

Report

Library database management system

Introduction

Based on database requirements, my database contains 10 interrelated tables reader, borrow, reserve, book, bookinfo, copy, location, publisher, author, and branch., and a separate admin table. Each table has its own key and constraint.

And my application to control the database is using the windowbuilder in the java by Eclipse.

ER-diagram:

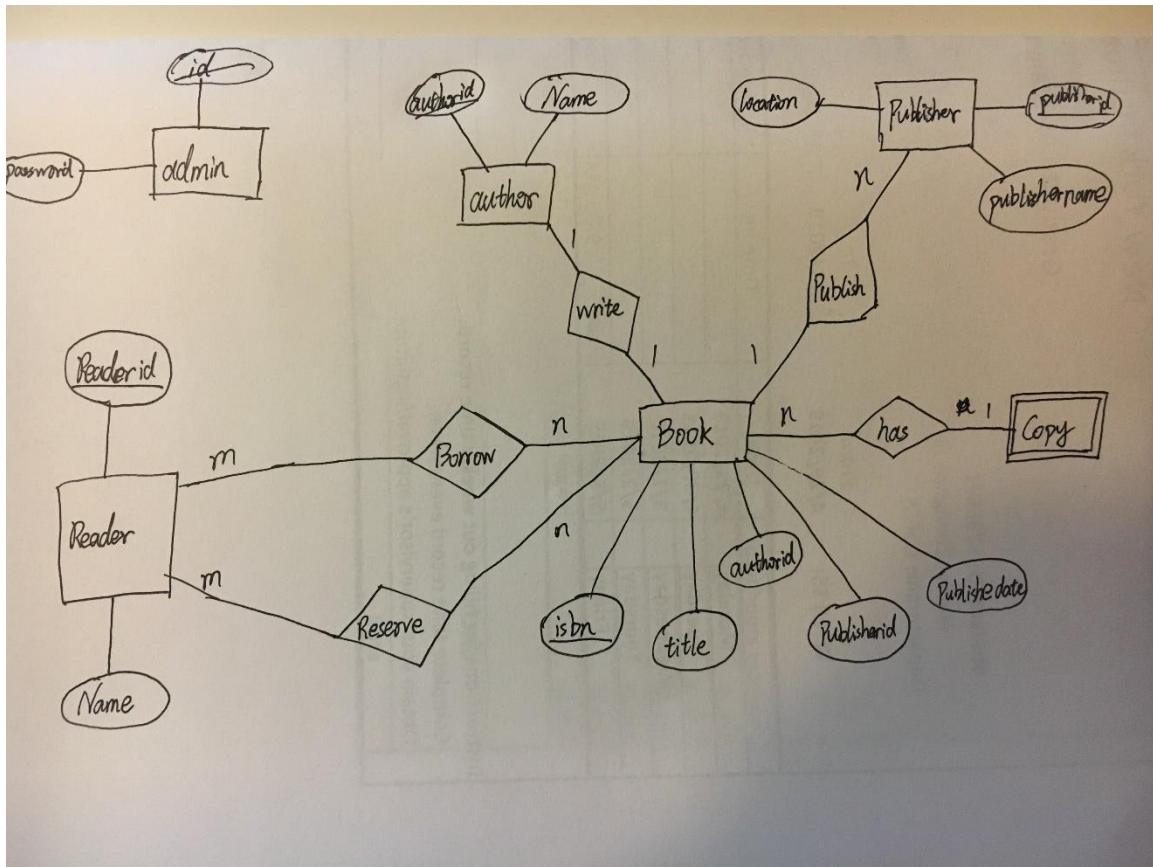


Table content:

Reader (Strong entity):

🔑 readerid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
💎 name	VARCHAR(20)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
💎 address	VARCHAR(100)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
💎 phone	VARCHAR(12)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>







The range of values of the corresponding attribute, and the code to create the Reader table:

```
CREATE TABLE IF NOT EXISTS `reader` (  
  `readerid` int(11) NOT NULL AUTO_INCREMENT,  
  `name` varchar(20) NOT NULL,  
  `address` varchar(100) NOT NULL,  
  `phone` varchar(12) NOT NULL,  
  PRIMARY KEY (`readerid`)  
)
```

Table initialization:

```
INSERT INTO `reader` (`readerid`, `name`, `address`, `phone`) VALUES  
(01001, 'A.B', '1234 Ast', '1'),  
(01002, 'B.C', '1234 Bst', '2'),  
(01003, 'C.D', '1234 Cst', '3'),  
(01004, 'D.E', '1234 Dst', '4'),  
(01005, 'E.F', '1234 Est', '5'),  
(01006, 'F.G', '1234 Fst', '6'),  
(01007, 'G.H', '1234 Gst', '7'),  
(01008, 'H.I', '1234 Hst', '8'),  
(01009, 'I.J', '1234 Ist', '9'),  
(01010, 'J.K', '1234 Jst', '0'),  
(02001, 'K.L', '1234 Kst', '11'),  
(02002, 'L.M', '1234 Lst', '22'),  
(02003, 'M.N', '1234 Mst', '33'),
```

