TEST REPORT

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Document Controls
Document Revision History

Version	Date	Author	Modification	Notes
1.0	01.10.2023	Andreea Ioana Rusu		Initial Version
1.1	05.10.2023	Andreea Ioana Rusu	Add the features that are going to be tested	
1.2	05.11.2023	Andreea Ioana Rusu	Update number of test cases passed	
1.3	18.11.2023	Andreea Ioana Rusu	Update the number of closed defects	Final Version

Distribution List

Name	Role
Jane Valencia	QA Team Lead
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Project description

This test plan document describes the strategies, process, workflows and methodologies used to plan, organize, execute and manage testing process for RayToys.

Objective

The scope of the final project for ITF Manual Testing Course is to use all gained knowledge through the course and apply them in practice, using a live application.

Application under test: https://raytoys.ro/.

Tools used: JIRA, Zephyr Squad.

The testing session for the website www.raytoys.ro aims to guarantee optimal functionality, meet customer expectations and deliver a seamless buying experience. This involves, through checks on product pages, shopping cart, checkout, payment processing and user account management, to detect and address any bugs or security vulnerabilities, ultimately enhancing overall performance and user satisfaction.

Product Description

The tested website is a domain registered in Romania that provides toys and accessories for babies and parents.

The website can be accessed via www.raytoys.ro

Test Scope
Tests in scope (a.i. tests that were executed during the testing process)

Features that need to be tested: functional testing.

User stories were created in Jira and describe functional specifications of the website, for which the final project is performed upon.

Features/Functionalities tested	
Autentificare	Jucarii
Înregistrare	Retur produs
Ai uitat parola?	Cosul de cumparaturi
Ce produs cauți?	Contul meu
Actualizează coșul	Finalizare comanda
Golește coșul	

Tests not in scope

Non-functional testing like stress, performance is beyond scope of this project.

No QA support for mobile application developed. Only web application will be tested.

Automation testing is beyond scope.

Additional Functionalities or Features Tested

There were no additional functions that were tested that were not originally in the plan to be tested.

Testing Period

The site was tested between 01.10.2023 – 18.11.2023

Test Environment

The testing was conducted in an environment that replicated the end-user environment, including the use of the same devices and internet connection.

The testing was conducted on the latest version of the website using mainly Google Chrome browser on Windows 10 Home operating system.

This testing session was performed on:

Laptop DELL:

Windows 10 Home

Version   22H2

Installed on   8/8/2020

OS build   19045.3693

Experience   Windows Feature Experience Pack 1000.19053.1000.0

Device: Samsung Galaxy S10 model number SM-G973F/DS, OS Android 11

The following browsers were used for cross browser testing:

Chrome version 119.0.6045.124 (laptop)

Microsoft Edge version 119.0.2151.72 (laptop)

Firefox version 119.0 (laptop)

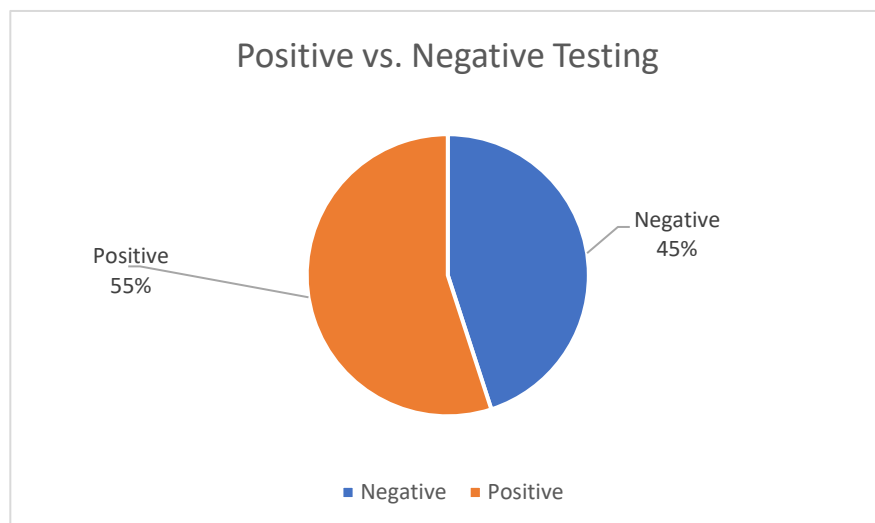Chrome version 119.0.6045.163 (phone)

