CPSC 304

Library Database System User Manual

INTRODUCTION

The library database is an interactive tool for managing library resources. It is developed for three types of users: librarian, clerk and borrowers. It provides unique functions to the users, providing the services that they would typically require.

ASSUMPTIONS

1. When a new book is inserted into the database, we also insert a book copy. If no other copies of the book exist in the database, we assign this copy 'C1'. Subsequent copies have incremental copy numbers (ie. C2, C3, …).

2. The first day that a book is checked out is counted as day 1 of a borrowing. For example, if a student, with a 14 day loan period, checks out a book on March 1, then the book is due March 14.

3. SIN numbers are always 9 characters. Student numbers are always 8 characters

4. Participation constraints from project Part I (that can be applied to this part of the project) hold.

Before You Begin

Before using the software, please open the OracleConn.php file and enter the following information:

$undergrad : this represents your UBC computer science username (for example, x8b9)

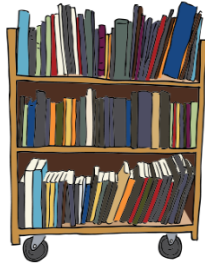$oracleUser : this represents your oracle account username

$oraclePass : this represents your oracle account password

Once you have entered this information, save.

You can now start using the library database system by opening the library.php file.

Library Main Page

WELCOME! YOU ARE NOW USING THE LIBRARY DATABASE SYSTEM!

Please select your authorization level:

[Librarian ▾]

Submit Query

*Select an authorization level to have access to the appropriate functions.

Clerk

CLERK

Please choose the transaction you would like to perform.

Add New Borrower

Check-Out Books

Return Books

Check Overdue Books

Back to Home

Add Borrower

Please enter new borrower's information.

Full Name: [　　　　　　　　　]

Address: [　　　　　　　　　]

Phone: [eg. xxx-xxx-xxxx]

Email: [　　　　　　　　　]

SIN or Student Number: [　　　　　　　　　]

Type of Borrower: [Student ▾]

[**Submit**]

[**Back to Clerk**]

To add a borrower, enter details into form.

If the any of the following conditions are not met, the borrower will not be added.

a) The phone number must be 10 digits long or have the form xxx-xxx-xxxx.

b) The email address must contain a @.

c) If new borrower is a Student, an 8 digit Student Number must be entered.

d) If new borrower is a Staff or Faculty, a 9 digit SIN Number must be entered.

Additionally, if the new borrower has a SIN or Student Number identical to an existing borrower, he/she will not be added.

Check-Out Book

Please enter information to check-out book.

Borrower ID: [   ]

Book Call Numbers: [callNumber#1, callNumber#2, callNumber#3, ...]

Submit

Back to Clerk

To check-out book(s), enter details into form.

A single book or multiple books can be checked-out in one go.

A book will not be checked-out if:

      a) The borrower already has another copy of the book checked-out

      b) The book is not available (on-hold by another borrower or out)

A book will be successfully checked-out if:

      a) The book is available (eg. status: in)

      b) The borrower has placed the book on-hold

Return a Book

Please enter information of book :

Call Number : [   ]

Copy Number : [   ]

[Submit Query]

[Back to Clerk]

Enter a book's call number and copy number.

Click 'Submit'.

Note: if one or both of the fields are empty, an error message displays.

After submitting:

The book information will display (title, callNumber, copyNumber) for verification.

The borrower's information will display (bid, bname).

Click 'Process Return' to complete the return process.

Note: if the book has an inDate that is non-null, it means the book has been returned already and there is no current borrowing of this book. An error message will display.

Check Overdue Books

Please enter information to borrower ID.

BORID : [_____]

[**Email Borrower**]

[**Back to Clerk**]

BORID	Book Title	CallNumber	CopyNo	outDate	BID	Borrower Name	Borrower Type	Borrower Email
1000000000	Database Engineering	QA74.79 J12 2001	C1	14-01-01	3414311864	James Dagenious	Student	jamesdagenious@gmail.com
1000000006	Database Engineering	QA74.79 J12 2001	C2	14-01-01	3414311864	James Dagenious	Student	jamesdagenious@gmail.com

BORID	Book Title	CallNumber	CopyNo	outDate	BID	Borrower Name	Borrower Type	Borrower Email
1000000002	Dream a Little Dream	QZ52.78 J14 2011	C2	14-01-01	5406073649	Navi Lalalala	Faculty	navilalalala@hotmail.com

BORID: Enter the borrower id (BID). Must be numeric.

"Email Borrower" Button: Email the borrower about the overdue books.

LIBRARIAN

Please choose the transaction you would like to perform.

Add New Book

Generate Report of Checked Out Books

Generate Report of Popular Items

Back to Home

Add Book

*To add a book, details should be entered in the following form:

Call Number: Refer to library specifications. Should be no longer than 30 characters.

ISBN: Must be 13 digits. If an ISBN is less than 13 digits long, append zeroes to it preceding the ISBN so that 13 digits are reached. Ex: 0000123456789

Title: Should be no longer than 80 characters.

Main Author: Recommended format is <Last Name> <First Name> <Middle Initial>.

or if length is an issue: <Last Name> <First Initial>. <Middle Initial>. Should be no longer than 30 characters. Forego middle initials if author has no middle name.

Publisher: Should be no longer than 30 characters.

Year: Should be the number given as the publish date. Must be numeric.

