



# Bibliotheca

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## ABSTRACT

Our Online Library Management System, **Bibliotheca** maintains the information about the books present in the library, their authors, the members of library to whom books are issued, library staff and all. This is very difficult to organize manually. Maintenance of all this information manually is a very complex task. Owing to the advancement of technology, organization of an Online Library becomes much simple. The Online Library Management has been designed to computerize and automate the operations performed over the information about the members, book issues and returns and all other operations.

## INTRODUCTION

- Our Library Management software is for monitoring and controlling all types of transactions in a library .The project “Bibliotheca” is developed in java, which mainly focuses on basic operations in a library like adding new books, and updating new information, searching books and members and return books.
- Our Library Management System is an application which refers to library systems which are generally small or medium in size. It is used by librarian to manage the library using a computerized system where he/she can add new books. Books and student maintenance modules are also included in this system which would keep track of the students using the library and a detailed description about the books a library contains. With this computerized system there will be no loss of book record or member record which generally happens when a non computerized system is used.

## RESULTS

- Our library database system is an infrastructure that allows users to search books and book content, add/remove, and download selected books. The problem faced is that library users require an efficient method to find a specific book or keyword(s) within a book given a continuously expanding library. We have also solved the problem for catalogue management and book circulation in our project, Bibliotheca.
- The purpose of our library management system, **Bibliotheca** is to operate a library with efficiency and at reduced costs. The system being entirely automated streamlines all the tasks involved in operations of the library. The activities of book purchasing, cataloging, indexing, circulation recording, and stock checking are done by the software. Such software eliminates the need for repetitive manual work and minimizes the chances of errors.
- We have also solved the problem for catalogue management and book circulation in our project, Bibliotheca.

## DISCUSSION

- Library Management System is a computerized system which helps user(librarian) to manage the library daily activity in electronic format. It reduces the risk of paperwork such as file lost, file damaged and time consuming. It can help user to manage the transaction or record more effectively and timesaving.
- Our system provides a computerized version of library management system which will benefit the students as well as the staff of the library. It makes entire process online where student can search books, staff can generate reports and do book transactions.
- It also has a facility for student login where student can login and can see status of books issued request as well for book or give some suggestions. It has a facility of teacher's login where teachers can add lectures notes and give necessary suggestion to library and add info about workshops or events happening in our college or nearby college in the online notice board.

## MODULES AND METHODS

- For your better understanding, we have divided the code into the following functions, and will be explaining function-wise:
  - Main class
  - Login
  - Connect
  - Create/ Reset
  - User Menu
  - Admin Menu

- Also, we have solved the recurring problem of catalogue management and book circulation in our library management system, **Bibliotheca**.



Figure 1. Project title and logo.

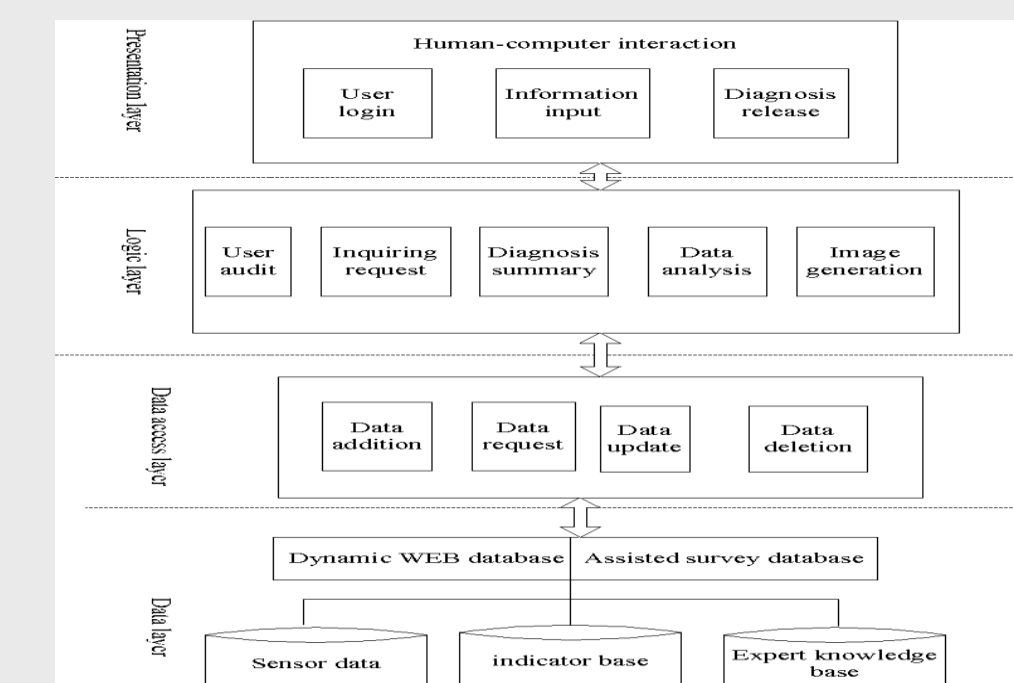


Figure 2. Flow diagram.