Ecosia version 8.0.5.572 (8.0.5) (phone)

Testing Tools:

- Jira;

- Zephyr Squad;

- Screenpresso;

- Microsoft Office.

Testing Types Used:

- Functional testing

- Non-functional testing

- Black box testing

- Smoke testing

- Positive testing

- Negative testing

- Exploratory testing

- Dynamic testing

- Usability testing

Functional vs. Non functional

Non functional
12%

Functional
88%

■ Functional   ■ Non functional

Positive vs. Negative Testing

Negative
45%

Positive
55%

■ Negative   ■ Positive
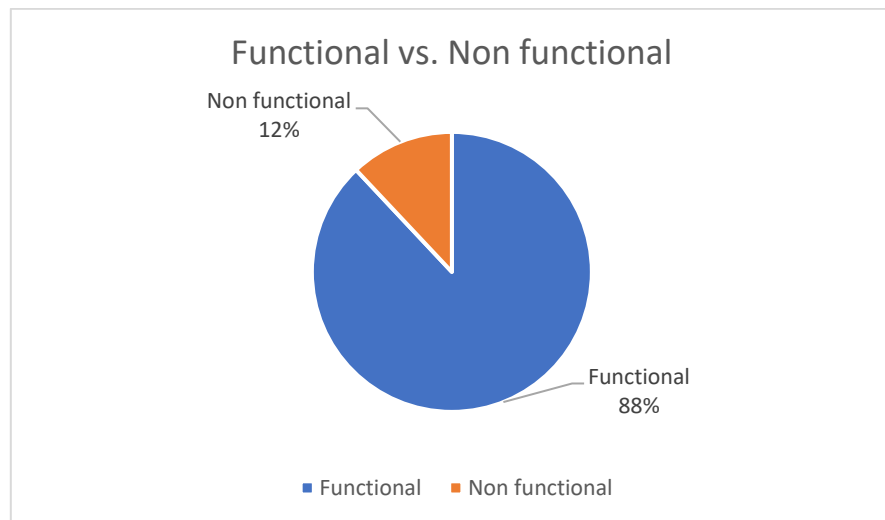
Test Design Techniques

•   Boundary Value Analysis;

