

Library Management System

Node.js Assignment

Manual

Name: Isurika Adikari

Repo Link: [isu92neth/Library-Management-System \(github.com\)](https://github.com/isu92neth/Library-Management-System)

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How to Install

Zip code for the web application is attached as **Library-Management-System-master.zip**.

Extract it and run **npm install** command after navigating to the **lms** and **Server** directories.

Or if needed download the zip code from the following link.

Link for the repo: [isu92neth/Library-Management-System \(github.com\)](https://github.com/isu92neth/Library-Management-System)

How to run

Run the command **npm start** in the **lms** directory to run the react application.

Run the command **npm start** in the **Server** directory to run the server.

Main functionalities of the system

- Adding book information
- Removing a book
- Viewing the list of books
- Viewing information of a single book
- Editing information of a book

- Adding members
- Removing a member
- Viewing the list of members
- Viewing information of a single member
- Editing information of a member
- Issuing a book
- Recording returned books

API Implementation

Following are the endpoints of the API implemented for books and members.

Books

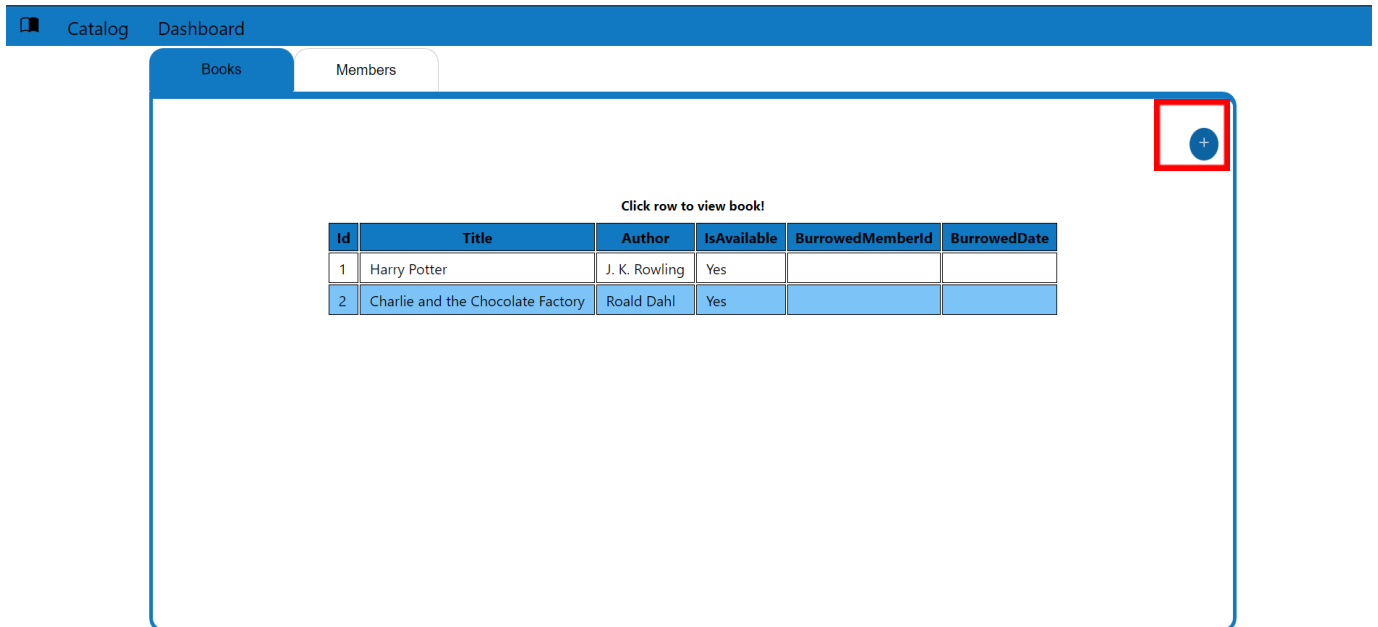
- GET /book
 - Get all books
- GET /book/:id
 - Get the specific book given by this id
- POST /book
 - Create a book
 - Request body properties
 - title
 - author
- PUT /book/:id
 - Update the specific book details given by this id
 - Request body properties
 - title
 - author
- PUT /book/:id/borrow
 - Lend the specific book details given by this id
 - Request body properties
 - borrowedMemberId
 - borrowedDate
- PUT /book/:id/return
 - Return the specific book details given by this id
- DELETE /book/:id
 - Delete the specific book details given by this id

