

TEST STRATEGY FOR nectar.com

PROJECT NAME: NECTAR.COM

DOCUMENT CONTROL

Version	1
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DOCUMENT SIGN-OFF

Version	Status	Date	Approved by	Job Title
1.0	Final		Sabin Roescu	Product Owner

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1 INTRODUCTION

This document outlines the overall test strategy for nectar.com version 1.0. The purpose of this strategy is to provide a clear and comprehensive plan for how testing will be conducted for the software, including the objectives, scope, and approach for testing. This strategy will guide the overall testing effort and ensure that testing is thorough and comprehensive, covering all key areas of the software. This document will be reviewed and updated as needed throughout the software development lifecycle.

As part of the test process requirements will be analyzed, a test plan will be created, test cases developed, tests will be executed and reports for the tests will be created.

The test techniques will include manual testing, exploratory testing, regression testing among others.

The workflow will follow the agile methodology.

2 PURPOSE

Testing team will check the functionalities of nectar.com. In this testing will be covered the way 'Account' and 'Welcome' pages are displayed, ACTIVITY button on the HOMEPAGE location, the 'brand/search' field from the HOMEPAGE characteristics, if the SAVED button on the HOMEPAGE redirects to a different page when selected, the 'My Nectar Prices' button on the HOMEPAGE characteristics and location, if when the user selects the 'Log out' button from the ACCOUNT page is logged out, that the PLAYBACK chart from YOUR 2022 PLAYBACK is divided in 10 categories

3 SYSTEM OVERVIEW

Nectar.com is a website that allows customers to collect and redeem points by making purchases from a variety of retail partners. The System Under Test (SUT) for Nectar.com could include various components such as:

User interface: The website's front-end, which allows customers to interact with the system, view their point balances, and redeem rewards.

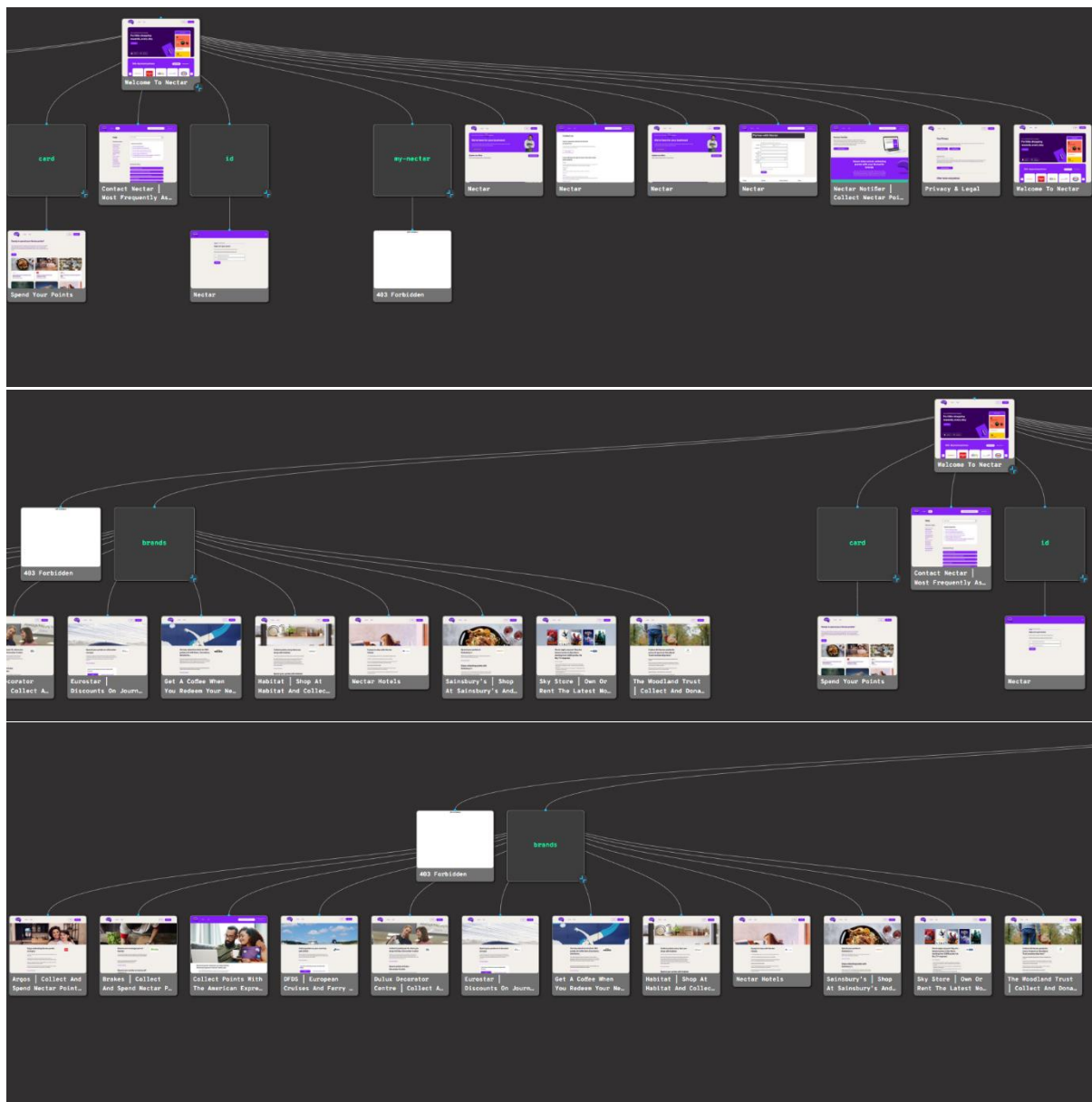
Point redemption system: The system that allows customers to redeem their points for rewards, such as gift cards or vouchers.

