Software Testing Documentation

**Prepared by**

**Nitinkumar das**

**Krish jain**

**Manas Dubey**

**Vishnu kudikala**

## for the project

## bookstore

## SAHYOG COLLEGE

**KKSU – BCA Department**

## Academic Year 2023•2024

1. Introduction
   1. Document Identifier
   2. Scope
   3. References
   4. Level In The Overal Sequence
   5. Test Classes And Overall Test Conditions 2. Details For System Plan

2.1 Features To Be Tested 2.2 Features To Be Tested 2.3 Approach

2.4 Item Pass / Fail Criteria 2.5 Test Deliverables

1. Test Management
   1. Planned Activities and Tasks; Test Progression 3.2 Environment / Infrastructure
2. Test Case Details 4.1 Introduction 4.2 Test Cases
3. System Test Report Details 5.1 Overview Of Test Results 5.2 Detailed Test Results
   1. Rationale For Decisions
   2. . Conclusions And recommendations

# Introduction

## Document Identifier

The project aims to create a service where all passwords can be stored securely, accessed by the authorized personnel only on a need•to•know basis.

This document is prepared by Codefellas2 with the purpose of testing the Linux Password Vault software. The document explains design of test cases and procedure with great detail so that any tester would be able to run and observe the outcomes. This document is the first versionof Software Testing Documentation.

## Scope

The purpose of this document is to provide the test cases of Linux Password Vault. The document provides the objective, scenario, expected outcomes and procedural requirements for each test case. Additionally, it contains a chart that shows the relation between test cases. The software will be tested using guidance of this document. Even though it embodies all the test cases specifically in detail, a little portion of the details is subject to change in test phase. In the first section, the background information about Linux Password Vault and the aim of this document are provided. The second section is dedicated to the details about system test plan, while the the third section gives management information about test. Finally,

last two chapters, form main part of the document, explaining all the test cases and giving the results.

## References

1. IEEE Standard for Software and System Test Documentation, IEEE Std 829 TM 2008
2. SDD of Linux Password Vault, Software Design Description

## Level In The Overal Sequence

* + - Integration testing: In this level, modules are combined together into different subsystems, which are then tested. The goal here is to see if the modules can be integrated properly. This testing activity can be considered testing the design.
    - System testing: In this level, the entire software system is tested. The reference document for this process is the requirements document, and the goal is to see if the software meets its requirements.
    - Acceptance testing: Acceptance Tests are the tests which will be performed by the stakeholders to validate the system to see if the system meet their needs or not. Acceptance Tests will be performed after the system test and performance tests.

In this document, only integration testing is followed in order to of ensure that the subsystems are able to work as a correlated system.

## Test Classes And Overall Test Conditions

In the next sections of the document, many test cases are given a place for checking the software in terms of different perspectives.

# Details For System Plan

## Features To Be Tested

Projects functional properties will be tested. While testing environment variables and specific input parameters will be

used to see the software’s behavior and the related errors.

## Features To Be Tested

During testing process capability (access control) will not be tested because it’s not finished exactly yet.

## Approach

Blackbox testing which examines the functionality of an application without peering into its internal structures or workings is determined to be used based on our knowledge of internal operation and implementation of Linux Password Vault.

## Item Pass / Fail Criteria

For each test there are input•output pairs which must be satisfied by related test cases. The test cases which result in unexpected outputs shall be considered as fail. This approach shall be applied only to test cases with black box method.

## Test Deliverables

This document contains test procedure specifications that explain the steps for executing all test cases given in the following sections and the results of each test case. It is prepared based on IEEE Standard for Software and System Test Documentation.

# Test Management

## Planned Activities and Tasks; Test Progression

The test process will start with analysis and inspection of the SDD in order to understand the requirements and design cases and code in order to find the error prone parts of the code in testing purposes. Then, necessary test cases will be determined and for better understanding, cases will bedivided into groups according to their objectives. After that, the expected outputs for each test case will be decided and described. Finally, inputs for each test case will be determined.

In the final step, the results of each test will be gathered in a test results table. This will enable us to see what should be done in further steps of the software’s development. The testing of this project will be done manually except performance testing.

## Environment / Infrastructure

**Hardware Needs:** The devices which will form the hardware components of the system shall have network access. Therefore, modem, WAN/LAN, Ethernet crosscable is considered as hardware needs.

**Software Needs:** A Linux Operating System with terminal is required.

# Test Case Details

## Introduction

This section provides the detailed explanation for each test case accompanied by the its inputs, outcomes, environmental and procedural requirements along with the dependencies among test cases. This section includes the information for all test cases we run on the project.

