Library Management System with CRUD Operations

BATAM ISLAND GROUP

Library

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Library

OVERVIEW

Library is Web-based application library management system for a public library using Microsoft SQL Server. The system allow librarians to manage books, patrons, loans, and fines efficiently

Library

PURPOSE

Book Management:

- Displays book data, including ISBN, title, author, genre, year of publication, availability, and total quantity.
- Provides the ability to add new books, Edit Books.

Loan Management:

- Displays loan data, including Loan ID, Book ID, Patron ID, Loan Date, Due Date, Return Date, and Status.
- Provides the ability to add new lending data, Approval Loan, Reservation, Active Loan,Overdue Loan,Returned Loan

Fines Management:

- Displays fine data, including Fine ID, Patron ID, Email, Amount, Payment Status, Due Date, and the option to notify patrons.
- Provides the ability to add new fine data.

Member Management (Patron):

- Member (Patron) data includes ID, name, email address and other information.
- Possible to add patron.

Integration with Microsoft SQL Server:

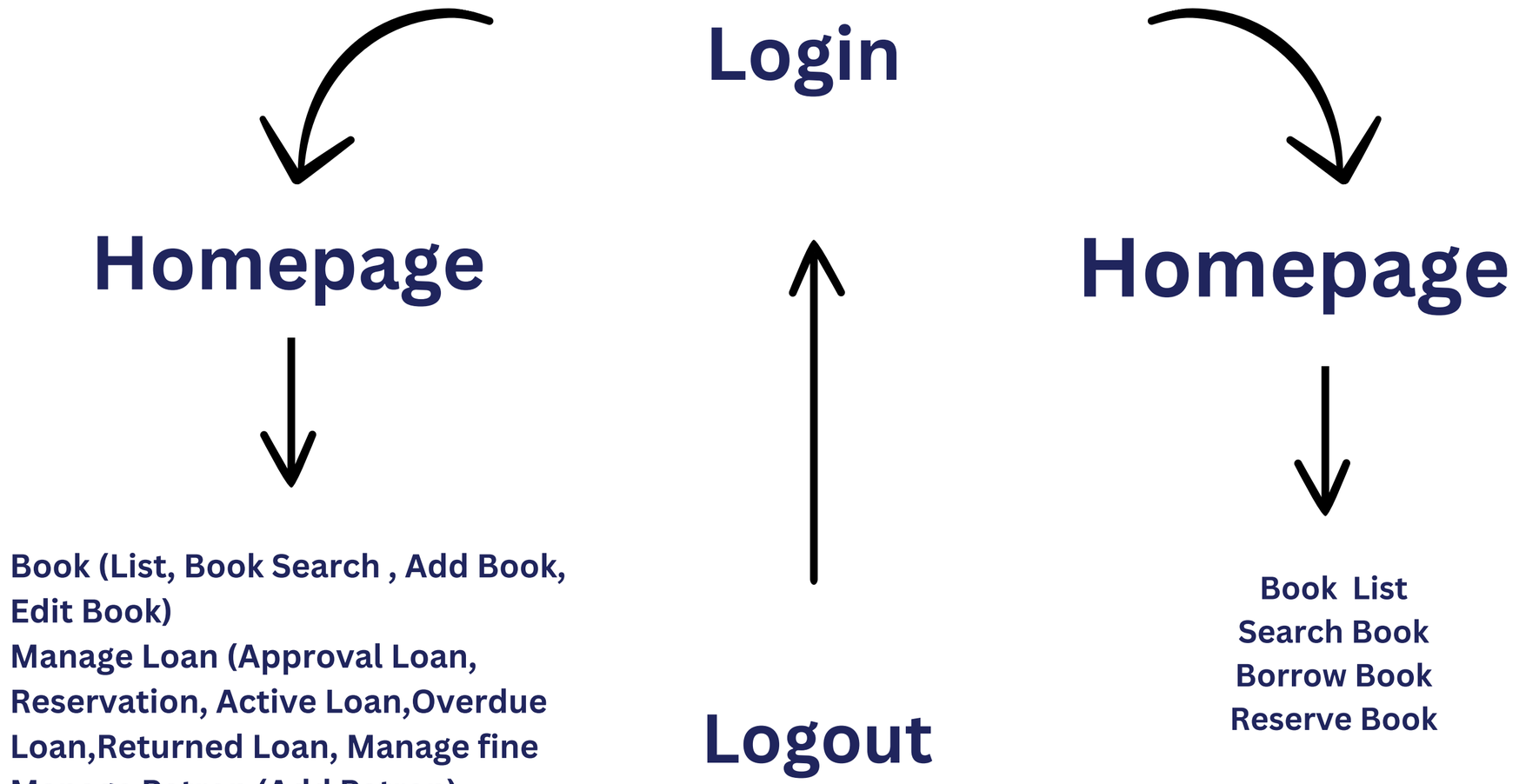
- Using Microsoft SQL Server to store and manage book, loan and fine data securely.

