

# Test Plan For Star Tech

## 1. Introduction

This test plan defines the strategy and scope for testing the Star Tech website. The objective is to ensure all features function correctly, delivering a seamless and efficient user experience. It includes the testing approach, covered features, start and completion criteria, roles, responsibilities, and schedule.

### 1.1 Application Overview

Star Tech is an online retail platform specializing in electronics, computer hardware, and accessories. It offers features such as user account management, product search, order placement, secure payment processing, and customer support.

### 1.2 Purpose

The purpose of this test plan is to validate that the Star Tech website meets defined requirements, operates smoothly across intended platforms, and delivers an optimal user experience. This document focuses on the System Test Plan level.

## 2. Scope of Testing Approach

- **Functional Testing:** To verify that each feature works as intended.
- **UI Testing:** To check user interface consistency, responsiveness, and ease of navigation.
- **Performance Testing:** To test the website under different load conditions, including peak traffic scenarios.
- **Security Testing:** To validate secure payment transactions, user data protection, and vulnerability checks.
- **Compatibility Testing:** To ensure the website works across multiple devices, screen sizes, and browsers.
- **Regression Testing:** To ensure that updates or changes do not impact existing functionalities.
- **Global Components Testing:** To confirm proper localization and currency adaptability.
- **Usability Testing:** To assess the website's user-friendliness and intuitive navigation.
- **Integration Testing:** To check seamless interaction between different modules.
- **Database Testing:** To verify the accuracy, retrieval, and security of stored data.

## 3. Test Items

- User account (registration, login, logout)
- Home page (search bar, product categories)
- Product details page

- Shopping cart and checkout process
- Order placement and tracking
- Payment gateway processing
- Customer reviews and ratings
- Customer support functionality

#### 4. References

- Star Tech Functional Requirements Document
- Star Tech UI Design Specifications
- Star Tech API Documentation

#### 5. Features to be Tested

- User authentication (registration, login, logout)
- Product search and filtering
- Product details display
- Shopping cart functionality
- Order placement and modifications
- Secure payment processing
- Order tracking system
- User profile and settings
- Customer support features (live chat, email support)

#### 6. Features Not to be Tested

- Back-end server infrastructure
- Third-party supplier systems
- Offline store functionalities

#### 7. Test Approach

Testing will follow the Agile methodology, utilizing both manual and automated testing techniques:

- **Manual Testing:** For UI, usability, and exploratory testing.
- **Automated Testing:** For regression, performance, and compatibility testing.
- **Testing Phases:** Unit testing, Integration testing, System testing, and User Acceptance Testing (UAT).

## 8. Entry Criteria

- Completion of feature development and deployment to the test environment.
- Availability of test cases and test data.
- Readiness of test tools and test environment.

## 9. Exit Criteria

- Resolution of all critical and high-priority defects.
- 95% of test cases passing.
- No unresolved issues impacting core functionalities.
- Approval from stakeholders.

## 10. Suspension Criteria

Testing will be suspended if:

- The test environment becomes unstable.
- Critical functionality is broken, preventing further testing.
- Test data is missing or incomplete.

## 11. Roles & Responsibilities

- **Test Lead:** Planning, coordination, monitoring, and reporting.
- **Testers:** Test case creation, execution, and defect reporting.
- **Developers:** Bug fixing and technical support.
- **Project Manager:** Approving test results and changes.

## 12. Schedule

- **Test Planning:** 1 week
- **Test Case Development:** 2 weeks
- **Test Environment Setup:** 1 week
- **Test Execution:** 3 weeks
- **Defect Resolution and Retesting:** 2 weeks
- **Test Closure:** 1 week

## 13. Training

- **Application Training:** Sessions on Star Tech's functionalities.

- **Tool Training:** Training on test management and automation tools.

#### 14. Test Environment / Lab

##### Hardware:

- Devices: Smartphones (iOS, Android), Tablets, Laptops, Desktops.
- Servers: Test servers mirroring the production environment.

##### Software:

- Operating Systems: Windows, macOS, iOS, Android.
- Browsers: Chrome, Firefox, Safari, Edge.
- Test Tools: Test management and automation tools as required.

#### 15. Test Deliverables

- Test Plan Document
- Test Cases and Test Scripts
- Test Execution Reports
- Defect Reports
- Test Summary Report

#### 16. Approvals

- **Test Lead:** Rokaiya Zaman Suthi
- **Project Manager:** Rokaiya Zaman Suthi
- **Quality Assurance Manager:** Rokaiya Zaman Suthi

#### 17. Glossary

- **Test Case:** A set of conditions under which a tester assesses the correct functionality of an application.
- **Defect:** A discrepancy between expected and actual results.
- **Regression Testing:** Retesting to ensure no new issues arise after changes.