image, price, and description.
- **Search**
 - Test the search bar with:
 - Exact product names.
 - Partial matches.
 - Invalid inputs (e.g., special characters).
 - Case sensitivity.
 - **Expected Result:** Relevant search results for valid queries and proper messaging for invalid inputs.

3. Adding to Cart and Managing the Cart

- **Add Products to Cart**
 - Add multiple products to the cart.
 - Test adding the same product multiple times.
- **Modify Cart**
 - Remove items and verify total recalculates.
 - Update product quantities.
- **Checkout**
 - Attempt to proceed to checkout with an empty cart.
 - **Expected Result:** Cart updates correctly; error messages for invalid actions.

4. Placing an Order

- **Shipping Details**
 - Fill in the shipping address and payment details with valid and invalid data.
- **Order Summary**
 - Confirm order details before placing the order.
- **Error Handling**
 - Simulate network interruptions or refresh the page during checkout.
 - **Expected Result:** Order placement succeeds with valid inputs; error messages for interruptions or invalid data.

5. Contacting Support (Feedback Form)

- **Submit Feedback**
 - Test the feedback form with:
 - Valid inputs (e.g., detailed message, correct email).
 - Invalid inputs (e.g., empty fields, invalid email format).
 - Attach files (if applicable) and test file size limits.
- **Verify Responses**
 - Confirm receipt of success messages after submission.
 - Test behavior when fields are incorrectly filled or left empty.
 - **Expected Result:** Feedback submission works as expected with valid inputs; error messages displayed for invalid data.

DEFECTS

Issue ID	Description	Steps to Reproduce	Expected Result	Actual Result
User Registration Issue 001	Application accepts weak password on signup	Navigate to the Sign-Up page. Input email Input password like 123	Password validation error	Account is created successfully
Product Search Issue 002	Case sensitivity in search functionality	Navigate to the search input . Search for "apple" and "Apple"	Results returned should be identical.	Different results displayed
Add to Cart Issue 003	Incorrect price total after update	Navigate to the cart page . Add multiple items to the cart	Total price recalculates correctly.	Price mismatch observed