QualityAssuranceGroup

TEST PLAN
MD Web Store

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Document History

Version	Date	Author	Description of Change
1.0	09/20/2023	Tsaruk Tamara	Creation

Approvers list

Name	Role	Approver	Approval Date
+ дописати			

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1. INTRODUCTION

1.1. Purpose

This test plan describes the testing approach and overall framework that will drive the testing of the MD Web Store (https://www.mdwebstore.it).

1.2. Project Overview

MD WEB STORE is the e-commerce of the Italian supermarket chain MD. A large and varied product catalog: over 1000 references, divided into electronics, large and small household appliances, household goods and DIY, easily searchable by section, price and brand. All products are covered by a warranty for 24 months from purchase (12 months if the customer purchases with a VAT number) for defects in conformity.

1.3. Audience

Gender: Male/Female
Age Group: 18-55
Interests: Electronic devices, household appliances

2. REFERENCES

- Project Plan;
- Detail design document;
- Test Cases;
- Bug Reports;
- Mind Map;
- User stories.

3. TEST STRATEGY

3.1. Test Objectives

The objective of the test is to verify that the functionality of MD Web Store web site works according to the specifications.
The test will execute and verify the test scripts, identify, fix and retest all high and medium severity defects per the entrance criteria, prioritize lower severity defects for future fixing.
The final product of the test is:

- A production-ready software;
- A set of stable test scripts that can be reused for Functional and UAT test execution.

3.2. Test Assumptions

General:

- All the defects would come along with a snapshot JPEG format;
- Test environment and preparation activities will be owned by Dev Team;
- Business Analyst will review and sign-off all Test cases prepared by Test Team prior to start of Test execution ;
- The project will provide test planning, test design and test execution support;
- Test team will manage the testing effort with close coordination with Project PM/Business Analyst;
- Project team has the knowledge and experience necessary, or has received adequate training in the system, the project and the testing processes.

3.3. Test Principles

- Testing will be focused on meeting the business objectives, cost efficiency, and quality.
- There will be common, consistent procedures for all teams supporting testing activities.
- Testing processes will be well defined, yet flexible, with the ability to change as needed.
- Testing activities will build upon previous stages to avoid redundancy or duplication of effort.
- Testing environment and data will emulate a production environment as much as possible.

- Testing will be a repeatable, quantifiable, and measurable activity.
- Testing will be divided into distinct phases, each with clearly defined objectives and goals.
- There will be entrance and exit criteria.

4. TEST ITEMS

4.1. Exploratory Test

PURPOSE: the purpose of this test is to make sure critical defects are removed before the next levels of testing can start.
SCOPE: First level navigation, dealer and admin modules TESTERS: Testing team.
TIMING: at the beginning of each cycle.

4.2. Functional Test

PURPOSE: Functional testing will be performed to check the functions of web site - MD Web Store. The functional testing is carried out by feeding the input and validates the output from the web site.
SCOPE: The scope is high level due to changes in the requirement.
TESTERS: Testing Team.
TIMING: After Exploratory Test is complete.

4.3. User Acceptance Test (UAT)

PURPOSE: this test focuses on validating the business logic. It allows the end users to complete one final review of the system prior to deployment.
METHOD: Since the business users are the most indicated to provide input around business needs and how the system adapts to them, it may happen that the users do some validation not contained in the scripts. Test team writes the UAT test cases based on the inputs from End user and Business Analyst's.
TESTERS: the UAT is performed by the end users.
TIMING: After all other levels of testing (Exploratory and Functional) are done. Only after this test is completed the product can be released to production.

5. RISK ISSUES

Risk	Constraint	Risk Management Measures
1. Insufficient Time for Testing	Testing timelines are limited.	- Prioritize testing tasks and focus on the most critical features before planning testing.
2. Insufficient Resources	Lack of access to necessary equipment and environments.	- Explore opportunities to expand access to required resources or equipment.
3. Lack of Documentation	Limited availability of testing devices.	- Engage in active communication with developers and create documentation during development to improve access to information.
4. Unbalanced Workload	Time constraints for testing.	- Distribute tasks within the team taking into account workload and competencies.
5. Changing Requirements	Possibility of introducing errors.	- Ensure regular information exchange between teams. - Thoroughly document all requirement changes and their impact on the software product.
6. Dependency on Third-Party Services	Inaccessibility of payment systems and third-party APIs.	- Plan extra time for testing in case of potential delays.
7. Testing Scalability	Limited testing time.	- Effectively plan tests and prioritize the most critical features.

6. FEATURE TO BE TESTED

1. **Website Navigation**: This is crucial as users should easily navigate through the site and find the necessary information.
2. **Order Checkout**: Functionality for placing orders is critical as it directly impacts the purchasing process.
3. **Adding Items to Cart**: This feature is important as it precedes the order checkout process, so it has a high priority.
4. **Registration and Login**: The ability for users to create accounts and log in is essential and also has high priority.
5. **Product Search:** The search functionality is important for user convenience but may have a moderate priority compared to other features.
6. **Product and Page Display**: This feature is vital for visually presenting products and their information but may have a moderate priority.

