BUGBUSTERS
QA TESTING TEAM

Power Pulse Test Report

1. Project Information

Project Name : Power Pulse Web Application

Tested Version (Build/Release No) : v3.5.1 (Build 102)

Test Dates : 11.06.2025 - 24.06.2025

Report Dates : 25.06.2025

Test Team / Responsible Persons :

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2. Purpose of the Report

This test report for the Power Pulse web application has been prepared to document the software testing activities conducted as part of the GoIT Software Testing Specialist Course Final Project; including the scope of the testing process, the test tools used, the test findings, and the encountered bugs.

3. Test Scope

This report provides a detailed documentation of the scope, identified findings, and results of the manual testing activities carried out on the Power Pulse web application. The testing process focused on verifying the core functionalities of the application through the user interface, aiming to evaluate its compliance with quality standards in terms of functionality and user experience.

4. Test Environment and Devices Used

The tests were performed on the following devices and systems

- Windows 11 Version 24H2 (Chrome v127, Opera v110,Edge v 137)
- macOS Sequoia Version 15.1.1 (Safari, Chrome v127,Opera v110)
- Android 13 (Chrome)
- iOS 18 (Safari)
- Test environment link: https://power-pulse-qa.f.goit.study/
- Testing Tools Used: Trello, Postman,Swagger, Responsively, JWT

5. Test Type and Method

- Manual testing processes have been carried out, and the following types of tests have been used:

- Functional tests
- UI & UX Tests
- API Tests (Postman, Swagger)
- Statik Tests (Review)
- Data Accuracy Testing

6. UI Test Case Summary

- **Unauthorized and Authorized User (register, login, logout, pages view)**
  - Total Test Cases: 138
  - Passed: 115
  - Failed: 23
  - Total Reported Bugs: 23

- **Profile Settings**
  - Total Test Cases: 56
  - Passed: 54
  - Failed: 2
  - Total Reported Bugs: 2

- **Diary**
  - Total Test Cases: 68
  - Passed: 64
  - Failed: 4
  - Total Reported Bugs: 4

- **Products Page**
  - Total Test Cases: 40
  - Passed: 31
  - Failed: 9
  - Total Reported Bugs: 9

- **Exercises Page**
  - Total Test Cases: 45
  - Passed: 23
  - Failed: 22
  - Total Reported Bugs: 22

7. API Test Case Summary

Tools used in the tests: Postman and Swagger. The following endpoints were tested in the API tests ;

User Operations

•POST/users/register
- Number of Test Cases: 8
- Passed: 8
- Failed: 0

• GET/users/verify/{verificationToken}
- Number of Test Cases: 1
- Passed: 0
- Failed: 1

• POST/users/verify
- Number of Test Cases:1
- Passed: 0
- Failed: 1

• POST/users/login
- Number of Test Cases:1
- Passed: 1
- Failed: 0

• POST/users/changePassword
- Number of Test Cases: 1
- Passed: 0
- Failed: 1

• PATCH/users/changePassword/{verificationToken}
- Number of Test Cases: 1
- Passed: 0
- Failed: 1

