# Test Strategy

### Project: <https://ecommerce-playground.lambdatest.io/>

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## **Objectives/Overview**

This documents contains set of rules the tests will be based on. It will provide answer on “how” to perform testing and it will also describe the test designs.

It will outline the most important features of the tested product and what to be automated first and why.

## **Goal**

The goal of the Testing Automation is to reduce the amount of time spent on testing and re-testing the functionalities of the product that are critical to the user experience. Bearing that in mind automating the **high priority tests** and the ones that must be **frequently repeated** (after each change in code, requirements, environment, etc.) will free man power that could be directed and used in other fields of testing which could lead to saving money and to providing better and faster result to the client.

## **Scope**

The scope of automation will be the major, most critical to the business features such as: Registration, Login, Add item to cart, Add check-out details, Check-out. The features will be tested both separately and in groups.

## **Levels of Testing**

The levels of testing performed on the web application will be:

* System testing – the system will be tested as a whole against business requirements.
* Acceptance testing (E2E) – the focus will be mostly on functionality and workflow, replicating user behaviour using simulation.

## **Types of testing**

**Smoke Testing**

*Purpose:* the goal of this test is to make sure the critical/main functionalities are working properly upon beginning if actual testing.

*Timing*: initial builds when the application is relatively unstable.

*Performed by:* QA team

**Regression**

*Purpose:* the goal of this testing is to confirm that recent program, code or environmental changes has not adversely affected the existing features. This is required when:

* There is change in requirement and the code has been modified accordingly;
* New feature is added to the product;
* Defect has been fixed;
* There has been a change in the environment.

*Performed by:* QA team

**Functional**

*Purpose:* the goal of this test is to verify weather implemented functions or features are working as expected and as specified in the requirements.

*Performed by:* QA team

**Load Testing**

*Purpose:* the goal of this test is to check the behaviour of the system under significant load. Test should simulate multiple User scenarios on the website mixed in the test run.

*Performed by:* QA team

**User acceptance testing**

*Purpose:* the goal of this test is letting UAT representative of the end user to perform exploratory testing sessions.. This final pass through the system allows for the final ‘catch’ of any unexpected items in the system.

*Timing*: prior to production release.

*Performed by:* UAT representative

## **Test Cases**

QA team to prepare high level test cases.

Test cases template:

|  |  |  |
| --- | --- | --- |
| Priority levels: | | |
| 1 | High | Related to major functionalities that are of utmost importance for the user experience |
| 2 | Medium | Related to core functionalities that aim to improve user experience but will not prevent the use of the application. |
| 3 | Low | Related to minor features; improvements made on them will not affect user experience. |

## **Tools**

For the automated browser testing of the web application Junit and Selenium Driver will be used.

Reporting tools

## **Test Environment**

Tests to be automated will include the following operational environments.

*Chrome, Version 116.0.5845.188*

*Microsoft Windows 10 Home, Version 10.0.19045*

## **Roles**

## **Risks Analysis**

## **Timeline**

1 week – first draft