

Nimra Mian
Database Systems Project
CMPSC F363 with Professor John Xu
December 17th 2022

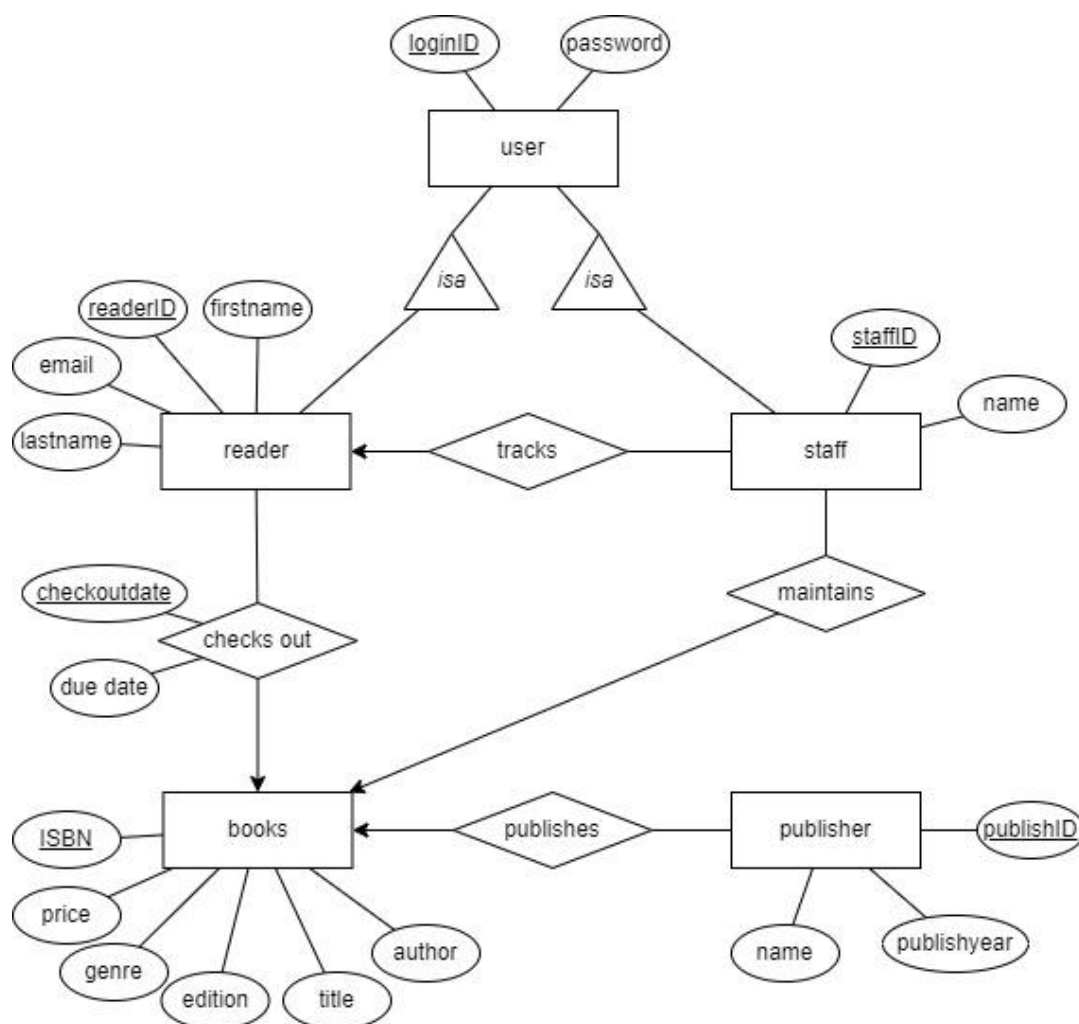
<https://github.com/miannimra/dbms-project.git>

Table of Contents

Library management system E/R diagram	3
Sample Data & Schema	4
Source Code	7
Application Screenshots & Description	8

Ideally this database would allow two types of users, staff and readers to sign into the database. Readers would be able to select books from a catalog and check out books and see when their books are due and staff have full authority to go through the books in the catalog and the catalog of reader membership of the library and view all their information as well as edit/delete what they need to.