• POST/users/logout
- Number of Test Cases: 1
- Passed: 1
- Failed: 0

• GET/users/current
  - Number of Test Cases: 1
  - Passed: 1
  - Failed: 0

• PATCH/users/avatar
  - Number of Test Cases: 2
  - Passed: 1
  - Failed: 1

Profile Setting Operations

• GET/profileSettings
  - Number of Test Cases: 2
  - Passed: 2
  - Failed: 0

• PUT/profileSettings
  - Number of Test Cases: 2
  - Passed: 2
  - Failed: 0

• POST/profileSettings
  - Number of Test Cases: 2
  - Passed: 2
  - Failed: 0

Exercises Operations

• GET/exercises
  - Number of Test Cases: 3
  - Passed: 3
  - Failed: 0

• GET/exercises/types
- Number of Test Cases: 2
- Passed: 2
- Failed: 0

Products Operations

• GET/products

- Number of Test Cases: 15
- Passed: 11
- Failed: 4

• GET/products/category

- Number of Test Cases: 1
- Passed: 1
- Failed: 0

Diary Operations

• GET/diary

- Number of Test Cases: 2
- Passed: 2
- Failed: 0

• POST/diary/products

- Number of Test Cases: 1
- Passed: 0
- Failed: 1

• DELETE/diary/products/{productId}

- Number of Test Cases: 2
- Passed: 2
- Failed: 0

• POST/diary/exercises

- Number of Test Cases: 1
- Passed: 0
- Failed: 1

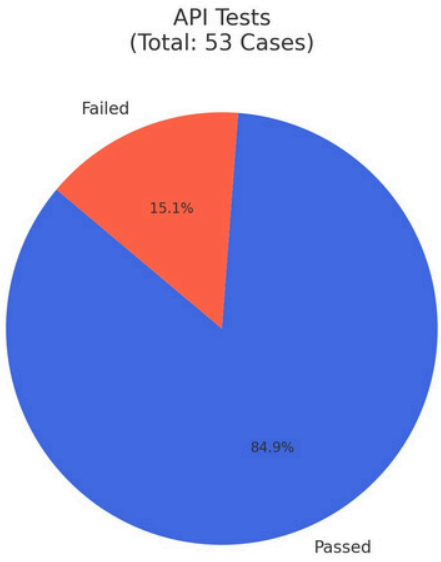
• DELETE/diary/exercises/{exercisesId}

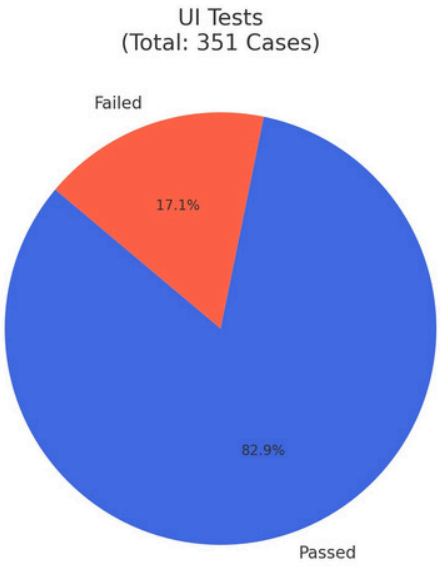
- Number of Test Cases: 2
- Passed: 2
- Failed: 0

8. Test Summary

	UI	API	Static Test	Total
Test Case	351	53	6	410
Passed	291	45	0	336
Failed	60	8	0	68
Number of Bugs Reported	60	8	0	68

9. Charts





10. Risks and Recommendations

QA observations and recommendations to improve the quality of the project:

- **Login,** Since it was not included in the documentation, it could not be tested whether a limit was set for incorrect username/password attempts.
- **Session Management,** Session conflicts could not be tested when logging in from different devices simultaneously.
- **Password Reset,** Since no verification link could be sent to the registered users' email addresses, it was not possible to check whether the password reset link had an expiration time or was for one-time use. The security of the links in the received emails, as well as redirection behaviors and errors, were excluded from testing.
- **Logout and session management,** including the session timeout mechanism, should be clearly defined in the documentation and tested. Notifications to be shown to the user after automatic logout should be clarified. It is recommended to notify the user in cases of simultaneous logins from different devices.
- **The test scenario documentation,** should be detailed and its deficiencies addressed to ensure a sustainable testing process.
- **From a user experience perspective,** the error messages may be missing or insufficiently informative their content can be improved.
- **Accessibility tests,** should be planned to ensure ease of use for users with disabilities.
- **Implementing a test automation,** process will enable faster and more reliable execution of regression tests.

11. General Evaluation and Recommendations

As a result of the manual UI and API tests conducted, it has been observed that the core modules of the Power Pulse web application generally function in a stable and user-friendly manner. The application performs key functionalities such as user registration, diary entry, exercise management, and profile updates mostly as expected.

On the UI side, minor issues have been identified, particularly in the login area. It is recommended that these issues be resolved before release to avoid negatively impacting the user experience.

During the API tests, some inconsistencies were observed between the documentation and the actual system behavior. Specifically, the POST /diary/product and POST /diary/exercise endpoints were expected to only receive data according to the documentation, but in reality, they performed data insertion operations. This was considered a documentation error. The related issues were submitted in the bug report and documented with detailed explanations.

12. Conclusion and Evaluation

As a result of the manual testing activities conducted on the Power Pulse web application, it has been observed that the core functionalities of the system largely meet expectations. The user interface, registration and login processes, diary and exercise modules, data consistency and access controls, as well as compatibility with mobile, desktop, and tablet devices were successfully tested, confirming that the overall system structure functions correctly.

The tests resulted in an 83.2% success rate. The majority of the identified issues were classified as low or medium priority. Some inconsistencies between the documentation and the actual behavior of the application (such as the POST /diary/product and POST /diary/exercise endpoints) were reported to the development team with detailed explanations.

It is recommended that, after addressing the documentation gaps prior to release, retesting be conducted on critical usability-related modules such as password reset, verification code systems, and accurate calculation checks.

Overall, the testing process has shown that the system is largely functional, user-friendly, and ready for release. The identified issues are mostly related to user experience, validation messages, and documentation inconsistencies, and do not hinder the core functionality of the system. Following the necessary corrections, the deployment of the application to the live environment is deemed appropriate and recommended.