Software Testing Documentation

for

BHPS Book Heaven Online Bookstore

Version 1.0

Prepared by TOH KHIM TAT

Book Heaven

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Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Date** | **Reason for Changes** | **Version** |
| 1. Fakhrul Hilmi Bin Azman 2. Chei Kah Yan 3. Nur Alhuda Binti Mahmoud Ahmed Shokr 4. Nur Rifqah Binti Shahrul 5. Toh Khim Tat | 25 Sept 2025 | Initial release | 1.0 |
|  |  |  |  |
|  |  |  |  |

# Introduction

The BHPS Book Heaven purchasing system project is a web-based platform designed to streamline book purchasing operations for both customers and administrators. This Software Testing Documentation outlines the approach, scope, and methodologies for testing the system to ensure its functionality, reliability, and performance meet the project's requirements. It provides definitions, acronyms, references, and an overview of the testing process to maintain clarity and alignment among all stakeholders involved.

## Purpose

The purpose of this Software Testing Documentation is to ensure that the BHPS Book Heaven purchasing system functions as intended by verifying and validating its core modules. Thorough testing, we aim to identify defects, ensure system reliability, and enhance user experience for both admins, staff and customers. This document outlines the testing strategies for key features, including user registration, profile management, book store management, payment processing, and feedback handling. The goal is to improve efficiency, reduce errors, and maintain a seamless rental process.

## Scope

BHPS Book Heaven is a book purchasing system with admin, staff and customer roles. Admins generate report sales. Staff manage the platform, oversee purchasing, and handle customer feedback, while customers purchasing book through a seamless process.

Key modules include:

• Registration: Quick sign-up for new and returning customers.

• Profile: Customers input personal and payment details; staff can assist.

• Book Management: Staff add, update, delete, and manage book.

• Payment Management: Supports multiple payment methods and generates invoices.

• Feedback: Customers submit reviews; Admins view and moderate.

BHPS Book Heaven enhances efficiency, improves customer satisfaction, and keeps the company competitive.

## Definitions, Acronyms and Abbreviations

Definitions:

The name of the system is BHPS Book Heaven purchasing system which is a combination of the word "Book Heaven" with knowledge, abbreviation prefix letter "BHPS” This gives it a knowledgeable and approachable tone, making it easy to remember and appealing to a wide range of customers. A web-based platform that allows customers to browse, purchasing, and manage Book purchasing online website.

Acronyms and Abbreviations:

• UI (User Interface) – The visual elements through which users interact with the system.

• UX (User Experience) – The overall experience of a user when interacting with the website.

• DBMS (Database Management System) – A system used to store and manage customer and book data.

## References [Partial]

This section lists the key documents, standards, and resources referenced during the preparation

of this Software Testing Documentation. These references include the BHPS Book Heaven purchasing system Requirements Specification, User Interface Design Guidelines, Test Plan Document, and any relevant industry standards or best practices followed to ensure comprehensive test coverage and quality assurance.

## Overview

This Software Testing Documentation provides a structured approach to verify and validate the

functionalities of the BHPS Book Heaven purchasing system, ensuring that all critical modules—including user management, book listings, purchasing processes, payment handling, and administrative controls—function as intended. It outlines the test objectives, scenarios, data, expected outcomes, and actual results, enabling the development team to identify defects, improve system reliability, and deliver a seamless user experience for both administrators and customers.

# Test Cases, Data and Expected Results

The table below summarizes the results of system testing.

## TC001 - Login (User)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC001\_01 | User has valid username and password | Navigate to login page |  | Navigate to the user dashboard | Navigate to the user dashboard | Pass |
| Enter valid username | Alia25 |
| Enter valid password | 123456 |
| Click on Login button |  |
| TC001\_02 | User has valid username and invalid password | Navigate to login page |  | Message error shows “Invalid Password” and navigate again to the login page | Message error shows “Invalid Password” and navigate again to the login page | Pass |
| Enter valid username | Alia25 |
| Enter invalid password | 123477 |
| Click on Login button |  |
| TC001\_03 | User leaving a username blank and valid password | Navigate to login page |  | Message error shows “Please enter username” and navigate again to the login page | Message error shows “Please enter username” and navigate again to the login page | Pass |
| Leave username blank |  |
| Enter valid password | 123456 |
| Click on Login button |  |

## TC002 - View Homepage (User)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC002\_01 | Already login | Navigate to user homepage |  | Information shown:  - Top navigation (Home, About Us, Book Listing, FAQs, Contact Us)  - Welcome message with username  - Profile dropdown (Profile, Logout)  - Search bar  - Contact info (email, phone)  - Homepage banner  -Book listings with   * details   - Testimonials  - Business stats  - Footer | Information shown:  - Top navigation (Home, About Us, Book Listing, FAQs, Contact Us)  - Welcome message with username  - Profile dropdown (Profile, Logout)  - Search bar  - Contact info (email, phone)  - Homepage banner  - Book listings with details  - Testimonials  - Business stats  - Footer | Pass |

