Car Purchasing App

Test Plan Document

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Contents

Introduction:

This test plan outlines the strategies, process, workflow, and methodologies used for testing the food web app website. The website has been developed using HTML, CSS, JS, and php The testing will be carried out using Intellij IDEA with Selenium Webdriver using Java and TestNG Framework, and using external libraries like Allure for reporting.

1.1) Scope:

1.1.1) In Scope:

Testing of all functional requirements such as user registration, login, menu display, ordering, and payment processing.

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1.1.2) Out of Scope:

Testing of all non-functional requirements such as usability, performance, security, and compatibility

Testing of any features not explicitly mentioned in the functional and non-functional requirements.

1.2) Quality Objective:

The objective of the testing project is to ensure that the application under test conforms to functional and non-functional requirements. The quality specifications defined by the client must be met, and any bugs or issues identified and fixed before go-live.

1.3) Roles and Responsibilities:

QA Analyst: responsible for designing, executing, and maintaining the test cases, as well as reporting and verifying defects.

Test Manager: responsible for planning, monitoring, and controlling the testing process and ensuring that the project meets its objectives.

Configuration Manager: responsible for managing the test environment and ensuring that it is consistent with the production environment.

Developers: responsible for fixing the bugs identified in the application under test.

Testing Team: responsible for creating and executing manual and automated test cases and bug reports.

Test Methodology:

2.1) Overview:

We will be adopting the agile test methodology for this project. Agile methodology provides flexibility and encourages continuous testing, which is suitable for web applications.

2.2) Test Levels:

The following test levels will be executed:

- Integration Testing: carried out to test the integration of individual modules.
- System Testing: carried out to test the application as a whole.
- Acceptance Testing: carried out to test the user acceptance of the application.

2.3) Bug Triage:

The bug triage process will be carried out to determine the priority of each bug and schedule the "To Be Fixed Bugs."

2.4) Suspension Criteria and Resumption Requirements:

The testing procedure will be suspended if any of the following criteria are met:

- Defects found in the application cannot be fixed in a reasonable time.
- The testing environment is not available.
- The testing can resume once the above criteria are resolved.

2.5) Test Completeness:

Testing will be deemed complete when the following criteria are met:

- All functional and non-functional requirements have been tested.
- All manual and automated test cases have been executed.
- All open bugs have been fixed, or will be fixed in the next release.

3) Test Deliverables:

The following test artifacts will be delivered during different phases of the testing lifecycle:

- Test Plan: detailing the testing strategy, process, and methodology.
- Test Cases: outlining the test cases designed for each test level.
- Requirement Traceability Matrix: outlining the relationship between the requirements and test cases.
- Bug Reports: documenting defects found in the application.

- Customer Sign-Off: sign-off by the client to indicate that the application has been tested and meets the required quality standards.

Resource & Environment Needs

4.1) Testing Tools

The following tools will be used for testing:

- IntelliJ IDEA IDE with Selenium WebDriver plugin
- TestNG testing framework
- REST Assured library
- Allure reporting library
- Git and GitHub version control system
- TFS for project management

4.2) Test Environment

The following software and hardware requirements are needed for testing:

- Windows 10 or above operating system
- Latest version of IntelliJ IDEA IDE with Selenium WebDriver plugin
- Latest version of JDK
- Latest version of Google Chrome browser

Internet connectivity

- Sufficient hardware resources including RAM, processor, and hard disk space
- Access to test database
- Additional software specific to the client's application may also be required.

Note: It is recommended that the test environment is identical to the production environment to ensure accurate and reliable results.

Test Execution Schedule

The test execution will be carried out in two phases, each phase consisting of functional and non-functional testing. The estimated time for each phase is:

- Phase 1: 1 week
- Phase 2: 1 week

Test Reporting

Allure reporting library will be used to generate detailed reports for each test run. The reports will include the following information:

- Test case status (Pass/Fail)
- Test case execution time
- Screenshots for failed tests
- Logs for failed tests
- Test case steps
- Test case description
- Test case owner
- Risks and Mitigation Strategies

Risk strategy

The following risks and their mitigation strategies have been identified:

Integration issues with client's existing systems - Regular communication with the client's development team and frequent testing of integrations during the development cycle will help mitigate this risk.

Insufficient time for testing - Proper planning and prioritization of test cases will help ensure that critical tests are completed within the given timeframe.

Inadequate test coverage - Continuous review of the test plan and test cases with the client's team will help identify areas where additional testing is required.

Sign-Off

The following sign-off criteria must be met before the application can be released:

All high and medium severity bugs must be fixed and re-tested.

All critical and major functional and non-functional requirements must be met.

Test reports must show that all test cases have been executed and passed.

The client must approve the application for release.

Conclusion

This test plan outlines the testing strategies, process, workflow, and methodologies that will be used to test the food web app website. By following this plan, we aim to ensure that the application meets the

Functional and non-functional requirements defined by the client and is free of critical bugs and issues.