Partner integration: The system that allows Nectar.com to integrate with its retail partners' systems, in order to track customer purchases and award points.

Account management: The system that allows customers to create and manage their accounts, view transaction history, update personal information, etc.

Security system: The system that ensures the secure handling of customer data and transactions.

Mobile App: The mobile app that allows customers to track their point balances, redeem rewards, and make purchases through their smartphones.



4 SCOPE OF TESTING

4.1 IN SCOPE

The types of testing that are in-scope are:

Example

- Static Testing
 - Requirements
 - Architecture
- Functional Testing
- Exploratory Testing
- Regression testing (where required)

4.2 OUT OF SCOPE

The types of testing that are out of scope are:

Example

- User Acceptance Testing (this will be performed in the development's environment but will be planned and executed by the client).
- Automated testing: using software tools to perform repetitive or complex tasks.
- Unit testing: testing individual units or components of the application's code.
- Integration testing: testing the interaction between different components or systems.
- Regression testing: testing to ensure that changes to the application do not break existing functionality.
- Load testing: testing the application's ability to handle large amounts of traffic or data.
- Stress testing: testing the application's ability to handle extreme conditions or unexpected inputs.
- Penetration testing: simulating real-world attacks to identify and remediate security vulnerabilities.

- Performance testing with large scale data and complex scenarios.

5 APPROACH TO TESTING

5.1 PRINCIPLES & APPLICATION

5.1.1.1 Principle

During the test process the following test principles will be applied:

1. Testing shows the presence of defects, not their absence: It's impossible to test every possible scenario and guarantee that a software is completely free of defects.

2. Early testing saves time and money: The earlier defects are found, the easier and cheaper they are to fix.

3. Exhaustive testing is impossible: It's impossible to test every possible scenario, so testing should focus on the most important and risky areas.

4. Defect clustering: Most defects are concentrated in a small number of modules or functions.

5. The Pesticide Paradox: Repeatedly using the same tests can lead to the same defects being found repeatedly while new defects may go unnoticed.