Borrow (Strong entity):

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G
 bookid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 readerid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 branchid	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 bdate	DATE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 rdate	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 fine	FLOAT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


The range of values of the corresponding attribute, and the code to create the Borrow table:

```
CREATE TABLE IF NOT EXISTS `borrow` (
  `bookid` int(11) NOT NULL,
  `readerid` int(11) NOT NULL,
  `branchid` int(11) NOT NULL,
  `bdate` date NOT NULL,
  `rdate` date DEFAULT NULL,
  `fine` float NOT NULL DEFAULT '0',
  PRIMARY KEY (`bookid`,`readerid`,`bdate`),
  UNIQUE KEY `bookid` (`bookid`,`bdate`)
)
```

Table initialization:

```
INSERT INTO `borrow` (`bookid`, `readerid`, `branchid`, `bdate`, `rdate`, `fine`) VALUES
(1, 01001, 1, '2018-12-24', '2018-12-28', 0),
(2, 01001, 1, '2019-02-21', '2013-03-10', 0),
(3, 01002, 2, '2019-04-28', NULL, 0),
(4, 01003, 1, '2018-08-24', '2018-09-28', 0),
(5, 01005, 1, '2018-07-13', '2018-09-01', 0),
(6, 01009, 2, '2018-12-24', '2018-12-31', 0),
(7, 03001, 2, '2019-04-24', NULL, 0),
(10, 03005, 1, '2019-01-24', '2019-02-22', 0),
(12, 03005, 1, '2019-02-11', '2019-03-21', 0),
(13, 03004, 2, '2018-02-28', '2018-03-31', 0),
(13, 02001, 2, '2018-12-24', '2019-01-29', 0),
(14, 02010, 1, '2018-01-13', '2018-04-29', 0),
(14, 02003, 1, '2018-09-03', '2019-01-15', 0),
(15, 01006, 1, '2019-04-20', NULL, 0),
(16, 03002, 2, '2018-10-21', '2018-10-31', 0),
(16, 03009, 2, '2019-01-24', '2019-01-29', 0),
(17, 02007, 3, '2018-03-24', '2018-03-29', 0),
(17, 02005, 3, '2018-09-24', '2018-11-02', 0),
(18, 02009, 3, '2018-12-13', '2018-12-12', 0),
```

Reserve (Strong entity):

 readerid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 bookid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 date	DATE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The range of values of the corresponding attribute, and the code to create the Reserve table:

```
CREATE TABLE IF NOT EXISTS `reserve` (  
  `readerid` int(11) NOT NULL,  
  `bookid` int(11) NOT NULL,  
  `date` date NOT NULL,  
  PRIMARY KEY (`readerid`,`bookid`)  
)
```

Table initialization:

```
INSERT INTO `reserve` (`readerid`, `bookid`, `date`) VALUES  
(03010, 8, '2019-05-01'),  
(03009, 19, '2019-04-15'),  
(03008, 23, '2019-04-28'),  
(02008, 31, '2019-04-29'),  
(01009, 35, '2019-04-29'),  
(01007, 46, '2019-05-01'),  
(01010, 50, '2019-05-01');
```

Book (Strong entity):

isbn	VARCHAR(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
bookid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The range of values of the corresponding attribute, and the code to create the Book table:

```
CREATE TABLE IF NOT EXISTS `book` (  
  `isbn` varchar(11) NOT NULL,  
  `bookid` int(11) NOT NULL AUTO_INCREMENT,  
  PRIMARY KEY (`bookid`)  
)
```

Table initialization:

```
INSERT INTO `book` (`isbn`, `bookid`) VALUES  
( '200001', 1 ),  
( '200002', 2 ),  
( '200002', 3 ),  
( '200003', 4 ),  
( '200004', 5 ),  
( '200004', 6 ),  
( '200004', 7 ),  
( '200005', 8 ),  
( '200005', 9 ),  
( '200006', 10 ),  
( '200007', 11 ),  
( '200007', 12 ),  
( '200007', 13 ),  
( '200008', 14 ),  
( '200008', 15 ),  
( '200009', 16 ),  
( '200010', 17 ),  
( '200010', 18 ),  
( '200010', 19 ),  
( '200011', 20 ),  
( '200011', 21 ),  
( '200012', 22 ),  
( '200013', 23 ),
```

Bookinfo (Strong entity):

🔑 isbn	VARCHAR(9)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
💎 title	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
💎 publisherid	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
💎 publicationdate	DATE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
💎 authorid	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>




