





Introduction

The purpose of this test plan is to ensure that the web application functions as intended for guest users, students, and mentors, and meets all functional and non-functional requirements.



Objectives:

- Identify main functionalities
- Verify if functionalities are working as expected
- Verify the integration of the different parts of iMentor



Risks

- Basic knowledge about API Testing
- Lack of user stories
- Expected results based on tester experience
- Changes in the test environment
- Short time



Prioritization criteria

FREQUENCY OF USE	Most used features	website usage data	Login - Logout - Chat
IMPORTANCE	In terms of its impact on user satisfaction	Acceptance	Roles - Functions by roles
RISK	Impact that error would have on the user	Error handling	Negative testing



Test Environment

The objective is to test the compatibility of the web on the most used browsers such as:







Operating systems:



Windows 10



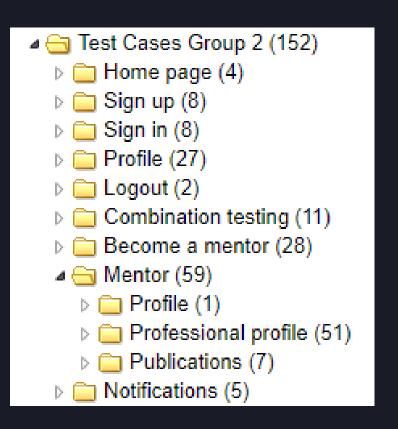
Windows 11



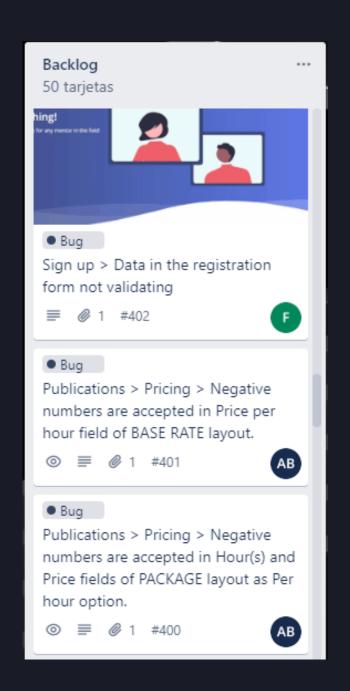
Toos

Test Case Management





Bug Tracking







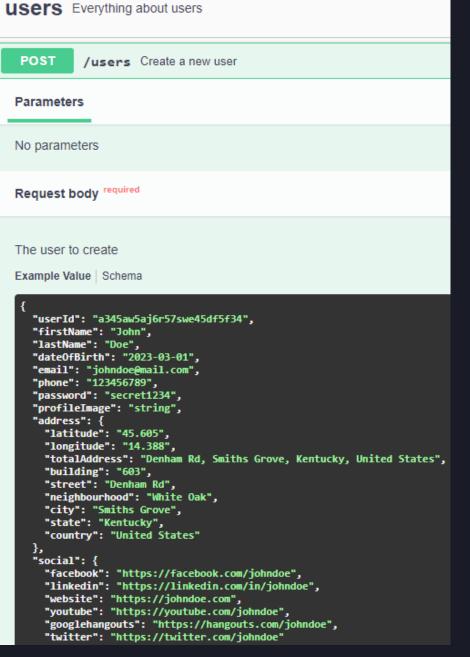


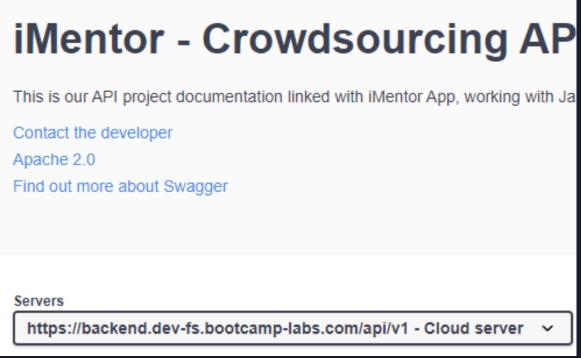
Toos

API TESTING









QA - DEV COMMUNICATION







Toos

Test Case / Bug report Tracking



ign Up > Verify that can be created a new user account by API		
ign in > Verify that the sign in form is accessible.		
ign in > Check required fields.		
ign in > Test password authentication.		
ign in > Test users can log in with Facebook.		
ign in > Test users can log in with Google.		
ign in > Forgot password link.		
ign in > Verify that users can't access using invalid credentials.		
ign in > Verify that users can't access with blank user and password.		
rofile > General information fields		
■		
> \equiv		

Test plan



- Browser: Google Chrome, Microsoft Edge, and Mozilla Firefox
- . Operating System: Windows 10 / 11
- · Test Data: Strings, images, links.

