

Quick Start Guide

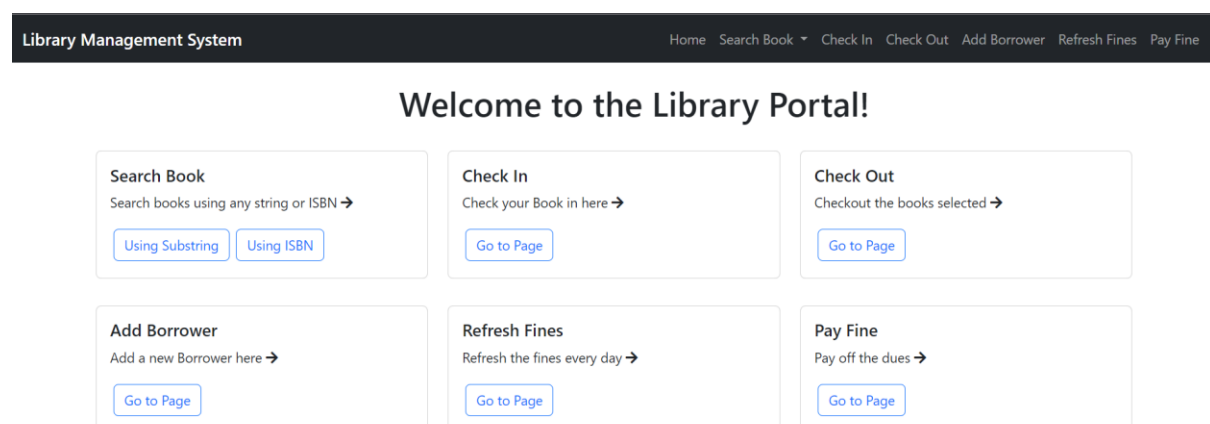
1. Extract the .zip file to a desired location.
2. Open the command terminal where the create_db_script and book_parser_new python scripts and the csv files are located.
3. To create the database run ``python create_db_script.py`` in the command line.
4. Navigate inside the librarymanagementsystem folder where pom.xml file is located and in command terminal run ``mvn spring-boot:run`` to run the backend Spring Boot application and making the tables in the database.
5. To parse the data from the csv files and push data into the tables, again navigate back to the location where the create_db_script and book_parser_new python scripts and the csv files were located and run the following command ``python book_parser_new.py``.
6. Now, navigate back to the librarymanagementsystemui folder. If node js isn't installed run ``npm install`` and then run the following commands ``ng build`` and ``ng serve`` in the command terminal to run the frontend Angular application.
7. The application has now been launched.

The project uses java version "21.0.1", jdk version 21, Angular CLI version "13.1.2" and Node version "14.17.5". It also uses Python for creating the empty database and pushing data into the tables created.

Various pages and their screenshots:

Home Page:

- On this page, Read the functionality of each page and click any of the buttons to navigates to the respective pages as shown.
- The application also has a navbar that links to all the pages as well.



Search Book by any substring

- On this page, type in any substring of the book title, author name or isbn and click Search button. It will show all the records with the current availability of that book.
- According to the availability of the book, the checkbox will be disabled.
- Click the desired checkboxes and click the Add to Check Out button to check the books out.
- Then click Go to Check Out button to navigate to the check Out page to issue the books selected.

Library Management System
Home Search Book Check In Check Out Add Borrower Refresh Fines Pay Fine

Search Book by any substring

S.no	ISBN	Title	Authors	Available	Checkout?
1	9780140040180	American Fried: Adventures Of A Happy Eater	Calvin Trillin	Yes	<input type="checkbox"/>
2	9780767910071	A Big New Free Happy Unusual Life: Self Expression And Spiritual Practice For Those Who Have Time For Neither	Nina Wise	Yes	<input type="checkbox"/>
3	9780375757143	Shrub : The Short But Happy Political Life Of George W. Bush	Molly Ivins, Lou Dubose	Yes	<input type="checkbox"/>
4	9780892131181	Chant And Be Happy: The Power Of Mantra Meditation (Contemporary Vedic Library Series)	A. C. Bhaktivedanta Swami Prabhupada	Yes	<input type="checkbox"/>
5	9780340682272	Snap Happy	Fiona Walker	Yes	<input type="checkbox"/>
6	9781558531024	Life's Little Instruction Book: 511 Suggestions, Observations, And Reminders On How To Live A Happy And Rewarding Life	H. Jackson Brown Jr.	Yes	<input type="checkbox"/>
7	9780446349468	Happy Are Those Who Thirst For Justice (A Father Blackie Ryan Mystery)	Andrew M. Greeley	Yes	<input type="checkbox"/>
8	9780515117615	Happy Are Those Who Mourn (Blackie Ryan Mystery)	Andrew M. Greeley	Yes	<input type="checkbox"/>

