# **Test Case Specification for PetStore**

## **1. Test Case Specification Identifier**

* **Document ID**: **TC-OCTOPERF-PETSTORE-001**
* **Version**: **1.0**
* **Version Date**: **April 27, 2025**

**Author**:  
**Contact**:

**Revision History**:

* **v1.0** – Initial Draft – April 27, 2025

## **2. Test Items**

* **User Registration**
* **User Login**
* **Product Search**
* **Product Detail View**
* **Shopping Cart Management**
* **Checkout and Order Confirmation**

## **3. Input Specifications**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Case No.** | **Test Element** | **Valid Values** | **Valid Response** | **Invalid Response** |
| **R1** | Registration Inputs | Valid username, password, email, address details | Account created successfully | Error for missing/invalid fields |
| **R2** | Login Credentials | Registered username and password | Redirect to homepage/catalog | Error message for wrong credentials |
| **R3** | Search Input | "fish", "dog", "bird", "reptile" | Products listed accordingly | 'No products found' message |
| **R4** | Add to Cart Quantity | 1–99 units | Quantity updated successfully | Error for >100 or negative quantity |
| **R5** | Checkout Shipping Information | Valid name, address, zip, country, phone | Proceed to Order Confirmation | Error for empty/invalid fields |

**Inputs**:

* New user data (username, password, email, address).
* Keywords ("fish", "dog", etc.) for product search.
* Valid product quantity (1–99).
* Shipping address details.

**Human Actions**:

* Mouse clicks (buttons, links).
* Typing into forms (registration, login, search, checkout).

**Conditions**:

* User starts as a guest (not logged in).
* Registration must be completed before login.
* Cart must have at least one product before checkout.

## **4. Output Specifications**

|  |  |
| --- | --- |
| **Output** | **Expected Result** |
| Registration Success | Welcome or confirmation message displayed. |
| Login Success | Redirected to catalog page. |
| Search Result | Products matching the search term displayed. |
| Product Detail View | Image, description, price displayed correctly. |
| Shopping Cart Update | Correct item and quantity added to cart. |
| Checkout Confirmation | "Thank you" page with order summary. |
| Error Handling | Clear messages for invalid data entry. |

**Validation Points**:

* Correct content rendering.
* Proper navigation (no broken links).
* Cart and session data persistence.

## **5. Environmental Needs**

|  |  |
| --- | --- |
| **Environment Aspect** | **Requirements** |
| Hardware | Desktop/Laptop with minimum 8GB RAM |
| Software | Chrome (latest), Firefox (latest) |
| Operating Systems | Windows 10+, macOS Monterey+, Ubuntu 20.04+ |
| Network | Stable internet connection (10 Mbps+) |
| Test Tools | Selenium WebDriver, JMeter |

## **6. Special Procedural Requirements**

* Clear browser cache before registration and login tests.
* Reset cart state before starting cart operations.
* Simulate different users for load tests.
* Validate mandatory fields for every form submission.
* Use a staging/test environment to avoid polluting live systems.

## **7. Inter-case Dependencies**

|  |  |
| --- | --- |
| **Dependency** | **Description** |
| TC-REG-001 ➔ TC-LOGIN-002 | Successful registration needed before login testing. |
| TC-LOGIN-002 ➔ TC-SEARCH-003 | Login must succeed before product search. |
| TC-SEARCH-003 ➔ TC-ADD-004 | Product must be found before adding to cart. |
| TC-ADD-004 ➔ TC-CHECKOUT-005 | Item must be added to cart before checkout starts. |

# **Individual Test Cases**

## **Test Case 1: User Registration**

* **Test Case ID**: **TC-REG-001**
* **Objective**: Validate that a new user can register successfully.
* **Input Data**: New username, password, email, address, phone.
* **Preconditions**: User is on the Registration page.

**Test Steps**:

1. Navigate to Registration page.
2. Enter valid details in all fields.
3. Submit the registration form.

**Expected Result**:

* User account is created.
* Redirected to login page or welcome page.

**Postconditions**:

* User credentials are saved and usable for login.

## **Test Case 2: User Login**

* **Test Case ID**: **TC-LOGIN-002**
* **Objective**: Verify that a registered user can login.
* **Input Data**: Registered username and password.
* **Preconditions**: User must be registered.

**Test Steps**:

1. Open Login page.
2. Enter correct credentials.
3. Submit login form.

**Expected Result**:

* User is logged in and redirected to the catalog.

**Postconditions**:

* Session started and user is recognized in the session.

## **Test Case 3: Product Search**

* **Test Case ID**: **TC-SEARCH-003**
* **Objective**: Validate product search functionality.
* **Input Data**: Search keywords like "fish", "dog".
* **Preconditions**: User is logged in.

**Test Steps**:

1. Enter search term in the search bar.
2. Click Search or press Enter.

**Expected Result**:

* List of matching products is displayed.

**Postconditions**:

* User can navigate to product details page.

## **Test Case 4: Add Product to Cart**

* **Test Case ID**: **TC-ADD-004**
* **Objective**: Validate adding products to shopping cart.
* **Input Data**: Selected product from search results.
* **Preconditions**: User has searched for a product.

**Test Steps**:

1. Select a product.
2. Click “Add to Cart”.

**Expected Result**:

* Cart updated with selected product.

**Postconditions**:

* Cart reflects correct item and quantity.

## **Test Case 5: Checkout and Order Confirmation**

* **Test Case ID**: **TC-CHECKOUT-005**
* **Objective**: Complete the checkout process with valid information.
* **Input Data**: Shipping address, name, phone number.
* **Preconditions**: Cart has at least one product.

**Test Steps**:

1. Open cart page.
2. Click Proceed to Checkout.
3. Fill all required shipping fields.
4. Confirm the order.

**Expected Result**:

* Order confirmation page with order summary displayed.

**Postconditions**:

* Order placed successfully.