

Challenge C - BestBuy website Test Plan

References

The documents that support this test plan include the following:

- [Test Case Matrix](#)
- [Test Case List](#)

Introduction

This test plan made for the BestBuy website covers the following objectives:

- To define how the tests will be run, and the criteria for their success.
- To address the responsibilities of the team.
- To define the environmental needs and the risks associated with the testing process.

Test Items

The test item is the front-end BestBuy website. The item should be tested on the latest stable versions of Chrome, Edge, Safari and Firefox on computers running Windows, Linux and Mac OS.

Features to be Tested

The test plan includes the following features to be tested:

- As a customer, searching and filtering by brand
- As a customer, searching for a TV set and filtering by television type
- As a customer, searching and filtering by rating
- As a customer, searching and filtering by price
- As a customer, searching and filtering by custom price
- (Negative Case) As a customer, performing a search with no search term
- (Negative Case) As a customer, searching and trying to filter by price with a negative value
- (Negative Case) As a customer, searching and trying to filter by price with a non-numeric value
- (Negative Case) As a customer, searching and trying to filter by price from \$0 to \$0
- (Negative Case) As a customer, searching and trying to filter by price when the starting value is actually higher than the ending one.
- (Security Case) As a customer, checking that the following SQL injection query could not be performed: "drop table products".
- (Security Case) As a customer, checking that the following SQL injection query could not be performed: "SELECT table_name FROM information_schema.tables".

Features not to be tested

For this Test Plan, only the desktop web page will be taken into account, not the mobile application.

Approach

To execute the test cases, the tester must follow the steps, in the same way as they are documented in the Test Case Matrix and in Testlodge. After the execution of each test case is finished, the tester will mark each case as Pass or Fail as the case may be.

In case the test case is failed, the tester must notify details about the failure. In addition, Testlodge must be integrated into an Issue Tracker, so that when a test is marked as failed, a bug report will be automatically created.

After completing the Test Execution phase, the Test Manager should report the result to the team.

Pass/Fail Criteria

To determine if a test case passes, the execution of each of the steps must have the expected result indicated in the test case matrix.

To determine the total success of the tests, it is necessary that all test cases have been successfully completed.

Suspension Criteria

In case a failure defined as crucial by the Product Owner is found, the testing process should be immediately suspended. To continue with the process, that failure must be solved before.

Test Deliverables

The test deliverables for this process are the following:

- Test Plan
- Test Cases Matrix
- Test Scripts
- Test Data
- Test Reports

Testing Tasks

To accomplish the testing process, it is necessary to finish the following steps:

- The test plan must be completed
- The test cases should be defined and posted in Testlodge
- The testing environment should be ready (including the test data)
- Execute the test cases
- Prepare the final testing report

Environmental Needs

The testing environment should be populated with mock data. The previously mentioned test data should include the products themselves, its names, prices, rating scores and any other data that belongs to the product.

Responsibilities

- Test Manager: Manage the testing process: Define its scope, its metrics. and communicate its completion.
- Tester: Execute the test cases and provide the automation code for them.
- Product Manager: Prioritize the planned features. Approve the finalization of the testing process.

Staffing and Training Needs

The test execution should be performed by testers who have the necessary knowledge about test execution and automation. Apart from that, the testers should be informed about how e-commerce sites should work and the features of the BestBuy website.

Schedule

The testing process should last for 4 weeks. The test case creation and execution should be ready for the first 2 weeks, and the automation should be ready for the next 2 weeks.

Risks and Contingencies

If a necessary new feature is planned, the testing process could be delayed. If that happens, it is important to discuss it with the Product Manager, who will define its urgency and the priorities of the testing process. The same would happen if an existing feature is modified.

If a phase of the testing process is delayed, it can impact the whole testing process. To mitigate this risk, it is recommended to communicate with the Product Manager, who can prioritize what feature is the most urgent, and limit the testing scope. If that has already happened, it would be important to discuss with the team what went wrong.

The lack of knowledge about the product to be tested can also impact negatively on the whole testing process. To prevent that, it is necessary to make sure that the testers are properly trained.

Approvals

After the Test Manager has reported the completion of the testing process, the Product Manager will confirm the result. If the Product Manager agrees, the software is ready to proceed to the next phase.