Test Plan Document

**CHANGE LOG**

| **Version** | **Date** | **Status** | **Author** |
| --- | --- | --- | --- |
| **1.0** | Aug 26, 2023 | Initial Draft | Sarah E. Aboh |
| **1.1** | Aug 28, 2023 | Updated | Sarah E. Aboh |

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Entry criteria

Exit criteria



# Introduction

## Purpose

The purpose of this test plan is to ensure that the LYTUP Application solution operates as expected, is user-friendly, and is secure on both web and Mobile Application.

We aim to verify the following key aspects:

* **Functionality**: Confirm that all features, including user Sign up, Dashboard components, customer and device management, inventory management, etc function as per the specified requirements.
* **Usability**: Evaluate the user experience for all user types on the application. This includes testing the application's navigation, design, and ease-of-use on both web and Mobile platforms.
* **Compatibility**: Ensure the application runs smoothly on various versions of iOS and Android, and on different devices that use these operating systems.
* **Performance**: Check the application's response time, speed, and overall performance under various network conditions (such as 3G, 4G, 5G, and Wi-Fi)
* **Security and Privac**y: Validate the security measures implemented to protect user data and privacy. This includes checking data encryption, and compliance with relevant privacy regulations.

## 

## Scope

## The scope of this test plan involves thorough testing of the Lytup Africa software on web and mobile applications. The areas covered will be:

## User Registration and Account Management: This will involve testing the user signup process, SIgn in process, Password recovery and user management features.

## Dashboard components: Testing will cover the Dashboard design and entry management

## Inventory management: This involves testing the functionalities related to managing the hardware inventory to ensure accurate Operation

## Security and Data Privacy: Testing will ensure the security of user data, and overall data privacy adhering to relevant standards and regulations.

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## Objectives

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## The primary objective of this test plan is to validate the functionality, reliability, performance, and security of the Application across its web and mobile platforms.

## This will encompass verification of the following key features

## User registration and Setup

## User Management

## Dashboard functions

## Device Management

## Inventory Management

## Verify the application's compatibility, responsiveness, and performance on different devices and screen sizes.

## Assess the application's security measures and ensure user data privacy.

## Identify and report defects, ensuring they are addressed before the application is released to end users.

## Provide comprehensive and reliable test coverage to instill confidence in the application's stability and usability.

# Test Strategy

# The test strategy for the Lytup Application will encompass various testing methodologies and levels to ensure the application's functionality, performance, usability, security, and compatibility.

**Testing Approach**

* **Manual Testing:** Manual testing will be conducted to identify any usability and navigational issues. It will also be used for exploratory testing where the test Team can investigate potential issues.
* **Compatibility Testing:**
* **Security Testing**: Specialized security testing tools will be used to identify any potential vulnerabilities in the application, with a focus on data protection.

**Test Levels**

* **Unit Testing**: Each individual component or module of the web and mobile application will be tested in isolation to ensure that they function correctly.
* **System Testing**: The entire system will be tested as a whole to ensure that it meets the specified requirements. This includes testing the end-to-end functionalities of the application.
* **Acceptance Testing**: After the system testing, acceptance testing will be conducted to validate if the application meets the business needs and is ready to be deployed to the production environment.
* **Usability Testing:** Usability tests will be carried out to ensure that the app provides a good user experience, is easy to navigate, and intuitive to use.
* **Performance Testing:** Performance tests like load testing and stress testing will be conducted to ensure the application can handle a high volume of users and entries without any degradation in performance.
* **Integration Testing**: Once the units are tested individually, integration testing will be conducted to ensure that these units work together without issues.

## Test Environment

The test environment will consist of the following:

* **Devices**: The application will be tested on a variety of iOS and Android devices to ensure compatibility. This will include different models with various screen sizes and hardware specifications.
* **Operating Systems**: The application will be tested on different versions of iOS and Android operating systems to ensure the application's compatibility with both older and newer OS versions.
* **Networks**: The application will be tested under various network conditions, including Wi-Fi, 4G, and 5G.
* **Test Data**: We will use test data that closely mimics the real data that the system would handle in a production environment.
* **Tools**: Depending on the type of testing, various tools may be used. This could include manual testing tools, Sheets and defect tracking systems, performance testing tools, etc.
* **Test Server**: A separate server will be used for testing purposes, ensuring that it doesn't interfere with the production server and the live app.

## Test Deliverables

| **Deliverables** | **Description** | **Responsible Parties** |
| --- | --- | --- |
| **Test Plan** | The test plan will document and outline the overall testing approach, objectives, scope, and schedule for the application. It will serve as a reference guide for the testing team and stakeholders throughout the testing process. | **Test Team** |
| **Test Cases** | Test cases are detailed instructions that describe the steps to be executed, inputs to be provided, and expected outcomes for each test scenario. These test cases will cover mostly functional aspects of the application. | **Test Team** |
| **Test Data** | Test data will include a set of predefined data that will be used to execute the test cases. It encompasses both valid and invalid scenarios to thoroughly validate the functionality, edge cases, and boundary conditions of the mobile business banking application. | **Test Team/Dev Team** |
| **Test Logs** | Test logs provide a record of the testing activities conducted during the testing process. They capture important information, such as the test execution date and time, test case status (pass/fail), environment details, and any notes or observations made during the test execution | **Test Team** |
| **Test Summary Reports** | Test Summary Reports provides a detailed account of the overall testing results and defects on web application and iOS and android versions of the mobile application | **Test Team** |

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## Dependencies:

* + Availability of test environment and devices.
  + Completion of development and build milestones.
  + Timely availability of test data.
  + Cooperation and timely feedback from stakeholders.

| Test Tools |
| --- |
| Test execution**:** Google sheet |
| Defect Tracking: Google sheet, Jira |
| Performance testing**:** Jmeter |
|  |

| **MILESTONES** | | |
| --- | --- | --- |
| **Tasks** | **Timeline** | **Responsible parties** |
| Test Plan | Week 1 | Test Team |
| Test Case Creation and Documentation for Admin User | Week 2 | Test Team |
| Test Case Creation and Documentation for Customer Support User | Week 3 | Test Team |
| Test Case Creation and Documentation for Employee User | Week 3 | Test Team |
| Test Case Creation and Documentation for | Week 4 | Test Team |
| Test Execution and Bug reporting | Week 4 | Test Team |
| Remediation of Bugs | Week 4 - 5 | Dev Team |
| Retest and Regression Tests | Week 6 | Test Team |
| Test Closure Report | Week 7 | Test Team |

| Roles and Responsibilities |
| --- |
| Testing Team: Testers |
| Development Team: Software Engineers, Product designers |
| Stakeholders: CEO, Product Manager |

| Approvals |
| --- |
| Test Plan Approval: CEO |
| **Test Completion Criteria:**   * Over 90% of test case coverage should be achieved. * No known failure critical defects detected * 90% requirement coverage |
| Signature: Tester |