Library

Technological Framework

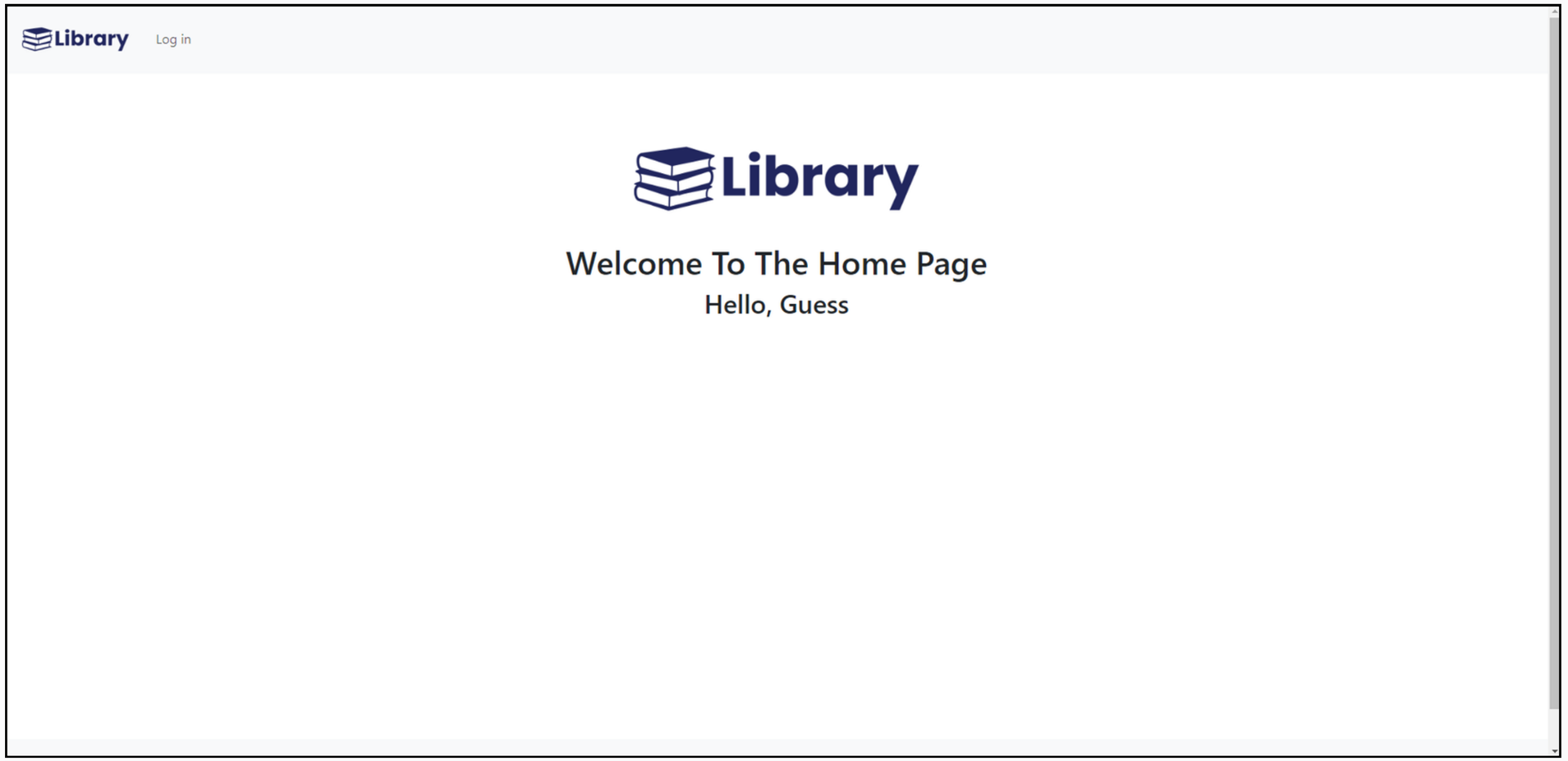
- Database: Microsoft SQL Server for secure and efficient data storage.
- Frontend: Web or mobile application using appropriate technologies (e.g., HTML, CSS,JS,Bootstrap).
- Backend: Server-side logic implemented using a suitable framework (e.g.,PHP, Docker).
- Reporting: Generate reports using SQL queries or reporting tools.