The range of values of the corresponding attribute, and the code to create the Bookinfo table:

```
CREATE TABLE IF NOT EXISTS `bookinfo` (  
  `isbn` varchar(9) NOT NULL,  
  `title` varchar(45) NOT NULL,  
  `publisherid` int(11) NOT NULL,  
  `publicationdate` date NOT NULL,  
  `authorid` int(11) NOT NULL,  
  PRIMARY KEY (`isbn`)  
)
```

Table initialization:

```
('200001', 'Hush Hush', 5, '1990-11-01', 15),  
( '200002', 'Big Lake Burning', 4, '1991-04-01', 14),  
( '200003', 'Jewels and Panties', 3, '1992-01-01', 13),  
( '200004', 'The New Girl', 2, '1993-03-01', 12),  
( '200005', 'Beneath the Skin', 1, '1994-12-01', 11),  
( '200006', 'Love Real Food', 5, '1995-10-01', 10),  
( '200007', 'Harry Potter', 4, '1996-05-01', 9),  
( '200008', 'Arcane', 3, '1997-06-01', 8),  
( '200009', 'Relation', 2, '1998-04-01', 7),  
( '200010', 'Stand By Me', 1, '1999-04-01', 6),  
( '200011', 'Life', 5, '2000-10-01', 5),  
( '200012', 'Five Unforgivable Things', 4, '2018-10-01', 4),  
( '200013', 'A Long Way From Home', 3, '2017-11-01', 3),  
( '200014', 'The Dispalced', 2, '2016-01-01', 2),  
( '200015', 'LL Story', 1, '2015-12-01', 1),  
( '200016', 'The Evil in the Tower', 5, '2014-11-01', 2),
```


Copy(weak entity):

 branchid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 isbn	VARCHAR(25)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 numcopy	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The range of values of the corresponding attribute, and the code to create the Copy table:

```
CREATE TABLE IF NOT EXISTS `copy` (
  `branchid` int(11) NOT NULL,
  `isbn` varchar(25) NOT NULL,
  `numcopy` int(11) NOT NULL,
  PRIMARY KEY (`branchid`,`isbn`)
)
```

Table initialization:

```
INSERT INTO `copy` (`branchid`, `isbn`, `numcopy`) VALUES
(1, '200001', 1),
(1, '200002', 1),
(1, '200003', 1),
(1, '200004', 1),
(1, '200005', 2),
(1, '200006', 1),
(1, '200007', 2),
(1, '200008', 2),
(1, '200011', 1),
(1, '200013', 1),
(1, '200014', 1),
(1, '200016', 1),
(1, '200017', 1),
(1, '200019', 1),
(1, '200022', 2),
(1, '200025', 1),
(2, '200002', 1),
(2, '200004', 2),
(2, '200007', 1)
```

Location(Strong entity):

 bookid	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 branchid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 position	INT(9)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>




The range of values of the corresponding attribute, and the code to create the Location table:

```
CREATE TABLE IF NOT EXISTS `location` (
  `bookid` int(11) NOT NULL,
  `branchid` int(11) NOT NULL,
  `position` int(9) NOT NULL,
  PRIMARY KEY (`branchid`,`position`)
)
```

Table initialization:

```
INSERT INTO `location` (`bookid`, `branchid`, `position`) VALUES
(1, 1, '01201'),
(2, 1, '01102'),
(3, 2, '01102'),
(4, 1, '01103'),
(5, 1, '01104'),
(6, 2, '01103'),
(7, 2, '01104'),
(8, 1, '01105'),
(9, 1, '01106'),
(10, 1, '01107'),
(11, 1, '01108'),
(12, 1, '01109'),
(13, 2, '01105'),
(14, 1, '01110'),
(15, 1, '02101'),
(16, 2, '01106'),
(17, 3, '01101'),
(18, 3, '01102'),
(19, 3, '01103'),
---
```

Publisher(Strong entity):

 publisherid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
 publishername	VARCHAR(20)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 location	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



The range of values of the corresponding attribute, and the code to create the Publisher table:

```
CREATE TABLE IF NOT EXISTS `publisher` (  
  `publisherid` int(11) NOT NULL AUTO_INCREMENT,  
  `publishername` varchar(20) NOT NULL,  
  `location` varchar(10) NOT NULL,  
  PRIMARY KEY (`publisherid`),  
  KEY `publisherid` (`publisherid`),  
  KEY `publisherid_2` (`publisherid`)  
)
```

Table initialization:

```
INSERT INTO `publisher` (`publisherid`, `publishername`, `location`) VALUES  
(1, 'pub1', 'NY'),  
(2, 'pub2', 'NY'),  
(3, 'pub3', 'CA'),  
(4, 'pub4', 'VA'),  
(5, 'pub5', 'TX');
```

