

## User Type: Librarian

### Librarian Subsystem Data Flows:

Action	Input Data	Database Tables Affected	SQL Used
Add Student	First Name (string) Last Name (string) Email (string) Password (string)	Members	INSERT
Add Book	Title (string) Author (string) Description (string) Genre (string)	Books	INSERT
Delete Book	None	Books	DELETE
Return Book for Student	None	Books	UPDATE, SET

### End to End Test Sequences:

#### 1. Add Student

- 1.1) Click Librarian Login in home page nav bar.
- 1.2) Enter Librarian credentials and click Login.
- 1.3) Click Add Student
- 1.4) Enter information in the form provided and click Add User.
- 1.5) Click the Logout button.

The screenshot shows a web application interface for adding a student account. The top navigation bar includes links for 'Return Books', 'Add Books', 'Delete Books', and 'Add Student Account', along with a 'Logout' button. The main form is titled 'Add Student Account' and contains fields for 'First Name', 'Last Name', 'Email', 'Password', and 'Confirm Password'. Below the form is an 'Add User' button. At the bottom, a table displays the list of added users with columns for 'member\_id', 'first\_name', 'last\_name', 'email', and 'password'.

	member_id	first_name	last_name	email	password
<input type="checkbox"/> Edit Copy Delete	1	m_first	m_last	member@bookhive.com	123
<input type="checkbox"/> Edit Copy Delete	2	Alice	Johnson	alice.johnson@bookhive.com	password123

#### 2. Add Book

- 2.1) Click Librarian Login in home page nav bar.
- 2.2) Enter Librarian credentials and click Login.
- 2.3) Click Add Books.
- 2.4) Enter information in the form provided and click Add Book.
- 2.5) Click the Logout button.

The screenshot shows the 'Add Book' form in the BookHive application. The form has a light green header with a 'Logout' button in the top right corner. Below the header is a navigation bar with links: 'Return Books', 'Add Books' (active), 'Delete Books', and 'Add Student Account'. The main form area is titled 'Add Book' and contains four input fields: 'Title' (with 'Harry Potter and the Prisoner of Azkaban'), 'Author' (with 'JK Rowling'), 'Description' (with 'Harry must deal with an ordeal at Hogwarts'), and 'Genre' (with 'Fiction'). An 'Add Book' button is at the bottom of the form.

Below the form is a table listing existing books:

<input type="checkbox"/>		45 Agatha Christie	And Then There Were None	Mystery	A thrilling murder mystery by renowned author Agat...	-1
<input type="checkbox"/>		47 JK Rowling	Harry Potter and the Prisoner of Azkaban	Fiction	Harry must deal with an ordeal at Hogwarts	-1

### 3. Delete Book

- 3.1) Click Librarian Login in home page nav bar.
- 3.2) Enter Librarian credentials and click Login.
- 3.3) Click Delete Books.
- 3.4) Use Search or Filter Options:
  - 3.4.1) Enter author, title, or description in the search bar at the top and click Search.
  - 3.4.2) Enter a Title in the Filter by Title bar under Filter Options and click Apply Filters.
  - 3.4.3) Enter an Author in the Filter by Author bar under Filter Options and click Apply Filters.
  - 3.4.4) Select an option from the Filter by Availability dropdown under Filter Options and click Apply Filters.
  - 3.4.5) Enter a combination of filters under Filter Options and click Apply Filters.
- 3.5) Click the Delete button for the intended book.
- 3.6) Click the Logout button.

The screenshot displays the BookHive application interface. At the top, there are three filter sections: 'Filter by Title:' with a text input field labeled 'Book title'; 'Filter by Author:' with a text input field labeled 'Author's name'; and 'Filter by Availability:' with a dropdown menu currently set to 'All Books'. Below these filters is a green 'Apply Filters' button. Underneath the filters, the heading 'All Books:' is followed by a list of books. The first book shown is 'Harry Potter and the Goblet of Fire' by JK Rowling, with a description 'This book's movie was the first PG 13 HP movie' and an availability status of 'Available'. A red 'Delete' button is located at the bottom of this book's entry. The second book shown is 'Harry Potter and the Prisoner of Azkaban' by JK Rowling, with a description 'Harry must deal with an ordeal at Hogwarts' and an availability status of 'Available'. A red 'Delete' button is also present at the bottom of this entry.

*In PHPMyAdmin, the book will no longer be found*

#### 4. Return book for a student

4.1) Click Librarian Login in home page nav bar.

4.2) Enter Librarian credentials and click Login.

4.3) Click Return Books.

4.4) Use Search or Filter Options:

4.4.1) Enter author, title, or description in the search bar at the top and click Search.

4.4.2) Enter a Title in the Filter by Title bar under Filter Options and click Apply Filters.

4.4.3) Enter an Author in the Filter by Author bar under Filter Options and click Apply Filters.

4.4.4) Select an option from the Filter by Availability dropdown under Filter Options and click Apply Filters.

4.4.5) Enter a combination of filters under Filter Options and click Apply Filters.

4.5) Click the Change Status to Available button for the intended book.

4.6) Click the Logout button.