

Test Plan

Project Name: DemoBlaze



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1 Introduction

1.1 PURPOSE

The purpose of this test plan is to ensure the thorough testing of the "<https://www.demoblaze.com/>" website, meeting the client's requirement for a high-quality website that has undergone the Software Testing Life Cycle (STLC). The Test Plan has been created to facilitate communication within the team members. This document describe approaches and methodologies that will apply to the unit, functional, integration and system testing of the "<https://www.demoblaze.com/>". It includes the scope, objectives, test responsibilities, schedule major milestones, entry and exit criteria and test approach. This document has clearly identified what the test deliverables will be.

1.2 PROJECT OVERVIEW

Demoblaze is an e-commerce website offering various items such as mobile phones, laptops, and monitors, allowing users to browse and place orders. Customers can explore items categorized by type and make purchases accordingly. The testing process will encompass unit testing, functional testing, system testing, and integration testing to ensure the application's robustness. Comprehensive testing not only enhances the overall user experience but also contributes to increased business prospects.

2 Scope

2.1 IN-SCOPE

The document mainly targets the functional testing and validating of data in report output as per requirements specifications provided by client. It includes automated testing of specifications, functionalities, pages, search functionality, filter logic, performance, and features to verify their correctness and ensure they are free of bugs.

2.1.1 FEATURE TO BE TESTED

The primary features to be tested of the Demo blaze e-commerce site are:

Module Name	Features Tested
Registration	<ol style="list-style-type: none">1. Signup scenario with valid username and password2. Signup scenario with existing username3. Signup scenario with empty credentials
Login	<ol style="list-style-type: none">4. Login scenario with valid username and password5. Login scenario with invalid username and valid password6. Login scenario with valid username and invalid password7. Login scenario with empty credentials
Categories	<ol style="list-style-type: none">8. Validate Category of Monitors9. Validate Category of Laptops10. Validate Category of Phones
Products	<ol style="list-style-type: none">11. Validate Device Name is displayed in Product Details12. Validate Device Price is displayed in Product Details13. Validate Device Description is displayed in Product Details14. Validate Add to Cart button is displayed in Product Details
Add to cart	<ol style="list-style-type: none">15. Validate Product is successfully added to the cart16. Validate Product is successfully removed from the cart17. Validate Total Price is calculated correctly
Checkout Process	<ol style="list-style-type: none">18. Checkout products from cart19. Checkout from cart having no products

2.2 OUT-OF-SCOPE

2.2.1 FEATURE NOT TO BE TESTED

- **Payment method functionality:** Since the payment gateway is handled by a third-party service provider, testing of this feature is not within the scope of this test plan.
- **User Interfaces**
- **Website Security and Performance**
- **Database testing**

3 Testing Strategy

3.1 TEST ASSUMPTIONS

Key assumptions for the Demoblaze e-commerce site project and test plan:

1. **Development Alignment:** The development team will adhere to the provided requirements specifications, ensuring alignment with the testing objectives.
2. **Resource Availability:** Adequate resources, including testing environments and relevant test data, will be provided as per the project schedule.
3. **Testing Expertise:** The testing team possesses the requisite skills and expertise to execute testing activities effectively.
4. **Scope Changes:** Any changes to the project scope or requirements will be communicated promptly to maintain alignment with testing efforts.
5. **Test Environment:** The test environment accurately mirrors the production environment, enabling simulation of real-world scenarios during testing.

3.2 TEST APPROACH

We plan to conduct White box (unit) and Blackbox tests (system/end user) to ensure comprehensive testing at different levels.

3.3 TEST ENVIRONMENT

Hardware Requirements: PC/Laptop with windows10/8.1/8 64-bit operating system, 8GB/16GB RAM, 500GB storage, i5/i7 processor

Network Requirements: Setup a LAN/WAN Gigabit and 1 internet line with the speed at least 5mb/s.

3.3.1 TESTING TOOLS:

Process	Tool
Test plan creation	Microsoft Word
Test case creation	Microsoft Excel.
Test case tracking	Microsoft Excel.
Test case execution	Automation in Visual Studio (2022), NUnit .Net Framework, Selenium web driver, Chrome Browser (latest version)
Test case management	Microsoft Excel.
Defect management	Microsoft Word
Test reporting	Allure Report
Check list creating	Microsoft Excel
Project structure	Visual Studio Solution File (.sln), Source Code Folder and Allure Report screen shots

3.3.2 TOP TEST PERFORMED:

White Box Testing: Each module will be sub-divided into further modules to be tested. Testers will understand the code, internal working of the system and test accordingly to make sure that all the validation is passed or failed. User Log in using email id and password.

