# **Test Plan for JPetStore Demo**

## **Table of Contents**

1) Test Plan Identifier

2) References

3) Introduction

4) Test Items

5) Software Risk Issues

6) Features to be Tested

7) Features not to be Tested

8) Approach

9) Item Pass/Fail Criteria

10) Suspension Criteria and Resumption Requirements

11) Test Deliverables

12) Remaining Test Tasks

13) Environmental Needs

14) Staffing and Training Needs

15) Responsibilities

16) Schedule

17) Planning Risks and Contingencies

18) Approvals

19) Glossary

## **1. Test Plan Identifier**

**Test Plan ID**: JPETSTORE-TESTPLAN-V1.0

## **2. References**

* Software Requirements Specification (SRS) for JPetStore Demo
* PetStore Application Framework Documentation
* Design Documents (UI/UX Wireframes, Database Design)

## **3. Introduction**

This test plan defines the strategy and scope for testing the JPetStore Demo application. It covers the features to be tested, the testing approach, the resources required, schedule, and responsibilities.

## **4. Test Items**

* Web Application: JPetStore (Frontend + Backend)
* Database: MySQL
* REST APIs between frontend and backend
* Admin Dashboard

## **5. Software Risk Issues**

* Payment gateway integration issues (PayPal, GPay)
* Database connectivity failures
* Browser compatibility issues
* Security vulnerabilities (data leaks during registration/payment)
* System performance under load

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

* User Registration and Login
* Product Browsing and Search
* Product Details Viewing
* Shopping Cart Functionality (Add/Remove/Update Items)
* Order Processing and Summary
* Payment Processing and Confirmation
* Admin Inventory Management (Add, Update, Delete Products)
* Feedback Collection after Order Completion

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

* External Payment Gateway (PayPal/GPay) internal processing (only integration will be tested)
* Third-party server performance
* Marketing-related modules (if any)

## **8. Approach**

* Manual Testing for functional, UI, and integration flows.
* Automation Testing for regression (Selenium with TestNG/JavaScript frameworks).
* API Testing using Postman for backend REST APIs.
* Performance Testing using JMeter for load handling.
* Security Testing for login, payments, and admin sections.

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

* A test item passes if all expected outputs match actual results without major/critical defects.
* A test item fails if:
  + Expected results do not match
  + Major defects (functional/blocker) are identified

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

* **Suspension**: Testing will be suspended if:
  + Critical defects block further testing.
  + Environment is not stable (backend server/database down).
* **Resumption**: Testing will resume once blockers are resolved, and a stable build is provided.

## **11. Test Deliverables**

* Test Plan Document
* Test Cases and Test Scenarios
* Bug Reports (in a Defect Management System)
* Test Summary Report
* Automation Test Scripts (if applicable)

## **12. Remaining Test Tasks**

* Complete writing manual test cases.
* Execute all functional and integration test cases.
* Complete API and Performance Testing.
* Report all bugs and retest fixes.
* Prepare the final Test Summary Report.

## **13. Environmental Needs**

* **Hardware**:
  + Client Machine: Intel i5 Processor, 8GB RAM
  + Server: Hosting with at least 8 cores, 16GB RAM
* **Software**:
  + Browsers: Chrome, Firefox, Edge (latest versions)
  + Test Tools: Selenium, JMeter, Postman
  + Database: MySQL
  + Backend: Spring Boot Server

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

* **Staffing**:
  + 2 Manual Testers
  + 1 Automation Tester
  + 1 Performance Tester
* **Training**:
  + Application training for understanding JPetStore features.
  + Tool-specific training if needed for Selenium/Postman/JMeter.

## **15. Responsibilities**

|  |  |
| --- | --- |
| **Role** | **Responsibility** |
| Test Manager | Overall ownership of testing activities |
| QA Engineers | Test case writing, execution, and bug reporting |
| Automation Engineer | Developing and executing automation scripts |
| Performance Tester | Load and stress testing of the system |

## **16. Schedule**

|  |  |  |
| --- | --- | --- |
| **Task** | **Start Date** | **End Date** |
| Test Planning | May 1, 2025 | May 3, 2025 |
| Test Case Development | May 4, 2025 | May 7, 2025 |
| Test Environment Setup | May 6, 2025 | May 7, 2025 |
| Test Execution | May 8, 2025 | May 14, 2025 |
| Bug Fix Verification & Retesting | May 10, 2025 | May 15, 2025 |
| Test Closure Report Preparation | May 16, 2025 | May 17, 2025 |

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

* **Risk**: Delay in build delivery → **Contingency**: Adjust test execution timeline.
* **Risk**: Payment gateway sandbox environment issues → **Contingency**: Use mock services temporarily.
* **Risk**: Critical defects found late → **Contingency**: Allocate buffer time for bug fixing.

## **18. Approvals**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Role** | **Signature** | **Date** |
| Test Manager | Quality Assurance |  |  |
| Project Manager | Project Management |  |  |

## **19. Glossary**

* **SRS**: Software Requirement Specification
* **QA**: Quality Assurance
* **UI**: User Interface
* **API**: Application Programming Interface
* **SDLC**: Software Development Life Cycle