•   Equivalence Class Partitioning

Smoke Testing

Smoke testing played a crucial role in the testing process, offering a rapid and efficient means to verify that the fundamental features are functioning as intended. Test case selection for smoke testing, in the absence of specific requirements, relied on the tester's past experience with similar ecommerce web applications. The smoke suite comprises 6 test cases (constituting 10% of the total number of test cases), addressing key functionalities such as:
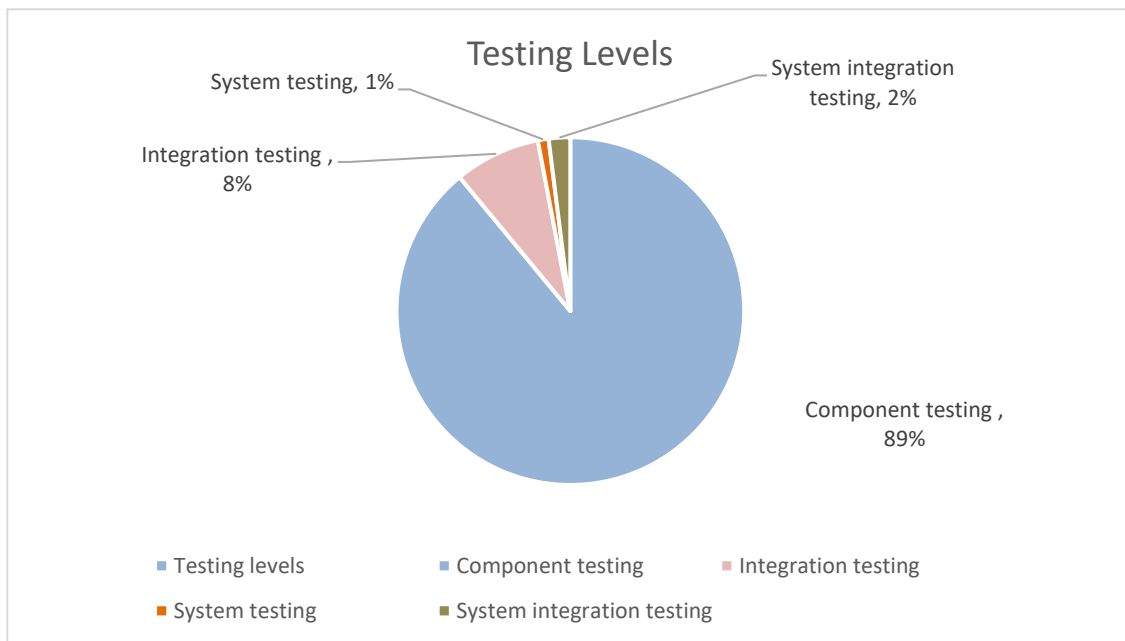
- Înregistrare
- Autentificare
- Cosul de cumparaturi
- Actualizează coşul
- Finalizare comanda
- Retur Produs

The pass rate for this smoke suite is 100%.

Smoke Testing

- Înregistrare, 17%
- Autentificare, 17%
- Cosul de cumparaturi, 17%
- Actualizează coşul, 17%
- Finalizare comanda, 16%
- Retur Produs, 16%
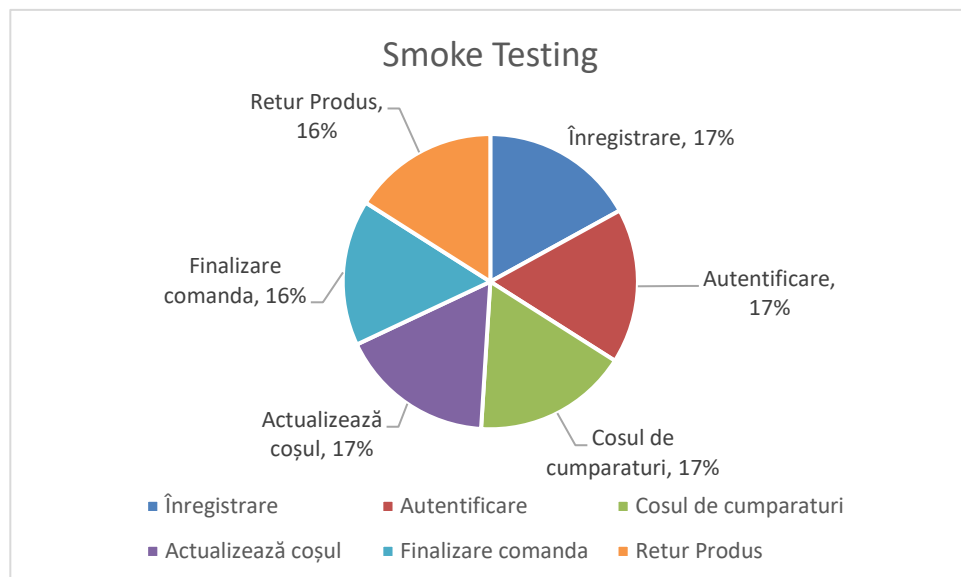
Testing levels

- • Component testing

- • Integration testing

- • System testing

- • System integration testing

The largest percentage belongs to "Component testing" and the components that underwent testing were: "Înregistrare", "Autentificare", "Cosul de cumparaturi", "Actualizează coşul", "Finalizare comanda", "Retur produs".