## TC003 – View about Us Page(User)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC003\_01 | Already login | Navigate to About Us page via navigation bar |  | Information shown:  - Page title “About Us”  - Company description about Book variety, quality, and services  - Mission statement | Information shown:  - Page title “About Us”  - Company description about Book variety, quality, and services  - Mission statement | Pass |

## TC004 – View Book Details(User)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC004\_01 | Already login | Navigate to Book Listing Page via navigation bar |  | Information shown:  - Page title “Book Listing”  -Filter options(Book Name, Title Type)  -Book list with image, name, price, year  -View Details Button  -Recently listed book sections | Information shown:  - Page title “Book listing”  - Filter option(Book name, Title Type, price, years)  -Book list with image, name, price, year  -View Details Button  -Recently listed book sections | Pass |

## TC005 – Submit Purchase Request(User)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC005\_01 | Already login | Click on “View Details” for a book in the listing | Any available book | Information shown:  - Book image gallery  - Book name, Price  - Book details (reg  year, book type)  - Book description  - Purchase form (date,  message, payment  method)  - Similar book section | Information shown:  - Book image gallery  - Book name, Price  - Book details (reg  year, book type)  - Book description  - Purchase form (date,  message, payment  method)  - Similar book section | Pass |
| TC005\_02 | User already  login; selected  book is already  purchase on  chosen dates | Open a Book’s detail page |  | - Purchase request is processed  - Notification shows if dates are unavailable  - User remains on the same page or sees purchase summary | - Popup message: "Book already booked for these days" - On click "OK", redirected to Book Listing page  - No receipt or purchase record shown | Fail |
| Fill in From Date, To Date, Message, and Payment Method | From: 07/05/2025 To: 08/05/2025 Message: I want purchase this Book  Payment: Cash On Delivery |
| Click “Purchase Now” button |  |

## TC006 – FAQs (User)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC006\_01 | Already login | Navigate to FAQs  page via navigation  bar |  | Information shown:  - Page title “FAQs”  - At least 3 common questions with answers  (age requirement,  cancellation, late return) | Information shown:  - Page title “FAQs”  - 3 questions and answers  displayed correctly | Pass |

## TC007 –Submit Contact Us Form(User)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC007\_01 | User is on  Contact Us  page | Fill in Full Name, Email  Address, Phone  Number, and Message | Name: Toh Khim Tat  Email:  tohjingtat@gmail.com  Phone: 123456789  Message: Book is very  nice and comfort | - Message is submitted - Success message shown:  "SUCCESS: Query Sent.  We will contact you shortly" | - Message submitted  successfully  - Success message  displayed | Pass |
| Click “Send Message” button |  |

## TC001 –Login (Staff)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC001\_01 | Staff has valid  username and  password | Navigate to staff  login page |  | Redirect to Satff  Dashboard page (showing  stats like Reg Users, Listed  Book, Purchasings, etc.) | Redirected to Staff Dashboard page with widgets (Reg Users, Listed Books, Purchasing, etc.) | Pass |
| Enter valid username | Staff |
| Enter valid password | Test@12345 |
| Click on Login button |  |
| TC001\_02 | User has valid username and invalid password | Navigate to login page |  | Popup appears with  message “Invalid Details”,  then redirect back to login  page after clicking OK | Popup appears with  message “Invalid Details”,  then returns to login page  after clicking OK | Pass |
| Enter valid username | Staff |
| Enter invalid password | 12345 |
| Click on Login button |  |
| TC001\_03 | User leaving a username blank and valid password | Navigate to login page |  | Popup displays “Invalid Details”, then stays on login page after clicking OK | Popup displays “Invalid Details”, then stays on login page after clicking OK | Pass |
| Leave username blank |  |
| Enter valid password | Test@12345 |
| Click on Login button |  |

## TC002 –Create And Update Book (Staff)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC003\_01 | Staff is logged  in and navigated  to “Create  Brand” page | Click Name>Create Name |  | Success message: Name Created successfully | Success message:  Name Created successfully | Pass |
| Enter Book Name | Fantastic |
| Click Submit |  |
| TC003\_02 | Staff is logged in and navigated to “Create Brand” page | Enter a brand name that already exists | Frozen | Error or duplicate  prevention message (e.g.,  Name already exists) OR  not listed again | Duplicate entry is allowed and name is listed again in Manage name list | Fail |
| Click Submit |  |
| TC003\_03 | Staff is logged in and navigates to Manage Name page | Click on edit icon next to a name |  | A success message “Name Update successfully” is displayed and the updated name appears in the name list | A success message “Name  Update successfully” is  displayed and "Rio"  appears in the name list | Pass |
| Change the brand name | Rio |
| Click the Submit button |  |

