User Manual for School Library App

This is a web app in which borrowings of books in many school libraries can be registered, so that students/teachers and librarians can access info in a comfortable way.

admin: *Administrator*
librarian: *Operator of the School Library*
simple-user: *student/teacher*

System standards

Sign up and Sign in

Every simple-user (*student/teacher*) can be registered only in his school (by choosing his school in the "School" field of signup page). In order to be accepted, the librarian of this school should validate him/her (from page "View not valid simple users (students, teachers) (and maybe accept some of them)"). Until then, when simple-user signs in he will see a "Not approved user page". When simple-user is validated he will be able to access his page. Every user of the web app can change his/her password.

Similarly, when a librarian signs up, he must be accepted from admin in order to have access to his page. However, every school can have only one librarian.

Reservations and Borrowings

Simple-users can only reserve (they cannot borrow) books from their account.
It is highly recommended that before a simple-user goes to the school library to borrow a book, he/she has reserved it, or at least he/she has checked that this book is available in school library.
A simple-user can reserve books of his/her school only following these restrictions:

Reservation is not allowed when:

- user has already reserved this book this week
- user has borrowed (and not returned) this book
- user has delayed borrowed not returned books
- user has already reserved 1 / 2 book(s) for teachers/students

(*) Note that reservations are deleted after one week.

Simple-users can also cancel their reservation of a book.

A librarian can register that a simple-user borrows a book of his/her school only following these restrictions:

Borrowing is not allowed when:

- book is not available in that school
- user has delayed borrowed not returned books
- user has already borrowed 1 / 2 book(s) for teachers/students
- user has already borrowed this book this day

Librarians can also register the return of a borrowed Book.

(**) Note that when a librarian registers a borrowing for a user and a book, reservation about this user and book is automatically deleted (if exists).

Before librarians register a borrowing of a book, if there are few copies, they should follow the link "All" in reservations fieldset and search (Using Ctrl+F because no search mechanism has been implemented) for the book that is going to be borrowed (for example using ISBN for search). If reservations are more than the copies then the librarian should keep in mind priority (based on the start_date). For example if there is 1 copy and 3 reservations, librarian should not lend the book to the first user that comes to the library but communicate with the first user who reserved this book and lend it to him/her when he comes. "All" reservations are shown together for each Book and with ascending start_date (for each Book) for librarian's convenience.

Reviews

Simple-users can review the books that they have borrowed. However, reviews of students need approval from the librarian of their school.

Admin and Librarian can review books from the whole School Library Network System.

Instructions

Admin

- Every day that admin logs in he should check if all users that signed up as librarians are accepted. If not then he may accept some of them.
- He/She should disable librarians when they resign.

Back up is the action of keeping an instance of the database at this specific time to another backup database. It is a good practice to back up often.

Restore is done only when something extremely bad happens and many data from the database are lost / modified. Then restore uses the backup database to restore data in the used database (the used database gets cleared and all records of the back up database are transmitted to the used database). Admin should check when the back up was made.

Follow the link that describes what you want to see/modify

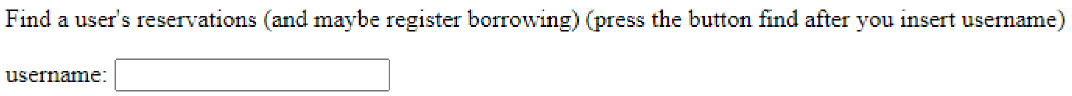
Librarian

- Every day that librarian logs in he should check if all users that signed up as students/teachers are accepted. If not then he may accept some of them.
- He/She should check for not approved reviews to approve.
- He/She should disable users if they did not conform with the rules of the school library

In order to register a Borrowing:

If the user has already reserved the book:

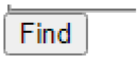
- You should write the username in the text input field:



Find a user's reservations (and maybe register borrowing) (press the button find after you insert username)

username:

and press button Find at the bottom of the page

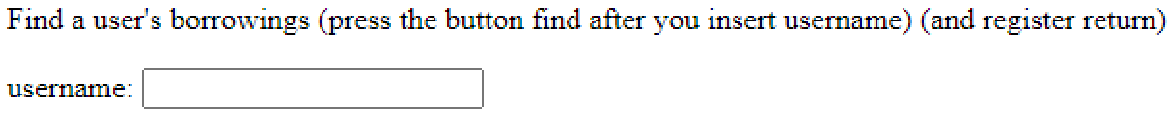


Else:

- follow the link “Register a borrowing searching username and title”

In order to register a Return of a borrowed Book:

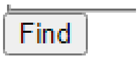
You should write the username of the borrower who returns the book in the text input field:



Find a user's borrowings (press the button find after you insert username) (and register return)

username:

and then press the Find button at the bottom of the page



In order to insert a Book into School Library:

You should check that the book is not already in the library books that are registered by following the link “All books by Title, Author (Search criteria: title/ category/ author/ copies).”.