Website Flow



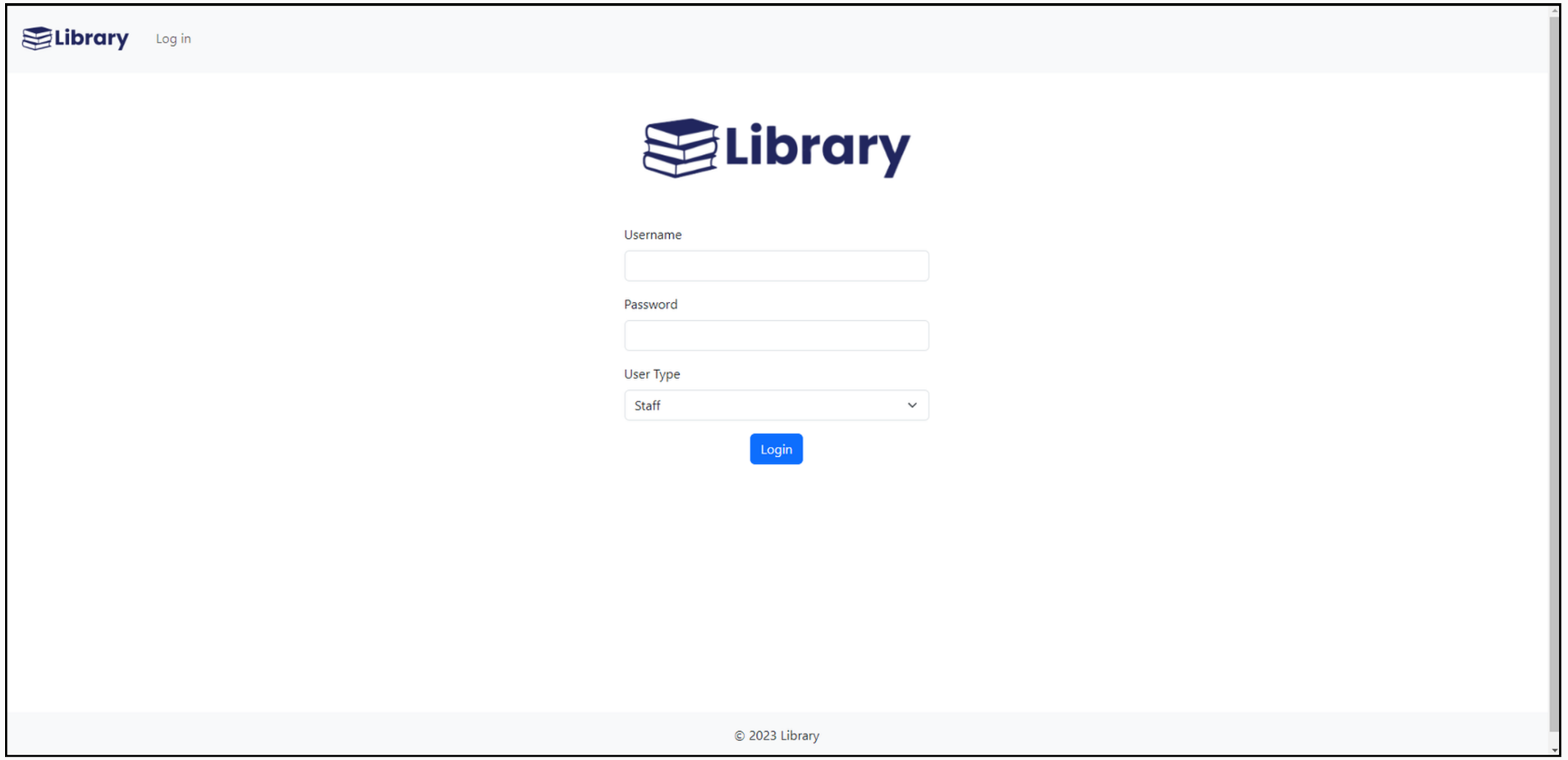
Library

Home Index



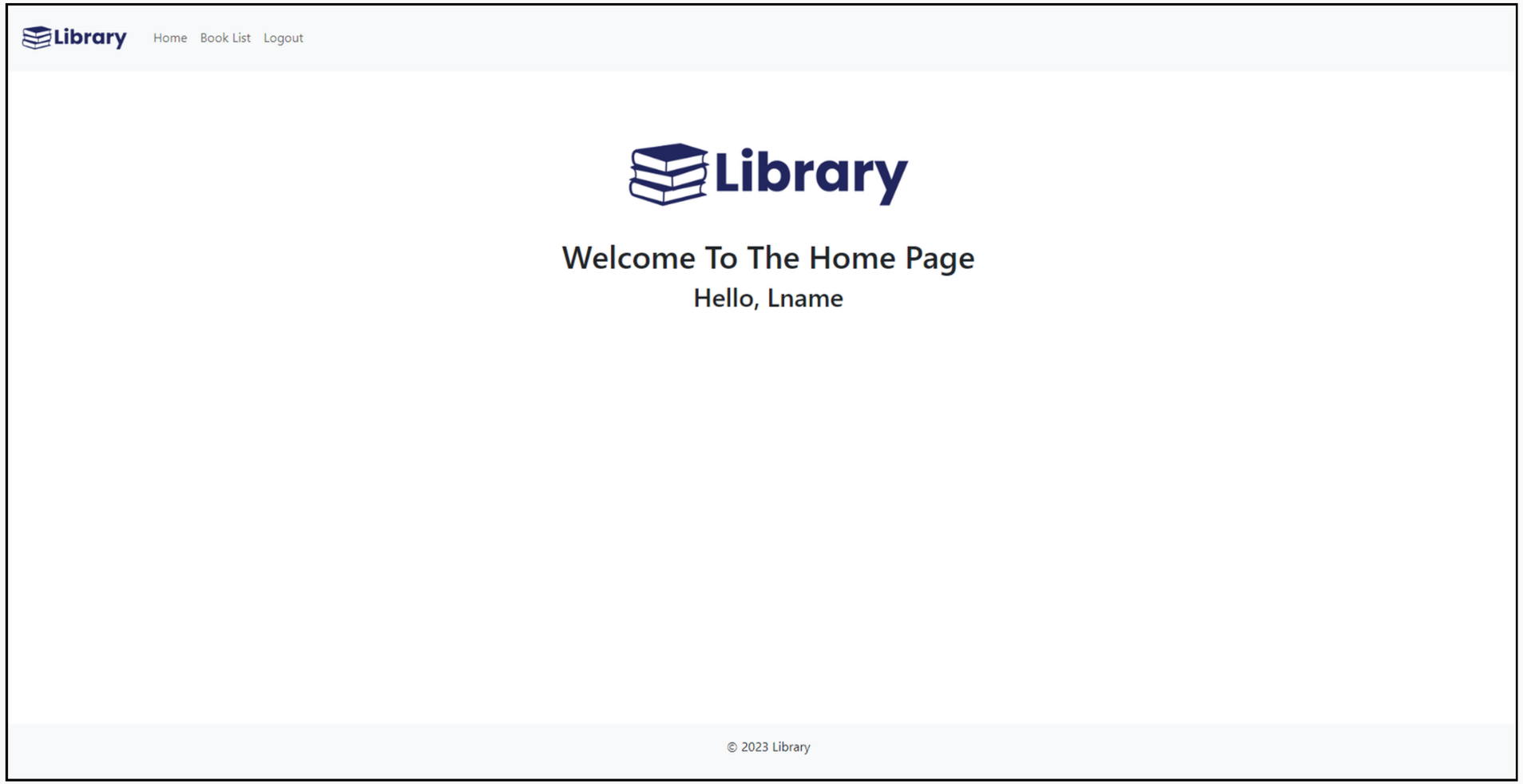
Library

Login Page



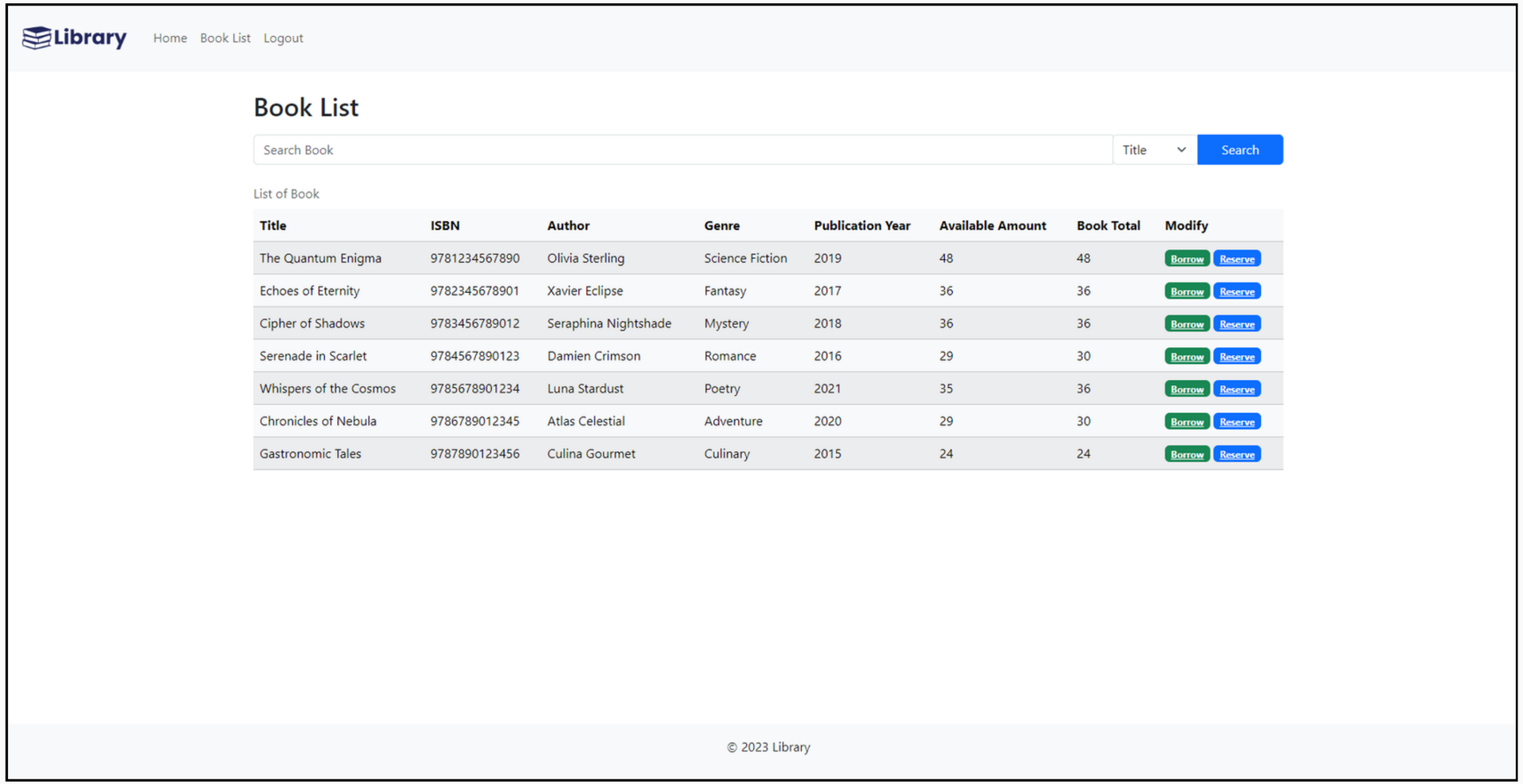
Library