Members

- GET /member
 - Get all members
- GET /member/:id
 - Get the specific member given by this id
- POST /member
 - Create a member
 - Request body properties
 - nic
 - firstName
 - lastName
 - contactNumber
 - address
 - userType
- PUT /member/:id
 - Update the specific member details given by this id
 - Request body properties
 - nic
 - firstName
 - lastName
 - contactNumber
 - address
 - userType
- DELETE /member/:id
 - Delete the specific member details given by this id

Handling Books

Click on the indicated button to add a book.

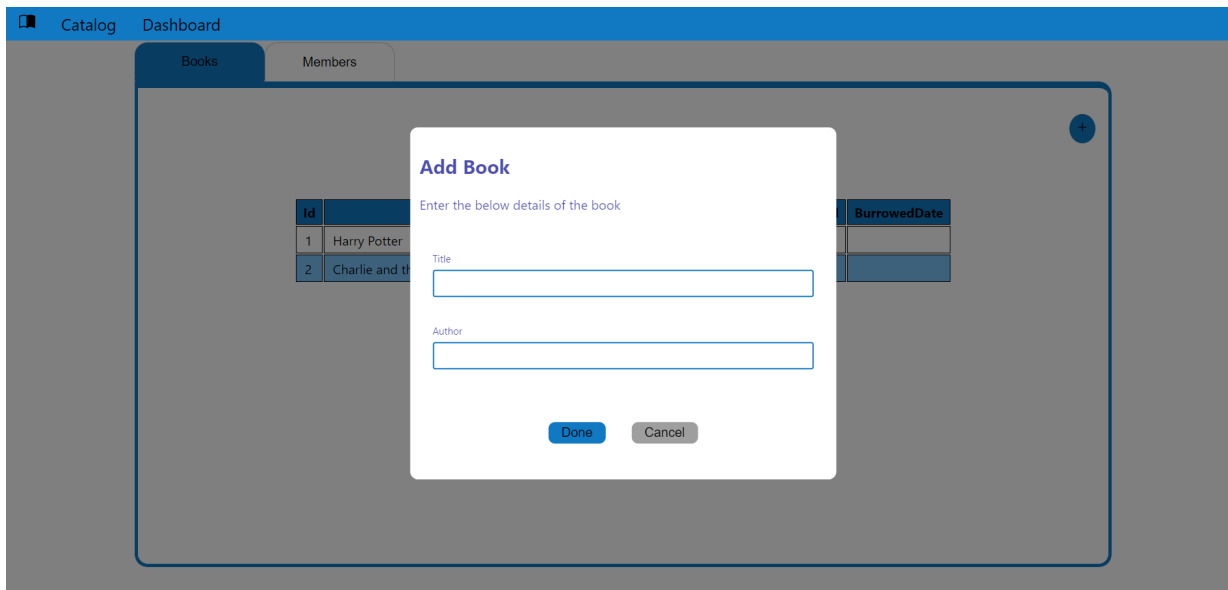


The screenshot shows a web application interface with a blue header bar containing 'Catalog' and 'Dashboard' links. Below the header, there are two tabs: 'Books' (active) and 'Members'. The main content area displays a table of books with the following data:

Id	Title	Author	IsAvailable	BurrowedMemberId	BurrowedDate
1	Harry Potter	J. K. Rowling	Yes		
2	Charlie and the Chocolate Factory	Roald Dahl	Yes		