7. **Responsive Design**: Ensuring correct display on various devices and screens is important but may be addressed after core functionalities.
8. **Data Security**: Ensuring the security of users' personal data and financial transactions is crucial but can be integrated into overall security testing.
9. **Social Media Integration**: This feature may have a lower priority if it is not a core part of the site's functionality.
10. **Error Handling and Exception Handling**: While important, these aspects may be addressed after the core functionalities are tested.
11. **Localization and Language Support**: This feature may have a lower priority if the site does not have a multilingual audience.
12. **Cross-Browser Compatibility Testing**: This can be conducted after primary testing of core features.
13. **Security Testing**: Security considerations should be integrated throughout the testing process, but it may have a moderate priority.
14. **Load Testing**: Load testing can be conducted later in the testing phase after core features are thoroughly tested.

7. FEATURE NOT TO BE TESTED

1. Static Interface Elements:
    - Background images of the website and pages
    - Color scheme
    - Logo
    - Menu items that navigate users to different sections of the website
    - Contact information
2. External Services and APIs
3. Spam and User Security
4. Admin Interface

8. APPROACH (STRATEGY)

The client will receive weekly reports on the progress of testing, identified defects, and suggestions for improving the product and its design. All identified defects will be documented in the form of individual tickets (bug reports) for further input into the client's bug tracking system.

During the testing of the website https://www.mdwebstore.it/, ad-hoc testing will be utilized due to the absence of strict specifications and resource limitations. We will check the functionality of the site (product catalog, order form). The testing process will include functional and non-functional testing. Including cross-browser testing, usability testing, and localization testing. Security and performance testing will not be performed due to limited access.The testing process is planned to consist of five stages:

1. Analysis of the technical specification (TS), writing user stories, and the creation of a test plan.
2. Writing test cases and conducting thorough functional testing with the identification and description of defects.
3. Compatibility testing with different web browsers, along with the description of any discovered defects.
4. The fourth stage involves verifying defects fixed by developers and conducting regression testing.

Operating system to be tested:

- Windows 10 Pro
- Windows 11 Pro

Web browsers to be tested:

- Google Chrome (117.0.5938.60)
- Opera 56.0.3051.104
- Mozilla Firefox (117.0.1)

Resources

Name	Target	Price
Jira Software	Management of project development and testing.	$57.50 per month
TestRail	Keeping checklists and test cases.	$1980 per year

Office 365	Maintaining documentation, creating tables, presentations, reports.	$30 per month
Microsoft Teams or Zoom	Holding meetings	Free

Team

- Boridko Tetiana - Junior QA Enginer
- Tsaruk Tamara - Junior QA Enginer/Team Lead
- Yashchenko Serhii - Junior QA Enginer
- Kremin Zoriana - Junior QA Enginer
- Dmutro Kovalchuk - Junior QA Enginer

Artifacts:

- Software Specification (User Story)
- Test Plan
- Test Case
- Check List
- Bug Report

Test devices:

(Tanya) Samsung A71	Android 13	Chrome (14.37.22.28.arm64)
(Zoriana) Samsung A54 5G	android 13	Chrome (117.0.5938.60)

(Serhii) Samsung Galaxy S10	Android 12	Chrome (117.0.5938.60)
(Tamara) Samsung Galaxy S10	Android 12	Samsung Internet (22.0.6.9)
(Tamara) Laptop HP EliteBook ×360	Windows 11 Pro (22H2)	Google Chrome (116.0.5845.188)
(Serhii)Laptop Dell Latitude E5470	Windows 10 Pro Version (22H2)	Google Chrome (116.0.5845.188)
(Zoriana)Laptop Acer aspire ES1-520	Windows 10 Pro (1903)	Google Chrome (116.0.5845.190)
(Tanya) Laptop Asus Vivobook	Windows 11 Pro (22H2)	Firefox (117.0.1)

Criteria for starting and ending a test:

Testing may be initiated if the following conditions are met:

- The necessary documentation is ready and approved;
- The functionality to be tested is completed and ready for submission to testing.

Testing is finished if the following conditions are met:

All defects found are documented.

9. SUCCESS AND FAILURE CRITERIA FOR THE ELEMENT

9.1. Success Criteria at the Master Test Plan Level:

All lower-level plans should be completed without errors. The percentage of plans with minor defects should not exceed 5%.

9.2. Success Criteria at the Unit Level:

- All test cases related to the website https://www.mdwebstore.it/ should be successfully completed without critical defects.

- This means that each individual test case, such as navigation, search, order placement, payment, etc., should pass successfully without critical errors that could lead to the improper functioning of the website.

- Code responsible for creating the core functional blocks of the website should be covered by tests.

- This implies that each part of the code responsible for important functions should be tested for correctness and reliability.

- The percentage of tests with minor defects should not exceed 5%.