1. Viewing various items in different categories.
2. Adding products to the cart.
3. Placing order.

Black Box Testing: End users will test the application without any knowledge regarding the application. User experience while performing each action will be considered. It exercises a system end-to-end testing. Basic tests performed are:

1. Front end design and UI testing including testing of the text box, fields, buttons, are working as expected or not in different pages like Place order, log in, sign up etc
2. Verify user log in using invalid inputs
3. Verify a logged user can view product and place order in sequential order.
4. Verify the security and session handling by the application
5. Verify by clicking the Phone tab will display Phone list only
6. Verify by clicking the Monitor tab will display Monitor list only
7. Verify by clicking the Laptop tab will display Laptop list only

3.3.3 NON-FUNCTIONAL TEST:

Testing non-functional aspects like performance, usability, reliability is important. It helps to reduce production risk and cost association with non-functional aspects of the product.

1. **Load Time:** It is the average amount of time a page takes to show up on your screen.
2. **Payload:** Assessing the efficiency of data transmission.
3. **Time to Interact:** It is the time taken by “Demoblaze” website to respond.











3.4 LEVEL OF TESTING

List the types of testing to be performed.







Test Type	Description	Responsible Parties
Unit Testing	Testing individual units or components	Developer
Integration Testing	Test modules or functions	Developer & Tester
System Testing	Testing the entire system to meet quality	Tester
Acceptance Testing	Test the application that satisfies client requirements.	Customers and end-users







4 Test Criteria

4.1 ENTRY CRITERIA

Entry Criteria	Test Team	Technical Team	Comments
All the testing tools have successfully installed and functioning properly.			Done
Test data is available			Available
Code has been merged successfully			Done
Test environment is available.			Available
QA resources have completely understood the requirements.			Understood

4.2 EXIT CRITERIA

Exit Criteria	Test Team	Technical Team	Comments
100% Test Scripts executed			Done
90% pass rate of Test Scripts			Pass
No open Critical and High severity defects			No any.

A certain level of requirements coverage has been achieved.			Confirmed
All high-risk areas have been fully tested, with only minor residual risks left outstanding			Confirmed
All test cases are captured in Allure Report			Done

5 Roles and Responsibilities

Role	Resources	Responsibilities
Project Manager	Muhammad Kamran	1. Acts as a primary contact for development and QA team. 2. Responsible for Project schedule and the overall success of the project.
QA Lead	Muhammad Kamran	1. Participation in the project plan creation/update process. 2. Planning and organization of test process for the release. 3. Coordinate with QA analysts/engineers on any issues/problems encountered during testing. 4. Report progress on work assignments to the PM
SQA SQA SQA	Adnan Mairaj Sabih	1. Understand requirements 2. Writing and executing Test cases 3. Reviewing Test cases 4. Defect reporting and tracking 5. Retesting and regression testing 6. Bug Review meeting 7. Checking correctness of Test Data 8. Coordinate with QA Lead for any issues or problems

6 Test Effort Estimation Cost

Task Name	Start	Finish	Estimate Effort
Create Test Planning Document	01/04/24	05/04/24	170 man-hour
Create Test Case to Register User and create its account	08/04/24	10/04/24	45 man-hour

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Create Test Case Valid Login	11/04/24	12/04/24	50 man-hour
Create Test Case Invalid Login	15/04/24	16/04/24	35 man-hour
Create Test Case Add product to the cart	17/04/24	19/04/24	55 man-hour
Create Test Case to Delete product from cart	22/04/24	23/04/24	25 man-hour
Create Test Case for Valid Order Placement	24/04/24	26/04/24	40 man-hour
Create Test Case for invalid Order Placement	29/04/24	30/04/24	35 man-hour
Deploy to QA test environment	02/05/24	03/05/24	25 man-hour
Functional Testing of features	06/05/24	07/05/24	30 man-hour
System testing	08/05/24	10/05/24	80 man-hour
User Acceptance Testing (UAT)	13/05/24	14/05/24	70 man-hour
Create Test Report (Allure Report)	14/05/24	14/05/24	10 man-hour
Deploy to Staging environment	14/05/24	14/05/24	10 man-hour
Release to Production	14/05/24	14/05/24	10 man-hour
Total			520 man-hour

7 TEST DELIVERABLES

Test deliverables are provided as below

7.1 BEFORE TESTING PHASE

Test plans document.

7.2 AFTER TESTING PHASE

Automated Test Executed Scripts

Test Result Report in Allure Report.