3.4. Prioritization

The prioritization of test cases will be based on:

- Frequency of use (Log in Chat Navigation)
- · Importance (Main functionalities by role)
- · Risk (Fields prone to errors)

	Likelihood	Impact	Priority
Login	4	4	2
Sign up	4	4	3
Logout	3	3	3
Become a mentor	2	3	3
Create course	3	3	3
Publications	1	1	1
Request course	1	1	1
Chat	2	4	3

Ι



Approach

 Exploration-based approach: Knowledge of the software under tests for the creation of test cases

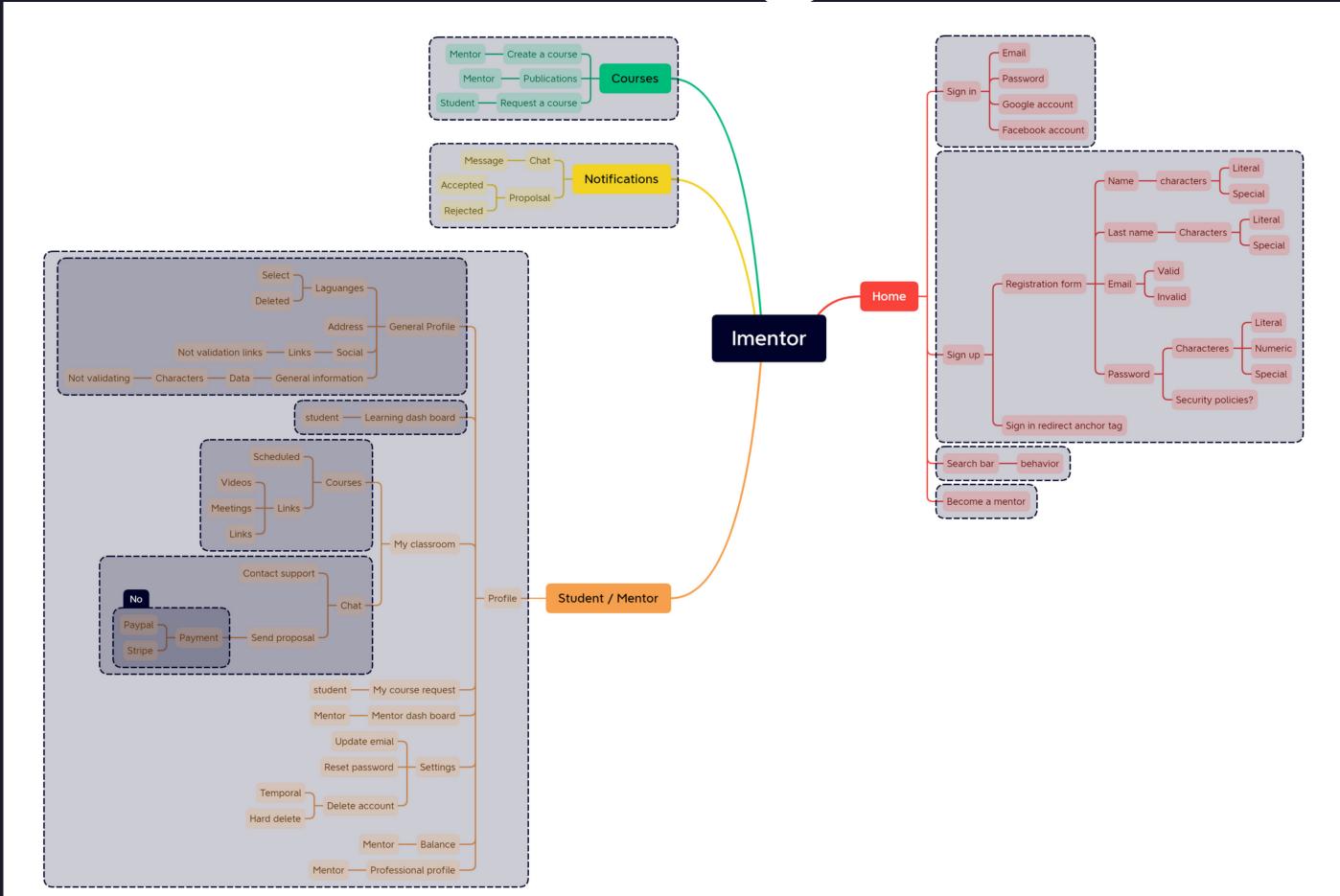
Risk-based approach: Test case priorization



Effort estimation

Tasks	Time	Resources	
Test cases creation	18 Hours	2 testers	
Execution 1	16 Hours	2 testers	
Execution 2	18 Hours	2 testers	
Execution 3	2 hours 28 mins	2 testers	
Requirements review	8 Hours 2 testers		
Report issues	17 Hours	2 testers	

Coverage





Test strategy

Functional Testing

- Test all links and buttons to ensure they function as intended.
- Test form validation to ensure all required fields are validated.
- Test error handling to ensure errors are displayed correctly.