6. Testing is context-dependent: The same test may have different results in different environments or with different inputs.

7.Absence-of-errors fallacy: Just because a software has passed testing, it does not mean it is error-free.

5.1.1.2 Application

1.Testing shows the presence of defects, not their absence: When testing the Nectar.co website, defects such as broken links, incorrect pricing or missing images may be found, but it is impossible to guarantee that there are no other defects present.

2.Early testing saves time and money: If defects are found and fixed during the development phase of the website, it will be less expensive and time-consuming than if the defects are found after the website has been launched.

3.Exhaustive testing is impossible: It would be impossible to test every single page and every possible scenario on the Nectar.com website, so testing should focus on the most important and risky areas, such as the checkout process.

4.Defect clustering: In the Nectar.com website, most defects may be concentrated in a small number of modules such as payment gateway, or the shopping cart.

5.The Pesticide Paradox: If the same tests are used repeatedly to check the website, the same defects may be found repeatedly while new defects may go unnoticed, so it's important to constantly update the test cases.

6.Testing is context-dependent: The Nectar.com website may have different results in different environments such as on mobile devices or different browsers, so it should be tested on multiple platforms to ensure compatibility.

7.Absence-of-errors fallacy: Just because the Nectar.com website has passed testing; it does not mean it is error-free. New defects may be introduced over time, so it's important to have ongoing monitoring and maintenance to ensure the website continues to function correctly.

5.2 TEAM – PLANNED ITERATIVE

A Team-Planned Iterative methodology which is a combination of Agile and Iterative approaches will be used during testing. This involves breaking a project down into smaller parts and continually refining and building upon those parts. This will allow for flexibility and adaptability to changes in real time, better communication among team members, greater customer satisfaction by involving them in the development process.

5.3 FIRST SPRINT

5.3.1 Objective

The First Sprint objective is to make sure that the product has as little defects as possible.

5.3.2 Scope

The scope of testing for the First Sprint is to check the SAVED button properties, the 'brand/search' field display and functionality, 'My Nectar Prices' button display and functionality, the ACCOUNT page display.

This will be achieved through functional testing.

5.3.3 Test Preparation

Requirements and user stories will be analysed, and test cases will be created accordingly.

5.3.3.1 Entry Criteria

1. Test plan and strategy should be created
2. Requirements should be clearly defined
3. The software should be created
4. Test environment should be ready for use
5. Developers should finish their own unit testing
6. The user stories must be in the Sprint Backlog

5.3.3.2 Exit Criteria

1. Test plan and strategy should be reviewed
2. Requirements should be verified
3. Documentation should be completed
4. Test environments should be reviewed and validated for readiness and availability

5.3.4 Test Execution

The test team will use the following approach after the test environment has been set up:

- Test cases will be executed using TestCaseLab
- For the test cases which have failed a bug report will be created in Jira
- The test progress will be monitored
- Test results will be reviewed and analysed
- Documentation will be completed and test execution will be closed

5.4 SECOND SPRINT

5.4.1 Objective

The Second Sprint objective is to evaluate the functionality, performance, and overall quality of the web page nectar.com

5.4.2 Scope

The Scope of the Second Sprint is to test the location and display of the ACTIVITY button, the display of the PLAYBACK chart, the functionality of the LOG OUT button, and the WELCOME page display

5.4.3 Test Preparation

Requirements and user stories will be analysed, and test cases will be created accordingly.

5.4.3.1 Entry Criteria

1. Test plan and strategy should be created
2. Requirements should be clearly defined
3. The software should be created
4. Test environment should be ready for use
5. Developers should finish their own unit testing
6. The user stories must be in the Sprint Backlog

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1. Test plan and strategy should be reviewed
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6 TEST ENVIRONMENTS REQUIREMENTS

PRODUCTION ENVIRONMENT

7 TEST DATA REQUIREMENTS

To access the website <https://www.nectar.com/homepage> an account will need to be created with a valid email address and password.