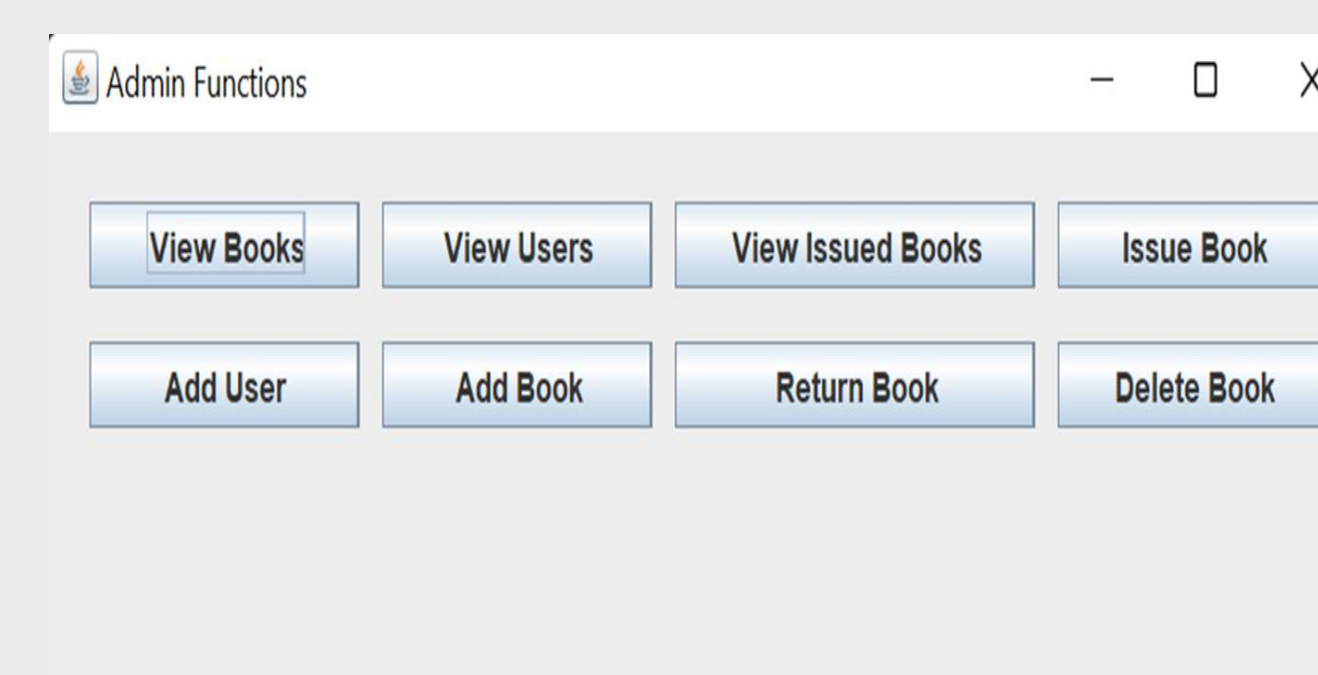


Chart 1. Admin functions of Bibliotheca

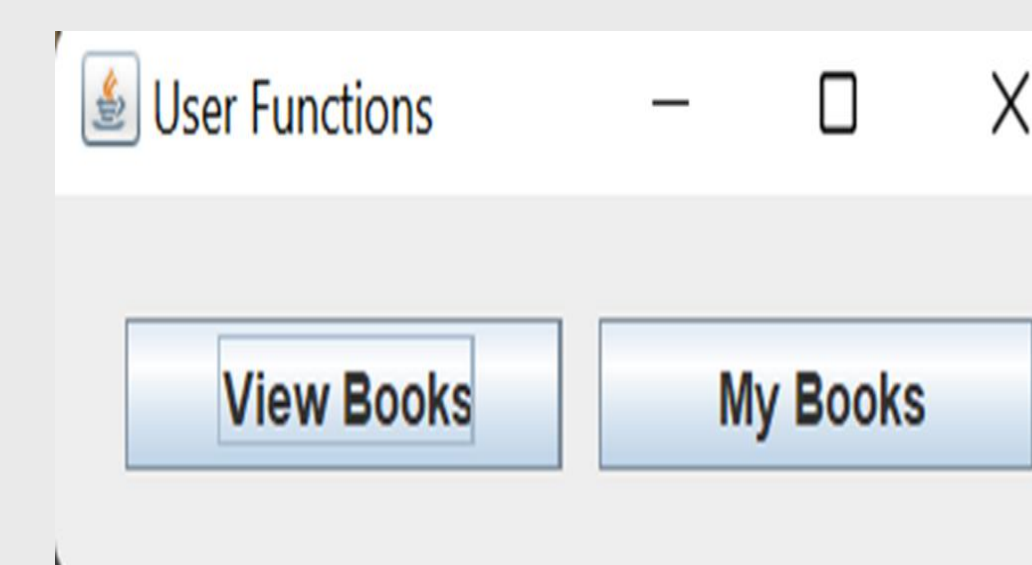


Table 1. User functions of Bibliotheca

## CONCLUSIONS

Our Library Management System Project in Java is one of the various systems developed that has numerous functionalities that meet the current requirements of the present-day library system. To enhance it, you can add features like RFID, SMS to remind users of the return date, and others. Java has many features that can be explored to create such wonderful programs.

## REFERENCES

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