**Test Plan Document**

## **1. Test Plan Identifier**

**TP-PS-2025-001**

Test Plan for Petstore Catalog Page - Functional and Performance Testing.

## **2. References**

This section lists documents and resources that were used to create the test plan or that will support the execution of testing:

* Petstore Application URL: <https://petstore.octoperf.com/actions/Catalog.action>
* IEEE 829 Standard for Software Test Documentation
* Product Requirements Document (PRD) outlining expected behavior
* Test case management tools like TestRail (if used)
* Browser compatibility checklist (detailing versions supported)
* Performance testing tools like JMeter test plans
* API Documentation (if product listing is fetched dynamically)

## **3. Introduction**

The purpose of this test plan is to outline the testing strategy, scope, resources, and schedule for validating the **Catalog page** of the Petstore application. The Catalog page is a critical feature that presents the various categories and items to users, allowing them to explore products and navigate further.  
 Testing will cover both **functional correctness** and **non-functional aspects** like performance, compatibility, and usability to ensure the user experience is smooth and bug-free.

## **4. Test Items**

This refers to the parts of the software that will be tested under this test plan. The focus is on:

* **Petstore Catalog Page** located at the specified URL
* **UI Components**: Category menus (Fish, Dogs, Cats, etc.), links, item thumbnails, and navigation buttons
* **Navigation Paths**: Clicking on categories, returning to home, switching sections
* **Client-Side Behavior**: Rendering speed, image loading, responsiveness
* **Backend Interactions** (if applicable): Ensuring that item lists are properly retrieved and displayed

## **5. Software Risk Issues**

This section identifies potential risks that could impact the success of testing or the software functionality:

* **High server response time**: May lead to slow catalog loading
* **Broken links**: If category links do not lead to the correct item list
* **Browser inconsistencies**: Elements may appear misaligned on different browsers
* **Session timeouts**: Catalog may stop functioning if session ends prematurely
* **Data mismatches**: Products may be missing, duplicated, or misclassified

Risks will be monitored, and any critical issue will be escalated immediately to the development team.

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

These are the functionalities that this test plan will cover:

* **Loading of the Catalog page**
* **Category Navigation**: Clicking on Fish, Dogs, Cats, etc., and ensuring correct items are shown
* **Product Listings**: Verifying images, names, and prices (if shown)
* **Cross-browser Functionality**: Ensuring the page behaves identically across Chrome, Firefox, Safari, and Edge
* **Responsiveness**: Testing how the Catalog page adapts to different screen sizes
* **Performance Testing**: Measuring load time, response time, and behavior under simulated load using JMeter

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

Some features are either out of scope or not relevant for this particular test phase:

* **Payment Gateway**: Checkout or cart functionalities
* **User Login or Registration**: Authentication is not part of this test plan
* **Admin Controls**: Backend content management tools
* **Email/SMS Notifications**: Not triggered through the catalog page
* **Deep integration with database or third-party APIs** (unless part of product listing)

## **8. Approach**

This section outlines the methodology and tools that will be used to execute the tests:

* **Manual Testing** will be used for exploratory testing, UI validation, and navigation checks
* **Functional Testing**: Test cases will be written based on business requirements and executed manually
* **Cross-browser Testing**: Use tools like BrowserStack or local installations to verify behavior on different browsers
* **Performance Testing**: JMeter will be used to simulate multiple users accessing the Catalog page concurrently and measuring server response
* **Regression Testing**: Will be performed after any bug fixes to ensure no new issues are introduced
* **Bug Tracking**: All defects will be reported and managed using Jira or similar issue tracking tools

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

Defines what conditions are required for a test to be marked as passed or failed:

* **Pass Criteria**: The catalog loads successfully, all links and items function correctly, and the layout matches expectations without any visual or functional defects
* **Fail Criteria**: If any category or item fails to display, navigation doesn’t work, or there are visual inconsistencies or performance below acceptable levels

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

When testing should be halted and when it can continue:

* **Suspension**: If the site becomes unresponsive, the server crashes frequently, or a critical blocker prevents access to the Catalog page
* **Resumption**: Once the blocking issues are resolved and verified by the development team, testing can continue

## **11. Test Deliverables**

These are the outputs of the testing process:

* Test Plan Document (this file)
* Detailed Test Cases and Checklists
* Bug/Defect Reports
* Performance Testing Report from JMeter
* Test Summary Report after execution
* Logs, Screenshots, and any relevant documentation

## **12. Remaining Test Tasks**

Tasks that still need to be completed:

* Finalize test case writing
* Set up JMeter test scripts
* Complete test execution across all browsers
* Review and log defects
* Perform re-tests and final validations
* Prepare and submit final test summary

## **13. Environmental Needs**

Outlines the hardware, software, and tools required to run the tests:

* Browsers: Chrome, Firefox, Safari, Edge
* Operating Systems: Windows 10/11, macOS
* Test Tools: JMeter, Selenium (optional), Jira, TestRail
* Network: Stable internet connection for testing live application
* Test Data: Predefined set of items for consistency during testing
* Devices: Desktop, laptop, and optionally tablets for responsive testing

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

The human resources needed and any required training:

* **Functional Testers (2)**: To perform UI and navigation testing
* **Performance Tester (1)**: To handle load testing with JMeter
* **Training Required**: Brief onboarding on how the Petstore site works, understanding of test tools, and test data usage

## **15. Responsibilities**

Defines who is responsible for what:

* **QA Lead**: Overall test planning, reporting, and issue management
* **Test Engineers**: Execute test cases, log defects, verify fixes
* **Performance Engineer**: Set up and run JMeter tests
* **Developers**: Resolve issues found during testing
* **Project Manager**: Oversee timelines and resource allocation

## **16. Schedule**

A timeline of planned activities:

|  |  |  |
| --- | --- | --- |
| **Task** | **Start Date** | **End Date** |
| Test Planning | April 29 | April 30 |
| Test Case Design | May 1 | May 3 |
| Test Environment Setup | May 3 | May 4 |
| Test Execution | May 5 | May 9 |
| Defect Triage and Retesting | May 10 | May 12 |
| Test Closure and Reporting | May 13 | May 14 |

Schedule may shift based on testing progress and bug fixes.

## **17. Planning Risks and Contingencies**

Risks that might affect testing and how we’ll deal with them:

* **Late Delivery of Stable Build**  
   *Contingency*: Use latest available staging version for early testing
* **Tester Unavailability**  
   *Contingency*: Train backups to step in
* **Tool or Environment Failures**  
   *Contingency*: Prepare alternative tools or test manually if automation fails
* **Scope Creep**  
   *Contingency*: Freeze scope before execution, document all changes

## **18. Approvals**

Key stakeholders who will sign off on the test plan:

|  |  |  |
| --- | --- | --- |
| **S.NO** | **Role** | **Approval Date** |
| 1 | QA Lead |  |
| 2 | Project Manager |  |
| 3 | Dev Team Lead |  |

## **19. Glossary**

**Catalog Page**: Section of the website listing product categories and items  
 **Test Case**: A set of conditions or variables to determine if a feature works correctly  
 **JMeter**: A tool for simulating users and measuring performance  
 **Regression Testing**: Retesting after changes to ensure existing features still work  
 **Cross-browser Testing**: Ensuring the site behaves consistently across different browsers  
 **Defect/Bug**: Any deviation from expected functionality or behavior