TEST PLAN

CA-Marketing

Final Project

SQA Member:

Iryna Tufan

Project Manager:

Sergey Efremov

Contents

Revision History

Version	Primary Author(s)	Description of Version	Date Completed

1. TEST PLAN IDENTIFIER

The Test Plan Identifier shall be a unique as a specified in the QASV Guidelines for Final Project. This Test Plan has the ID: *FP.2023.IT-v.1.0.*

2. INTRODUCTION

This is the Test Plan for the CA-Marketing website applications. Customers want a perfect website, which passes the full cycle of manual testing. Given the specificity of the site it is important to have the same quality of the site as per requirements.

The Test Plan has been created to facilitate communication among the team members. This document describes approaches and methodologies that will apply to the unit, integration, and system testing of https://qasvus.wixsite.com/ca-marketing. It includes the objectives, test responsibilities, scope, schedule major milestones, entry and exit criteria and approach. This document has clearly identified what the test deliverables will be, and what is deemed in and out of scope. The estimated development timeline for this project is very aggressive (approximately 1 month).

3. TEST ITEMS

As specified by the Project Requirements will be performed Exploratory Testing, GUI Testing, Functional Positive/Negative testing with Equivalence Partitioning & Boundary Value Analysis testing techniques, Performance Testing with Lighthouse and Security with Mozilla Observatory tool in the testing process of CA-Marketing website.

3.1 FEATURES TO BE TESTED

The following functions will be tested:

Feature	Description	Level of Risk
New User Sign Up	New user must be able to authorize into the system	High
User Login	User must be able to login using their email address and provided password	High
GUI	Expecting responsive design across devices (desktop, tablet, mobile) and accessibility compliance.	Medium
Adding/Deleting Address	User requires the ability to add new address to the system and to correct or to remove address from the system.	Medium
Home Page	Correctly work of display of articles and videos, navigation menu and footer functionality.	Medium
API Integration	API testing should confirm that endpoints return correct data, handle errors, maintain security, perform well under load, and comply with standards for reliable integration.	High

3.2 FEATURES NOT TO BE TESTED

No other features mentioned in paragraph 3.1 above are subject to testing, as this is not required by the terms of the Final Project.

4. APPROACH

A methodical testing approach will be used during testing CA-Marketing website. This test approach is combination of structured and systematic methodologies that enable the testing process to conduct a comprehensive software system validation. Testers can follow predefined guidelines and prioritize and plan their testing activities accordingly. Primarily, there are two types of methodical testing approaches- failure-based and experience based. And we will use the second one.

4.1 OBJECTIVES

1) To detail the activities required to prepare for and support the test.
(2) To detail the activities required to perform and the schedule to be followed in performing the tasks.
(3) To define the sources of information used to prepare the test plan.
(4) To define the test tools and environment needed to conduct the test.

As specified by the Project Requirements will be performed *Manual test, Automated test, API test, Performance Test and Security test.*

4.1.1 WEBSITE MANUAL TEST

Execute manual testing for the New User Sign Up Form based on the next types of testing:

- Functional Positive testing;
- Functional Boundary testing;
- Functional Negative testing;
- Functional Ad-hoc testing.

Environment Support:
- Laptop;
- OS: Windows 10/ 64; macOS (Monterey 12.7.6);
- Browsers (latest versions): Google Chrome, Firefox Mozilla, Safari, Microsoft Edge.

Testing Tools:
- Microsoft Excel, JIRA.

4.1.2 WEBSITE AUTOMATED TEST

Automation tests are created by using Selenium Python UnitTest frameworks on the basis of functional manual test cases and executes to check functionality of *User's Address Account Menu*.

Environment Support:
- Laptop;
- OS: Windows 10/ 64; macOS (Monterey 12.7.6);
- Browsers (latest versions): Google Chrome, Firefox Mozilla, Safari, Microsoft Edge.

Testing Tools:
- PyCharm, Selenium.

4.1.3 WEBSITE API TEST

API tests execute to determine whether the APIs that are developed meet expectations when it comes to functionality, performance, reliability and security for website.

