### **Test Plan for TutorialsNinja Application**

#### **1. Introduction**

1.1 **Purpose**: This test plan outlines the strategy and approach for testing the TutorialsNinja demo e-commerce application to ensure its functionality, performance, and usability align with the defined requirements.

1.2 **Scope**: The testing scope includes key functionalities of the TutorialsNinja application, such as user registration, product search, shopping cart, checkout process, payment gateway integration, order management, and gift certificate functionality.

1.3 **Objectives**:

* Verify that the application meets all functional requirements.
* Ensure the application is free of critical defects.
* Validate the performance and security of the application.
* Confirm compatibility across different devices and browsers.

#### **2. Test Strategy**

2.1 **Types of Testing**:

* **Functional Testing**: Ensure all features work as intended.
* **Regression Testing**: Verify that new changes don’t negatively impact existing functionality.
* **Performance Testing**: Assess the application's responsiveness and stability under load.
* **Usability Testing**: Evaluate the user interface and overall user experience.
* **Compatibility Testing**: Confirm the application works seamlessly across various devices and browsers.

2.2 **Testing Tools**:

* **Manual testing**

**3. Test Scope**

3.1 **Features to be Tested**:

* **User Registration & Login**: Test valid and invalid user registrations, login/logout functionality.
* **Product Search**: Test search by category, keywords, filters, and sorting options.
* **Product Details**: Test viewing product details, images, and reviews.
* **Shopping Cart**: Test adding/removing items, updating quantities, and viewing cart summary.
* **Checkout Process**: Test address entry, shipping options, payment methods, and order confirmation.
* **Order Management**: Test viewing order history, tracking orders, and managing returns.
* **Gift Certificate Functionality**: Test creating, purchasing, and redeeming gift certificates.

3.2 **Features Not to be Tested**:

* Integration with third-party services (e.g., external APIs) will not be tested in this plan.

#### **4. Test Environment**

4.1 **Hardware**:

* **Servers**: Windows11
* **User Devices**: Laptop

4.2 **Software**:

* **Operating Systems**: Windows 10, macOS, iOS 15+, Android 12+
* **Browsers**: Chrome, Firefox, Safari, Edge
* **Database**: N/A

#### **5. Test Schedule**

5.1 **Milestones**:

* **Test Planning**: 27-08-2024 - 27-08-2024
* **Test Case Design**: 27-08-2024 - 28-08-2024
* **Test Execution**: 28-08-2024 - 30-08-2024
* **Defect Reporting**: Ongoing during test execution
* **Test Closure**: 27-08-2024 - 31-08-2024

#### **6. Test Deliverables**

6.1 **Test Artifacts**:

* Test Plan Document
* Test Cases and Scripts
* Test Data
* Test Execution Reports
* Defect Reports
* Final Test Summary Report

#### **7. Roles and Responsibilities**

7.1 **Test Manager**:

* Oversee test planning and execution.
* Coordinate with stakeholders.
* Review and approve test deliverables.

7.2 **Test Engineers**:

* Design and execute test cases.
* Report and track defects.
* Collaborate with the development team.

7.3 **Product Owner**:

* Provide requirements and clarify doubts.
* Validate test results and provide feedback.

#### **8. Risk and Mitigation**

8.1 **Risks**:

* **Incomplete Requirements**: Regular review and clarification sessions with stakeholders.
* **Environment Issues**: Ensure test environments are stable and reflective of production.
* **Testing Delays**: Prioritize critical test cases and allocate additional resources if needed.

#### **9. Approval**

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Approved by: Shiva Kumar  
Date of Approval:

This structured approach will help ensure the TutorialsNinja application is thoroughly tested and meets the expected quality standards.