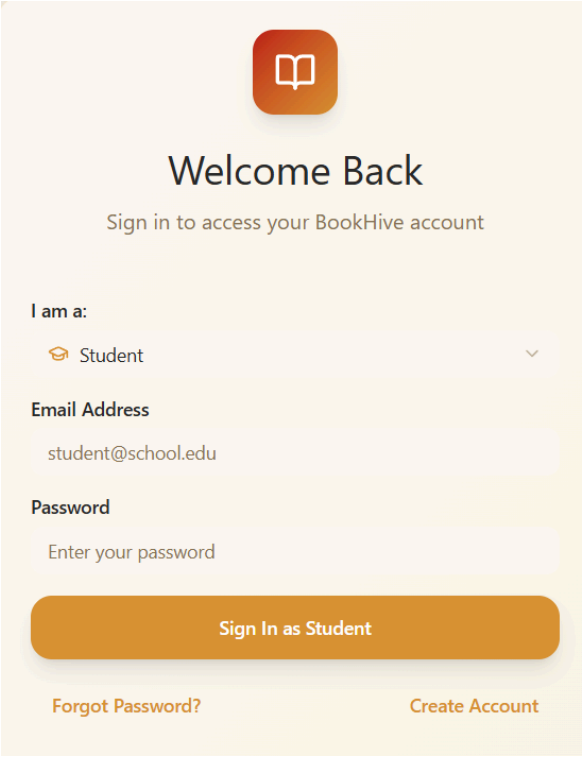
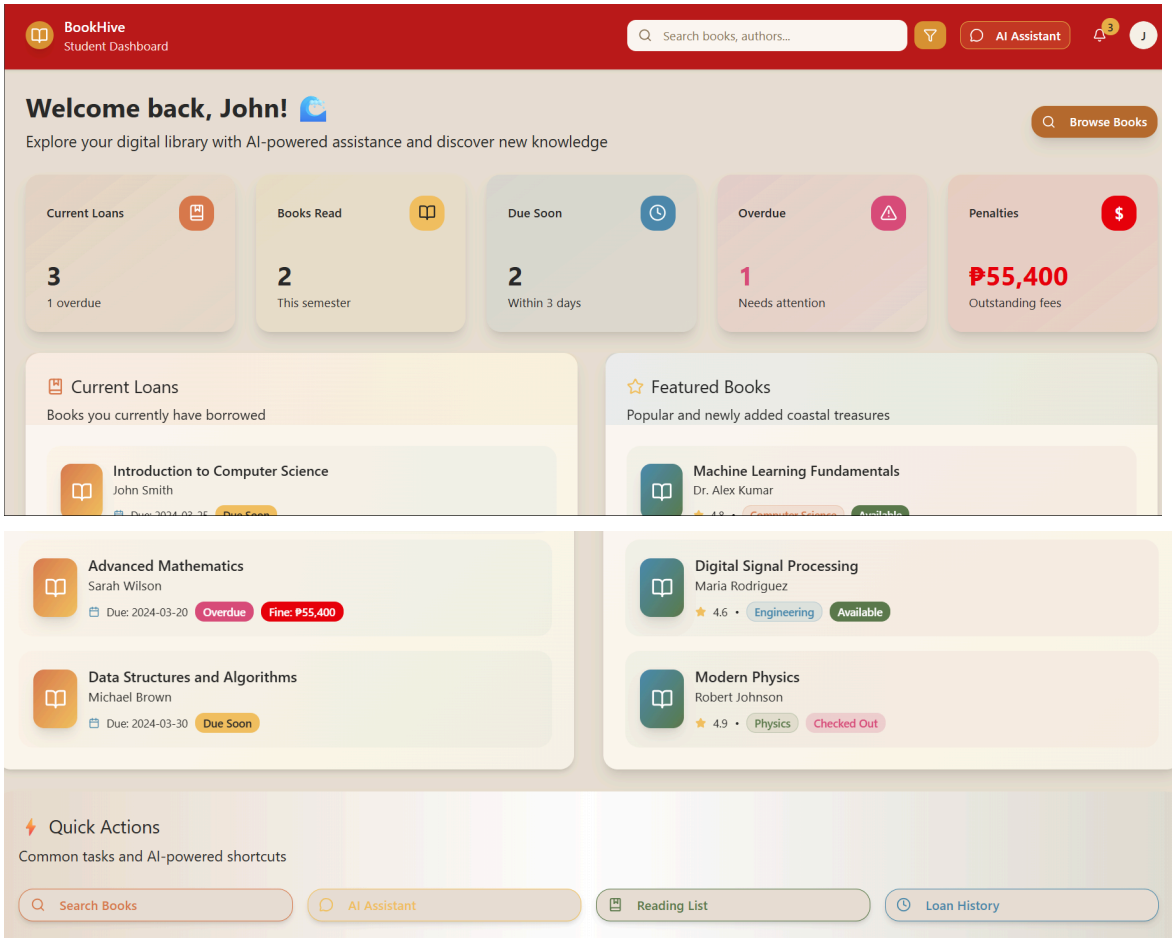
Acceptance Criteria – BookHive

