Test Plan of Silpo.com

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TABLE OF CONTENTS

1.0 INTRODUCTION

This document outlines the test plan for the Silpo.com website. The goal of the testing is to ensure that the website functions correctly across all modules, ensuring a smooth and error-free experience for users when interacting with Silpo's online services such as product search, online ordering, user account management, and payment processing.

2.0 OBJECTIVES AND TASKS

2.1 Objectives

- Ensure that the website is free from critical bugs and performs efficiently under various conditions.
- Validate the user experience, security, and performance aspects.
- Confirm the system meets the necessary requirements and is ready for release.

2.2 Tasks

- Define test cases for functional and non-functional aspects of the website.
- Set up and configure the testing environment.
- Execute the test cases and report defects.
- Perform regression testing to confirm that resolved issues do not reappear.

3.0 SCOPE

The scope of this test plan covers all critical aspects of Silpo.com, including:

- User registration and login
- Product search, filtering, and categorization
- Shopping cart functionality
- Payment gateway integration
- Order management and tracking
- User profile management
- Performance under various user loads

4.0 TESTING STRATEGY

4.1 System and Integration Testing.

Definition:

System and integration testing checks the operation of the system as a whole, after all components have been integrated. System testing ensures that all modules interact correctly with each other as required. Integration testing checks the correctness of data exchange between modules (for example, shopping cart, search, payment).

Participants:

System and integration testing will be performed by QA engineers from the testing team.

Methodology:

The QA team will develop test scenarios based on system requirements. The tests will be carried out in the following sequence: first the modules are combined and tested for compatibility, then general system testing is carried out to check the functioning of all parts of the system together. Testing will be conducted in a dedicated test environment using real usage scenarios.

4.3 Performance and Stress Testing.

Definition:

Performance testing evaluates how well a site performs under load. Stress testing is used to check the website's behavior under excessive load that exceeds normal conditions.

Participants:

Performance testing and stress testing are the responsibility of the DevOps team and QA engineers specializing in performance testing.

Methodology:

During performance testing, several scenarios with different load levels (eg peak hours, promotions) will be simulated. Tools like JMeter or LoadRunner will be used for testing. Stress testing will be conducted to determine the point of failure of the system under overloads.

5.0 HARDWARE REQUIREMENTS

- Servers capable of handling simultaneous requests and database load.
- Workstations for testers with browser configurations for testing.

6.0 ENVIRONMENT REQUIREMENTS

- Desktop:
  - Macbook Pro (16-inch, 2019), MacOS Sonoma version 14.5
- Mobile:
  - iPhone 11, iOS 16.1.1
  - Samsung Galaxy S23, Android 13
- Web browsers:
  - Chrome version (latest version)
  - Safari version (latest version)
  - Firefox (latest version)

7.0 TEST SCHEDULE

1. Integration Testing: 1.5 weeks
2. Performance Testing: 1 week
3. User Acceptance Testing: 2 weeks
4. Regression Testing: Continuous after each development cycle.

8.0 CONTROL PROCEDURES

- Defect tracking using Jira or similar tool.
- Daily stand-up meetings to track progress.

9.0 FEATURES TO BE TESTED

- User registration and login
- Product search and filtering
- Shopping cart and checkout process
- Payment and order confirmation
- User profile management
- Product recommendations

10.0 FEATURES NOT TO BE TESTED

- Backend inventory management (handled by a separate system)
- Internal marketing and CRM tools
- Financial auditing and reporting systems

11.0 SCHEDULES

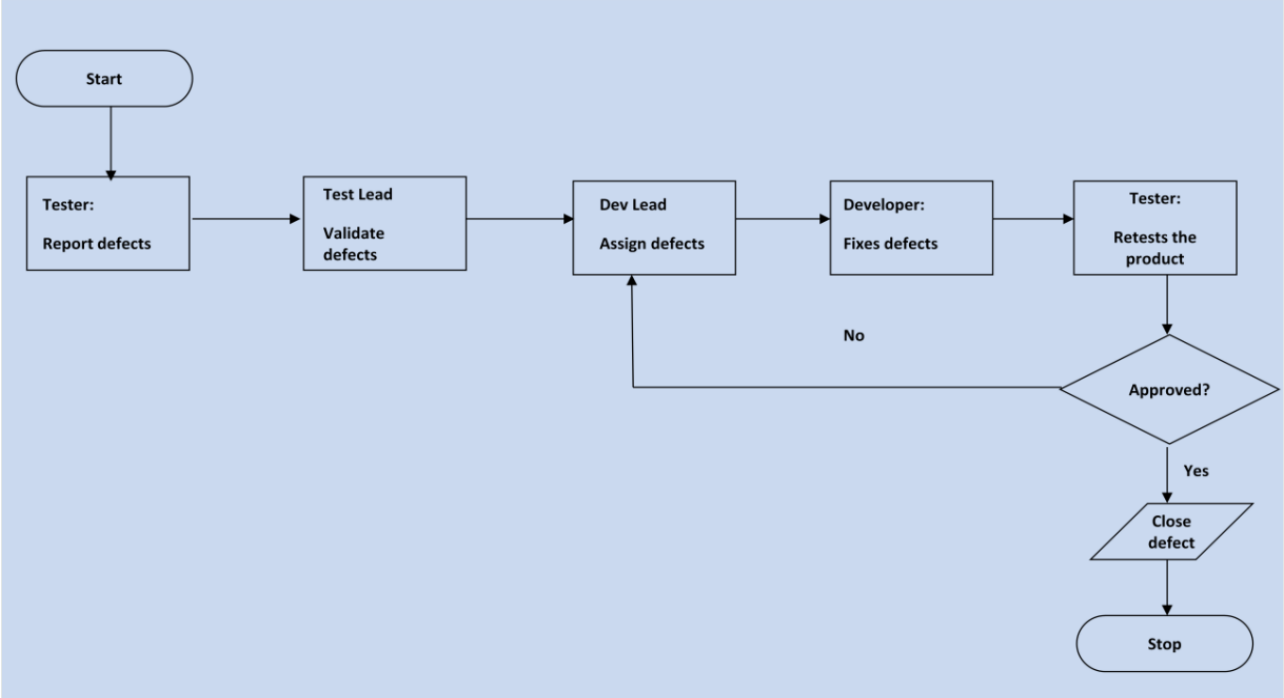
The overall testing phase will be completed in 5 weeks, with each phase planned to align with the development cycle.

Identify the deliverable documents.

- Test Plan
- Test Cases
- Test Incident Reports
- Test Summary Reports

12.0 Defect tracking & Reporting

Following flowchart depicts Defect Tracking Process:



13.0 DEPENDENCIES

- Coordination with the development team to ensure that the test environment is up-to-date.
- Availability of third-party services like payment gateways for integration testing.

14.0 RISKS/ASSUMPTIONS

- **Risks**: Possible delays in code delivery, potential downtime of the test environment, failure of third-party services.
- **Assumptions**: Test data and the test environment will be stable, with dedicated support from developers.

15.0 TOOLS

- **Testing Management**: Jira, TestRail, GoogleSheets
- **Automation**: Selenium, Playwright
- **Performance Testing**: JMeter
- **Browser Testing:** PixelPerfect, Page Ruler, Spell Checker, Grammarly

16.0 APPROVALS

This test plan has been reviewed and approved by the following:

Name (In Capital Letters) Signature Date

1. Test Manager

2. Development Lead

3. Product Manager

End.