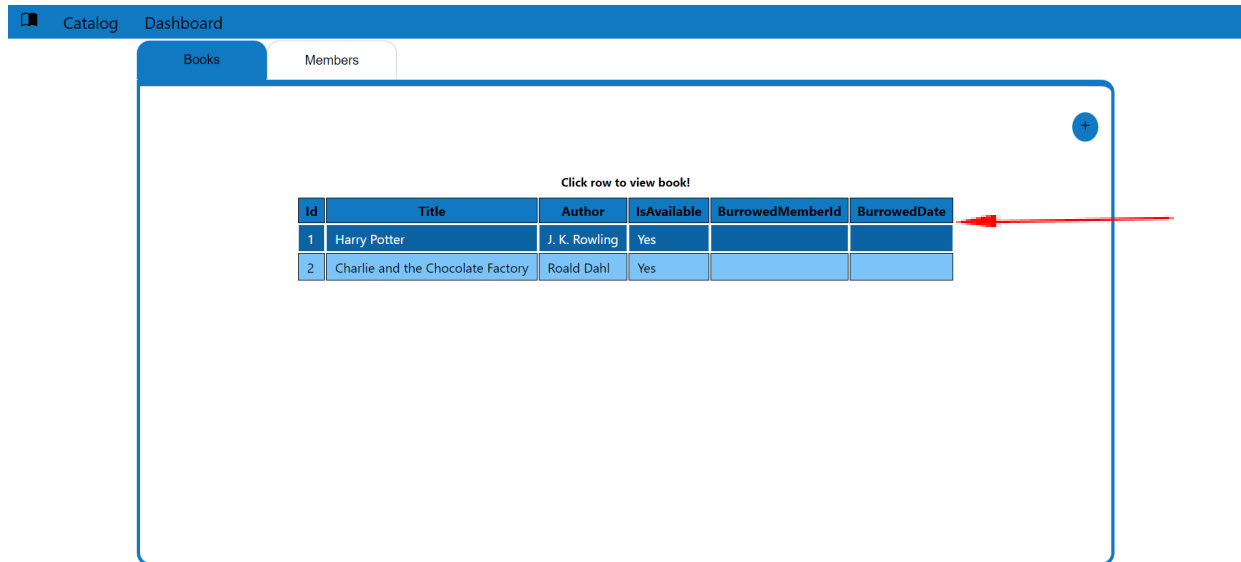
Below the table, there is a text prompt: 'Click row to view book!'. In the top right corner of the main content area, there is a red square button with a white plus sign (+).

You will be prompted with the following dialog box to fill the relevant information.