Home Index – Patron



Library

Book List – Patron



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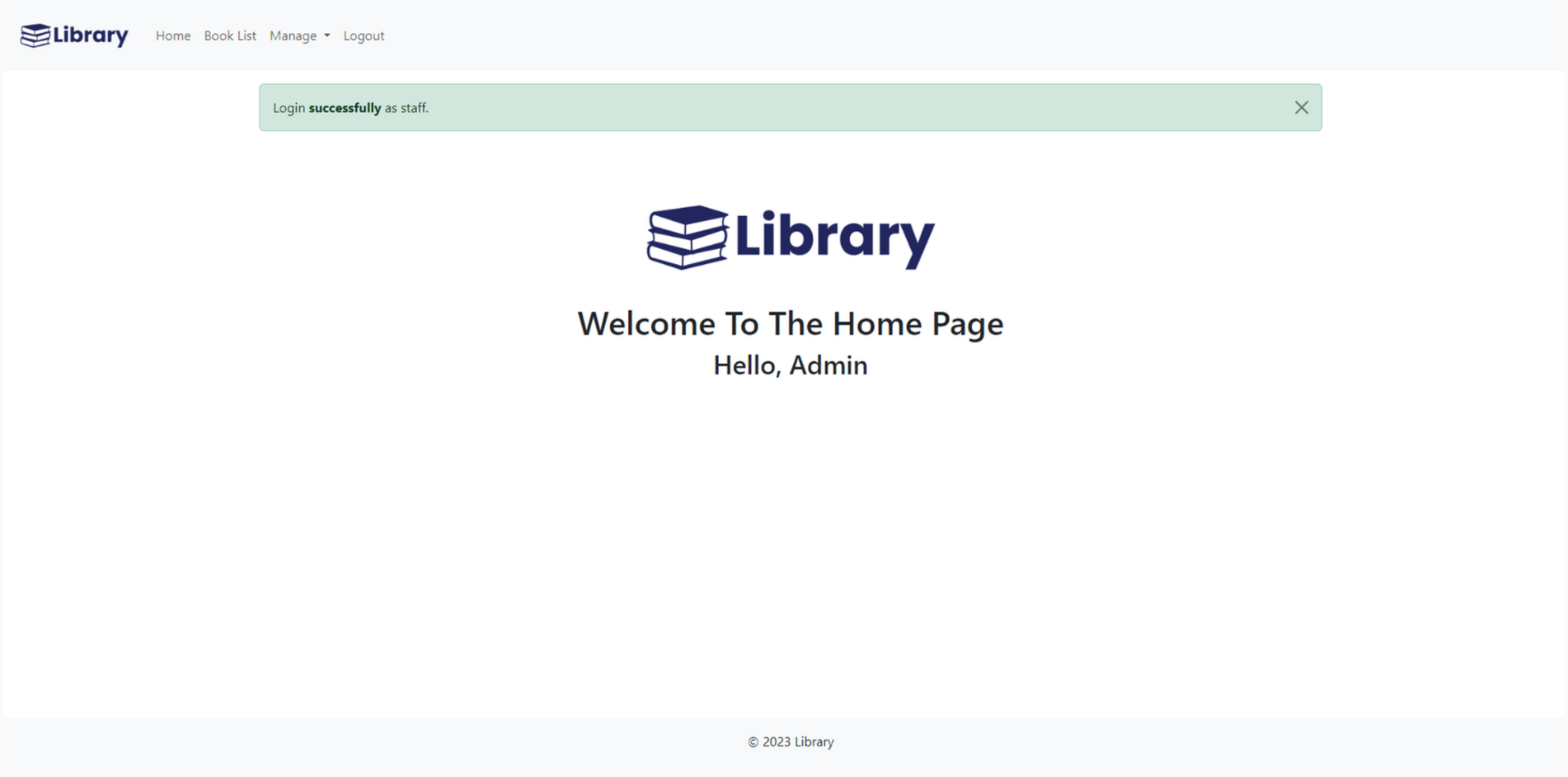
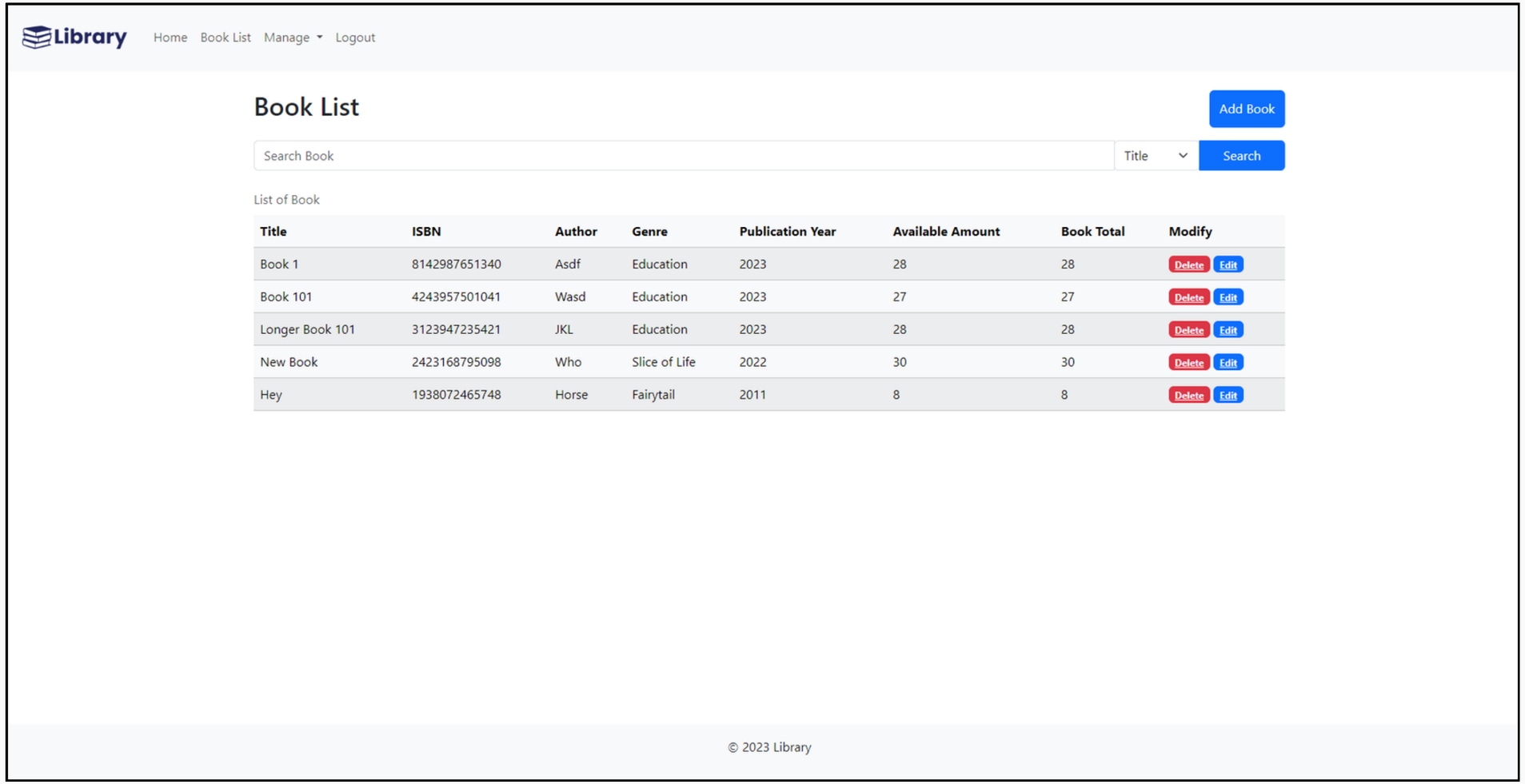
Home Index – Staff Admin