Domain testing:

- Data on fields
- Boundary values

Combination testing:

- Navigation flow per roles
- Permissions and functions to each role
- Methods API

User Interface Testing

• Test the web application on different browsers to ensure the user interface is consistent.



Security Testing

- Test the web application for common security vulnerabilities such as cross-site scripting attacks and url manipulation.
- Test that the password cannot be copied and pasted to get the characters used



Exploratory Testing

- Learn more about the software under test
- Identify workflows and navigability
- Know the expected behavior of the main functionalities
- General view of the application to be able to analyze the coverage that is planned to be carried out with the test cases



Test cases 150 TC execution: 98 % 92% Passed 5% Failed 2% Not executed 1% Under review 31 Smoke TC



Bug Reports

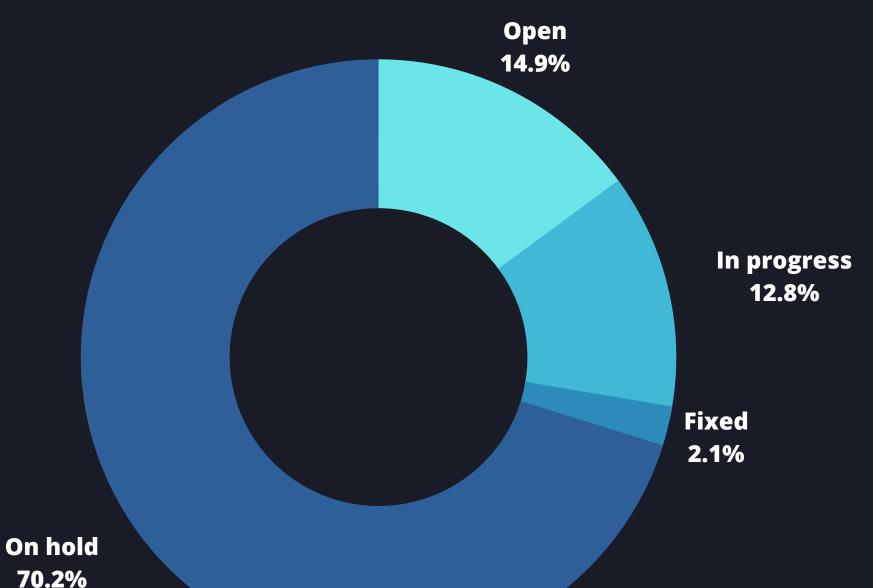
Total Bugs reported: 47

Open: 7

In progress: 6

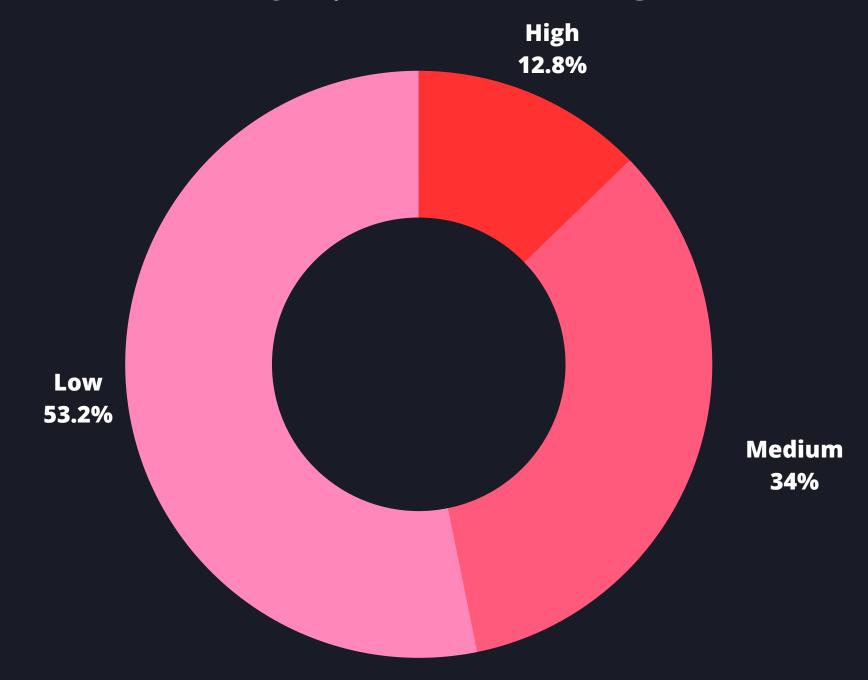
Fixed: 1

On hold: 33



Severity

High: 6
Medium: 16
Low: 25





Conclusion

During our testing we were able to identify each functionality and how it should work.

Also taking advantage of the constant use of iMentor we were able to analyze certain improvements that could help improve factors such as user experience and user acceptance, improvements such as:

- Functionality to visualize all courses
- Search courses based on the category
- Delete chats
- Update languages