Library management system E/R diagram



user(loginID, password)

reader(readerID, firstname, lastname, email)

```

checks_out(checkoutdate, ISBN, readerID, duedate)
tracks(readerID, staffID)
staff(staffID, name)
publisher(publishID, name, publishyear)
publishes(publishID, ISBN)
books(ISBN, price, genre, edition, title, author)

```

Sample Data & Schema

Book table

ISBN	genre	title	author
143134183	NONFICTION	BIRDS BY THE SHORE: OBSERVING THE NATURAL LIFE OF THE ATLANTIC COAST	JENNIFER ACKERMAN
345528670	HISTORICAL FICTION	THE AVIATOR'S WIFE	MELANIE BAJNAMIN
375826696	FANTASY	ERAGON	CHRISTOPHER PAOLINI
394724550	NONFICTION	GIFT FROM THE SEA	ANNE MORROW LINDBERG
553588486	FANTASY	A GAME OF THRONES	GEORGE MARTIN
593099323	SCIENCE FICTION	DUNE	FRANK HERBERT
1400052920	SCEINCE FICTION	THE HITCHHIKER'S GUIDE TO THE GALAXY	DOUGLAS ADAMS
1542023912	THRILLER	THE APARTMENT	K.L. SLATER
1786816652	THRILLER	CLOSER	K.L. SLATER
1863256814	MYSTERY	I CAME TO SAY GOODBYE	CAROLINE OVERINGTON

Reader Table

readerID	firstname	lastname	email
100000	John	Paul	JohnPaul@email.com
100001	Connie	Kline	conniekline@email.com
100003	Bennet	Miles	bennetmiles@email.com
100004	Sidney	McDonald	sidneymcdonald@email.com
100005	Foster	Webb	FosterWebb@email.com
100006	Fred	McDaniel	fredmcdaniel@email.com
100007	Rae	Oconner	raeoconner@email.com
100008	Merle	West	merlewest@email.com
100009	Una	Lucas	unalucas@email.com
100010	Holly	Webb	hollywebb@email.com

tracks table

staffID	readerID
235647	100000
235647	100001
235647	100003
235647	100004
235647	100005
235647	100006
235647	100007
235647	100008
235647	100009
235647	100010

publisher table

publishID	publishyear	name
1	2018	BOOKOUTURE
2	2010	RANDOM HOUSE AUSTRALIA
3	2019	ACE BOOKS
4	2016	METROPOLITAN BOOKS
5	2019	PENGUIN BOOKS

publishes table

publishID	ISBN
1	1542023912
1	1786816652
4	143134183
3	345528670
4	375826696
5	394724550
3	553588486
3	593099323
5	593099323
5	1400052920
3	1863256814

maintains table

staffID	ISBN
235647	143134183
235647	345528670
235647	375826696
235647	394724550
235647	553588486
235647	593099323
235647	1400052920
235647	1542023912
235647	1786816652
235647	1786816652
235647	1863256814

Checks_out table

checkoutdate	duedate	readerID	ISBN
2022-06-08	2022-06-18	100001	345528670
2022-07-01	2022-07-10	100004	553588486
2022-09-07	2022-09-17	100007	1786816652
2022-09-17	2022-09-27	100007	1542023912
2022-11-01	2022-11-10	100003	375826696
2022-12-01	2022-12-10	100004	143134183
2022-12-03	2022-12-13	100005	1400052920
2022-12-04	2022-12-14	100005	593099323
2022-12-13	2022-12-23	100009	1863256814
2022-12-17	2022-12-27	100008	1400052920

Source Code

```
back
└─ library-management-sys.sql
front
└─ dbh-inc.php
└─ deletebook.php
└─ deletereader.php
└─ login.css
└─ main.css
└─ main.html
└─ main.php
└─ selectbook.php
└─ selectreader.php
└─ submitupdatebook.php
└─ submitupdatereader.php
└─ updatebook.php
└─ updatereader.php
Index.php
```

<https://github.com/miannimra/dbms-project.git>

Application Screenshots & Description

Login

username
password

Login page, to login use:

username: 235647

password: passwd1

Library Manager

ISBN

Valid ISBN number is required.

Title

Author

Genre

Submit

Reader ID

Valid ID number is required.

First Name

Last Name

Email

Submit

Main page, enter data fields either for readers or books

Sample book info:

ISBN: 593099323

Title: DUNE

Author: FRANK HERBERT

Genre: SCIENCE FICTION

Sample reader info:

Reader ID: 100001

First Name: Connie

Last Name: Kline

Email: conniekline@email.com