8 TESTING TOOLS & TECHNIQUES

Tools needed for testing:

1. Jira - <https://www.atlassian.com/software/jira>
2. TestCaseLab - <https://itschool.testcaselab.com/projects>
3. Planning poker - <https://planningpokeronline.com/TZE11HIKTDfkbI0HQWlq>
4. Google Chrome Version 108.0.5359.125 (Official Build) (64-bit)
5. Developer Tools from Google Chrome;

Techniques to be used:

- Exploratory testing
- Monkey testing

8.1 REQUIREMENTS & USE CASE MANAGEMENT

The team will manage the requirements by identifying, documenting, and tracking the needs of stakeholders.

By identifying, documenting, and managing the different scenarios in which the product will be used the team will handle the use case management. To help in doing so use case diagrams and flowcharts will be created

8.2 TEST MANAGEMENT & DEFECT TRACKING

Test Management:

1. A test plan will be created to outline the objectives of the testing phase
2. Test analysis
3. Test cases will be designed
4. Test monitoring and control will be done all throughout the testing phase
5. The tests will be implemented
6. Tests will be executed. Test results are recorded and analysed to identify any defects or issues.
7. Test completion

During the test process defects will be tracked by identifying, documenting, and managing issues that are found by creating a bug report.

9 TESTING ROLES & RESPONSIBILITIES

Activity	Responsibility/Ownership	Name
Test Plan Creation	[Test Manager]	Claudiu Balcu
Test Phase Plan Creation	[Test Lead]	Mariana Dudau
Test Management	[Development Company Test Manager & System Test Lead]	Claudiu Balcu, Mariana Dudau
Test Preparation, Execution & Results	[Development Company Test Engineers]	Alexandru Pocovnicu
[Test Defect Submission]	[Development Company Test Engineers]	Alexandru Pocovnicu
[Test Summary Reporting]	[Development Company Test Manager & Test Lead]	Claudiu Balcu, Mariana Dudau