Sub-Authors: Use the same format as main author, but separate with commas. If there are more than 3 authors, or if the authors cannot fit, it is acceptable to use 'et al.'

Subjects: The main keywords to help categorize the item such as strain of academics

                (ie. Physics, Computer Science), or genre (ie. Science Fiction, Autobiography).

 Separate the genres with commas and spaces as follows:

                <subject 1>, <subject 2>, ..., <subject n> The subjects field cannot be left empty.

Generate Report of Checked Out Books

Please enter a subject, or leave field empty for any subject.

Enter a Subject (optional):

Search

Back to Librarian

To generate a report of checked out books, enter a subject into the subject field and press submit. If you do not want to specify a subject, then simply press submit without typing anything into the subject field.

Alternatively, regex can be entered to query for results where the subject matches the input pattern.

The resultant table will be a summary of all checked out books that have subjects containing the subject you entered (not case sensitive). For example, and entry of 'science' will find items of subject 'Computer Science' but also 'Bioscience' (assuming both subjects exist). It is thus recommended that you be as specific as possible. The last column labelled 'Borrower Status' indicates whether or not a particular borrowed item is overdue ('Overdue') or not ('Lent').

Generate Popular Report

Please enter a year and the maximum amount of results you want.

Enter a year: [   ]

Enter a number (list top *n* books): [   ]

[Search]

[Back to Librarian]

*To generate a report of the most popular items in a certain year, fill out the fields:

Year: Must be numeric and between -4713 and 9999.

n: Must be numeric and greater than or equal to 0.

The result will be a table with the top n most commonly borrowed items of the specified year. It will be sorted by times borrowed. If two books have been borrowed the same amount of times, they will sort by call number alphanumerically.

Borrower

BORROWER

Please choose the transaction you would like to perform.

Login to Account

Search for Books

Back to Home

Search

Please enter search details.

Title Keywords: [_____]

Author Keywords: [_____]

Subject Keywords: [_____]

[Search]   [Back To Account]

*To search for books, at least one of the following fields should not be empty

Title Keywords: To find item(s) with matching titles, enter words that describe the item into the search box.

Author Keywords: To find item(s) with matching author, enter words that describe the item into the search box.

Subject Keywords: To find item(s) with matching subject, enter words that describe the item into the search box.

"Search" Button: Submit the query

"Back to Account" Button: Redirect the page back to the borrower account if already logged in. Otherwise, redirect the page back to borrower main page.

Login

Please enter new borrower's information.

Username: [_____]
Password: [_____]

Login

*To login to your account, all of the following fields should not be empty.

Username: Must be numeric. Enter your borrower id (BID)

Password: Enter your account password

"Login" Button: Submit login information

Account

WELCOME TO YOUR PROFILE DASHBOARD!

Pay Fines	Place Hold Request	Search	Logout

Account Information:

Borrower	Password	Name
3414311864	1N1dBs7Ym04	James Dagenious

Address		
1003 - 2205 Lower Mall, Vancouver, BC, V6T 2G9		

Phone Number	Email	
71411120	jamesdagenious@gmail.com	

Expire On	Account Type	SIN / Student #
14-04-30	Student	920654327

Currently Borrowed (not yet returned):

Borrower ID	Call Number	Copy Number	Out Date	In Date
1000000000	QA74.79 J12 2001	C1	14-01-01	
1000000006	QA74.79 J12 2001	C2	14-01-01	
1000000001	QZ52.78 J14 2011	C1	14-03-27	

Placed Hold Requests:

Hold Request ID	Call Number	Issued Date	Status
3	QB72.59 J74 2013	14-03-27	Ready! Currently on hold for you.
6	TM16.35 C76 1956	14-03-20	Not Ready

Outstanding Fines:

Fine ID	Issued Date	Amount
2	14-03-27	$1.2

Payment History (Fines):

Fine ID	Issued Date	Amount	Payment Received On
3	14-03-22	$2.4	14-03-27

*After a valid login, user is redirected to this page.

"Pay Fine" Button:	Redirect the page to pay fine
"Place Hold Request" Button:	Redirect the page to place hold request
"Search" Button:	Redirect the page to search
"Logout" Button:	Erase login information, redirect to main page
Account Information:	Displays all the information we have on the borrower
Currently Borrowed:	Displays all the currently borrowed books that are not yet returned.
Placed Hold Request:	Displays all the active hold requests placed by the user
Outstanding Fines:	Displays all the outstanding fines
Paid Fines History:	Displays all the paid fine

Place Hold Request

Please enter details of book you wish to place on hold.

CallNumber: [   ]

Comfirm and Request   **Back To Account**

*To place a hold request for a specific book, the following fields should not be empty

CallNumber: Enter the callNumber of the specific book (must be exact)

"Confirm and Request" Button: Submit the request

Pay Fine

Please enter details.

Name: [   ]

Fine ID (FID): [   ]

Credit Card Number: [   ]

CVV: [   ]

[**Comfirm and Pay**]   [**Back To Account**]

*To pay for an outstanding fine, all of the following fields must be not empty

Name: Enter your name as it appears on your credit card

Fine ID: Must be numeric. Must be issued to you. Enter the fine id (FID).

Credit Card Number: Must be numeric. Enter your credit card number

CVV: Must be numeric. Enter your CVV number as it appears on the back of your credit card

"Confirm and Pay" Button: Submit payment information.