## **IEEE 829-Based Test Case Specification Document for JPetStore**

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

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

#### **Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Description** |
| 1.0 | 2025-04-27 | Aranya | Initial Draft |

### **2. Test Items**

* Category Browsing
* Product Listing
* Product Detail Viewing
* Product Search
* Add to Cart Functionality

### **3. Input Specifications**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Case ID** | **Input Element** | **Valid Input Example** | **Expected Response** | **Invalid Input Example** | **Error Handling Expected** |
| C1 | Category Selection | "Fish", "Dogs", etc. | Displays relevant products | "InvalidCategory" | "No products found" or proper error page |
| C2 | Product Selection | "FI-SW-01", "K9-BD-01" | Displays product details | Broken/Invalid IDs | 404 error or friendly error message |
| C3 | Search Term | "Fish", "Dog" | Shows relevant product list | "qwerty123" | "No products found" message |
| C4 | Add to Cart | Valid Product ID, Qty: 1-99 | Product added to cart | Invalid quantity or ID | "Invalid input" or product not found |

### **4. Output Specifications**

|  |  |
| --- | --- |
| **Output Scenario** | **Expected Result** |
| Category Page | Products matching the selected category are displayed |
| Product Detail View | Image, description, price, and stock displayed correctly |
| Search Results | List of products matching the keyword input |
| Add to Cart | Product is shown in the cart with correct quantity |
| Error Handling | Clear error messages, e.g., “No products found” or 404 pages where needed |

#### **Validation Points**

* Page titles and breadcrumbs are accurate.
* Redirection and navigation are seamless.
* Shopping cart reflects actions correctly.

### **5. Environmental Needs**

|  |  |
| --- | --- |
| **Aspect** | **Specification** |
| Hardware | Laptop/Desktop with 8GB+ RAM |
| OS | Windows 10+, macOS Monterey+, Ubuntu 20.04+ |
| Browser | Chrome (latest), Firefox (latest) |
| Network | Stable Internet Connection (10+ Mbps) |
| Tools | Selenium WebDriver (Optional for Automation) |

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

* Clear browser cache before testing.
* Ensure the cart is empty before running each add-to-cart test.
* Use a clean session for every search scenario.
* Test with multiple category paths (via homepage and navigation menu).

### **7. Inter-Case Dependencies**

|  |  |
| --- | --- |
| **Dependency Chain** | **Description** |
| TC-CAT-001 → TC-PROD-002 | Product detail can only be tested after selecting a category |
| TC-PROD-002 → TC-CART-004 | Add to cart test must follow successful product detail display |

## **Individual Test Cases**

### **Test Case 1: View Category Products**

* **ID**: TC-CAT-001
* **Purpose**: Validate that selecting a category displays the appropriate product listings.
* **Input**: Select "Fish" from the homepage or side menu
* **Preconditions**: User is on the Catalog page
* **Test Steps**:
  + Navigate to Catalog.
  + Click "Fish" in the category list.
* **Expected Output**: Fish products are displayed in a grid or list.
* **Postconditions**: User can click on a product to view its details.

### **Test Case 2: View Product Details**

* **ID**: TC-PROD-002
* **Purpose**: Ensure product detail pages are loading correctly.
* **Input**: Click "FI-SW-01" from the Fish product list.
* **Test Steps**:
  + From a category list, select a product.
  + Observe product detail page.
* **Expected Output**: Product image, description, price shown.
* **Postconditions**: Ready to proceed with "Add to Cart".

### **Test Case 3: Search for Products**

* **ID**: TC-SEARCH-003
* **Purpose**: Verify search field returns appropriate results.
* **Input**: Enter "Dog" into the search bar.
* **Test Steps**:
  + Type "Dog" in search.
  + Click Search button or press Enter.
* **Expected Output**: Products matching "Dog" displayed.
* **Postconditions**: Products can be clicked for more info or added to cart.

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

* **ID**: TC-CART-004
* **Purpose**: Test functionality for adding a product to the shopping cart.
* **Input**: Select product from list, click "Add to Cart".
* **Test Steps**:
  + View product detail.
  + Click “Add to Cart”.
* **Expected Output**: Product added to cart with correct quantity.
* **Postconditions**: Cart reflects changes; user can continue shopping or check out.