

Library Management System

with full authentication.

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Overview

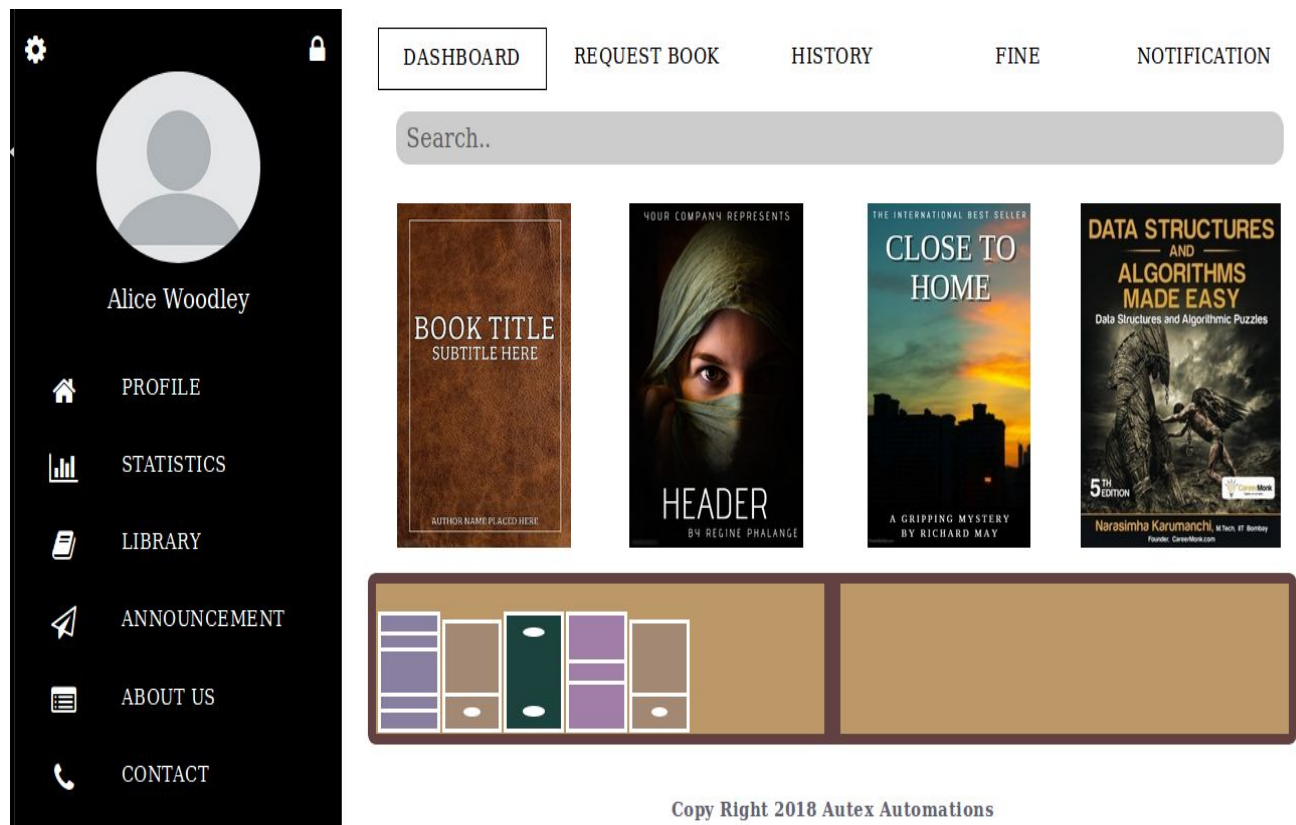
{Name of software} software is full featured library management system with many key features like **Analytic, Easy to Manage, Flexible** etc.. and manages all functionality of library digitally. Fully customizable views for library admin and member separate it from the existing solutions in the market. Suitable for large and small scale libraries and much flexible for user. It can be used by the Schools, Colleges, universities and public library. **This can be easily integrated by any of your existing solution.** Also focused on **data privacy** of user by using encryption.

Features



- **User Dashboard [1]**
 - Search for a book [1.1]
 - Pre-reservation of book [1.2]
 - Request for new book [1.3]
 - Create own library shelf [1.4]
 - Notification [1.5]
 - New book added in library [1.5.a]
 - Pre-notify before return date [1.5.b]
 - Request approval/decline [1.5.c]
 - History [1.6]
 - Issued book history [1.6.a]
 - All past transaction history [1.6.b]
 - Analytic [1.7]
 - Searched book request analytic [1.7.a]*
 - Most requested book(related to your department)[1.7.b]
 - Fine [1.8]
 - Total fine [1.8.a]
 - Payment (later feature) [1.8.b]
- **Librarian Dashboard [2]**
 - Add a new book [2.1]
 - Single mode [2.1.a]
 - Bunch mode [2.1.b]
 - Delete a book [2.2]
 - Update book details [2.3]
 - Issue book [2.4]
 - Status of student (on card scan) [2.4.a]
 - Return book [2.5]

- Notification [2.6]
 - Requested books [2.6.a]
 - Departmental notice [2.6.b]
- Analytic [2.7]
 - Issued book [2.7.a]
 - Request book analytic [2.7.b]

Dashboard Snapshot



Search Snapshot

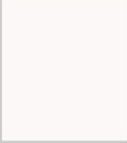



Alice Woodley

- PROFILE
- STATISTICS
- LIBRARY
- ANNOUNCEMENT
- ABOUT US
- CONTACT

DASHBOARD REQUEST BOOK HISTORY FINE NOTIFICATION

Search..



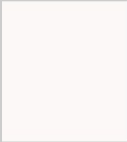
test_4 1

Testing_data_4

★★★★☆

Pre-book

read more test_auth_4




Mathematics-3 102

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis.