Library

Book List - Staff Admin



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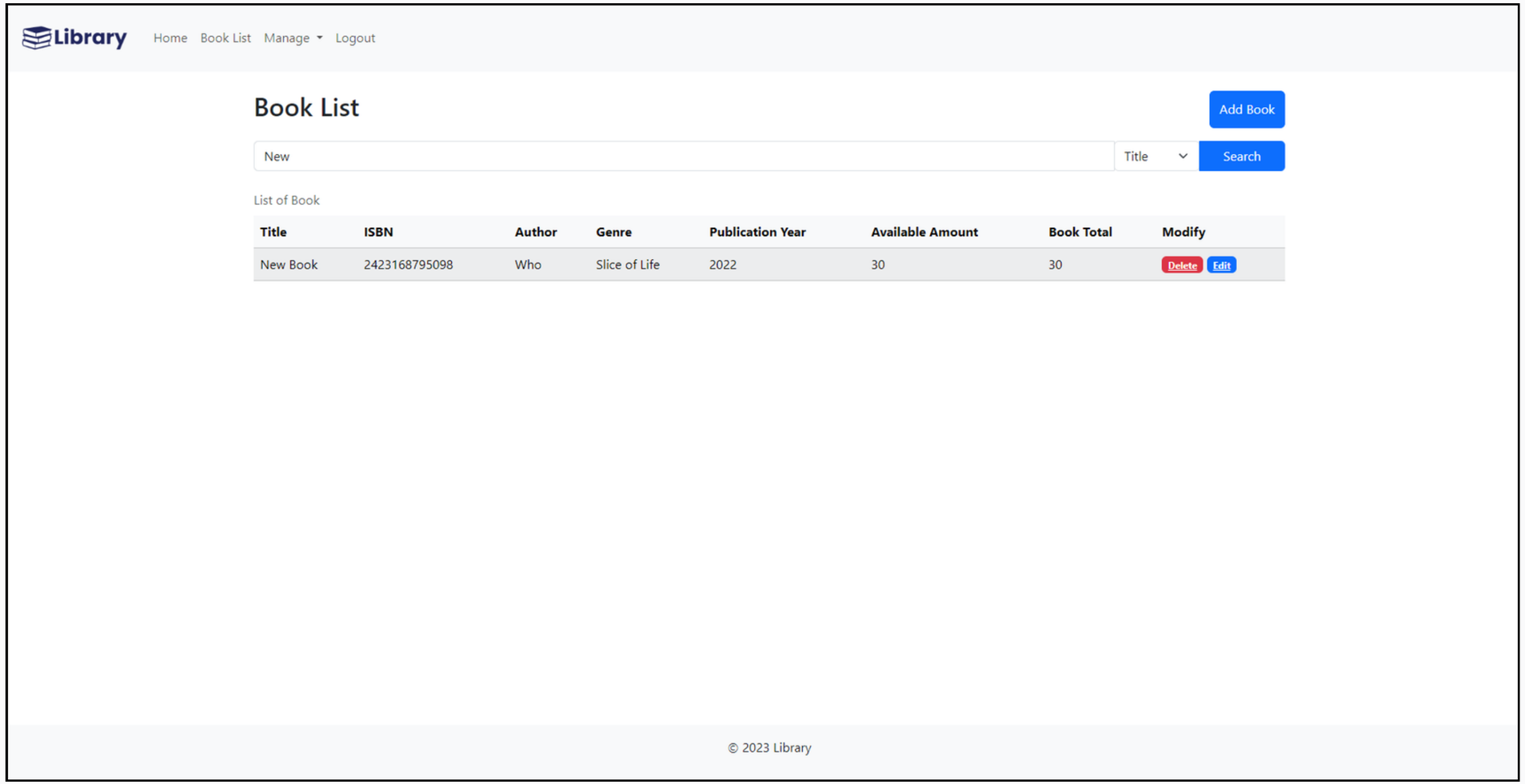
Book Search - Staff Admin