Environment Support:
- Laptop;
- OS: Windows 10/ 64;
- Browsers (latest versions): Google Chrome (DevTools).

Testing Tools:
- Postman, Chrome DevTools.

4.1.4 WEBSITE PERFORMANCE TEST

Performance automation tests execute for measures the speed, responsiveness and stability of the tested website. Tests execute in incognito environments.

Testing Tools:
- Google Lighthouse, GTMetrix, BrowserStack-SpeedLab.

4.1.5 WEBSITE SECURITY TEST

Security automation tests execute to reveal potential flaws or weaknesses of software and website.

Testing Tools:
- Mozilla Observatory.

4.2 CONFIGURATION MANAGEMENT CONTROL

GitHub
The testing documentation is hosted on GitHub; therefore, git will be our version control system. Additionally, the project will be publicly available of GitHub for keeping track of existing bugs and fix them if needed in the future. All of our test suits will be published to GitHub as well.

Slack
Slack is our primary communication tool. We use Slack to update each other on our progress with the project.

5. ITEMS PASS / FAIL CRITERIA

The pass/fail criterion for applications of CA-Marketing website is that they should exhibit the behavior expected by the user, and also meet the requirements specified in the documentation. For each test in each category, the operations should take place in the proper sequence and each of the applications should be left in the appropriate state following the operation.

6. SUSPENSION CRITERIA AND RESUMPTION REQUIREMENTS

6.1 SUSPENSION CRITERIA

- The build contains many serious defects which can seriously limit testing progress.
- Significant change in requirements suggested by Final Project.
- Software problems.
- Assigned resources are not available.

6.2 RESUMPTION CRITERIA

Resumption will only occur when the problem(s) that caused the suspension have been resolved.

7. TEST DELIVERABLES

- Test Plan (this document)
- Test Case Specifications
- Test Traceability Matrix
- Test Summary Report

8. TESTING TASKS

1. Preparation of the Test Plan
2. Preparation of Test-Case Specifications
3. Prepare the Software Test Environment
4. Perform the Test Procedures
5. Resolve Test Incident Reports
6. Repeat tasks 5 – 7 until all test procedures are successful
7. Prepare the Test Report

9. ENVIRONMENTS

To be setup the following needs:

1. Device: Desktop; Mobile device.
2. OS: Windows 10/64, macOS (Monterey 12.7.6), iOS.
3. Browsers: Google Chrome, Mozilla Firefox, Microsoft Edge, Safari.
4. Tools: Selenium for automated testing; Postman for API testing.

10. RESPONSIBILITIES

For the effectiveness of a testing team, every member's role and responsibilities must be clearly defined and recorded.

No	Member	Tasks
1	Project Manager	Managing the whole project
		Defining project directions
		Acquiring appropriate resources
2	SQA Member	Analysis of the product
		Reading and understanding the requirements
		Designing, preparing, executing a test suite
		Testing of the product
		Tracking and reporting defects
		Conducting re-tests and regression testing

		Preparing a summary test report

11. STAFFING AND TRAINING NEEDS

Test designs assume a thorough and complete knowledge of the operation Web Application under test as well as knowledge of the primary service tools and their appropriate operation. Testing was performed by Iryna Tufan, QA Automation Engineer.

12. SCHEDULE

Task	Start Date	Finish Date
Test Planning	12.01.2023	12.05.2023
Test Case Design	12.05.2023	12.12.2023
Manual Test Execution	12.14.2023	12.16.2023
Automated Test Execution	12.17.2023	12.18.2023
API Test Execution	12.19.2023	12.20.2023
Performance Testing	12.21.2023	12.21.2023
Security Testing	12.26.2023	12.26.2023
Project Release	12.27.2023	

13. RISKS AND ASSUMPTIONS

13.1 RISKS

1. Delay in development.
2. Staging environment is offline.
3. Product is not ready for testing.

13.2 ASSUMPTIONS

4. System under test is ready to use.
5. Code changes are in the dev system.

14. APPROVALS

The Names and Titles of all persons who must approve this plan.

Approved by:	
Name:	
Role:	
Date:	