Author(Strong entity):

 authorid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
 name	VARCHAR(45)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The range of values of the corresponding attribute, and the code to create the Author table:

```
CREATE TABLE IF NOT EXISTS `author` (  
  `authorid` int(11) NOT NULL AUTO_INCREMENT,  
  `name` varchar(45) DEFAULT NULL,  
  PRIMARY KEY (`authorid`)  
)
```

Table initialization:

```
INSERT INTO `author` (`authorid`, `name`) VALUES  
(1, 'A A'),  
(2, 'B B'),  
(3, 'C C'),  
(4, 'D D'),  
(5, 'E E'),  
(6, 'F F'),  
(7, 'G G'),  
(8, 'H H'),  
(9, 'I I'),
```

Branch(Strong entity):

🔑 branchid	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
🔹 name	VARCHAR(20)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
🔹 location	VARCHAR(25)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The range of values of the corresponding attribute, and the code to create the Branch table:

```
CREATE TABLE IF NOT EXISTS `branch` (
  `branchid` int(11) NOT NULL AUTO_INCREMENT,
  `name` varchar(20) NOT NULL,
  `location` varchar(25) NOT NULL,
  PRIMARY KEY (`branchid`)
)
```

Table initialization:

```
INSERT INTO `branch` (`branchid`, `name`, `location`) VALUES
(1, 'Manhattan', 'Downtown'),
(2, 'Queens', 'Elmhurst'),
(3, 'Brooklyn', 'Grand AV');
```

Admin(Strong entity):

🔑 id	VARCHAR(7)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
🔹 password	VARCHAR(10)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The range of values of the corresponding attribute, and the code to create the Admin table:

```
CREATE TABLE IF NOT EXISTS `admin` (
  `id` varchar(7) NOT NULL,
  `password` varchar(10) NOT NULL,
  PRIMARY KEY (`id`)
)
```

Table initialization:

```
INSERT INTO `admin` (`id`, `password`) VALUES
('admin', '1234'),
('zjin10', '1236831');
```

SQL Query

Admin Query:

```
select password from admin where id =''+ input admin name +''''
```

Reader Query:

```
select * from reader where readerid =''+ uid +''''
```

Search Query:

```
query = "select * from bookinfo where title like '%"+ data +"%";"
```

```
query = "select * from bookinfo where isbn =" + data +";"
```

```
query = "select * from bookinfo where publisherid =" + data +";"
```

Because we want to have a flexible search way so we need three different query to handle that.

Addbook Query:

```
sqlCopy = "INSERT INTO copy (branchid, isbn, numcopy)" + "VALUES (?, ?, ?)";  
sqlLocation = "INSERT INTO location (bookid, branchid, position)" + "VALUES  
(?, ?, ?)";  
sqlBookinfo = "INSERT INTO bookinfo (isbn, title, publisherid,  
publicationdate, authorid)" + "VALUES (?, ?, ?, ?, ?)";
```

If we insert a new book we need to manipulate three table at the same time.

Addreader Query:

```
query = "INSERT INTO reader (readerid ,name ,address , phone)" + "VALUES  
(?, ?, ?, ?)";
```

Reserve Query:

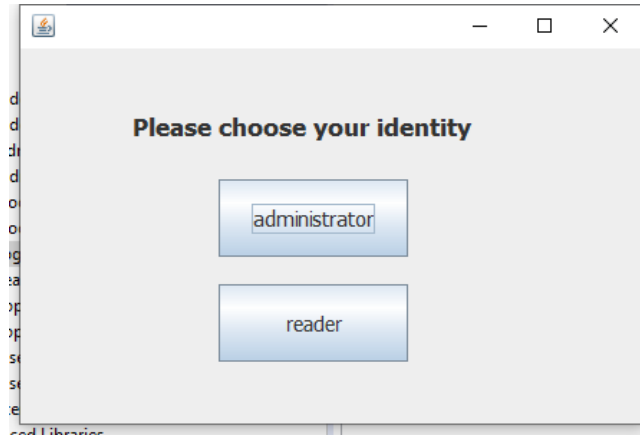
```
sql = "INSERT INTO reserve (readerid, bookid, date)" + "VALUES (?, ?, ?)";
```

Checkout Query:

```
query = "INSERT INTO borrow (bookid ,readerid ,branchid , bdate)" + "VALUES  
(?, ?, ?, ?)";
```