Then check if the book is in the library-network system (that means that there is in another school and the book is in the registered in the system) by following the link “Books in the library-network System (You can Review them)” (Use Ctrl+F to search a book with ISBN or title because no search mechanism has been implemented).

If the book exists:

- follow the link “Add an existing in the system book to this school”

Else:

- follow the link “Insert Book (only if it is not in the two categories above)”

Simple-user

- Checks borrowings so that he/she knows if he/she has delayed returning a book.
- Checks reservations so that he/she knows if the books reserved are available.
- Simple-user should check “My Reviews” before he writes a review for a book so that he does not write review for a book that he had reviewed already.

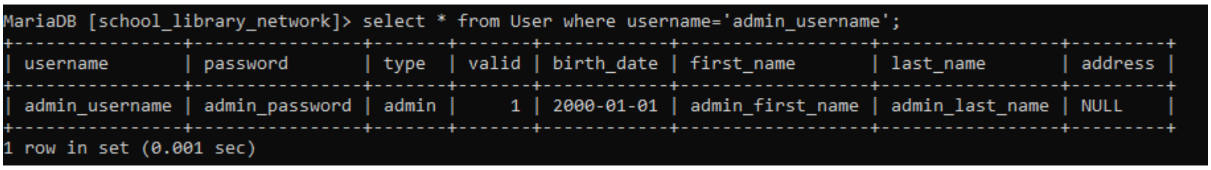
Follow the link that describes what you want to see/modify

Disclaimers

1. Data in the **insert-schema.sql** script are fake. These data have made a school library network in which some of the above restrictions where not considered such as:
   - Users could borrow books even if they had delayed some others
   - Simple-users could review all the books from the library network system
2. Admin cannot change his username without communication with the developer of the system. If admin changes he should tell his password to the new admin to use it for first time (and then he can change it).
3. If you want to use the system for real use - so you do not use the insert-schema.sql script (**skip** the instruction *source /path/to/insert-schema.sql;* in **Installation Guide**), then admin should be inserted first to the system by the admin in order the app to be used. The developer should just run these instructions in the Maria DB command prompt (read Installation Guide):
   - *use school_library_network;*
   - *insert into User values('admin_username', 'admin_password', 'admin', 1, '2000-01-01', 'admin_first_name', 'admin_last_name', null);*
   - *select * from User where username='admin_username';*

   Replace 2000-01-01 in the insert statement with admin birth date, as well as username, password, first name, last name.

   The last instruction just shows that admin was successfully inserted and it must return something like this:

```
MariaDB [school_library_network]> select * from User where username='admin_username';
+----------------+----------------+-------+-------+------------+------------------+-----------------+---------+
| username       | password       | type  | valid | birth_date | first_name       | last_name       | address |
+----------------+----------------+-------+-------+------------+------------------+-----------------+---------+
| admin_username | admin_password | admin |     1 | 2000-01-01 | admin_first_name | admin_last_name | NULL    |
+----------------+----------------+-------+-------+------------+------------------+-----------------+---------+
1 row in set (0.001 sec)
```

   You are now ready to run the app.

   The admin should insert schools for the library network system from his page so that librarians and users can be registered.

   The librarians should insert the books of their library from their page in order for the users to be able to see them and reserve, borrow, review under some circumstances that were mentioned in System Standards.

4. “Average Ratings per borrower and category” does not check that the user who wrote the review had borrowed this book (but simple-users can only review the books they borrowed)
5. “Top 3 topic couples in borrowings” does not handle parity (means that if the 3rd and 4rth topic pair has the same number of borrowings then only one of them will be displayed).
6. Dates are static in insert-schema.sql script, so if you want to insert the dummy data into the database, developer should use “/insert” route and change some code in insert.py .