

EXECUTIVE REPORT: TESTING RESULTS

BEATRIZ BURGUEZ GABRIELA GUTIÉRREZ MICHELLE MONZÓN ANA SAAVEDRA

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GROUP 286

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INTRODUCTION

The following report shows the login, new client registration, pet registration, and vaccination registration testing results performed on the Veterinaria Guau Guau website, as well as its database. The testing consisted of two phases: a testing process performed from October fourteen to October twenty-fourth, and a re-testing phase from October twenty-eighth to November fifth.

Its objective was to evaluate the quality of the already mentioned functionalities in order to improve the product.

SCOPE

This process included a variety of tests and approaches, which were:

Specification-based testing: A number of specification-based test cases were performed, confirming the functionalities worked as anticipated.

Exploratory testing: The application was explored in order to identify possible errors and unexpected situations. To carry out this type of test, the browsers Google Chrome (130.0.0.0 version) and Safari (17.1 version) were used.

Positive testing: The client, pet, and vaccine registration features were verified to work correctly under normal conditions, confirming that these actions can be carried out without any issues.

Negative testing: Negative testing cases were performed on the software by introducing incorrect or invalid data in the different registration types.

White box testing: The operation of the internal structure and the software design were verified by testing the database.

Moreover, in the re-testing, the following types of testing were added:

Confirmation testing: Bugs found during the previous phase were re-tested to confirm their solution.

Regression testing: The system was tested to confirm that the corrections implemented in this phase have not negatively affected other areas of the software.

DEVELOPMENT AND KEY RESULTS

Login

Functional testing: Login test cases were performed satisfactorily; thus, confirming that the system

does not present errors in this area.

Data validation: Data validation in this functionality was carried out, corroborating that the software

detects empty field, as well as invalid and valid input.

New Client Registration

Functional testing: New client registration tests were carried out, confirming that, for the most part,

the function performs as expected, though some errors were still detected.

Data validation: The form's data input was validated. Even though the software was capable of

detecting when form fields were empty, it was unable to do so when the input exceeded the maximum

number of characters specified by the database.

Regression and confirmation testing: In this second version, the same results were obtained.

Pet Registration

Functional testing: Pet registration tests were executed, which confirmed that the system

successfully allows said registration. Errors found during this instance were of low impact and,

therefore, do not affect the functionality.

Data validation: Data input was validated, verifying the system's correct detection of most errors,

though some minor ones were not caught by the software.

Regression and confirmation testing: During the re-testing, the same test results were obtained,

meanwhile, one of the reported bugs was fixed.

Vaccine Registration

Functional testing: Tests were performed on the vaccine registration function, corroborating that the

system works as anticipated. Minor errors were encountered, but they do not affect the software's

operation.

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Data validation: The system was able to process the data input without any issues.

Regression and confirmation testing: During the re-testing, the same test results were obtained, meanwhile, one of the reported bugs was fixed.

Database

Data validation: Data was validated, confirming that the system is able to process the information correctly. Moreover, no new errors were found.

Regression and confirmation testing: Two new bugs were reported from test cases that previously had been successful.

Other findings

During the testing process, other problems were found and reported, like the incorrect use of a verb, and button usage discrepancies.

DATA AND METRICS

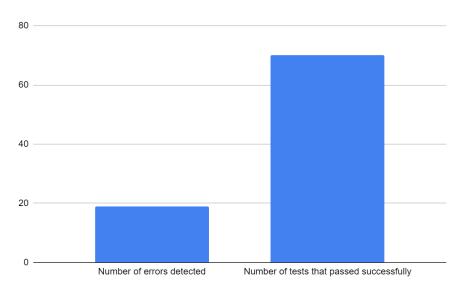
Data was compiled during testing, some of which can be used to generate graphics and metrics.

Success rate: The number of case tests that were executed successfully was documented, which allows visualizing the application's functionality. On the first phase of testing, 78.7% were successful, while 84.7% were successful on the re-testing phase.

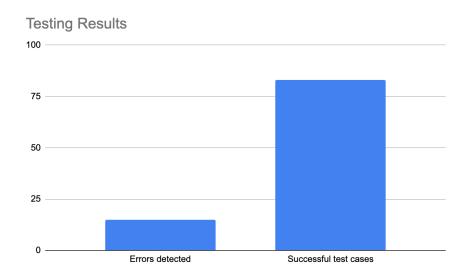
Error detection: Errors found during testing were also recorded. This not only allows representing the areas that might need improvement, but it also creates a tentative plan on where to start fixing said errors (from those that affect the system and its users critically to those that are not as detrimental). There was a 21.3% error-rate detection in the tests performed during the testing phase. It decreased on the re-testing phase, with a 15.3% error-rate detection.

Results of the tests carried out

TESTING PHASE:

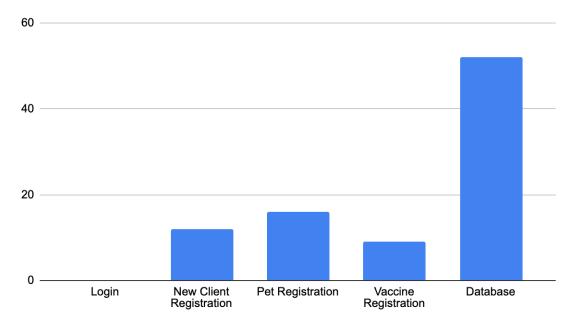


RE-TESTING PHASE:



^{*}This graph considers the test cases carried out and does not include the data found in the exploratory tests.