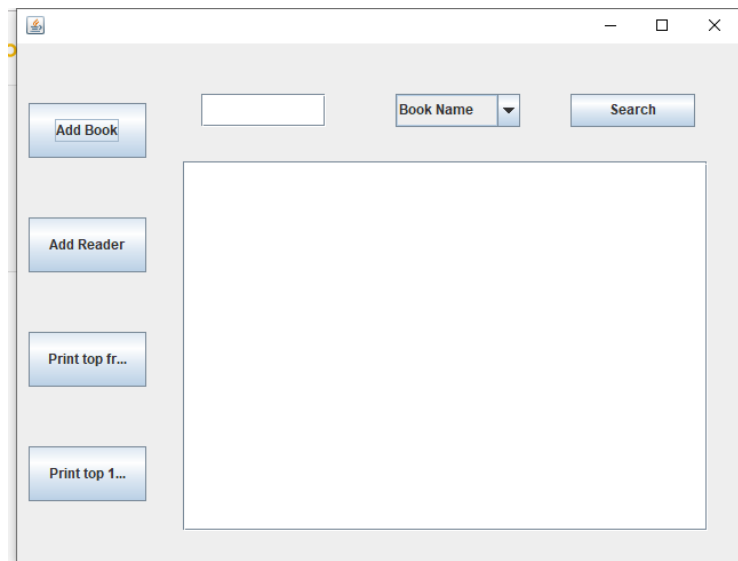
DATABASE Application(Running Example and User guide)

Users first need to confirm their identity (administrator or ordinary reader), and then they will be directed to their respective login interfaces.



After selecting the user type and entering the account password, it is followed by different operation pages of different user groups. This page contains all the functions that the corresponding user should have.

For Admin:



For Reader:

reserve bo...

reserve list

book return

book chec...

isbn | title | publisherid | authorid | publicationdate | bookid

Search

reserve bo...

reserve list

book return

book chec...

the

Book Name

Search

isbn | title | publisherid | authorid | publicationdate | Available bookid

200004 | The New Girl | 2 | 12 | 1993-03-01 | 5,6,7,

200005 | Beneath the Skin | 1 | 11 | 1994-12-01 | 8,9,

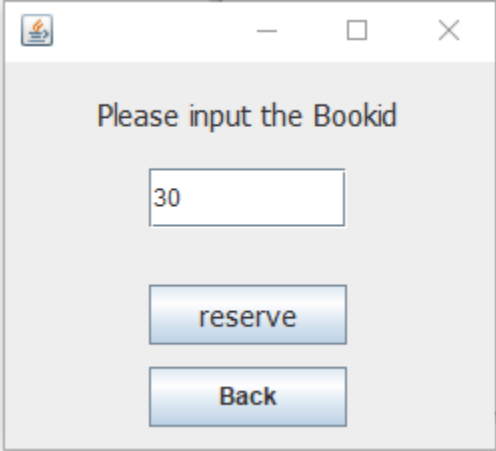
200014 | The Dispalced | 2 | 2 | 2016-01-01 | 26,27,

200016 | The Evil in the Tower | 5 | 2 | 2014-11-01 | 29,30,31,

200020 | Before the Broken Star | 1 | 6 | 2010-09-01 | 38,39,

200023 | The Apology | 3 | 9 | 2003-06-01 | 44,45,

Reserve:



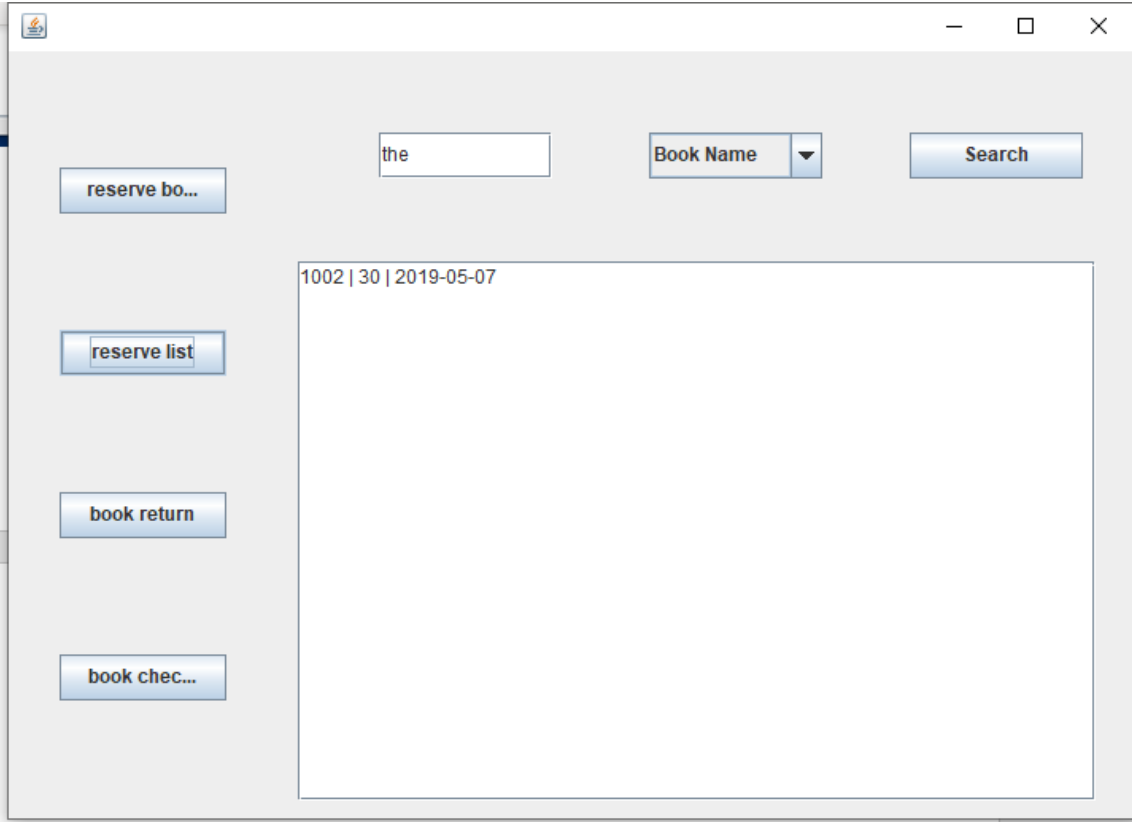
Please input the Bookid

30

reserve

Back

After you reserve the book you can use the reserve list button to check your reserve list.



the

Book Name

Search

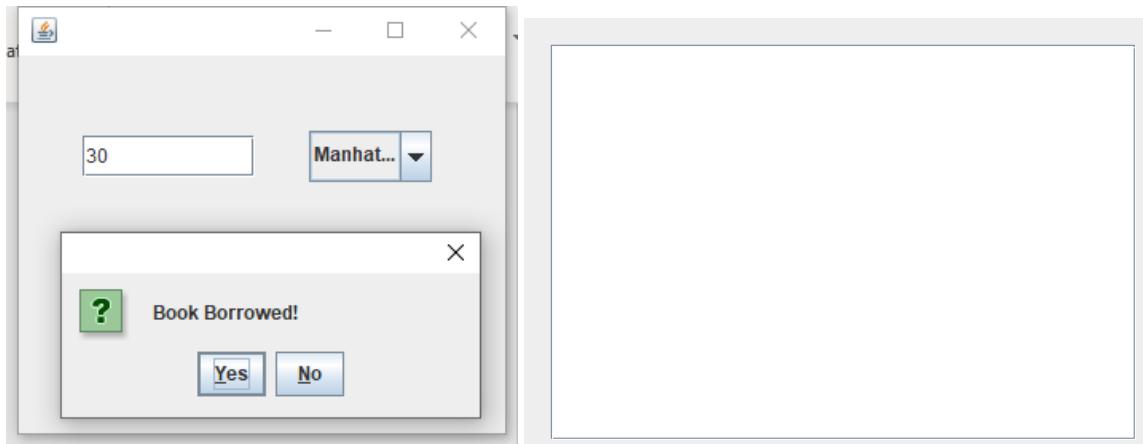
reserve bo...

reserve list

book return

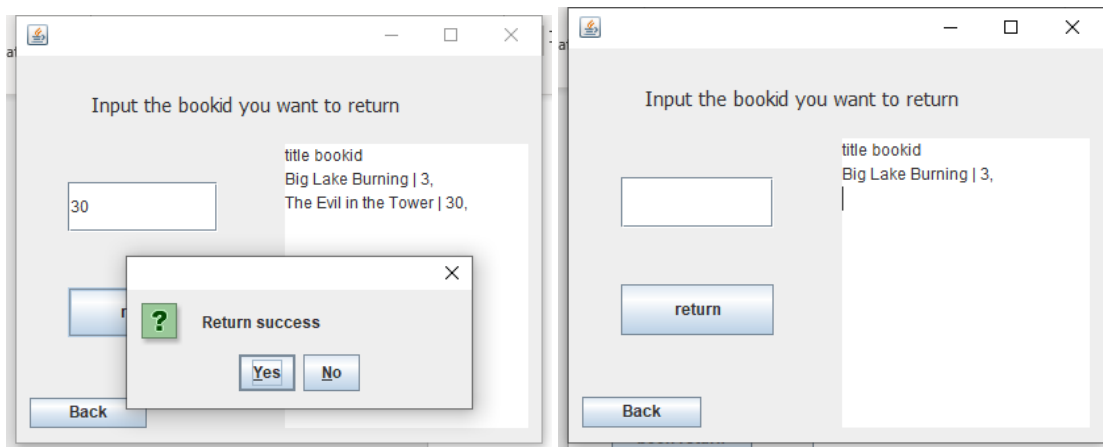
book chec...

