## **Test Case Specification Document – PetStore**

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

* **Document ID**: TC-OCTOPERF-PETSTORE-001
* **Version**: 1.0
* **Version Date**: April 27, 2025
* **Author**: *[Your Name]*
* **Contact**: *[Your Email]*

**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 | 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)
* Search keywords (e.g., "fish", "dog")
* Valid product quantity (1–99)
* Shipping details (name, address, contact)

**Human Actions:**

* Mouse clicks
* Keyboard typing for form inputs

**Conditions:**

* User starts as a guest
* Registration required before login
* Product must be in cart 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, and price correctly shown |
| Cart Update | Correct item and quantity added to cart |
| Checkout Confirmation | “Thank You” page with complete order summary |
| Error Handling | Clear validation messages for incorrect inputs |

**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 8GB RAM or more |
| Software | Latest Chrome or Firefox browsers |
| OS | Windows 10+, macOS Monterey+, Ubuntu 20.04+ |
| Network | Stable internet (≥10 Mbps) |
| Tools | Selenium WebDriver, JMeter |

### **6. Special Procedural Requirements**

* Clear browser cache before registration and login tests
* Reset cart before cart management tests
* Simulate multiple users for performance tests
* Validate all mandatory fields during form submissions
* Use staging/test environment to avoid affecting production data

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

|  |  |
| --- | --- |
| **Dependency** | **Description** |
| TC-REG-001 ➔ TC-LOGIN-002 | Registration must succeed before login testing |
| TC-LOGIN-002 ➔ TC-SEARCH-003 | Login is required before searching for products |
| TC-SEARCH-003 ➔ TC-ADD-004 | Product must be found before adding to cart |
| TC-ADD-004 ➔ TC-CHECKOUT-005 | Cart must have items before checkout can proceed |

## **Individual Test Cases**

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

**Test Case ID**: TC-REG-001

**Objective**: Validate new user registration

**Input Data**: New username, password, email, address, phone

**Preconditions**: User is on the registration page

**Test Steps**:

1. Navigate to Registration page
2. Fill all required fields with valid data
3. Submit the form

**Expected Result**:

* User account is created
* Redirect to login or welcome page

**Postconditions**:

* User credentials saved in the system

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

**Test Case ID**: TC-LOGIN-002

**Objective**: Verify user login functionality

**Input Data**: Registered username and password

**Preconditions**: User is registered

**Test Steps**:

1. Open login page
2. Enter valid credentials
3. Submit login form

**Expected Result**:

* User is redirected to the catalog page

**Postconditions**:

* Session is initiated

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

**Test Case ID**: TC-SEARCH-003

**Objective**: Validate product search

**Input Data**: Search terms (e.g., "fish", "dog")

**Preconditions**: User is logged in

**Test Steps**:

1. Enter search keyword
2. Click on search or press Enter

**Expected Result**:

* Relevant products are displayed

**Postconditions**:

* User can click on a product to view details

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

**Test Case ID**: TC-ADD-004

**Objective**: Verify adding product to cart

**Input Data**: Selected product

**Preconditions**: Product was searched and is visible

**Test Steps**:

1. Select product from search result
2. Click “Add to Cart”

**Expected Result**:

* Product is added to cart with correct quantity

**Postconditions**:

* Cart updates and reflects item

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

**Test Case ID**: TC-CHECKOUT-005

**Objective**: Complete order with valid checkout info

**Input Data**: Shipping details

**Preconditions**: Cart has at least one item

**Test Steps**:

1. Go to cart page
2. Click on “Proceed to Checkout”
3. Fill in shipping form
4. Submit order

**Expected Result**:

* Order confirmation page displayed

**Postconditions**:

* Order successfully placed and stored