**Test plan**

**Project: CALIFORNIA MARKETING**

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4. Introduction

Customers want a perfect website, which has passed the full cycle of manual testing. Given the specificity of the site it is very important to have the same quality and the Site. The Test Plan has been created to facilitate communication within the team members. This document describes approaches and methodologies that will apply for functional end-to-end process form Log In to buy products on the web site https://qasvus.wixsite.com/ca-marketing. The Test Plan includes sub-tasks for each of the tests, types of testing, environments and tools to be used. It includes test cases with expected and actual results.

1. Scope

The document mainly targets the GUI testing, Manual and Automation testing such as Positive and Negative testing, API testing, Performance and Security testing.

1. GUI
2. Unit testing
3. Functional testing
4. Manual testing
5. Automation testing
6. API testing
7. Performance testing
8. Security testing
9. Testing

QA is performing testing in order to make sure that everything is working according to the plan and to identify weaknesses that may have occurred. If any weaknesses (bugs) are spotted they will be reported to Jira or any other CRM system.

* 1. **Manual testing**

QA will be preparing test cases based on the exploratory testing, there will be 9 test cases, 5 positive and 4 negative tests.

**Purpose:**

Perform manual testing, using existing account, create a new delivery address and add new products to the cart from the shop.

* GUI
* Exploratory testing
* Positive testing
* Negative testing

**Functional testing:**

**Positive tests:**

* Log in with existing account.
* Verify and validate “Shop” section
* Check that all products of the “Shop” section can be verified and validated.
* Add one or more product in the cart.
* Refresh the page and make sure that the product that has been put in the cart is still in the cart.

**Negative tests:**

* Try to create new address with only numbers in Name and Surname section.
* Try to create and address with the Name ”\_” and Surname “.”
* Try to add any product in the cart with the quantity of “0”.
* Log out of existing account and try to register the new one with no password.

Environments Support:

OS: Windows 11/64 Browser: Google Chrome (version: 108.0.5359.125), Firefox Mozilla (version: 108.0.2).

**In order to see the Functional testing report please visit my GitHub repository “Project”/ “Functional testing”**

* 1. **Automation testing**

QA performs Automation testing in order to atomize test mentioned earlier in order to save time and money of the company. Automation testing is made to make the actions over and over again so they are not to be done manually so QA can move forward and focus on other problems. Due to the nature of development process, product might be changed, that means that automation scripts should be rewritten (repaired).

In order to prepare automation scripts QA is going to use following tools:

|  |
| --- |
| **Python** as a programming language**, PyCharm** as IDE**, Selenium Web Driver** as additional software |
| Browser Stack to run tests in various environments |
| Unittest Framework to do cross-browser testing |

**In order to see the Automation testing script please visit my GitHub repository “Project”/ “Automation Script”**

* 1. **API testing**

API testing is performed in order to assure that data exchange between user and the server is working correctly. In order to check this process QA is going to use Postman API tool. QA will check all command (POST/PUT, GET, PATCH, DELETE). Also, the internal tests will be applied.

**In order to see the API testing report please visit my GitHub repository “Project”/ “API”**

* 1. **Performance testing.**

In order to check the performance of the website QA is going to use following tools: GTmetrix and Lighthouse.

Performance testing is done in order to understand webpage’s responsiveness and work of the system under load.

**In order to see the Performance testing report please visit my GitHub repository “Project”/ “GTmetrix performance testing” and “Lighthouse performance testing”**

* 1. **Security testing**

In order to check how website is secured QA is going to perform security testing with following tools: Snyk and Mozilla Observatory.

Security of the website is very important. Companies should always keep an eye on the security parameter and always work on improving it. An important factor is that people who are try to still data or crush the product are also improving. Hacking tolls are improving and so should security of the websites.

**In order to see the security testing testing report please visit my GitHub repository “Project”/ “Snyk Security test” and “Mozilla Observer Security test”**