Any variance to original test Plan

The first testing cycle was delayed by three days. However, the timelines were adapted throughout the process and the project finished on time.

Test coverage

Given the website's relatively low complexity, the test coverage stands at 85%, signifying the completion of a substantial part of functional testing. However, to attain full 100% test coverage, additional testing is needed for non-functional aspects. This includes security testing and scalability.

Test results

Test cases	Number	Rate %
Designed	66	n/a
Executed	66	100
Passed	58	88
Failed	8	12
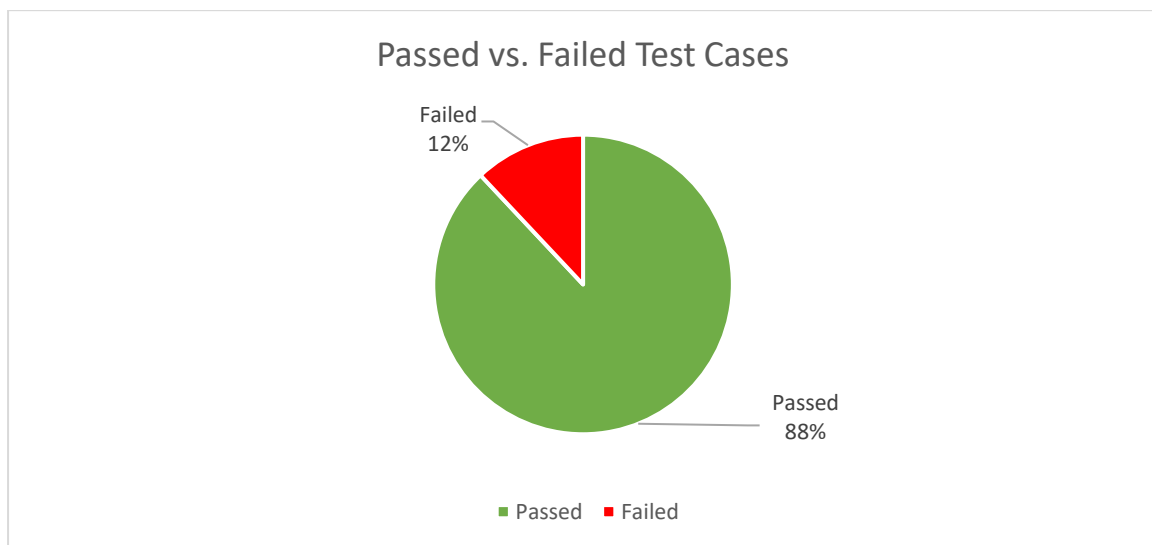
Test metrics per functionality/ feature

Test overview	Status			
	Passed	Failed	Blocked	Not run
Acasa	16	3	0	0
Cosul de produse	17	6	0	0
Autentificare	18	3	0	0
Inregistrare	3	1	0	0
Checkout	8	2	0	0
Contul meu	5	3	0	0
Produse	13	2	0	0