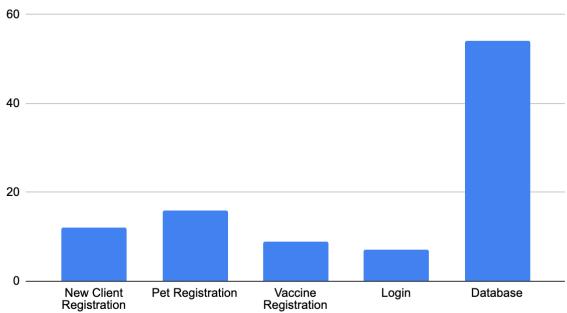
TESTING PHASE:



Test cases executed per area

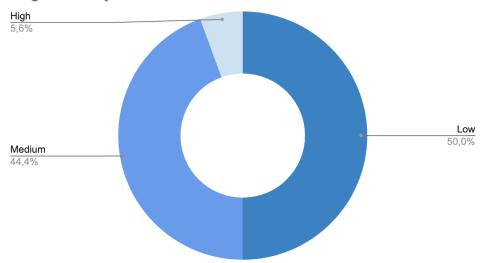
RE-TESTING PHASE:





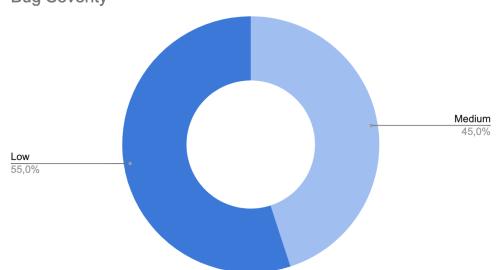
TESTING PHASE:

Bugs Severity

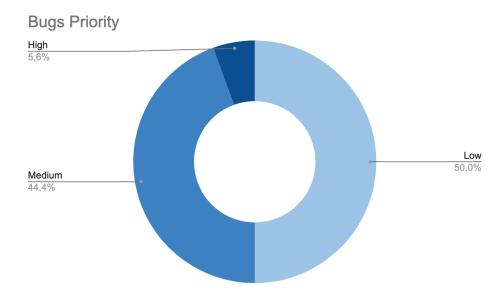


RE-TESTING PHASE:

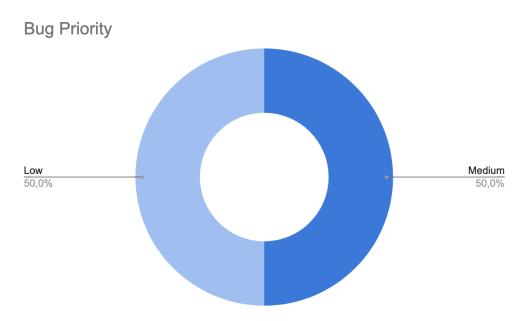
Bug Severity



TESTING PHASE:



RE-TESTING PHASE:



RECOMMENDATIONS

According to the data recollected, the following recommendations are offered:

- Perform monitoring testing to corroborate data cohesion and error solutions.
- Keep track of reports to quickly tackle any issues that might arise.
- Schedule periodic system revisions to evaluate the performance and detect optimization areas.

- Carry out a more strict data validation control in the client registration *Email* field to avoid possible misunderstandings when communicating with them.

IMPROVEMENT SUGGESTIONS

The testing team offers the following recommendations,

- In the login: that username and password are not autocompleted, as this could become a security vulnerability.
- Adding a menu where users can select between the different types of registration, instead of being redirected to the client registration form, might be something worth considering.
- In the dashboard functionality: we suggest that the client's information can be visualized. Being able to eliminate or edit the information in the client, pet, and vaccine tables could also be beneficial.
- When a client is registered, the session automatically closes, and the user must log in again. We recommend fixing this issue.
- In the client registration, we suggest: making it impossible to add two clients with the same email and adding a form for cellphone numbers (as it is more common to send reminders to clients via text than via email). We also advise that the button to add a pet appears from the get-go, instead of having to check 'Register Pet' in order to do so.
- In the pet registration, we consider it convenient that the user can select which pet belongs to which client, as the system currently links any pet registered with the last client registered. Moreover, in the case that the pet registered belongs to the 'Other' category, we suggest adding a written section to clarify its species.
- In the vaccine registration, being able to select which pet a vaccine belongs to should also be possible. Currently, the system automatically links the vaccine with the last pet registered. Adding a drop-out list of vaccines (like rabies, ticks, etc.) could perhaps be useful for the vet.
- Finally, a client login, where the client can inspect their and their pets' information (like vaccines' expiration dates), could be beneficial.

CONCLUSION

During this report, a summary of Veterinaria Guau Guau testing results was carried out, in which different types of approaches were performed, including specification-base testing, exploratory testing, positive testing, negative testing, database white box testing, confirmation testing, and regression testing.

In general, testing performed on both phases has been successful, and the system has been shown to be functional. However, it is recommended to pay attention to some details to guarantee data integrity and user satisfaction.

Please, do not hesitate to contact us if you have any questions.