1002 30 2019-05-07

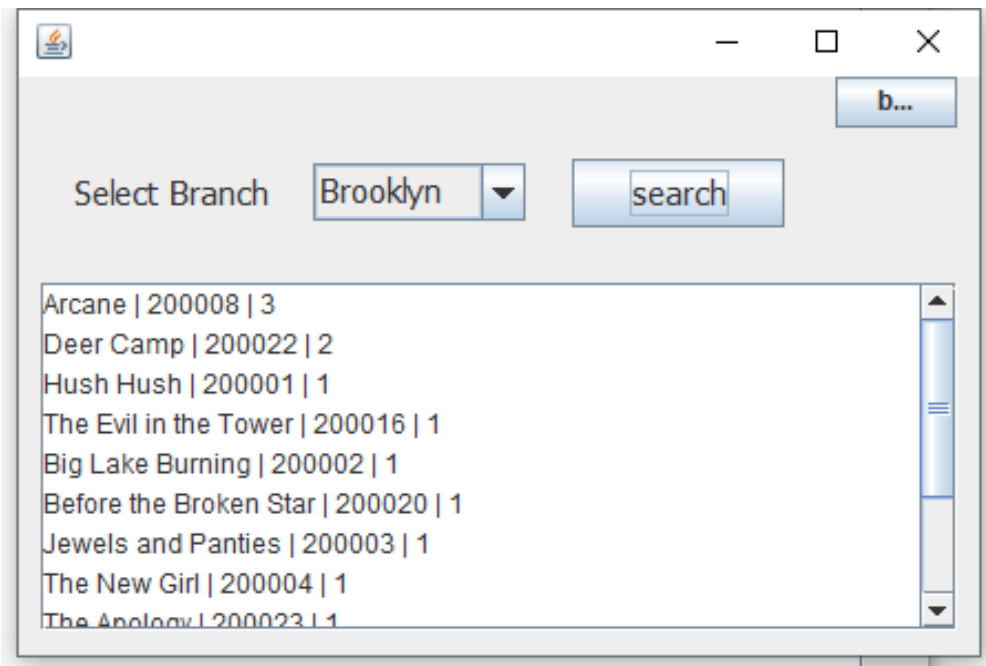


After check the book by using the check button you will see the book in the reserve list has been removed.

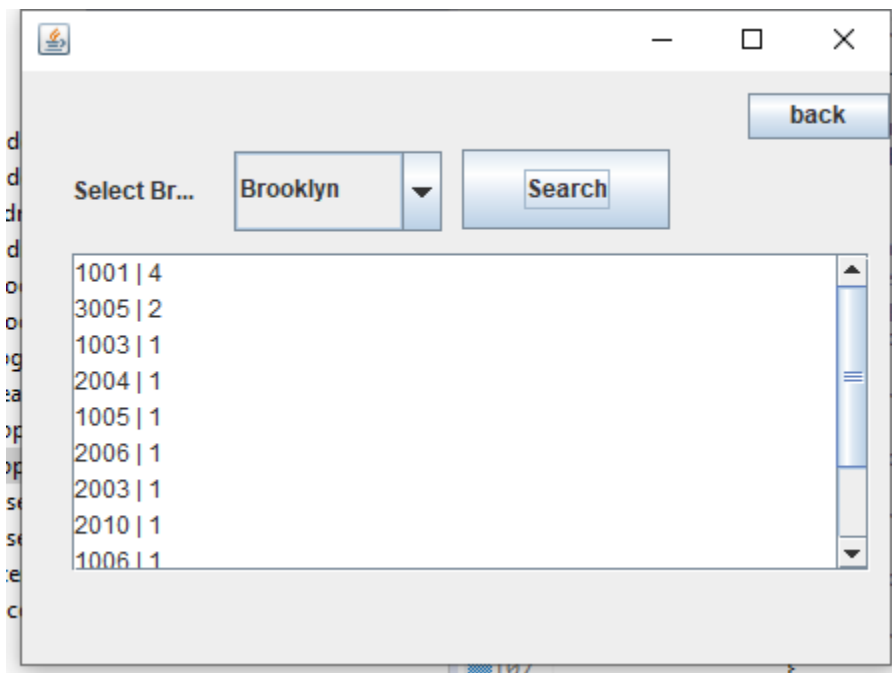
And with the return book window you can find out what book you have not return yet and input the bookid than click return.



Admin function:



This Gui show the top frequent book from one branch.



For this two function user just need to select the branch to get the result.

And you can add book by using this page.

The image shows two side-by-side screenshots of a web application window for adding a new book. The window has a title bar with standard minimize, maximize, and close buttons. The form contains the following fields and controls:

- ISBN:** A text input field.
- Title:** A text input field.
- Author:** A text input field.
- Select bra...:** A dropdown menu currently showing 'Manhattan'.
- date:** A text input field with a placeholder 'yyyy-mm-dd'.
- publis...:** A dropdown menu currently showing 'pub1'.
- Buttons:** An 'Addbook' button and a 'back' button.

The left screenshot shows the form with empty input fields. The right screenshot shows the form with the following data entered:

- ISBN: 142536
- Title: new day
- Author: zjin
- date: 1234-12-10
- publis...: pub1

Once you add a new book you can see the new book in the book list.