- This means that although some tests may have minor defects that are not critical, no more than 5% of all tests may have such minor issues.

-The percentage of tests with minor defects should not exceed 5%.

10. SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

10.1. Suspension Criteria:

Detection of Critical Defects:

If critical defects are identified during testing that have a significant impact on the website's functionality and can lead to its inaccessibility or improper operation, testing must be suspended immediately. Critical defects must be documented and

communicated to developers for immediate resolution. Testing can be resumed after confirmation that critical issues have been resolved.

Security Threats or Infrastructure Concerns:

If situations threatening the security of the website are detected during testing, testing should also be suspended. In this case, measures should be taken to protect the site from potential threats, and testing can be resumed once security has been restored.

10.2. Resumption Requirements:

Correction of Critical Defects:

-After suspending testing due to critical defects, developers must promptly address and resolve these issues. After critical defects have been corrected, a verification process should be conducted to ensure that they have been successfully resolved and no longer pose a threat to the website's functionality.

Restoration of Testing Infrastructure:

-If testing was suspended due to issues with the testing infrastructure or environment, these components must be restored. This may involve bringing testing servers, databases, web servers, and other infrastructure elements back to operational status. After the infrastructure has been restored, it should be verified that all systems are functioning correctly and ready to resume testing.

11. TEST RESULTS

11.1. Documents to be Provided:

Test Report: This document contains comprehensive information about the testing of the website https://www.mdwebstore.it/.

The report should include the following sections:

-TEST CASE/CHECKLIST

Description of executed test cases and their results: Detailed description of each test case, including input data, expected outcomes, and actual test results. This helps understand how the testing of each element of the website went.

-BUGS REPORT

Description of identified defects: A list of all defects identified during testing. Each defect should be documented, indicating its status (open, fixed, verified, etc.), importance, and criticality.

-RTM

Code coverage information: If available, information about code coverage by tests. This indicates which part of the code was tested and to what depth.

11.2. Detailed Analysis of Results:

-Successful Tests: List of tests that were successfully completed without defects. This information demonstrates that the core functions of the website are working correctly.

-Identified Defects: Description of all identified defects, along with their characteristics. This helps developers understand the problems that arose and their level of importance.

-Code Coverage: An analysis of which part of the code was tested and whether there is a need for additional tests.

11.3. Conclusions:

-Conclusions: A general summary of the testing results, its quality, and the state of the website. Typically, this is a brief conclusion about whether the site is ready to continue working or requires additional fixes.

-Plans for Further Testing: If additional tests are identified after analyzing the results, plans for conducting these tests should be outlined.

-Test Summary Report

12. REMAINING TESTING TASKS

12.1. Recovery Testing:

Conduct tests to verify how the website recovers from emergency situations or server outages. Testing may include data recovery, ensuring site availability, and restoring core functionality.

12.2. Defect Resolution and Verification:

Track and fix defects identified during previous testing. After defect resolution, it is necessary to perform verification to ensure they have been corrected correctly and have not led to other issues.

12.3. Documentation Update:

Update documentation related to the testing results and identified defects. The updated documentation should reflect the current state of the website and its functionality after testing.

12.4. Long-Term Stability Tests:

Conduct tests to verify the stability of the website over an extended period of use. The goal is to identify potential issues that may arise due to prolonged site usage, such as memory accumulation or errors after long-term operation.

13. ENVIRONMENTAL NEEDS

Software Requirement.
13.1 OS:

- Windows 10;
- Windows 11;
- Android 12;
- Android 13.

13.2 Software:

- Jira Software;
- TestRail.

13.3 Network Configuration

- Network Configuration:
- DHCP, ~100 Mbps.

14. STAFFING AND TRAINING NEEDS

The testing team underwent training at QA Group courses. Various testing methods were studied. TestRail will be used for documentation creation and management in the project. Jira is used for project management, optimizing team work. It helps track initiated processes (projects) and monitor resource allocation (employees).

15. RESPONSIBILITIES

Roles and Responsibilities:
• Testers: Primary executors of testing, performing test scenarios, logging bugs, and providing test reports.
• Test Leaders: Responsible for test planning, selecting test tasks, and leading the tester team.
• Developers: Addressing identified bugs and issues.
• Analysts: Assisting in defining test scenarios, testing requirements, and specifications.
• Server Administrators: Providing access to test servers and environments.

16. SCHEDULE

12.09.2023 -19.09.2023	Meeting. Consultations. Documentation development. Writing

	User Stories.
19.09.2023 -26.09.2023	Meeting. Consultations. Documentation development. Writing Test Plans.
26.09.2023-03.10.2023	Meeting. Consultations. Product testing. Writing TRMs
03.10.2023- 10.10.2023	Meeting. Consultations. Writing Test Summary Reports. Presentation.

18. APPROVALS

The Names and Titles of all persons who must approve this plan.

Signature:	
Role:	
Date:	
Name:	

Signature:	
Role:	
Date:	
Name:	