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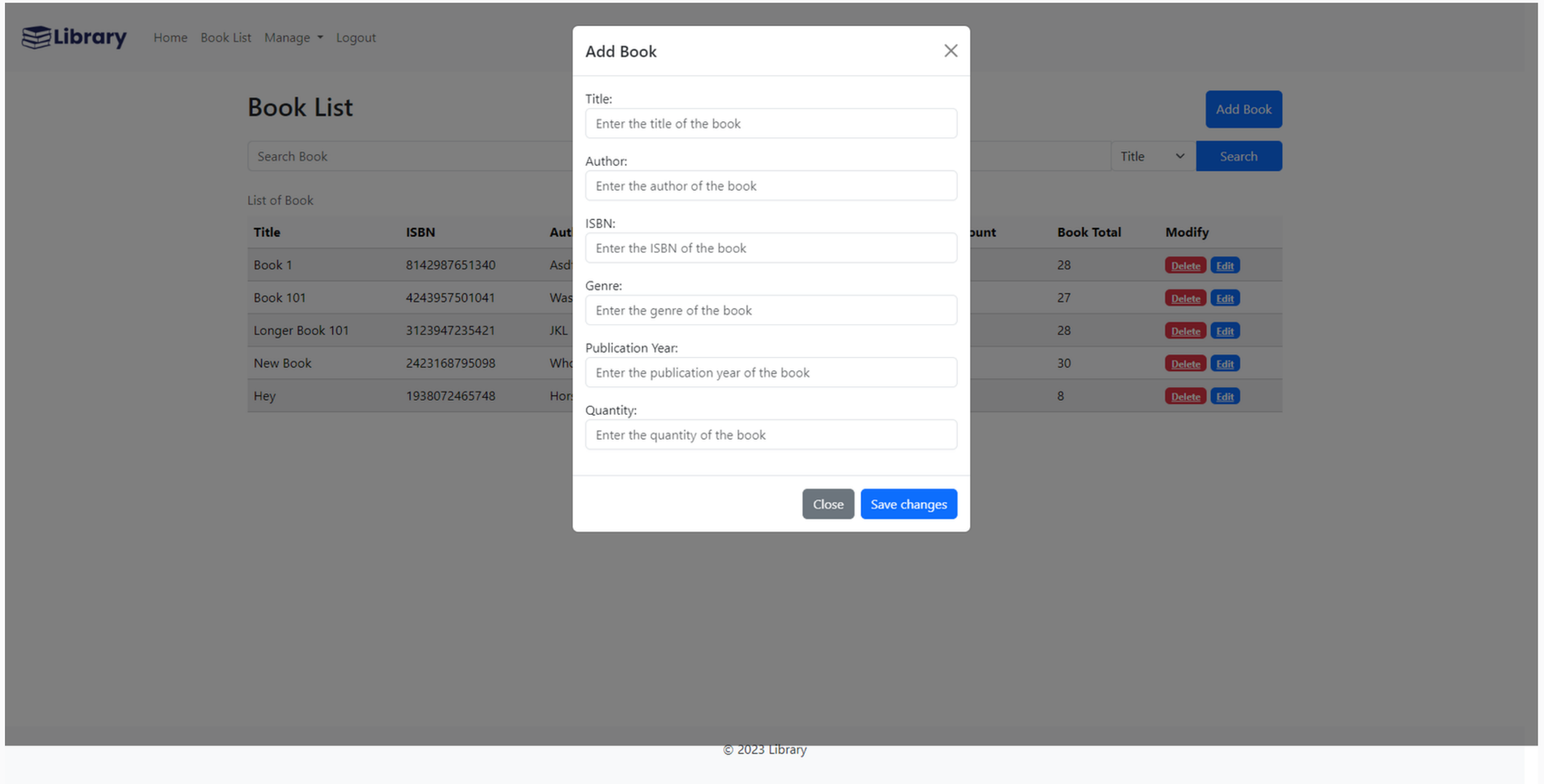
Add book – Staff Admin



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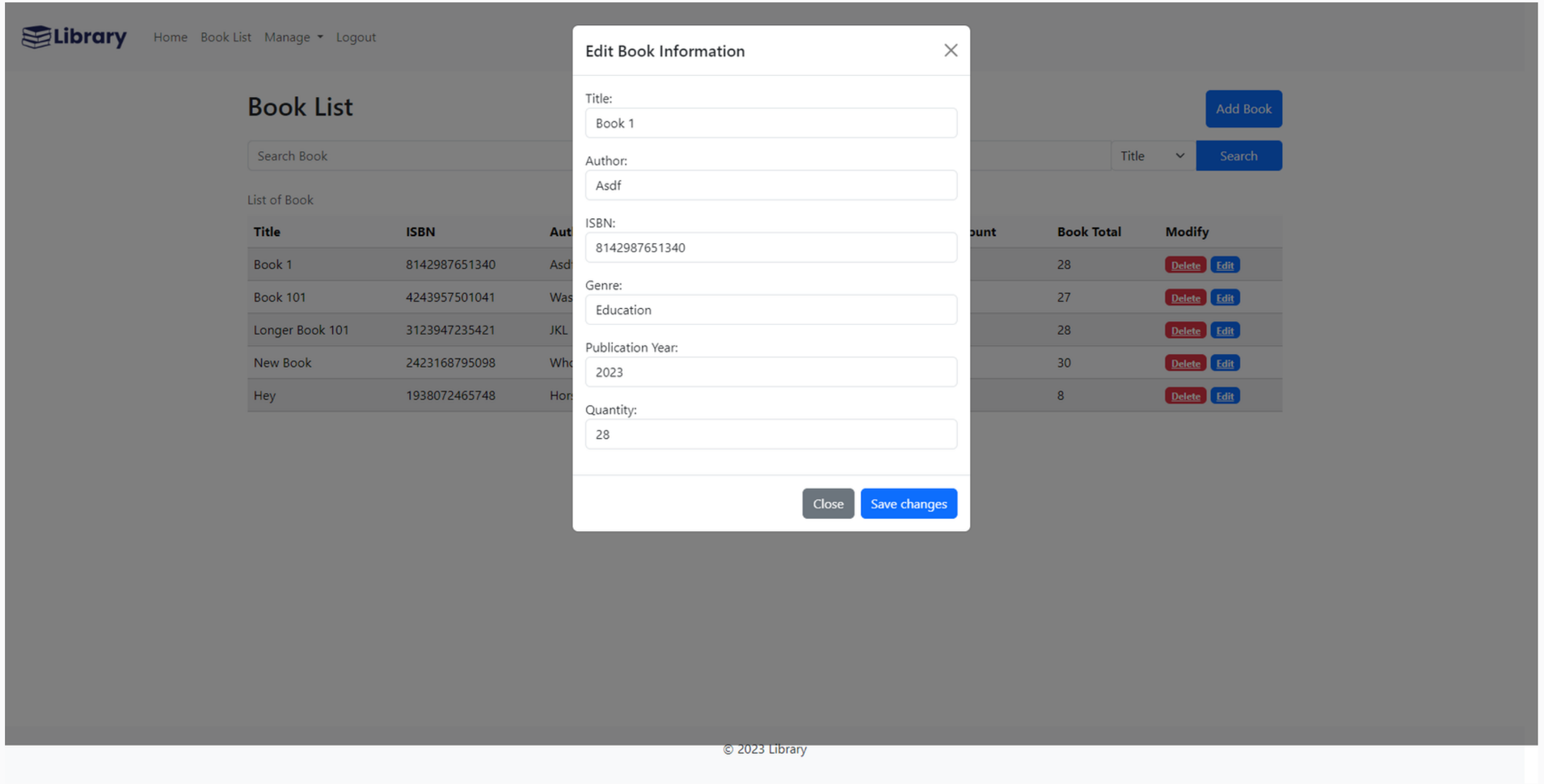
Edit book – Staff Admin