Search Book by ISBN

- In this page, type in any substring of the book's isbn and click Search button. It will show all the records with the current availability of the books.
- According to the availability of the book, the checkbox will be disabled.
- Click the desired checkboxes and click the Add to Check Out button to check the books out.
- Then click Go to Check Out button to navigate to the check Out page to issue the books selected.

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Search Book by ISBN

S.no	ISBN	Title	Authors	Available	Checkout?
1	9780425123454	Frequent Flyer	Kinky Friedman	Yes	<input checked="" type="checkbox"/>

Check In:

- In this page, type in any substring of the book's isbn, Borrower's Card ID, or any substring of Borrower's name. and click Search button. It will show all the records of the current checked out books.
- Click check in box for the book you want to check in.

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Check your Book in

Loan Id	Card Id	Date Out	Due Date	Book Title	Borrower Name	
9780060973124	ID000031	2023-11-20	2023-12-04	Decision In Normandy	Steven Wood	<input type="button" value="Check In"/>

Check Out:

- In this page, Re-confirm the books you require to check out and click the delete button for the ones you don't want to issue.
- Enter the card ID of the borrower who wants to issue the books and click Check out button below the records to issue the books.
- If the borrower tries to check out more than 3 books, the system will throw an error and not check the books out.

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Check your Books Out

Card ID:

S.no	ISBN	Title	Authors	Delete?
1	9780882077116	You Can Be The Wife Of A Happy Husband (An Input Book)	Darien B. Cooper	<input type="button" value="Delete"/>
2	9780670031894	I Should Be Extremely Happy In Your Company: A Novel Of Lewis And Clark (Lewis & Clark Expedition)	Brian Hall	<input type="button" value="Delete"/>

Add Borrower

- In this page, fill in all the details of the new borrower to be added and click Add Borrower button in the end.
- Adding Users with same/duplicate SSN will not be allowed, system will throw an error and not add the borrower.

Add Borrower

SSN

Borrower Name

Address

Phone

[Add Borrower](#)

Refresh Fines

- In this page, click on the Refresh fines button to refresh all the fines of the books that haven't been checked in yet.

Refreshed Fines Successfully!

Click to refresh fines

[Refresh Fines](#)

Pay Fine

In this page, you have two options:

- 1) Display All Fines for all Borrowers
 - Clicking this button will display all the fines for all the existing borrowers of the books that been created.

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Display All Fines For All Borrowers

Display and Pay Fine for Borrower

S.no	Card ID	Borrower Name	Fine Amount
1	ID000267	Teresa Marshall	0
2	ID000172	John Hicks	0
3	ID000648	Jimmy Ford	0
4	ID000634	Donald Phillips	0
5	ID000472	Christine Chavez	0
6	ID000231	Randy Stanley	0
7	ID000531	Albert Marshall	0
8	ID000971	Donald Palmer	0
9	ID000207	Rose Oliver	0
10	ID000443	Julia Oliver	0
11	ID000574	Kenneth Medina	0

2) Display and Pay Fine for Borrower

- Clicking this button will prompt you to enter the Card ID of the borrower and it will then show all the Pending Fines along with the due date, date in and date out of the books.
- It will also show the total Pending fine amount for the books that have checked in and a button for paying off those pending fines.
- It will also show all the previously paid fines of the borrower.

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Display All Fines For All Borrowers

Display and Pay Fine for Borrower

ID000030

Display All Fines

Fine Amount: \$4.00

Pay All Fines

Pending Fines:

S.no	Loan ID	ISBN	Book Title	Pending Fine Amount	Due Date	Date In	Date Out	Book Out
1	4	9780002005012	Clara Callan: A Novel	4	2023-11-04	2023-11-20	2023-11-20	Yes

Previously Paid Fines:

S.no	Loan ID	ISBN	Book Title	Pending Fine Amount	Due Date	Date Out	Date In
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