Test metrics per functionality/ feature

Test metrics per functionality/ feature

	Passed	Failed
Autentificare	7	2
Înregistrare	8	0
Ai uitat parola?	5	0
Ce produs cauți?	5	1
Actualizează coșul	9	1
Golește coșul	1	0
Jucarii	5	0
Retur produs	5	0
Cosul de cumparaturi	5	0
Contul meu	1	0
Finalizare comanda	8	3
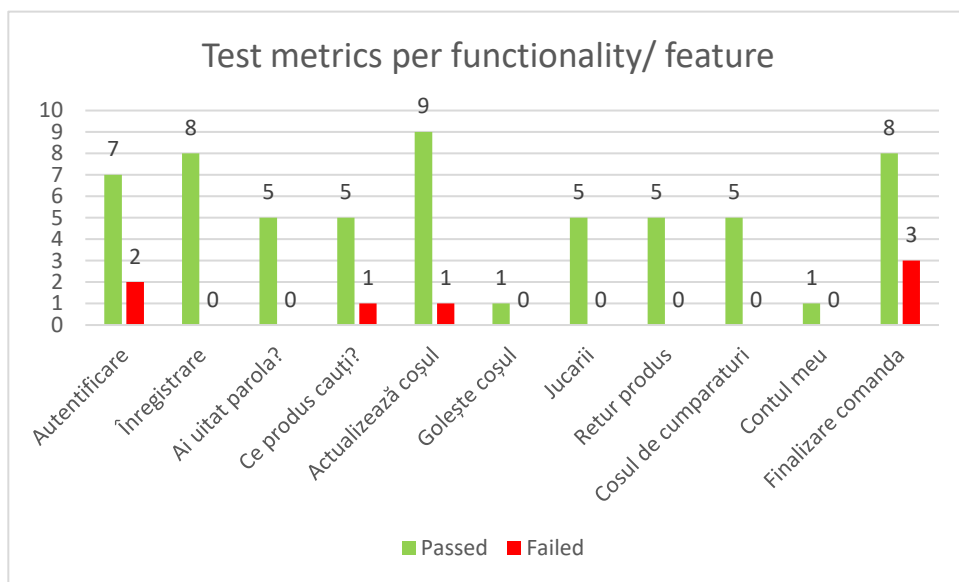
■ Passed ■ Failed

"Finalizare comanda" area has been identified as the section with the highest number of bugs identified during testing. The severity of these bugs is normal.

Test rate per functionality/ feature

	Pass rate (%)	Passed	Fail rate (%)	Failed
Autentificare	78%	7	22%	2
Înregistrare	100%	8	0%	0
Ai uitat parola?	100%	5	0%	0
Ce produs cauți?	83%	5	17%	1
Actualizează coșul	90%	9	10%	1
Golește coșul	100%	1	0%	0
Jucarii	100%	5	0%	0
Retur produs	67%	2	33%	1
Cosul de cumparaturi	100%	5	0%	0
Contul meu	100%	1	0%	0
Finalizare comanda	73%	8	27%	3

Test Rate per Functionality/ Feature
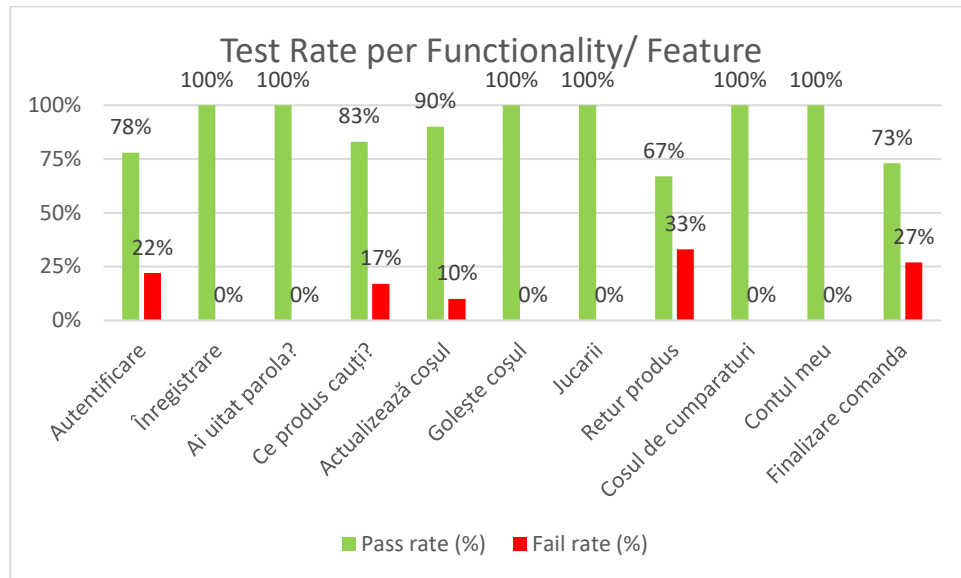
Exploratory Session Results

