**Test Plan for Pet Store**

### **1. Test Plan Identifier**

**TP-OCTOPERF-PETSTORE-001**

### **2. References**

* OctoPerf PetStore Demo
* OctoPerf Documentation
* JMeter Test Plan Example

### **3. Introduction**

This test plan aims to validate the functionality, performance, and reliability of the OctoPerf PetStore application. The application serves as a demonstration platform for load testing tools and practices.

### **4. Test Items**

* User Registration and Authentication
* Product Catalog Browsing
* Shopping Cart Operations
* Order Placement and Confirmation
* Search Functionality

### **5. Software Risk Issues**

* Potential session management vulnerabilities
* Data consistency under concurrent access
* Performance degradation under high load
* Incomplete input validation leading to security issues

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

* Navigation through product categories
* Adding and removing items from the cart
* User login and logout processes
* Order checkout workflow
* Search functionality accuracy

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

* Third-party integrations (e.g., payment gateways)
* Email notifications
* Mobile responsiveness

### **8. Approach**

* **Functional Testing**: Manual testing of user workflows.
* **Performance Testing**: Using JMeter scripts to simulate load.
* **Automation Testing**: Implementing Selenium-based tests for regression.

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

* **Pass**: All test cases execute without errors, and the application behaves as expected.
* **Fail**: Any deviation from expected behavior or unhandled exceptions occur.

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

* **Suspension**: Critical defects that block further testing.
* **Resumption**: Resolution of critical defects and confirmation from the development team.

### **11. Test Deliverables**

* Test Plan Document
* Test Cases and Scripts
* Test Execution Reports
* Defect Logs

### **12. Remaining Test Tasks**

* Finalize test data preparation.
* Complete automation script development.
* Conduct exploratory testing sessions.

### **13. Environmental Needs**

* **Hardware**: Standard desktop or laptop with internet access.
* **Software**: Latest versions of Chrome or Firefox, JMeter, Selenium WebDriver.
* **Test Environment**: Access to the OctoPerf PetStore demo application.

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

* **Testers**: 2 QA engineers familiar with web application testing.
* **Training**: Briefing on the OctoPerf PetStore application's functionalities.

### **15. Responsibilities**

* **Test Lead**: Oversee the testing process and coordinate with stakeholders.
* **QA Engineers**: Design and execute test cases, report defects.
* **Developers**: Address reported defects and provide necessary support.

### **16. Schedule**

* **Test Planning**: April 26 – April 27, 2025
* **Test Case Development**: April 28 – April 30, 2025
* **Test Execution**: May 1 – May 5, 2025
* **Defect Fixing and Retesting**: May 6 – May 8, 2025
* **Test Closure**: May 9, 2025

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

* **Risk**: Delayed access to the test environment.
  + **Mitigation**: Coordinate early with the infrastructure team.
* **Risk**: Unavailability of key personnel.
  + **Mitigation**: Cross-train team members to cover critical tasks.

### **18. Approvals**

* **Test Lead**
* **Project Manager**
* **Client Representative**

### **19. Glossary**

* **QA**: Quality Assurance
* **JMeter**: An open-source tool for performance testing.
* **Selenium**: A framework for automating web applications.
* **Test Case**: A set of conditions to determine if a feature functions correctly.