Smart Bargain

Test Plan

Version v1.0.1

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1. Test Plan Identifier

SmartBargain_TestPlan_v1.0.1

2. Introduction

The Smart Bargain System is a web based e-commerce platform that enables buyer seller interactions, negotiations, order management, messaging and also purchases. This test plan describes the testing approach for the system. The goal is to verify that the system satisfies specified requirements by validating its usability, security, performance, and functionality.

3. Objectives and Tasks

Objectives

- To make sure core feature functions as expected
- Validate user roles and access control.
- Discover and fix functional and nonfunctional bugs.

Tasks

- Design test cases.
- Execute test cases.
- Manage test data
- Log and create and monitor defects.
- Report test results.
- Outline test automation strategies

4. Scope

Below is what is in scope and is out of scope for the initial implementation

In Scope

- Homepage access to other pages

- Registration & Login (Buyer/Seller)

- Product catalog with categories

- Negotiation Feature with Buyer/Seller Workflow

- Manual Approval where sellers can accept, reject, or counter customer offers

- Order Confirmation and History

- Contact Messaging System

- Buyer and Seller Dashboards

- Role-based Access

Out of Scope

- Bid Feature where customers can propose a price (bid) for eligible products

- Product recommendations based on browsing and purchase history

- Automated Approval where the system can auto-approve bids/bargains based on set rules

- Multiple payment models

- Mobile-responsive design for seamless shopping on any device

- Order management

- Invoice management

- Review and rating system for products and seller

5. Entry Criteria

- Development is complete for the module being tested.

- All required test data is available.

- Unit testing is completed and remains pass.

6. Exit Criteria

- All planned test cases have been executed.

- All high and critical defects are fixed and closed.

- Regression testing is completed.

- Test summary report is reviewed and has been signed off.

7. Test Deliverables

- Test Plan (this document)

- Test Cases

- Test Data Sets

- Defect Logs

- Test Summary Report

8. Test Strategy

Test Type	Description
Unit Testing	Conducted by the developer to make sure each module works as expected in isolation. Both positive and negative test should be conducted for each function.
Smoke Testing	Performed on every new build to make sure core functionalities (e.g., login, product load, dashboard access) of the system is working
Component Testing	Each individual module such as login.py, product management, negotiation, and messaging is tested alone and in isolation to other components.
System Testing	System testing is conducted by combining two modules together to make sure the integration between the modules are working as expected. End to end system testing is conducted to make sure the entire flow from top to bottom is working as expected and no major breaks when multiple components are connected together.
Regression Testing	Regression is conducted to make sure the working functionality is not broken due to a fix or a new enhancement.
User Acceptance Testing	This is conducted from the end user perspective. Based on availability the customers are expected to be apart of UAT. A different set of test cases are maintained for UAT. The main goal is to make sure the system is built to address user expectations.

9. Environment Requirements

- **Browser Support**: Chrome, Firefox (latest versions)

- **Backend**: Django (Python), SQLite (Singleton pattern)

- **Frontend**: HTML/CSS/JS, Bootstrap

- **Test Data**: Sample users (Buyers, Sellers), Products, Negotiation cases, Orders

- **Optional Tools**: Postman (for backend API tests), Selenium (for UI test automation)

10. Responsibilities

Role	Responsibility
QA/Test Lead	Approve test plan, oversee execution, report progress.
QA Engineer	Write and execute test cases, log defects.
Developer	Fix defects, support debugging.
Project Manager	Track testing progress, coordinate handoffs.

11. Schedule

Phase	Duration
Test Planning	1 day
Test Case Design	2 days
Test Execution	3–5 days
Defect Fixing and Retesting	As needed
Final Sign-Off	1 day

12. Risks and Mitigations

Risk	Mitigation
Incomplete Requirements	Regular consultation with potential stakeholders
Time constraints	Prioritize test cases based on high-risk features and core flows
Development and testing overlaps	Implement effective test strategies for faster feedback and turnaround time as well as support parallelism where developers work on new features while testers work on previous versions in different branches

13. Change Log

Version Number	Date	Contributor	Description
v1.0.0	07 July 2025	Lakmali	Test plan creation
v1.0.1	08 July 2025	Sheila	Test plan review