1. Login Page



a. The login form must display fields for **username/email** and **password** immediately after the page loads.
b. A **role selector** must be available for choosing Student or Librarian.
c. Clicking “Login” must redirect users to:
    - **Student Dashboard** if role = Student
    - **Librarian Dashboard** if role = Librarian
d. Clicking “Forgot Password” must open a password recovery modal.
e. Clicking “Register” must redirect to the registration form (if self-registration is allowed).
f. **Requirement:** A user cannot log in as **Student** unless their account has been added/approved in the **Librarian Dashboard’s User Management** page.

2. Student Dashboard



A. The dashboard must show a **welcome message** with the student's name.

B. A **search bar** must be visible at the top, allowing search by:

i. Title
ii. Author
iii. Genre
iv. Availability

C. When the search is performed, the result grid must populate dynamically with matching books.

D. Clicking a book must open the **Book Details modal** showing:

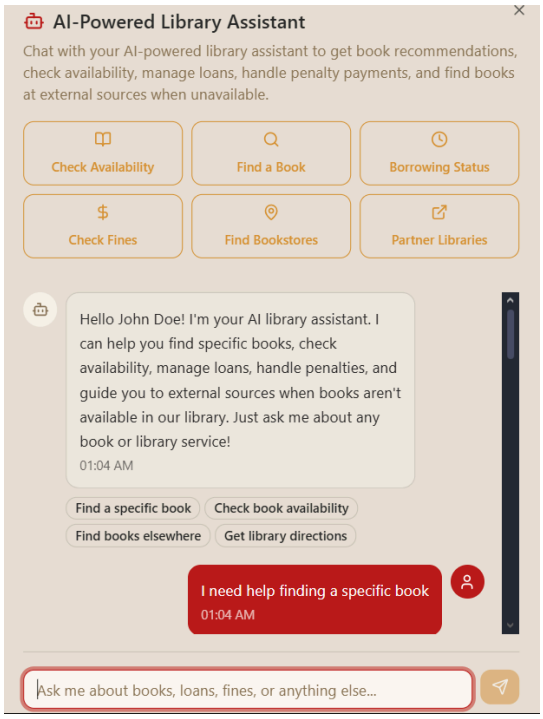
- Title, Author, Genre, Date Added
- Quantity Available
- Borrow/Reserve button

E. **My Account page** must display:

- Borrowing history

- Current loans with due dates
- Overdue books highlighted in red with corresponding penalty amounts

F. **AI Chatbot modal** must open when the chatbot icon is clicked and allow:



- Checking book availability and where it can be found if unavailable
- Showing borrowing status
- Suggesting similar books
- Checking for penalty and overdue

