Software Test Report (STR)

Project Name: ToolShop E-commerce
Version: 1.0
Test Leads:
Test Execution Period: March 24, 2025 – February 02, 2025
Test Environment: Windows 10, Chrome
Test Tools Used: jira, JMeter, Postman, TestRail

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1. Introduction

This Software Test Report summarizes the testing activities conducted for the **ToolShop v1.0** before deployment. It includes test execution details, defect analysis, and overall software quality evaluation. The objective was to validate system functionality, performance, and compatibility.

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2. Test Execution Summary 📌:

Metric	Value
Total Test Cases Planned	93
Test Cases Executed	52
Test Cases Passed	33
Test Cases Failed	19
Test Execution Rate	55.91%
Test Coverage	55.91%

- **Test Execution Rate** was **55.91%**, indicating that most planned test cases were executed, but there is still room for improvement.

- **Test Coverage** was **55.91%**, meaning that more than half of the requirements were tested, but some functionalities remain unverified.

- **19 test cases failed**, highlighting critical issues that require further investigation and resolution before proceeding with deployment.

3. Defect Analysis 📌 Summary:

Metric	Value
Total Defects Reported	5
Defects Fixed	3
Defects Pending Fix	2
Defect Density	0.25
Defect Removal Efficiency	60%

- **5 defects** were reported, out of which **3 were fixed**, leaving **2 pending**.

- **Defect Density** was **0.25**, indicating a relatively low defect occurrence rate.

- **Defect Removal Efficiency (DRE)** of **60%** reflects a moderate defect resolution rate, suggesting that further improvements are needed.

4. Defect Severity & Priority Distribution 📌 Summary:

Severity/Priority	Count
Critical	5
High	8
Medium	4
Low	2

- **5 Critical defects** .

- **8 High severity defects**.

- **4 Medium severity defects**

5. Performance Testing Summary 📌:

Metric	Value
Peak Response Time	2.5s
Average Response Time	1.2s
Error Rate	0.5%
Throughput	150 requests/sec

- **Response time under 3 seconds**, meeting performance goals.

- **Error Rate below 0.5%**, indicating system stability.

- **Throughput of 150 requests/sec**, ensuring the platform can handle expected traffic.

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6. Test Execution Timeline & Schedule Adherence 📌 Summary:

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7. Risks & Issues

- 44% of tests were not executed due to time constraints.
- Some issues are related to the test environment and may not appear in production.
- Additionally, some key features are missing, such as the Reviews and Ratings functionality and several other features.

8.Conclusion & Recommendations:

Based on the current test results, the overall success rate is **35%**, which is significantly below our quality expectations. On this basis, the following recommendations are made:

- **Immediate Bug Fixes:**
  Address all identified defects, with a particular focus on the 5 critical issues affecting checkout and payment processing.

- **Enhance Homepage Functionality:**
  Resolve issues on the homepage, such as the logo image not displaying and the Home button incorrectly redirecting to the Contact page. In addition, review and fix other homepage-related problems.

- **Implement Missing Features:**
  Several key features are absent, including the Reviews and Ratings functionality and other enhancements. These should be implemented promptly to improve user experience.

- **Comprehensive Regression Testing:**
  After the necessary fixes and feature additions, perform a thorough regression testing to ensure overall system stability and quality.

- **Reassess Quality Metrics:**
  Continuously monitor the success rate and other quality metrics to ensure that improvements are effective and that the system meets the required standards before release.

These actions are critical to improve the overall quality and reliability of the system prior to any production release.