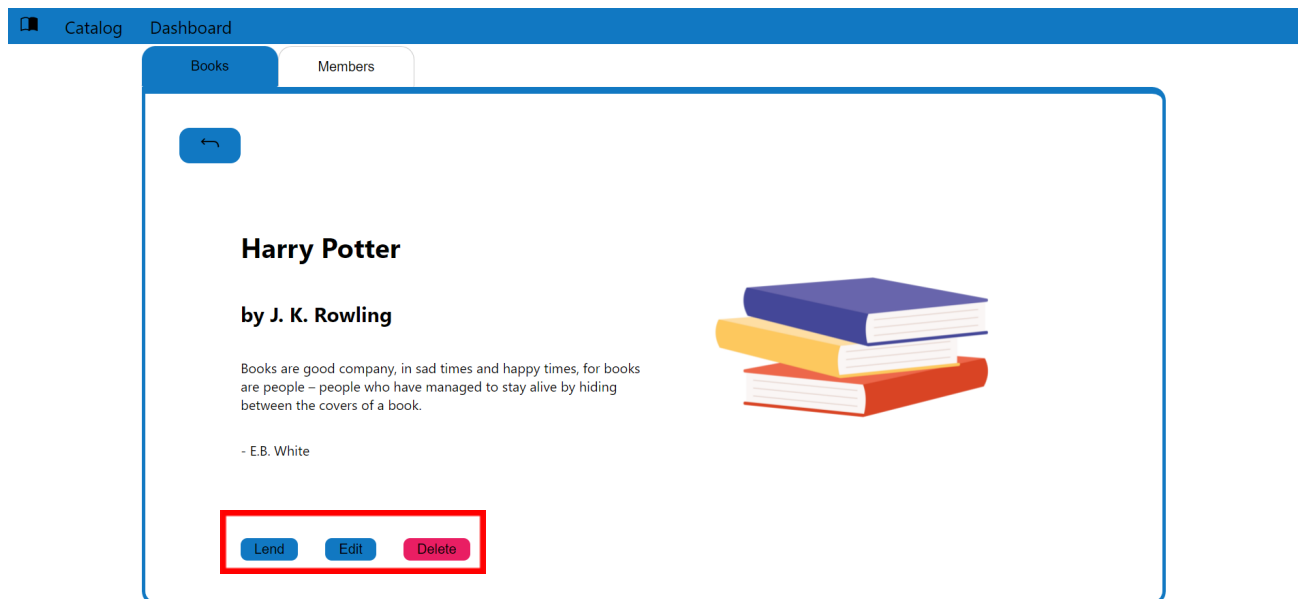
The screenshot shows the same web application interface as before, but with a modal dialog box open in the center. The dialog box is titled 'Add Book' and contains the following text: 'Enter the below details of the book'. Below this text, there are two input fields: 'Title' and 'Author'. At the bottom of the dialog box, there are two buttons: 'Done' (blue) and 'Cancel' (gray).

A single book can be viewed by clicking on the specific row in the book table.

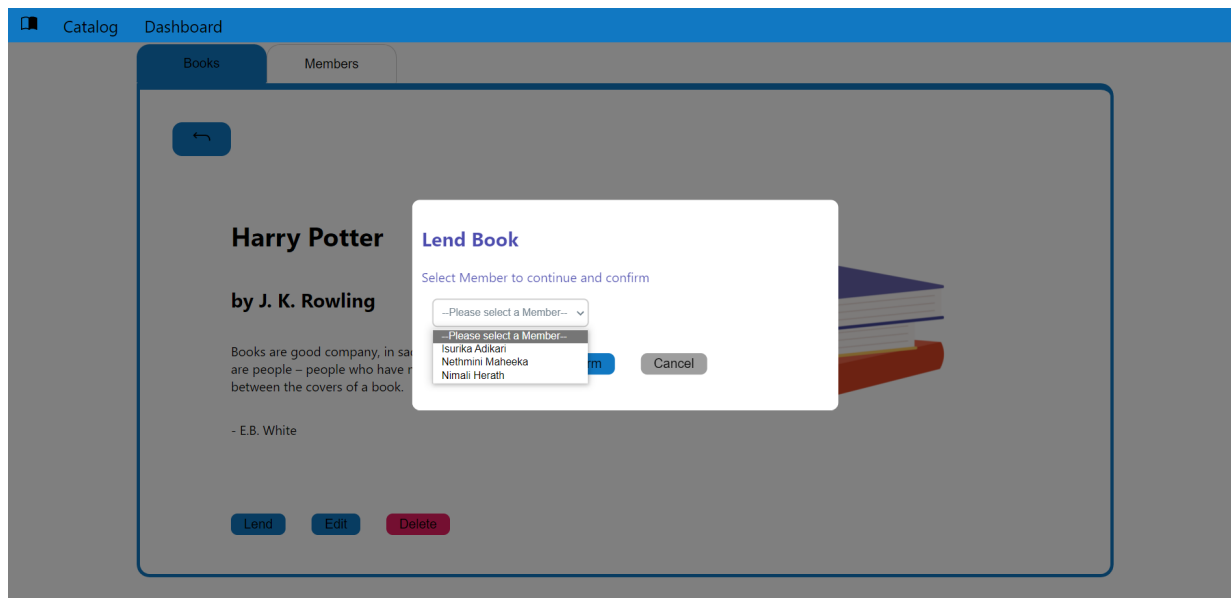


Then you will be prompted with the following interface with the corresponding book information.