## TC003 – Post a Book (Staff)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC004\_01 | Staff is logged  in and on "Post  a Book" page | Enter Book Title | Jungle | Book is posted successfully and confirmation message appears | Book is posted successfully and confirmation message appears | Pass |
| Enter book overview | Bird explore jungle |
| Enter price | 85 |
| Enter model years | 2020 |
| Select Name | Rio |
| Select Book type | Story |
| Enter book capacity | 20 |
| Upload all 5 image |  |
| Select accessories |  |
| Click ”Save change” |  |

## TC004 –User purchase request (Staff)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC005\_1 | Staff is logged  in and navigated  to the New  purchase  section | Click View on a  purchase in the New  purchase table |  | A success message  “Purchasing Successfully  Confirmed" appears. The  Purchasing moves to the  Confirmed | A success message  "Purchasing Successfully  Confirmed" appears. The Purchasing moves to the  Confirmed | Pass |
| In the Purchase Details page, click Confirm Purchase. |  |
| A confirmation prompt  appears |  |
| Click OK to confirm |  |
| TC005\_02 | Staff is logged  in and navigated  to the New  purchase  section | Click View on a  purchase in the New  purchase table |  | A success message  "Purchase Successfully  Cancelled" appears. The purchase moves to the Canceled purchase list. | A success message "Purchase Successfully Cancelled" appears. The purchase moves to the Canceled purchase list. | Pass |
| In the Purchase Details page, click Cancel Purchase |  |
| A cancellation prompt appears |  |
| Click OK to confirm  cancellation |  |

## TC005 –User purchase request (Staff)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC006\_01 | Staff is  logged in and  navigated to  Update  Contact Info | Go to "Update  Contact Info” |  | Success message “Info  Updated successfully”  appears | Info Updated successfully message shown | Pass |
| Enter Address | melaka |
| Enter Email | bookheaven@gmail.com |
| Enter Contact  Number | 123456789 |
| Click "Update" |  |
| TC006\_02 | Staff is logged in and navigated to Update Contact Info | Go to "Update  Contact Info" |  | Error message indicating invalid phone number | Info Updated successfully  message shown | Fail |
| Enter Address | melaka |
| Enter Email | bookheaven@gamil.com |
| Enter Contact  Number | 23456 |
| Click "Update" |  |

## TC005 – Generated sales report (Admin)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Pre-Conditions** | **Test Steps** | **Test Data** | **Expected result** | **Actual result** | **Pass/Fail** |
| TC006\_01 | Admin is  logged in and  navigated to  Sales Report | Navigate to staff login page |  | Success message “login successfully”  appears | Info Login successfully message shown | Pass |
| Enter valid Username | Admin |
| Enter valid password | Test@12345 |
| Click on Login button |  |
| TC006\_02 | Admin has valid username and invalid password | Navigate to login page |  | Popup appears with message “Invalid Details”, then redirect back to login page after clicking OK | Popup appears with message “Invalid Details” then returns to login page after clicking OK | Pass |
| Enter valid username | Admin |
| Enter valid password | 123456 |
| Click on Login button |  |
| TC006\_03 | Admin has invalid username and valid password | Navigate to login page |  | Popup appears with message “Invalid Details”, then redirect back to login page after clicking OK | Popup appears with message “Invalid Details” then returns to login page after clicking OK | Pass |
| Enter valid username |  |
| Enter valid password | Test@12345 |
| Click on Login button |  |

# Test Approach Analysis

## TC001 - Login

* Verify if a user will be able to login with a valid username and valid password.
* Verify if a user cannot login with a valid username and an invalid password.
* Verify the login page for both, when the field is blank and Submit button is clicked.
* Verify the ‘Forgot Password’ functionality.
* Verify the messages for invalid login.
* Verify the ‘Remember Me’ functionality.
* Verify if the data in password field is either visible as asterisk or bullet signs.
* Verify if a user is able to login with a new password only after he/she has changed the password.
* Verify if the login page allows to log in simultaneously with different credentials in a different browser.
* Verify if the ‘Enter’ key of the keyboard is working correctly on the login page.

## TC002 – View Homepage(User)

# Verify if the homepage is displayed after successful login.

# Verify if navigation options like Home, About Us, book listing, FAQs, Contact Us are visible.

# Verify if user welcome message, profile menu, and search bar are shown.

# Verify if contact info, homepage banner, book listings, testimonials, and another are displayed correctly.

## TC003 – View About Us Page (User)

* + Verify if user can navigate to the About Us page from the navigation bar.
  + Verify if the page displays company description and mission statement.
  + Verify if page title is correctly shown as “About Us”.