Nr. of exploratory sessions: 2

Duration: 1h /session

In the course of exploratory testing, the tester made on-the-spot decisions regarding what to test, how to test, and which areas warranted more in-depth investigation. This approach facilitated a comprehensive understanding of the website-s functionality, encompassing its behavior and limitations. This insight proved valuable in guiding testing efforts and prioritizing test cases.

Features/functionalities explored:
- Autentificare
- Înregistrare
- Ai uitat parola?
- Ce produs cauți?
- Actualizează coșul
- Golește coșul
- Jucarii
- Retur produs
- Cosul de cumparaturi
- Contul meu
- Finalizare comanda

Exploratory testing results by functionalities

There were 6 bugs and 1 improvement identified on exploratory session on the following functionalities:

FEATURE	No of bugs
Contul meu	1
Autentificare	1
Ce produs cauți?	1
Actualizează coșul	1
Finalizare comanda	1
Retur Produs	1

Bug metrics per functionality
(identified during exploratory testing)
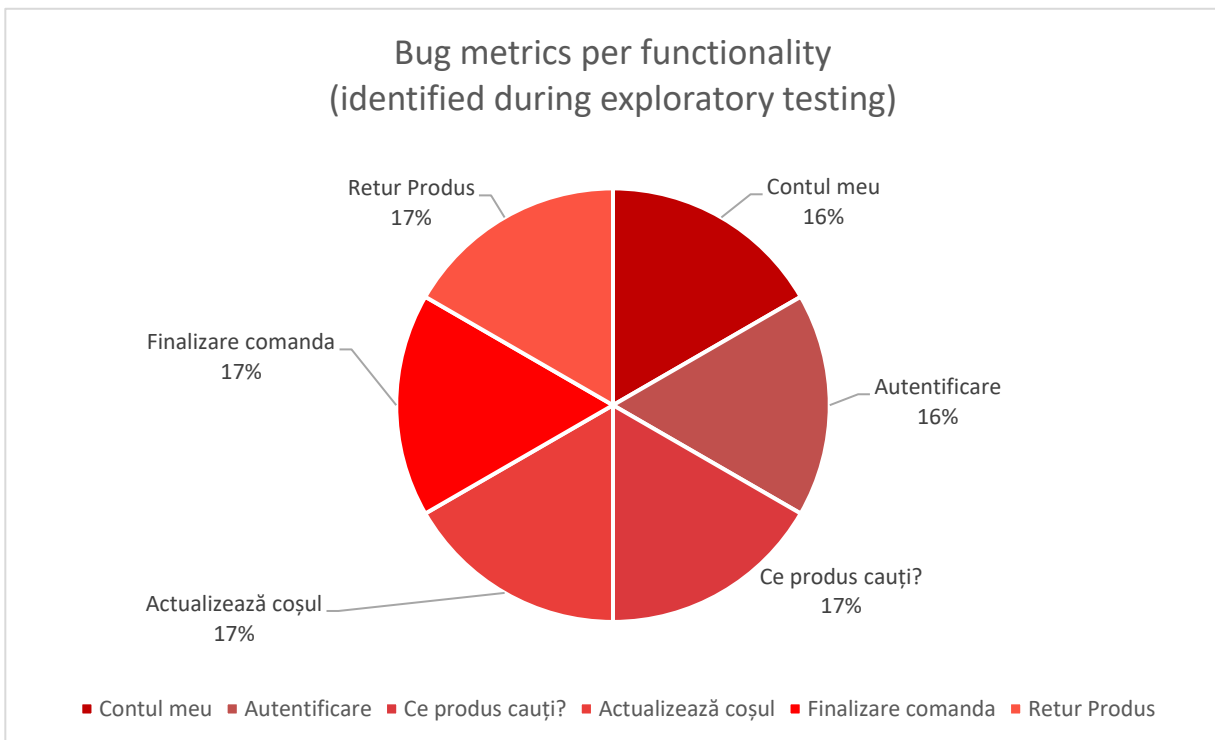
After conducting exploratory testing, an additional round of test cases uncovered another bug highlighting the importance of thorough testing in uncovering potential issues within the software.
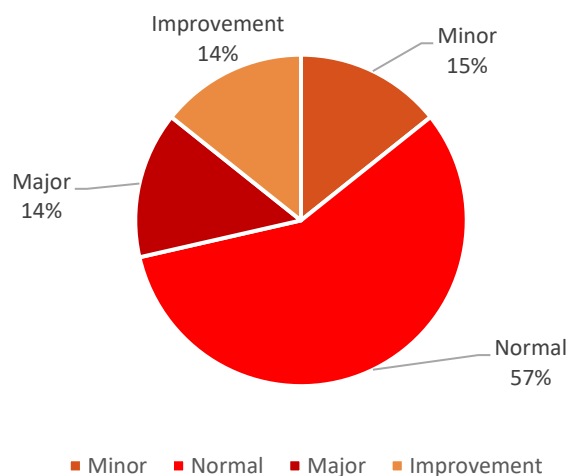
Bug metrics per functionality
(during the overall testing session)