10 TEST MANAGEMENT

Example

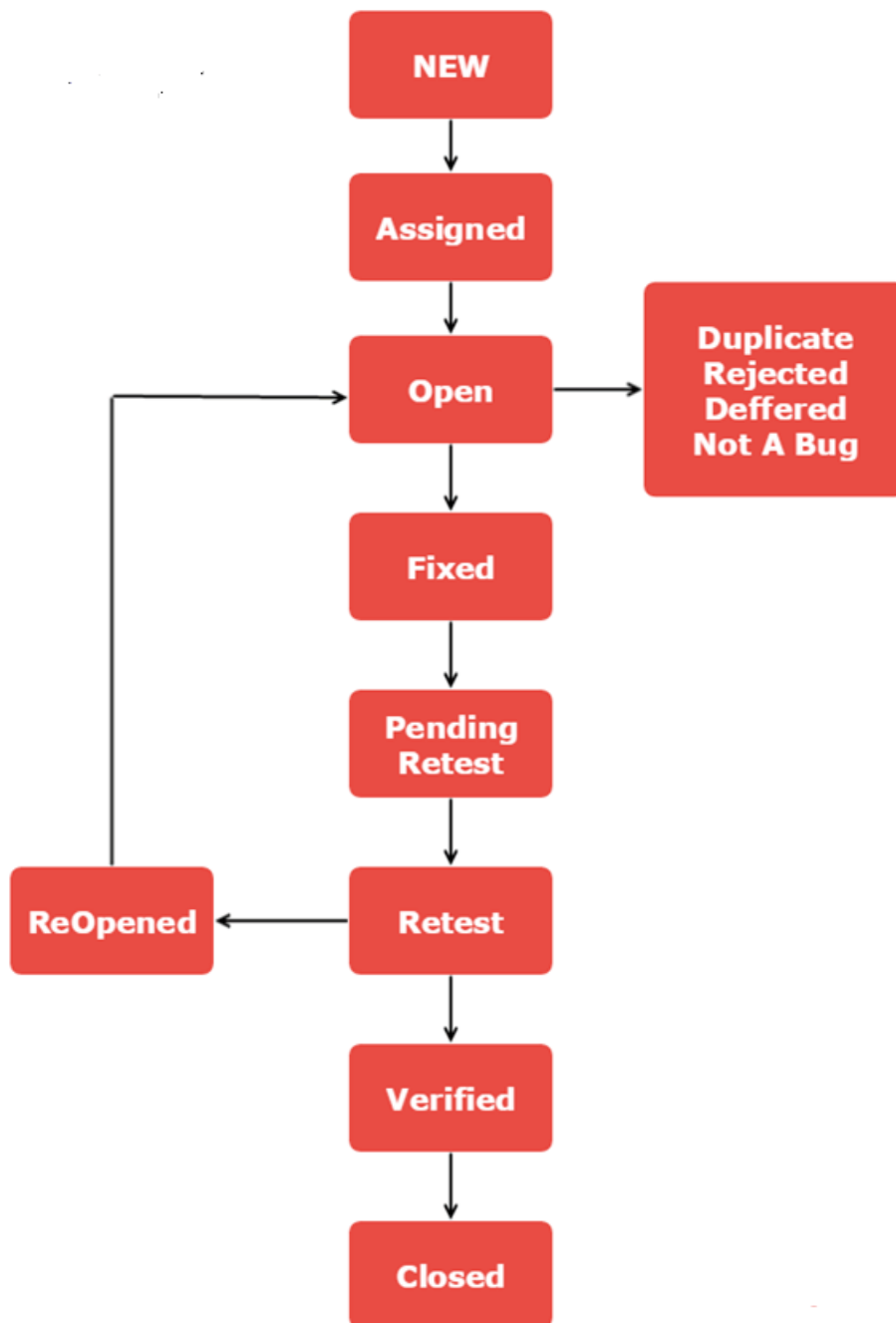
Overall responsibility for the Testing Project will be with the Development Company Test Manager Claudiu Balcu. Day-to-day Test Management will be the responsibility of the Development Company Test Lead Mariana Dudau .

Our test manager Claudiu Balcu will create the test plan making sure that testing is completed on schedule.

The test lead Mariana Dudau will assign tasks to the testing team and also communicate with the test manager about progress.

The test engineer Alexandru Pocovnicu will create and execute test cases also will report any issues found.

11 DEFECT MANAGEMENT



11.1 DEFECT MANAGEMENT PROCESS

1. When defect is found it receives the status NEW and a bug report is created for it
2. The defect is assigned
3. The defect receives the status of OPEN, from here the defect will be analysed to determine if:

- It's going to be rejected because:
 - it's a duplicate
 - it's not a defect
 - it's out of scope
 - the bug report is not clear enough
- or
- Its going to be fixed
 4. The developing team will analyse and fix the defect
 5. Defect will be retested , if the defect fails the retest then it will be reopen , if it passes then it will receive the status VERIFIED and the defect life cycle will be closed

12 TEST SCHEDULE

Test Strategy	01/01/2023-05/01/2023
Test Plan	06/01/2023-09/01/2023
Test Case creation	07/01/2023-09/01/2023
Sprint 1 execution	10/01/2023-20/01/2023
Test Completion Report 1	20/01/2023
Sprint 2 execution	21/01/2023-31/01/2023
Test Completion Report 2	31/01/2023

13 REFERENCED DOCUMENTS

The following table identifies the documentation used for developing this Test Plan:

#	Document	Author	Description
1	Test Plan	Claudiu Balcu	This document provides information regarding what specific testing will be completed on the Project.
4	Project Documentations	Laura Fenesan	This provides information with regards to the Project as a whole.