STAGE 4 - PRESENTATION

Jóvenes a Programar (JaP)

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Executive Summary:

This report summarizes the conclusions and results obtained for the Client and Pet Management System of the Guau Guau Veterinary Clinic, whose main objective is to enable the registration and management of client information and their respective pets. The purpose of this testing phase was to verify the database to confirm the correct implementation of the tables and their associated constraints.

General Conclusions:

The tests conducted have successfully validated the implementation of database constraints, ensuring a robust and functional structure for data storage. However, the removal of the user table significantly affects security and access control, while the navigation failure disrupts the user experience, preventing smooth operation.

Software Quality:

The software demonstrates good quality in terms of data integrity and consistency, with constraints effectively functioning to protect the information. Proper error handling contributes to a positive user experience.

However, the removal of the user table negatively impacts security and access control, and the failure in the registration flow navigation limits usability. Improving these aspects is crucial to achieving comprehensive quality and providing a more secure and user-friendly system.

Functionality:

The software performs well in data integrity and compliance with constraints. However, the removal of the user table limits authentication, and the failure in the registration navigation affects smoothness. Improvements in these areas will strengthen its functionality.

Security:

The software's security is compromised by the removal of the user table, which limits authentication and access control. Without this element, the system becomes vulnerable in terms of permissions and user management, a critical aspect for protecting information. Restoring this functionality is essential to enhance security.

Performance:

The software's performance was not evaluated in load testing or under high traffic conditions, so there is no data on its behavior at scale. To ensure optimal performance in high-usage scenarios, performance testing will be necessary in future versions.

Key Findings:

Test Coverage Percentage:

When analyzing the work done, four main areas are identified, covered by a total of 13 test cases: user authentication in the database, client registration in the database, page relationships, and relationships between tables in the database. This represents 21.13% coverage of the total 61 test cases created by the team, indicating that the tests have covered the key functionalities of the system at this stage.

Number of Errors Fixed:

The only incident reported in the first instance of testing was related to the interaction between web pages. This error persists. During the re-testing phase, after the removal of the user table from the database, a new incident was reported, which has not yet been resolved.

Security Evolution:

The software's security has evolved by initially focusing on data integrity through database constraints. However, the removal of the user table compromised access control and authentication. To improve security, it is essential to restore these functionalities and ensure proper management of users and roles.

Observations and Recommendations:

- Interdepartmental Collaboration (Continuous Improvement Practices):

We consider communication between different departments to be essential during the process, as more feedback could have prevented many issues.

- Documentation:

To improve efficiency, it is recommended to establish constant feedback with the client, thoroughly verify the entered data, and maintain clear communication about the changes made, facilitating change tracking and optimizing validation testing.

- Data Integrity:

The constraint tests (NOT NULL, UNIQUE, FOREIGN KEY, CHECK) were effective in maintaining data integrity and consistency. These constraints ensured that insertion, update, and deletion operations met the system's requirements, protecting the quality of the stored information.

- Error Handling:

The error messages generated in response to constraint violations were specific and detailed. This contributes to a better user experience while preventing data corruption.

- Modification in Table Structure:

The removal of the user table in the second testing version resulted in the loss of key functionalities for authentication and access control. This absence represents a critical risk for systems that require differentiated roles and secure access levels.

- Relational Consistency:

The consistency tests confirmed that the relationships between tables remain stable. The foreign key constraints (FOREIGN KEY) prevented the deletion of referenced records, preserving the structure and integrity of the database.

- Customer Registration Flow and Navigation:

Although the initial customer registration flow worked correctly, a failure was detected in the redirection to the pet registration page. This limitation in navigation highlights the need for improvements in the routes to optimize the user experience.

Finally, the customer registration flow was evaluated, which should redirect to the pet registration page after a successful registration. However, a navigation failure was detected that prevents this process from being completed properly, highlighting an area for improvement in defining the system's navigation routes

Acknowledgments:

We thank the development team for the project versions provided during these eight weeks of work, the mentors for their technical contributions and tools for managing emotions and situations both within and outside the team, and each member of the testing team for their expected responses, commitment, and contributions throughout the process.

Final Conclusion:

The eight-week testing project has revealed significant findings in key areas of the system, especially in user authentication and navigation between web pages. Two incidents were identified: one related to navigation functionality and another critical one, linked to access, which directly impacts the system's operability. Both require prompt resolution to ensure the proper functioning of the software.

Despite the progress, the tests showed that the new version presented more incidents than the previous stage, highlighting the need to address these defects before implementation in production. Correcting these issues will be essential to ensure that the system operates efficiently and provides an optimal user experience.

From the service quality department, I conclude that there is still work to be done and several incidents to resolve before going into production. I look forward to continuing to collaborate on the project to ensure the final service meets the client's expectations.

Sincerely,

Tester Florencia Herrero.