Retur Produs 14%
Contul meu 15%
Autentificare 14%
Ce produs cauți? 14%
Actualizează coșul 14%
Finalizare comanda 29%

- Contul meu
- Autentificare
- Ce produs cauți?
- Actualizează coșul
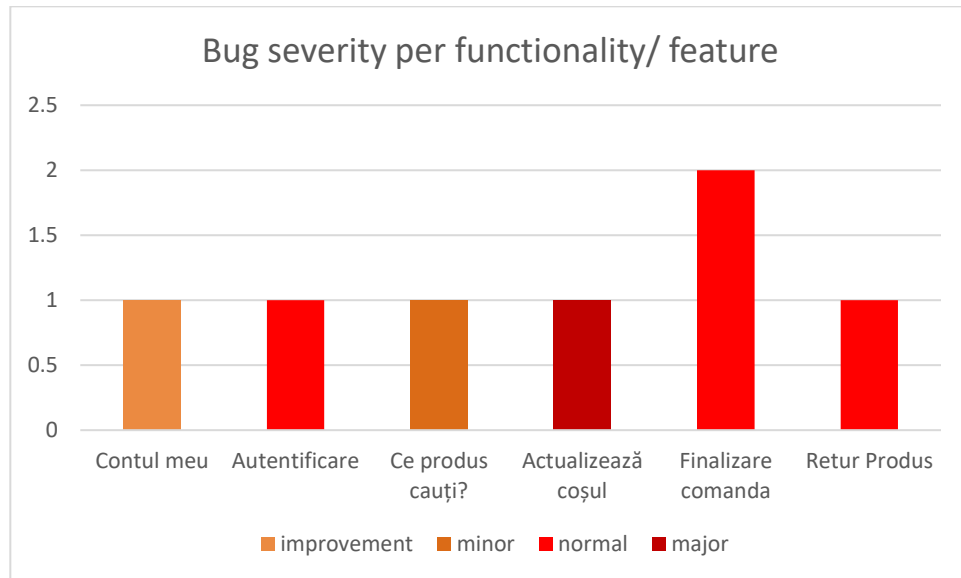- Finalizare comanda
- Retur Produs
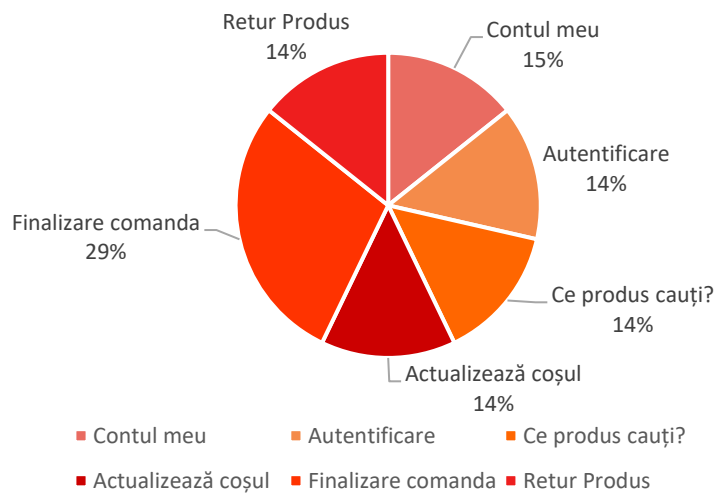
Bug metrics by severity