For each test case, there are seven fields; test case identifier, objective, inputs, outcomes, environmental needs, special procedural requirements, intercase dependencies. Test case id is unique for each test case and is used for identifying test cases.

* 1. **Test Cases**

|  |  |
| --- | --- |
| Test case identifier | Test1 |
| Objective | Sign-up |
| Inputs | username, e-mail, password |
| Outcome | User added successfully and data is stored in database for easy login. |
| Environmental needs | For coding : visual studio code and for connecting database XAMP. |
| Special procedural requirements | There are no special procedural requirements. |
| Intercase dependencies | There are no intercase dependencies for this test case. |

|  |  |
| --- | --- |
| Test case identifier | Test2 |
| Objective | Sign-in |
| Inputs | Email , password. |
| Outcome | User is logged and redirected to the home page |
| Environmental needs | For coding : visual studio code and for connecting database XAMP. |
| Special procedural requirements | There are no special procedural requirements. |
| Intercase dependencies | Test1 |

|  |  |
| --- | --- |
| Test case identifier | Test3 |
| Objective | Order books |
| Inputs | quantity |
| Outcome | Product added to cart |
| Environmental needs | For coding : visual studio code and for connecting database and outcome XAMP(appache,mysql). |
| Special procedural requirements | There are no special procedural requirements. |
| Intercase dependencies | Test2 |

|  |  |
| --- | --- |
| Test case identifier | Test4 |
| Objective | Update cart |
| Inputs | quantity |
| Outcome | Cart quantity updated |
| Environmental needs | For coding : visual studio code and for connecting database and outcome XAMP(appache,mysql). |
| Special procedural requirements | There are no special procedural requirements. |
| Intercase dependencies | Test2, Test3 |

|  |  |
| --- | --- |
| Test case identifier | Test5 |
| Objective | Logout |
| Inputs | Quit command |
| Outcome | The user has successfully logged out and need to login for order books. |
| Environmental needs | For coding : visual studio code and for connecting database and outcome XAMP(appache,mysql). |
| Special procedural requirements | There are no special procedural requirements. |
| Intercase dependencies | Test2 |

# System Test Report Details

## Overview Of Test Results

In this section of the document, test cases that are explained in the previous section are concluded with their results according to pass/fail criteria that is also defined in the document. Results of the all test cases are given in following part.

## Detailed Test Results

|  |  |
| --- | --- |
| Test1 | PASS |
| Test2 | PASS |
| Test3 | PASS |
| Test4 | PASS |
| Test5 | PASS |

* 1. **Rationale For Decisions**

Test cases were formed in order to see the behavior of the code in prone parameters and inputs. The test cases were tested number of times and behavior of the system was observed using our predefined evaluation metrics.

## Conclusions And recommendations

In the testing period, 10 different test cases are executed. All of the test are about functionality testing about the project.

**Report**

**Manual Testing Report for bookstore website**

**Date : 1-11-2023**

**Tester : knmv group**

**Website : bookstore**

**Test Summary**: The manual testing was conducted to ensure the functionality and usability of the bookstore website. The primary focus was on testing the Login of the existing user, user sign-up process, quantity add , update and delete ,Log out of the user, and overall user experience.

**User Login Process Testing**:Only Existing users can log in using their credentials without any issues.

**User Sign-Up Process Testing** : new user can create account by sign-up. Existing user will not be able to sign-up.

Existing users were able to log in using their credentials without any issues.

**Home page** :

* Verify that all links and buttons are working properly.
* Verify that the image is displayed correctly.
* Verify that the search bar is not working.

**Product details:**

* Verify that all product information is displayed correctly (name, price, quantity, images, etc.).
* Verify that the "Add to Cart" button is working properly.

**Shopping cart:**

* Verify that shopping cart is displaying all added products correctly.
* Verify that calculation of every quantity and products working correctly

**Log-out testing :** when the user login in the website he/she will see the user icon on top right corner of page when user click on that icon he/she will see the log-out button after clicking the log-out button he/she will get redirected to the log-in page.

**Security and Privacy Testing**: User data was securely stored and protected from unauthorized access.

**Other test cases:**

* Verify that the website is responsive and works well on various devices including desktop , tab , smart phone.
* Verify that the website is working well in other browser.

**Conclusion:** Overall, the manual testing confirmed that the bookstore website is functioning as expected, providing a seamless and secure experience for users. The identified issues were promptly addressed and resolved, ensuring a reliable platform for customers to order books.

**Recommendations:** Regular monitoring and maintenance are recommended to ensure that the website continues to operate smoothly and remains secure. Additionally, periodic checks for updates and security patches should be implemented to safeguard against potential vulnerabilities.