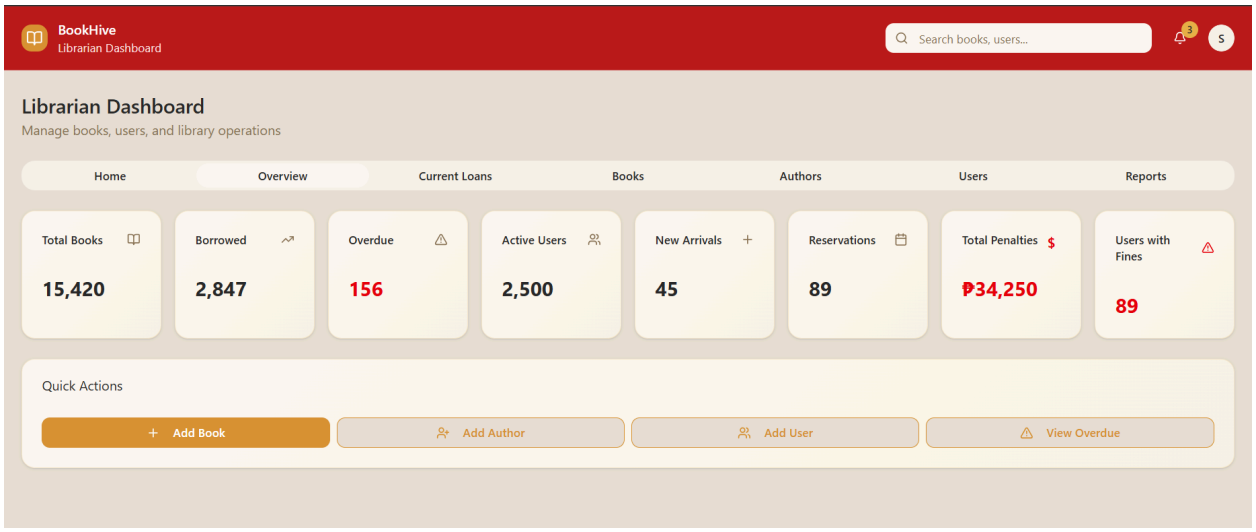
G. **Notifications panel** must show:

- Due date alerts
- New arrivals (sorted by most recent)
- Overdue and penalty reminders

H. **Profile Settings** must allow:

- Editing personal information
- Changing password

3. Librarian Dashboard



A. The dashboard must display **summary cards** for:
   - Total books
   - Books currently borrowed
   - Overdue books
   - Total penalties collected and outstanding penalties
B. Clicking “Books Borrowed” must show a table with:
   - Book title
   - Borrow date
   - Due date
   - Return date (if available)
   - Current status
C. **Authors page** must display a list of authors with an “Add Author” button.
D. Clicking “Add Author” must open a modal to input author's name and biography.
E. **Add Book page** must have fields for:
   - Title
   - Author (select or add new)
   - Category/Genre
   - Date Added
   - Quantity of copies
F. **User Management page** must allow:
   - Viewing all students
   - Assigning/removing roles
   - Editing or deactivating student records
G. **Notifications panel**
   - System alerts
   - Overdue/fine reminders
H. **Penalty Management:**
   - Librarians can extend due dates for loans.
   - System automatically calculates penalties for overdue books.
   - Librarians can confirm, waive, or adjust penalties.

- Penalty status (paid/unpaid/waived) must be visible.

l. **Profile Settings**
   - update information
   - change passwords

4. System-Wide Criteria

a. Passwords must be hashed and stored securely.
b. Every borrowing, returning, penalty assignment, due date extension, and inventory update must be recorded in **AuditLogs** with user_id, timestamp, and action.
c. Data integrity must be maintained. No orphaned loans (book_id/student_id must exist). System must validatethe quantity before allowing a book to be borrowed (cannot be less than 1 available).
d. All critical actions (borrow, return, and delete book, apply penalty, extend due date) must have confirmation modals.
e. **Overdue Handling:**
   i. Loans not returned by due date are automatically marked as overdue.
   ii. Penalties are computed daily or per system-defined rules.
   iii. Students cannot borrow new books until existing penalties are cleared.