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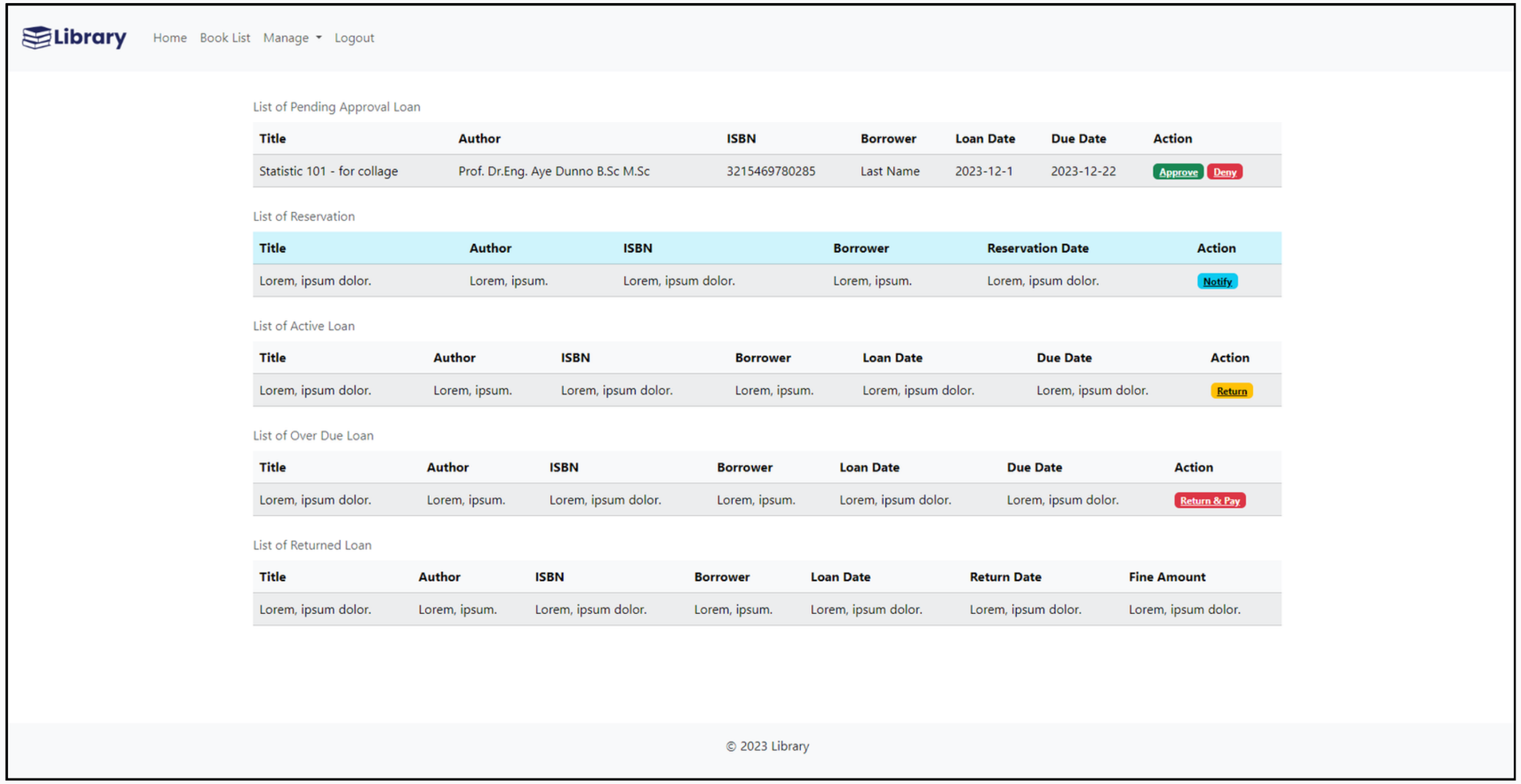
Manage Loan – Staff Admin