Here you could Lend, Delete or Edit information of the book.

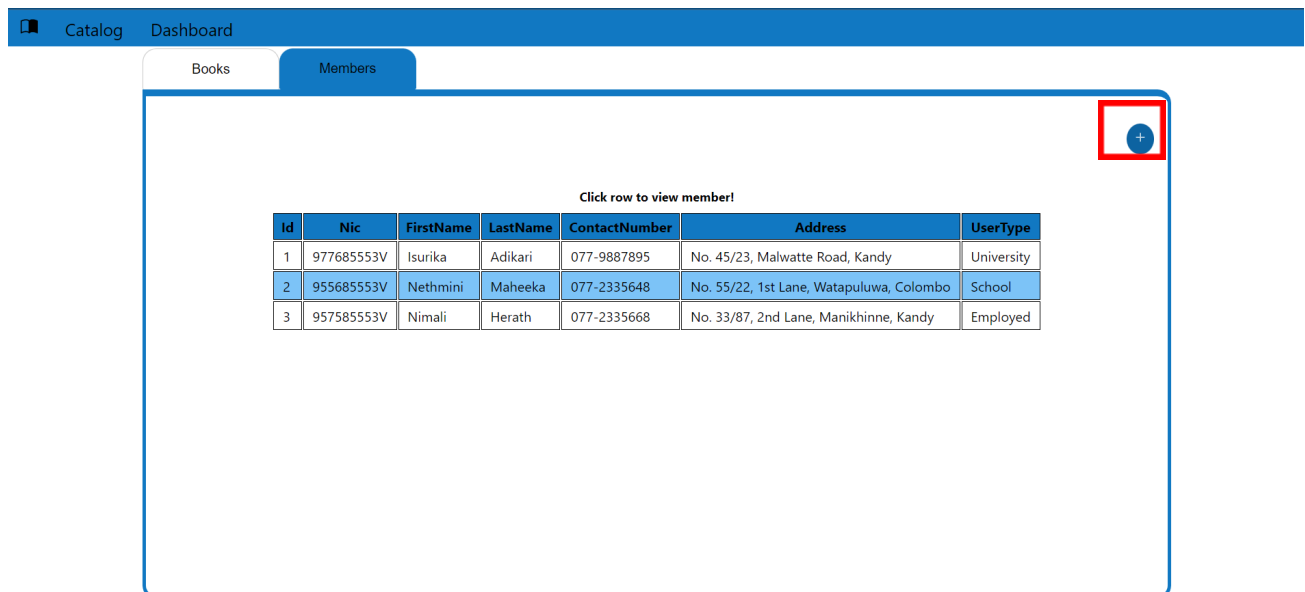


To Lend a book you need to select one of the members from the drop-down member list as shown below.



Handling Members

Click on the indicated button to add a member.



You will be prompted with the following dialog box to fill in the relevant information.

Add Member

Enter the below details of the member

NIC

First Name

Last Name

Contact Number

Address

University ☐ School ☐ Employed ☐

Done **Cancel**

Id	Nic	First	UserType
1	977685553V	Isurika	University
2	955685553V	Nethmini	School
3	957585553V	Nimali	Employed

A single member can be viewed by clicking on the specific row in the member table.

Click row to view member!

Id	Nic	FirstName	LastName	ContactNumber	Address	UserType
1	977685553V	Isurika	Adikari	077-9887895	No. 45/23, Malwatte Road, Kandy	University
2	955685553V	Nethmini	Maheeka	077-2335648	No. 55/22, 1st Lane, Watapuluwa, Colombo	School
3	957585553V	Nimali	Herath	077-2335668	No. 33/87, 2nd Lane, Manikhinne, Kandy	Employed

Then you will be prompted with the following interface with the corresponding member information.

Here you could Delete or Edit the information of the member.