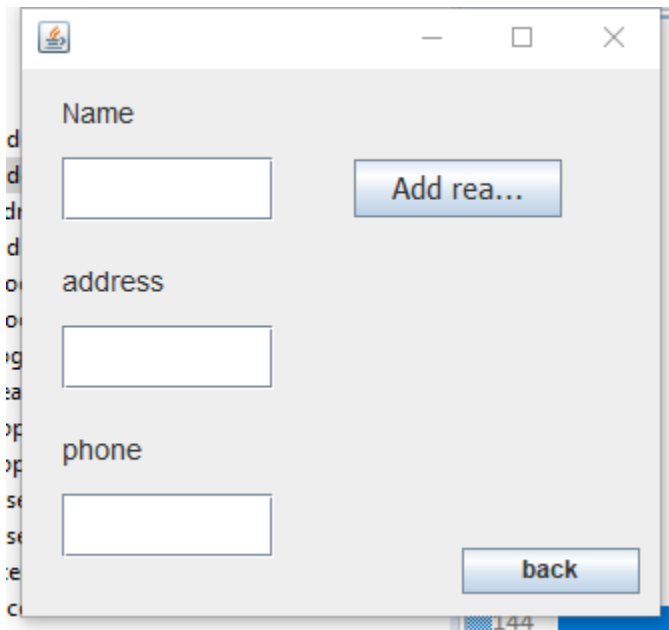
The image shows a screenshot of a web application window displaying a list of books. The window has a title bar with standard minimize, maximize, and close buttons. The interface includes the following elements:

- Search Bar:** A text input field containing the word 'new' and a 'Search' button.
- Buttons:** Four buttons on the left side: 'Add Book', 'Add Reader', 'Print top fr...', and 'Print top 1...'.
- Table:** A table displaying a list of books. The table has the following columns: isbn, title, publisherid, authorid, publicationdate, and bookid in the library. The table contains two rows of data:

isbn	title	publisherid	authorid	publicationdate	bookid in the library
142536	new day	1	16	1234-12-10	66,67,66,67,
200004	The New Girl	2	12	1993-03-01	5,6,7,5,6,7,

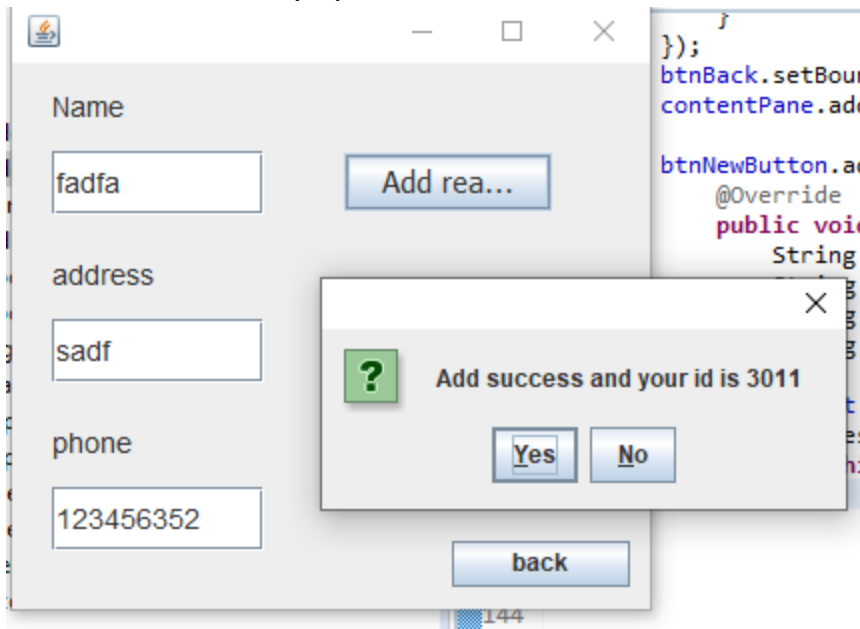
You can click the add book button many times if you do that you will add some copy of the same book.

This one is for you to add a new reader.



A Java Swing window titled "Add new reader" with a standard Mac OS X title bar (red, yellow, green buttons). The window contains three text input fields labeled "Name", "address", and "phone". To the right of the "Name" field is a button labeled "Add rea...". At the bottom right of the window is a button labeled "back".

Once you success add a new reader you will get the reader id which is used to access the library system.



The "Add new reader" window is shown with the following data entered: "Name" is "fadfa", "address" is "sadf", and "phone" is "123456352". The "Add rea..." button is highlighted. A small dialog box is overlaid on top of the main window. The dialog box has a green question mark icon and the text "Add success and your id is 3011". It has two buttons: "Yes" and "No".

```
});  
btnBack.setBour  
contentPane.add  
  
btnNewButton.ad  
@Override  
public void  
String
```