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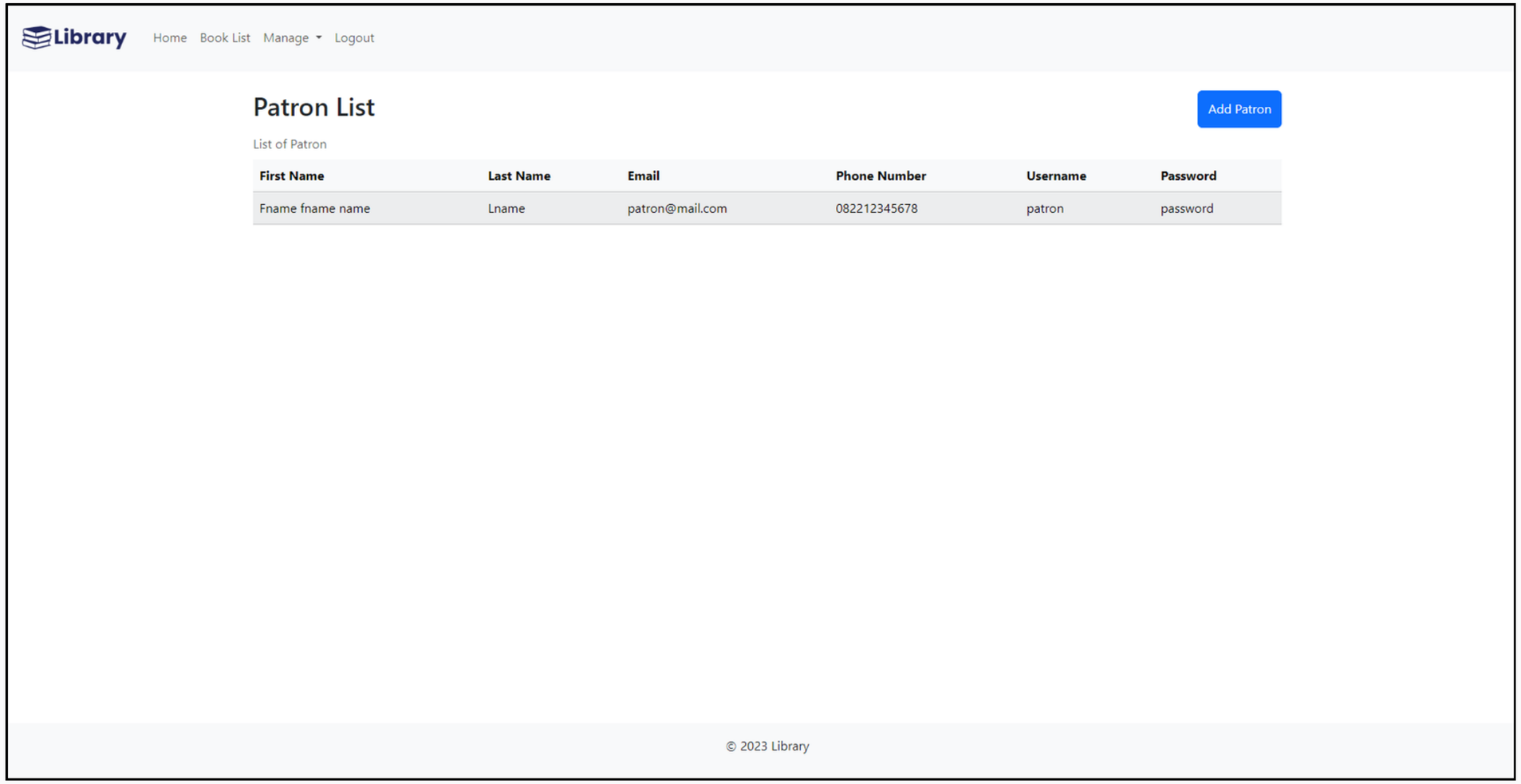
Manage Patron - Staff Admin



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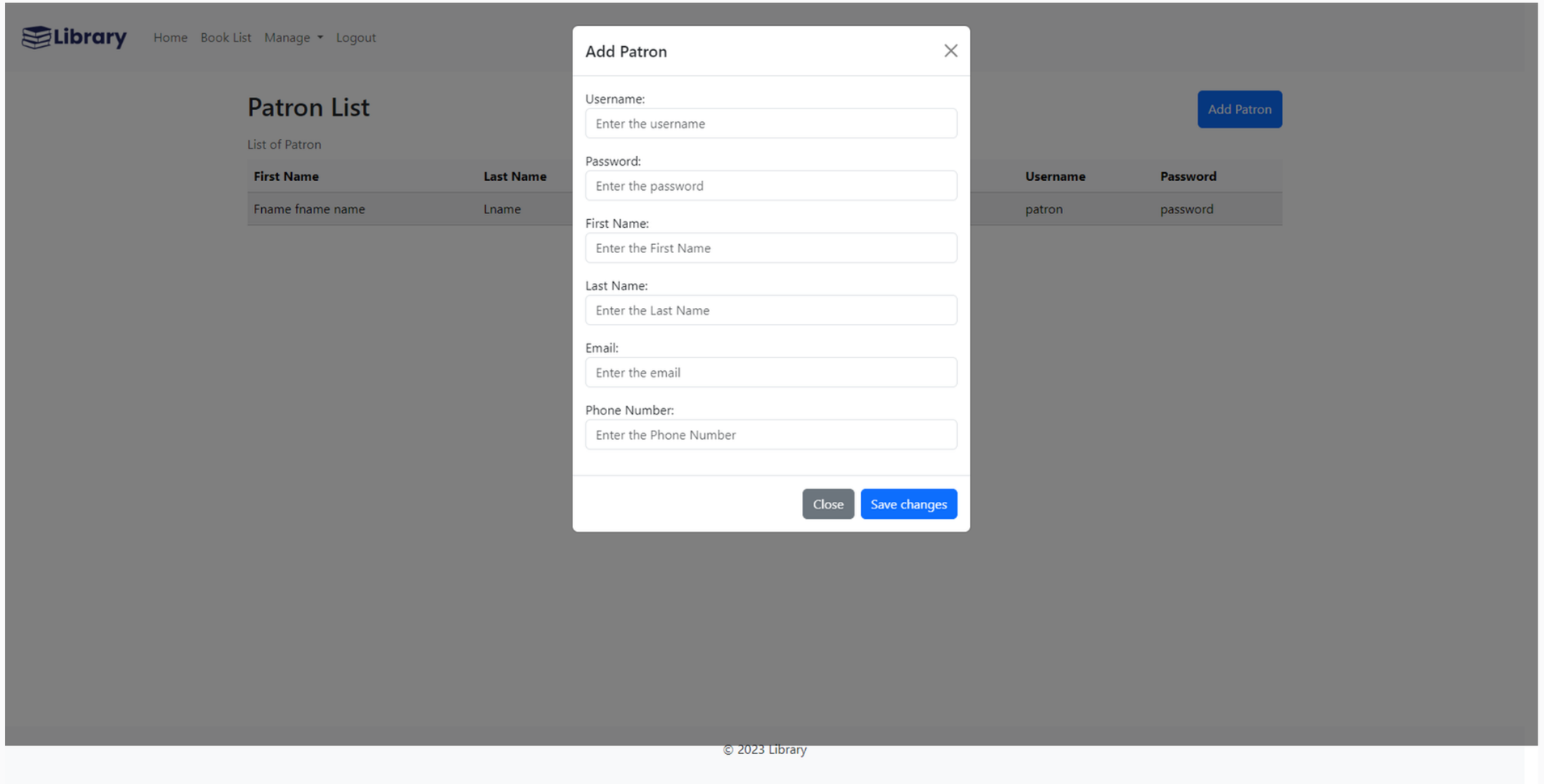
Manage Patron (Add Patron) – Staff Admin



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