# **Test Case Specification for JPetStore**

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

* **Document ID**: **TC-JPETSTORE-FLOW-001**
* **Version**: 1.2
* **Version Date**: April 27, 2025
* **Author**
* **Contact**
* **Revision History**:
  + v1.0 – Initial Draft – April 25, 2025
  + v1.1 – Updates Based on Review – April 27, 2025
  + v1.2 – Full Expansion and Renaming to JPetStore – April 27, 2025

## **2. Test Items**

* Homepage Navigation and Category Display
* Product Search by Name or Keyword
* Product Detail Page (Description, Image, Pricing)
* Shopping Cart Management
* Checkout Process with Shipping Information Capture
* Order Confirmation Display
* Wishlist Feature Validation (if available)
* Cart Persistence Across Sessions

## **3. Input Specifications**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Case No.** | **Test Element** | **Valid Values** | **Valid Response** | **Invalid Response** |
| R1 | Search Input | "dog", "cat", "bird", "fish" | Related product list shown | 'No products found' message |
| R2 | Add to Cart Quantity | 1-99 units | Quantity updated successfully | Error for >100 or negative quantity |
| R3 | Checkout Address Fields | Valid full address, postal code, phone | Proceed to Order Confirmation | Validation error for empty/invalid fields |

**Inputs**:

* Keywords ("dog", "bird", etc.)
* Valid quantity (positive integers 1–99)
* Shipping Address (Full name, street, city, zip, country, phone)

**Human Actions**:

* Mouse clicks on products, links, buttons.
* Form input typing (search, checkout).

**Conditions**:

* User not logged in (anonymous browsing).
* Cart should have at least one product to checkout.

## **4. Output Specifications**

|  |  |
| --- | --- |
| **Output** | **Expected Result** |
| Category Navigation Result | Product listing page with relevant category items. |
| Search Result | Products matching the search term. |
| Product Detail Page | Full product information (image, price, description, stock status). |
| Shopping Cart | Updated list with correct quantities and totals. |
| Checkout Confirmation | Thank You / Order Summary page displayed. |
| Error Handling | Validation messages for invalid inputs (empty fields, wrong quantities, etc.). |

Outputs must be validated against:

* Correct content
* Proper navigation (no broken links)
* Consistent session state (cart persistence)

## **5. Environmental Needs**

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

## **6. Special Procedural Requirements**

* Clear browser cache before each new session testing.
* Always reset the cart to empty before cart tests.
* Different sessions/users should be simulated for load testing.
* Focus on edge cases for form field validations (e.g., empty address, numeric-only names).
* Use sandbox/staging environment if available (if not, caution needed while testing on live demo).

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

|  |  |
| --- | --- |
| **Dependency** | **Description** |
| TC-PS-001 ➔ TC-AC-002 | Product must be found through search before adding to cart. |
| TC-AC-002 ➔ TC-CO-003 | Product must be successfully added to cart before proceeding to checkout. |
| TC-CO-003 ➔ TC-OC-004 | Checkout must complete successfully to validate order confirmation. |

# **Example of Individual Test Cases:**

## **Test Case 1: Product Search Functionality**

* **Test Case ID**: **TC-PS-001**
* **Objective**: Verify that users can search products successfully by valid keywords.
* **Input Data**: Keywords – "fish", "dog", "bird".
* **Preconditions**: JPetStore homepage loaded.
* **Test Steps**:
  + Open JPetStore homepage.
  + Enter keyword "fish" in the search bar.
  + Click on the search icon or press Enter.
* **Expected Result**: List of pets matching the keyword "fish" should be displayed.
* **Postconditions**: User can click on any result to view product details.

## **Test Case 2: Add Product to Cart**

* **Test Case ID**: **TC-AC-002**
* **Objective**: Validate that a user can add a product to their cart.
* **Input Data**: Selected product from search results or category listing.
* **Preconditions**: Search results or product listing page visible.
* **Test Steps**:
  + Select a product (e.g., Angel Fish).
  + Click on “Add to Cart”.
* **Expected Result**: Cart is updated, and a success message is shown.
* **Postconditions**: Cart should reflect the selected product and quantity.

## **Test Case 3: Shopping Cart Management**

* **Test Case ID**: **TC-CM-003**
* **Objective**: Validate the functionality of updating and removing items from the cart.
* **Input Data**: Products already added to the cart.
* **Preconditions**: User has an active shopping cart session.
* **Test Steps**:
  + Go to the Shopping Cart page.
  + Update quantity (increase or decrease).
  + Remove one item from the cart.
* **Expected Result**: Cart updates quantities and total price correctly. Removed item no longer listed.
* **Postconditions**: Updated cart reflects correct final list.

## **Test Case 4: Checkout and Order Confirmation**

* **Test Case ID**: **TC-CO-004**
* **Objective**: Complete checkout with valid information.
* **Input Data**: Name, Address, City, State, Postal Code, Phone Number.
* **Preconditions**: User has items in the cart.
* **Test Steps**:
  + Open the cart page.
  + Click Proceed to Checkout.
  + Fill all mandatory shipping information fields.
  + Confirm the order.
* **Expected Result**: Display Order Confirmation page with Order ID and details.
* **Postconditions**: Order is placed and can be tracked if the system supports order history.