#### **Project Overview**

The Toolshop application (<https://practicesoftwaretesting.com/>) is an online platform designed for purchasing tools and equipment. The primary objective of manual testing for Toolshop is to ensure that all functionalities work as expected, providing a seamless user experience. The testing will cover all critical aspects of the application, including user interface, functionality, performance, and security.

#### **Testing Objectives**

1. **Verify the core functionalities of the Tool Shop application:**
   * User registration and login.
   * Product browsing and search.
   * Shopping cart and checkout process.
   * Payment gateway integration.
   * Order history and user profile management.
2. **Ensure the application is user-friendly and responsive across different devices and browsers.**
3. **Identify and document any bugs, defects, or inconsistencies.**
4. **Validate the security measures in place to protect user data and transactions.**

#### **Scope of Testing**

1. **Functional Testing:**
   * **User Registration and Login:**
     + Verify user registration with valid and invalid data.
     + Test login functionality with valid and invalid credentials.
     + Check password recovery process.
   * **Product Browsing and Search:**
     + Validate product categories and navigation.
     + Test search functionality with various keywords.
     + Ensure product details page displays correct information.
   * **Shopping Cart:**
     + Add and remove items from the cart.
     + Update item quantities.
     + Verify cart total calculation.
   * **Checkout Process:**
     + Test checkout process with valid and invalid inputs.
     + Validate shipping and billing address forms.
   * **Payment Gateway:**
     + Verify payment with valid and invalid card details.
     + Check payment confirmation and error handling.
   * **Order History and User Profile:**
     + Verify order history details.
     + Test user profile updates.
2. **Usability Testing:**
   * Assess the user interface for ease of use.
   * Ensure the layout is consistent across different pages.
   * Verify navigation flows are logical and intuitive.
   * Test application responsiveness on various devices (mobile, tablet, desktop).
3. **Compatibility Testing:**
   * Test the application on different browsers (Chrome, Firefox, Safari, Edge).
   * Validate functionality on different operating systems (Windows, macOS, iOS, Android).
4. **Performance Testing:**
   * Assess page load times for various sections of the application.
   * Verify the application's performance under different network conditions.
5. **Security Testing:**
   * Validate user authentication and authorization processes.
   * Check for vulnerabilities such as SQL injection, XSS, and CSRF.
   * Ensure sensitive data is encrypted and protected.
6. **Regression Testing:**
   * Perform regression testing to ensure new changes do not affect existing functionalities.
   * Re-test critical paths and high-impact areas after bug fixes and updates.

#### **Out of Scope**

* Automated testing (as this scope focuses on manual testing).
* Load testing and stress testing (requires specific tools and setups).
* Backend and database testing beyond user interface interactions.

#### **Testing Deliverables**

1. **Test Plan:**
   * Document outlining the testing strategy, objectives, scope, resources, schedule, and deliverables.
2. **Test Cases:**
   * Detailed test cases covering all functional, usability, compatibility, performance, and security aspects.
3. **Defect Reports:**
   * Log of all identified defects with descriptions, steps to reproduce, severity, screenshots, and status.
4. **Test Summary Report:**
   * Summary of testing activities, test results, defect metrics, and overall assessment of the application quality.

#### **Resources Required**

* Testers with experience in manual testing.
* Test environment with various devices and browsers.
* Access to test data and user accounts.

#### **Timeline**

* **Planning:** 1 week
* **Test Case Design:** 2 weeks
* **Test Execution:** 3 weeks
* **Defect Reporting and Retesting:** 2 weeks
* **Test Summary Report:** 1 week

By adhering to this scope, the manual testing process for Toolshop will thoroughly evaluate the application’s functionality, usability, compatibility, performance, and security, ensuring a high-quality user experience.