# **IEEE 829 Test Plan Document**

### **Title: JPetStore – Catalog Functionality Testing**

**Test Plan Identifier**: TP-OCTOPERF-PETSTORE-CATALOG-001

**Version**: 1.0

**Date**: April 29, 2025

**Prepared by**: Aranya

## **1. Test Plan Identifier**

**TP-OCTOPERF-PETSTORE-CATALOG-001**

## **2. References**

* JPetStore Demo Application: <https://petstore.octoperf.com/actions/Catalog.action>
* OctoPerf Documentation & User Guide
* IEEE 829-1998 Software Test Documentation Standard

## **3. Introduction**

This test plan defines the testing scope, approach, resources, and schedule for verifying the **Catalog functionality** of the JPetStore application. It focuses on validating core catalog operations including category browsing, product viewing, searching, and adding items to the cart.

## **4. Test Items**

* Category Listings
* Product Listings within Categories
* Product Detail Pages
* Search Bar Functionality
* Add to Cart Operations

## **5. Software Risk Issues**

* Broken links in category or product navigation
* Incorrect product information
* Inaccurate or empty search results
* Cart not updating after item addition

## **6. Features to be Tested**

* Proper rendering and behavior of:
  + Category navigation
  + Product listings
  + Product detail views
  + Search bar interaction
  + Add-to-cart functionality

## **7. Features Not to be Tested**

* User login and registration functionality
* Payment and checkout workflows
* Mobile device-specific responsiveness or UI layout
* Admin/product management backend

## **8. Approach**

* **Manual Testing**: All catalog-based features will be tested manually against predefined test cases.
* **Automation**: Selenium WebDriver scripts will automate core tasks like search input and adding items to the cart.
* **Performance Testing (Optional)**: Apache JMeter may be used to simulate multiple users accessing categories simultaneously.

## **9. Item Pass/Fail Criteria**

* **Pass Criteria**:
  + Categories and products display correctly
  + Product detail pages load with accurate data
  + Search results are relevant
  + Cart updates reflect added items
* **Fail Criteria**:
  + 404 or broken pages
  + Mismatched or missing product information
  + Inconsistent or failed search responses
  + Items not added or incorrectly displayed in cart

## **10. Suspension Criteria and Resumption Requirements**

* **Suspension**:
  + Application is down
  + Critical features (category navigation or product pages) are inaccessible
* **Resumption**:
  + Application uptime restored
  + Data is corrected or repopulated as needed

## **11. Test Deliverables**

* IEEE 829 Test Plan (this document)
* Functional Test Case Specification Document (including:
  + TC-CAT-001 – Category Listing
  + TC-PROD-002 – Product Details
  + TC-SEARCH-003 – Search Functionality
  + TC-CART-004 – Add to Cart)
* Selenium Test Scripts (automated)
* Daily and Final Test Execution Reports
* Bug/Defect Reports (via issue tracker)

## **12. Remaining Test Tasks**

* Finalize test data (sample product IDs and category names)
* Review and validate Selenium automation scripts
* Prepare testing dashboard/reporting format
* Validate functional coverage with developers/stakeholders

## **13. Environmental Needs**

|  |  |
| --- | --- |
| **Component** | **Specification** |
| Browsers | Chrome (latest), Firefox (latest) |
| OS | Windows 10+, macOS Monterey+, Ubuntu 20.04+ |
| Network | Stable 10+ Mbps connection |
| Tools | Selenium WebDriver, Apache JMeter (optional), Issue Tracker (e.g., Jira) |

## **14. Staffing and Training Needs**

|  |  |
| --- | --- |
| **Role** | **Requirement** |
| QA Engineers | 1–2 testers with experience in web app testing |
| Test Lead | 1 experienced lead to manage test execution |
| Training | Brief walkthrough of catalog functionality, Jira usage, automation scripts |

## **15. Responsibilities**

* **Test Lead**:
  + Define scope
  + Oversee test planning and reporting
  + Liaise with developers
* **QA Engineers**:
  + Execute manual and automated tests
  + Report bugs and validate fixes

## **16. Schedule (Insert Estimated Dates)**

|  |  |  |
| --- | --- | --- |
| **Task** | **Start Date** | **End Date** |
| Test Planning | Apr 28, 2025 | Apr 29, 2025 |
| Test Case Development | Apr 29, 2025 | Apr 30, 2025 |
| Automation Development | May 1, 2025 | May 3, 2025 |
| Test Execution | May 4, 2025 | May 7, 2025 |
| Defect Logging & Retesting | May 4, 2025 | May 8, 2025 |

## **17. Risks and Contingencies**

|  |  |
| --- | --- |
| **Risk Description** | **Mitigation Strategy** |
| Category/product data changes mid-testing | Coordinate with Dev; update test data |
| Automation breaks due to UI changes | Use robust locators; sync with frontend team |
| Server downtime or instability | Schedule buffer days for test execution |

## **18. Approvals**

|  |  |  |
| --- | --- | --- |
| **Name** | **Role** |  |
| Test Lead | QA/Test Lead |  |
| Project Manager | Project Manager |  |

## **19. Glossary**

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Catalog | Page where product categories and listings are shown |
| Product | An item available for sale in the pet store |
| Search | Text input to find specific products by keyword |
| Cart | Temporary storage for selected products before checkout |