

TEST PLAN

E-PODROZNIK.PL WEBSITE

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1. INTRODUCTION

The purpose of the created test plan is to test the functions of the e-podroznik.pl website in detail based on the provided requirements. The address of the site on which the tests will be conducted is e-podroznik.pl. Any defects encountered will be corrected and forwarded to testers for confirmation testing.

Features:

- new user registration,
- logging in an existing user of the e-podróżnik website
- searching for connections in different configurations (with and without transfers)
- adding and removing tickets to/from the shopping cart

2. TEST SCOPE

The test levels covered in the test plan are :

- unit tests
- integration tests
- acceptance tests

Types of tests:

- functional tests - the software will be verified with the provided specification
- integration tests - testing of communication between APIs of the implemented PayPal module
- automatic tests - implementation of automatic tests to key system functionalities according to provided test cases

Types of tests excluded from the test plan: security tests (no pentester in the team).

3. SUBJECT OF TESTS

The subject of the tests is a website for ordering tickets available at e-podroznik.pl with its listed functionalities.

4. PASSING CRITERIA

- Performance tests
 - Response time from the server must be no longer than 500 ms
 - The software must be able to withstand the load of 1000 users at the same time
- Functional tests
 - Acceptance criteria are in accordance with the current implementation on the e-podroznik.pl website
- Automatic tests
 - All test cases have been automated
 - Tests have been connected to CI/CD tool - Jenkins

5. FAILURE CRITERIA

- Performance tests
- Server response time is greater than 500 ms
- Functional tests
- Implemented functionalities are not in accordance with the requirements

6. ENTRY CRITERIA

- Running test environment
- The test environment must be similar to the production environment
- Access to the IOS device

7. EXIT CRITERIA

- All test cases have been executed
- All test types and levels included in the plan have been executed
- All defects have been corrected

8. LIST OF FUNCTIONALITIES TO TEST

- Connection search engine
 - Tickets ordering process
 - Integration with PayPal payment system
 - User panel
 - User login and registration
- (Adding reference links with test cases in Jira Xray)

9. TEST ENVIRONMENT

Testing of the e-podroznik website will be carried out on the production environment of e-podroznik.pl

Specifications:

Processor: 2GHz

RAM : 4GB

Disk : 240GB

System: Windows

The tests will be conducted using the following devices:

1. PC with I3 3.6 GHz processor, RAM: 16 MB
2. Mobile device running Android 12 - Huawei P30 with RAM 5 GB

10. ERROR CATEGORIES

We distinguish different priorities in our test plan:

- Failure
- Blocking error (e.g. login page does not work)
- Major error (e.g., ability to buy a new product)
- Medium error
- Trivial error (e.g., typo on page)

11. PLACE OF TESTING

Tests will be conducted at the headquarters of the software development company.

12. TESTING SCHEDULE

- Static testing

- Verification of prepared documentation
- Verification of user stories

Time: 10h

- Functional testing

- Verification of implemented functionalities according to prepared assumptions
- Defect reporting
- Execution of test cases manually

Time: 30h

- Performance tests

- Verification of server response time
- Verification of server load with users

Time: 10h

- Automatic tests
- Preparation of file structure (installing the library)
- Implementation of tests based on provided test cases
- Connecting tests under Jenkins and Grafana tool

13. TEST REPORTS

- Reports on detected defects
- Designed test cases
- Automated test scripts
- Metrics from performance tests (e.g. average server response time)

14. TOOL LIST

Defect reporting tool - Jira

Test case creation tools: TestRail and Xray

Automation tools: WebdriverIO, SuperTest, Allure, Jenkins, Grafana

Performance testing tools: Jmeter

Tools for creating screenshots and videos: PicPick and ShareX

15. INCIDENT MANAGEMENT

When a defect is detected, it is reported to the defect management system, which in our case is Jira. Such a defect will have a priority indicated in the test plan and a person who will be in charge of correcting this bug. When the programmer corrects such a defect it will then be passed to the tester for confirmation testing. When the defect is fixed correctly, the submission will be closed and moved to the "Done" column. When the defect is incorrectly fixed, the ticket will be re-submitted to the programmer.

16. ROLES AND RESPONSIBILITIES:

Test Manager - overseeing and organizing the work of the entire test team.

Test Analyst - analyzing the basis of tests. Prepares the basis of tests (testalia). Supporting the test manager in other activities.

Tester - performs tasks assigned by the test manager, executes tests and reports defects.

System technical administrator - prepare and supervise the test environment.