A total number of 7 bugs and 1 improvement have been identified during tests execution and exploratory sessions:

Bug metrics by severity
(identified during test execution and exploratory testing)

Improvement 14%
Minor 15%
Major 14%
Normal 57%

- Minor
- Normal
- Major
- Improvement

Bug severity per functionality/ feature

Bug ID	Severity	Status	Summary
0055234	Bug	major	[Actualizează coşul] User is able to update product qty to 900000000000000000 on bag
0055358	Bug	normal	[Retur Produs] User is able to submit "Retur Produs" form with invalid mandatory fields
0055424	Bug	normal	[Finalizare comanda] [PF] User is able to place order with invalid values for mandatory fields
0055409	Bug	normal	[Autentificare] User is unable to login using Facebook
0055367	Bug	normal	[Finalizare comanda] [PJ] User is able to register as "Persoana Juridica" with invalid "CUI *"
0055410	Bug	minor	[Ce produs cauți?] User does not receive an appropriate message when no search results are found
0055413	Improvement	normal	[Contul meu] User cannot easily find the authentication button

Exit Criteria

Criteria	Met/Not Met
All planned test cases have been executed in Execution Tool	Met
All defects found have been recorded in the Defect Management Tool	Met
All Severity High defects have been resolved	Met
Test Summary Report (this document) issued to stakeholders	Met

Conclusions

The smoke testing session covered 6 test cases, all marked as passed. However, 6 bugs and 1 improvement were identified during the execution, revealing some issues across the system. These problems impact various areas, including registration, shopping cart, search for a product, order placement and product return, potentially leading to incorrect data input or system malfunctions.

Examining the list of bugs suggests a mix of functional and non-functional issues on the website. Despite users being able to perform basic actions like creating an account, logging in, navigating, searching for products, these bugs affect the overall user experience.

The lack of a session timeout feature poses a security risk, and shopping cart issues like difficulty in product management may discourage users from completing purchases.

In summary, these bugs underscore the need for substantial improvements to enhance the website's accessibility and user-friendliness.

Recommendations

Website owners or developers should carefully examine every part of the website, including how it works and how users experience it. Quickly fixing problems is crucial for building trust and loyalty among users, ultimately making the overall user experience better.

Knowledge Maintenance

Lessons learned

- Start testing early.
- Ask questions.
- Understand the end user's perspective.
- Address the WHAT, WHY, and HOW ('what should be tested?', 'what should the result be?', 'Why does it happen?', and 'How it can be rectified?')
- Visualize the product features, think about their behavior during its development, and how they would be used by the end-user.

- Write only what is necessary.

- Don't underestimate errors.

Best Practices Adopted & New Improvements Implemented

- QA Team performed Peer review of Test Cases which helps in better test coverage.

- QA team involved Development team to provide review comments on test cases.

- QA team member is attending daily development scrum calls for seeking clarifications & inputs.

- Communication improved by mitigating conflicts in the team.