

Project Name: Pet Store API

Date: June 21, 2025

Prepared By: Mohai Minul Islam

1. Overview

This test plan defines the testing strategy and scope for Pet Store API, an API of an eCommerce platform offering pets. It aims to ensure a reliable, secure, and user-friendly experience across web and mobile platforms.

2. Scope of Testing

In Scope:

- User registration and login
- Product browsing and search
- Product Information Updating
- User Information Updating
- Order management (tracking, returns)

Out of Scope:

- Legacy browser compatibility (e.g., IE11)
- Internal system analytics

3. Objectives

- Validate all core workflows, from product discovery to payment
- Ensure system stability under concurrent users
- Check for security vulnerabilities (SQL injection, XSS)
- Confirm compatibility across devices and major browsers

4. Test Strategy

- **Manual Testing:** Functional tests, UI validation, exploratory tests
- **Automated Testing:** Regression and smoke tests via Selenium
- **Performance Testing:** Load testing using JMeter
- **Security Testing:** Run scans with OWASP ZAP

5. Test Environment

- **Environments:** Staging and Pre-Prod servers
- **Devices:** iOS, Android, desktop browsers (Chrome, Safari, Firefox, Edge)
- **Dependencies:** Payment gateway sandbox, SMTP server

6. Test Scenarios

- Validation of Upload Pet Image functionality
- Validation of Adding a new pet store functionality
- Validation of Updating pet details functionality
- Validation of Finding pets by status functionality
- Validation of Finding pet by ID functionality
- Validation of Updating a pet in the store with form data functionality
- Validation of Deleting pet functionality
- Validation of Returning pet inventories by status functionality
- Validation of Order functionality
- Validation of Finding order functionality
- Validation of Deleting order functionality
- Validation of Creating a list of user functionality
- Validation of Fetching user functionality
- Validation of Updating user functionality
- Validation of Deleting user functionality
- Validation of Login functionality
- Validation of Logout functionality
- Validation of Creating a user functionality

7. Resources & Responsibilities

- **QA Engineer:** Manual/automated test execution
- **Test Lead:** Review test cases, oversee coverage
- **Developers:** Bug resolution, deployment support
- **Tools Used:** JIRA for bug tracking, TestRail for test management

8. Schedule

Phase	Timeline
Test Case Development	June 22 – June 24
Test Execution	June 25 – July 1
Regression Testing	July 2 – July 3
Final Review & Signoff	July 4

9. Entry & Exit Criteria

Entry: All features deployed to staging, test data available

Exit: 95%+ test case pass rate, no critical bugs open

10. Risks and Mitigation

Risk	Mitigation Plan
Delays in third-party APIs	Mock API responses where possible
Design changes mid-testing	Daily syncs with dev/design teams