## TC004 – View Book Detail and purchase section (User)

* + Verify if user can access Book Listing via the navigation bar.
  + Verify if book list includes image, name, price, year, book type.
  + Verify if user can click “View Details” for more info.
  + Verify if filter options (Name, Book Type) are available.
  + Verify if Recently Listed book purchase section is visible.

## TC005 – Submit Purchase Request (User)

* Verify if clicking “View Details” shows book purchase section.
* Verify if user can select From Date, To Date, write message, and choose payment method.
* Verify if purchase request is submitted successfully when dates are available.
* Verify if error appears when selected book is already purchase on chosen dates.
* Verify if user is not redirected unexpectedly when purchase fails.

## TC006 – FAQS (User)

* Verify if FAQs page is accessible from the navigation bar.
* Verify if at least three questions and answers are shown (e.g., age requirement, cancellation)
* Verify if the page title and content are displayed correctly.

## TC007 – Submit Contact Us Form (User)

* Verify if user can access Contact Us page.
* Verify if form fields (Full Name, Email, Phone Number, Message) can be filled.
* Verify if user can submit the message.
* Verify if a success message is shown after submission.
* Verify if the system handles message input and submission correctly.

## TC001 – Login (Staff)

* Verify login functionality with valid staff credentials.
* Verify that an error message "Invalid Details" appears when incorrect passwords are used.
* Verify that leaving the username blank triggers the "Invalid Details" error.
* Verify that after clicking "OK" on the error popup, the system returns to the login page.
* Verify password input is masked correctly.
* Verify that pressing the "Enter" key triggers login action.
* Verify system behavior when multiple sessions are initiated in different browsers.

## TC002 – Create And Update Book (Staff)

* Verify that the staff can access the "Create" page via the Book List menu.
* Verify successful Book creation with valid, unique book names and a success message appears.
* Verify that the system prevents duplicate book names and shows an appropriate error (This failed in your testing, needs fixing).
* Verify that the staff can edit an existing book name and that the change is reflected immediately.
* Verify that the success message "Book Update successfully" is displayed after editing.

## TC003 –Post a Book (Staff)

* Verify that the staff can successfully access the "Post a Book" page.
* Verify that all required fields (Book Title, Overview, Price, Year, Name) must be completed before submission.
* Verify successful posting of a book with all valid data inputs and a success confirmation message.
* Verify that after posting, the book appears correctly in the book listings.
* Verify that at least 5 images can be uploaded and are required for posting (as per your test case).
* Verify that selected accessories are saved and displayed in the book details after posting.

## TC004 –User Purchase Request (Staff)

* Verify that the staff can view pending purchase requests under the New purchase section.
* Verify that clicking "View" on a purchase opens detailed purchase information.
* Verify that the staff can confirm a purchase with a confirmation prompt and the purchase moves to the Confirmed list.
* Verify that the staff can cancel a purchase with a cancellation prompt and the purchase moves to the Canceled purchase list.
* Verify that proper success messages appear for both confirmation and cancellation actions.

## TC005 –Contact Information (Staff)

* Verify that the staff can navigate to "Update Contact Info" page.
* Verify that valid address, email, and contact number inputs are accepted and saved successfully.
* Verify that a success message "Info Updated successfully" appears after updates.
* Verify that invalid phone numbers trigger validation errors (this failed in your testing and needs correction).
* Verify that all updated contact information reflects correctly on the public-facing site or admin views.

## TC006 – Generated Sales Report (Admin)

* Verify login functionality with valid admin credentials.
* Verify that an error message "Invalid Details" appears when incorrect passwords are used.
* Verify that leaving the username blank triggers the "Invalid Details" error.
* Verify that after clicking "OK" on the error popup, the system returns to the login page.
* Verify password input is masked correctly.
* Verify that pressing the "Enter" key triggers login action.
* Verify system behavior when multiple sessions are initiated in different browsers.

# Appendix A: Test Report Approval

The undersigned acknowledge they have reviewed the BHPS Book Heaven purchasing system Software Testing Documentation and agree with the approach it presents. Changes to this Software Testing Documentation will be coordinated with and approved by the undersigned or their designated representatives.

**Prepared by**

Signature :

Name : Fakhrul Hilmi Bin Azman

Role : Team Leader

Date : 27 Sept 2025

**Approved by**

Signature :

Name : Noor Diana Binti Mohamed Hassim

Role : Project Manager

Date : 27 Sept 2025