Test Plan

Puma

<https://us.puma.com/us/en>

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1. Introduction

The test plan was created to facilitate communication between team members. This document describes the approaches and methodologies that will be applied to the modules: “Registration”, “Login”, “My account”, “Address” of the site https://us.puma.com/us/en.

This document clearly defines the subtasks of testing the modules of this site, the types of testing, what devices, environments and tools will be used. The document includes test cases with expected and actual results.

1. Score

The document mainly targets GUI, Exploratory, Functional Positive and Negative Testing, Performance Testing and Security Testing of the Website, API Testing.

1. Sub-Tasks
   1. Website Manual Test

Perform manual testing of the user account based on current testing types:

- GUI

- Exploratory testing

- Functional Positive Testing

- Functional Negative Testing

- Functional Ad-hoc Testing.

GUI Testing:

GUI testing includes testing the UI part. It covers look and feel, error messages, spelling mistakes, GUI guideline violations.

Exploratory Testing:

Exploratory testing will includes a type of software testing where Test cases are not created in advance but

QA check system on the fly.

Functional Positive testing:

Checks whether the website behaves as expected when given positive input.

Functional Negative testing:

Invalid data is inserted to compare the output against the given input.

Functional Ad-hoc testing:

Includes an informal testing type with an aim to break the system.

Environment Support:

- Laptop

- OS: MacOS Monterey 12.7.2

- Browsers (latest versions): Google Chrome, Safari, Firefox, Edge

The following test cases are covers these manual tests:

|  |  |  |
| --- | --- | --- |
| TC | Test Action | Expected Results |
| Positive Tests | | |
| 01 | Verify that this website is located at the URL: https://us.puma.com/us/en | Https protocol is active |
| 02 | Verify that the user can register with the correct email and password | The user successfully registered on the site |
| 03 | Verify that the user can sign in to the site using an existing mail and password | The user successfully entered on the sites |
| 04 | Verify that the address can be added to the address book | Address added successfully |
| 05 | Verify that the address can be edited | Address changed successfully |
| 06 | Verify that item "1" can be added to cart | Product "1" has been successfully added to cart |
| Negative Tests | | |
| 01 | Verify that it is impossible to register with an incorrectly entered email | Got the error message: “Incorrect username or  password.” |
| 02 | Verify that you cannot register with an incorrectly entered password | Got the error message: “Incorrect username or  password.” |
| 03 | Verify that you cannot register with an empty login | Got the error message: “Incorrect username or  password.” |
| 04 | Verify that you cannot register with an empty password | Got the error message: “Incorrect username or  password.” |
| 05 | Verify that you cannot log into an account with an invalid email | Got the error message: “Incorrect username or  password.” |
| 06 | Verify that you cannot log into an account with an invalid password | Got the error message: “Incorrect username or  password.” |
| Ad-hoc Testing | | |
| 1 | Verify that it is impossible to register with an incorrectly entered email (Enter your email address in the login field twice) | Got the error message: “Incorrect username or  password.” |

* 1. Website Automation Test

Automation tests are created using Selenium WebDriver Python UnitTest frameworks based on functional manual test cases and are executed to test the functionality of the user account.

Environment Support:

- Laptop

- OS: MacOS Monterey 12.7.2

- Browsers (latest versions): Google Chrome, Safari, Firefox, Edge

The following test cases are covers automation tests:

|  |  |  |
| --- | --- | --- |
| TC | Test Action | Expected Results |
| Positive Tests | | |
| +01 | Verify that this website is located at the URL: https://us.puma.com/us/en | Https protocol is active |
| 02 | Verify that the user can register with the correct email and password | The user successfully registered on the site |
| 03 | Verify that the user can sign in to the site using an existing mail and password | The user successfully entered on the sites |
| 04 | Verify that the address can be added to the address book | Address added successfully |
| 05 | Verify that the address can be edited | Address changed successfully |
| +06 | Verify that item "1" can be added to cart | Product "1" has been successfully added to cart |
| Negative Tests | | |
| 01 | Verify that it is impossible to register with an incorrectly entered email | Got the error message: “Incorrect username or  password.” |
| 02 | Verify that you cannot register with an incorrectly entered password | Got the error message: “Incorrect username or  password.” |
| 03 | Verify that you cannot register with an empty login | Got the error message: “Incorrect username or  password.” |
| 04 | Verify that you cannot register with an empty password | Got the error message: “Incorrect username or  password.” |
| 05 | Verify that you cannot log into an account with an invalid email | Got the error message: “Incorrect username or  password.” |
| 06 | Verify that you cannot log into an account with an invalid password | Got the error message: “Incorrect username or  password.” |
| Ad-hoc Testing | | |
| 1 | Verify that it is impossible to register with an incorrectly entered email (Enter your email address in the login field twice) | Got the error message: “Incorrect username or  password.” |

Testing Tools used:

|  |  |
| --- | --- |
| Process | Tools |
| Test case creation | PyCharm, Selenium |
| Test case tracking | PyCharm, Browsers |
| Test case execution | Automation |
| Test reporting | HTML Report, Allure Report |

Additional automation tests execute on the cloud platform “Browserstack”:

- OS: Windows 11 (Browsers (latest versions): Google Chrome, Firefox Mozilla, Microsoft Edge)

- OS: Windows 10 (Browsers (latest versions): Google Chrome, Firefox Mozilla, Microsoft Edge)

- OS: macOS Sonoma (Browsers (latest versions): Safari, Google Chrome, Firefox Mozilla, Microsoft Edge)

Testing Tools used:

|  |  |
| --- | --- |
| Process | Tools |
| Test case creation | PyCharm, Selenium |
| Test case tracking | Browserstack.com |
| Test case execution | Automation |
| Test reporting | Video file (mp4) |

* 1. Website Automation Performance Test

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

After testing reports were generate.

Testing Tools used:

|  |  |
| --- | --- |
| Process | Tools |
| Test case creation | Google Lighthouse, GTMetrix, Webpagetest, BrowserStack-SpeedLab |
| Test case tracking | Google Lighthouse, GTMetrix, Webpagetest, BrowserStack-SpeedLab |
| Test case execution | Automation |
| Test reporting | txt -, html -, pdf - files |

* 1. Website Automation Security Test

Security automation tests execute to reveal potential flaws or weaknesses of website. Testing focuses on whether the website is designed and configured correctly.

Tests execute in incognito environments. After testing reports were generate.

Testing Tools used:

|  |  |
| --- | --- |
| Process | Tools |
| Test case creation | Mozilla Observatory, Pentest, Sucuri |
| Test case tracking | Mozilla Observatory, Pentest, Sucuri |
| Test case execution | Automation |
| Test reporting | txt -, html -, pdf - files |

* 1. Website API Test

|  |  |  |
| --- | --- | --- |
| TC | Test Action | Expected Results |
| Positive Tests | | |
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