

# User manual

## Library app built for Databases in 6<sup>th</sup> Semester ECE NTUA

There are 3 types of users for this application:

### **1) Central administrator**

This user is the administrator of the application. On their main page, the following options are available:

- [View total borrowings per school](#)

Here, the admin can search for total borrowings per school, month and year (also all-schools options is available) to view the number of borrowings and details about them per each category they specify

- [Authors and borrowings from selected category](#)

Here, the admin can see all the authors who have written books about the specified theme, and teachers who have borrowed books from this category in the past year

- [Young teachers with the most borrowings](#)

This page lists the teachers who are aged less than 40, and have borrowed the most books

- [Handlers with same number of borrowings](#)

This page lists the names of the handlers who have registered the same number of borrowings in their schools in the past year, and displays the number of borrowings (must be greater than 20)

- [Top-3 pairs of common themes](#)

Here, the admin can view the top-3 genres that appeared in borrowings, and the number of the borrowings they appeared on

- [Authors with less than 5 books than the author with most books](#)

On this page, the admin can see how many books the author who has written the most books, has, as well as the authors who have written at least 5 books less than the specified author

- [Handle handler's accounts](#)

This page is for deactivating handler's accounts. Deactivating an account means a handler can no longer log in and use the application

- [Register a new school](#)

On this page, the admin can register a new school to the database, and create dummy credentials for this school's handler, which can later be changed by the handler

- [Create backup](#)

This option is used when the admin wants to backup the database, to later restore the application from the specified backup

- [Restore system from backup](#)

Restores the system from specified backup

- [Edit school information](#)

Information about schools can be edited on this page

## **2) Handler**

This user is responsible for operating the application on school level, add books to their school's library, handle borrowings and returns as well as manage student's and teacher's account from their school

- [View active borrowings](#)

This page lists all the active borrowings for books in their school

- [Go to main book page](#)

Redirects to the page where all books are displayed. When a book is in this handler's school, option to view reservations, edit reviews as well as edit book information are available

- [Register a return](#)

By specifying username and ISBN for the book, a return is registered

- [Register borrowing](#)

By specifying username and ISBN for the book, a borrowing is registered

- [Search for a book](#)

Based on the desired parameters, search through the database for a book that fits them

- [Handle user accounts](#)

Here, the handler can deactivate and delete user accounts from students and teachers that are on their school

- [Add new book](#)

On this page, the handler can add new books

- [Search user](#)

By specifying a username, the handler can view information about a user as well as active reservations and borrowings

- [View overdue returns](#)

By specifying days/first name/last name, the handler can view all the overdue returns that fit the specified parameters

- [View user ratings and averages](#)

By specifying username/theme, the handler can view the average ratings of the books that fit those categories

- [My profile](#)

Here the handler can view their profile, and make changes

- [Add person](#)

On this page, a new person is added to the handler's school. Also, a person id is printed on the screen, through which the person can register to use the application

### 3) Users

Users are students and teachers in the schools

- Search for books

Based on the specified parameters the users can search for a book that fits into them

- My profile

Users can view their profile, while users who are teachers can also change some of their information

- Go to main book page

On this page, all the books are displayed, and reservation can be made, as well as reviews can be added

- View reservations

On this page, a user can see their active reservation, as well as the date, and is also able to cancel them

- View borrowing history

Here, a user can see all the books they have borrowed as well as information about each borrowing

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### Usage of the application

Basically, this application functions as an online library where multiple schools can list their books so students from different areas can borrow and read them. Simple users (students and teachers) can view books and make reservations about books they want to borrow. Each teacher can borrow one book per week, and make one reservation, whereas each student can borrow 2 books per week and make 2 reservations. Moreover, each user can borrow a book without a reservation, from a library, if the above limits are kept. The procedures of borrowings and returns of books, are done by the handler. Each handler can register borrowings, without reservation for a book of their school's library, and mark borrowings as reservation, when the user picks up the book. They are also responsible for noting the returns of books. Reservations made by users are either marked as active, or inactive. Active reservations mean that when the reservation was made, there were copies of the book available, thus one copy is reserved for one week, for the user who made the reservation. Reservations marked as inactive are reservations that were made when no copies were available and will be executed based on the time they were made (the earliest reservation will be made active before the rest). Inactive reservations are marked as active, when enough copies of the book have been returned from the users who borrowed them. Users can also write reviews about books they have or have not borrowed, and rate them on a scale of 1-5. The handler then approves the reviews, at which point they are displayed below the book they were made about. New students are added to their schools by the handler, and upon adding them the handler provides a number (person\_id) with which the students can register to the application and wait for their account's activation, to start using the application. New schools can be added by the administrator.

For credentials about each user, check the "credentials" file.