Pre-book



read more -Ramanajun



Mathematics-3 102

Sed ut perspiciatis unde omnis iste natus error sit




History Snapshot

Alice Woodley

- PROFILE
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DASHBOARD REQUEST BOOK HISTORY FINE NOTIFICATION

Title	Detail	Issue Date	Return Date
 Mathematics-1 by Ramanajun	bdshgsdhhhshgdghfng...	19/11/2018	29/11/2018
 Mathematics-2 by Ramanajun	bdshgsdhhhshgdghfng...	19/11/2018	29/11/2018
 Mathematics-3 by Ramanajun	bdshgsdhhhshgdghfng...	19/11/2018	29/11/2018

Feature description

[1.0] User dashboard is the graphical interface for the user to access the features provided by the library. It is a user friendly interface so that any age group (>5) can easily use it. This interface include many feature to make the life easier and hassle free. Following are the key feature described below :

[1.1] User can **search** for a **book online** that are available to the library. So that before visiting to the library they can search for the book they need. And also we suggest them related book if searched book is not found in library. User can search by applying filters on there search result like **rating, department, author, title etc.**

[1.2] User can pre-book there book in library if book are available in the library. If book is not available then user get suggested another book or continue with pre-booking if book is available in future then he/she get notify. Ever pre booking request is valid for 10 to 12 hours. Before 2 hours expires of request user get notify.

[1.3] User can request for addition of new book in library, and his/her request get approved/decline by the librarian further request is forwarded to the higher department for approval.

[1.4] User can create their own virtual shelf where user can kept those books which they are more needed. Those book which are kept in virtual shelf are easily accessed by the user for pre-booking. User can add book in there virtual shelf by searching it only. And user can also manage there shelf.

[1.5] A notification is a **message**, icon or another symbol that appears when an application wants you to pay attention. Notifications are a way to let you know that something new has happened so you don't miss anything that might be worth your attention and appears whether you are willing to know that information or not, so you don't miss **important information** or activity that's taking place in the library.

[1.5.a] Whenever any book will be added in the library through librarian dashboard then the system will send the notification of adding a new book in the collection of books in the library to the user dashboard of all the users. Librarian can also select the categories of users like course and department etc. so that only specific type of users can get the notification of adding a new book. This is how all the users can get only those notifications which relevant to them.

[1.5.b] If any user had issued any book from the library then the a notification of reminder to return the book within time to library will be appeared on the user dashboard. If the user had already returned the book to the library then the user will not get any notification regarding this. Notification will also contain the information of how much time is left to return the book.

[1.5.c] If any user had requested to add any new book to the library and the librarian had also responded to that request either by accepting or by rejecting it then the user who made that request will get the notification of the response by the librarian.

[1.6] History is the record or collection of the information regarding all the activities performed by you in the past related to the library.

[1.6.a] All the users can see the entire history of issued books by them till now in the user dashboard. Users can also see the other details related to the issued books like issue date and return date.

[1.6.b] Users can also see the history of all the fines or any other payment paid by them along with their issued book history in the user dashboard.

[1.7] Analytics is the discovery, interpretation, and communication of meaningful patterns in data. Especially valuable in areas rich with recorded information, **analytics** relies on the simultaneous application of statistics, computer programming and operations research to quantify performance.

[1.7.a] There is a key feature that represents the analysis of the mostly **searched book** in the form of a bar graph or pie chart. This gives the record of the most trending and demanded book.

[1.7.b] The analysis chart of most **requested book** is also formed and is represented at the user end. It also keeps you updated with the books related to your department.

[1.8] Fine is the charge taken from the user if the book is not returned on time. The late fee is imposed and is added to the user's profile.

[1.8.a] The book should be returned within 15 days from the issue day otherwise a fine of rupees 10 per day will be added as a the total amount.

[1.8.b] For the convenience of the user the fine imposed can easily be cleared since the payment can be done online as well as offline. The credit card , debit card and netbanking are accepted.

[2.0] Librarian dashboard is the graphical interface for the librarian to manage all the task online. The design of dashboard is created on major focus on its user friendly design and a easy to use as other traditional library management system. The dashboard almost covers every aspect of library that can be handled online/digitly. Following are the key feature described below.

[2.1] Librarian can add new books to there portal to easily get the status and record of books available to the library. There will two options available to add a new book to the library portal described below.

[2.1.a] Single mode as name suggests it would be used to add a single book that have only one copy of it. Librarian has to add some details about the book. Details includes

- Title of the book
- Author of the book
- Edition of the book

Or you can add the details by reading the barcode printed on the book. This would add the details automatically to the required field

[2.1.b] Bunch mode

[2.2] The librarian have the access to the dashboard where he/she can easily **delete** the record of the books that is no more available at their library center. This keeps the records up to date and hence helpful for the user to search for the required book in the list.

[2.3] There are much of the addition of new books on the daily basis to the library. The librarian can easily **update** the name of the new books along with the updation of the edition of books. Hence, proves helpful to maintain the list for the users.

[2.4] The user can **issue** the required book for a period of **15 days**. The process of the book issue is based on scanning library ID which pops up the user's profile on screen. Further the book is scanned and this add up the details to the profile. Incase of pre imposed fine the user must have to clear the previous dues.

[2.4.a] The **status** of the student is updated on the dashboard. The profile includes the previous books issued and late fee imposed along with all the previous transaction.

[2.5] The user can **return** the book after some time period. The process of returning the book is the same. The library ID is scanned which pops up the user's profile. On scanning the code on the book the profile gets updated. Incase of returning the book after the period of 15 days , the fine is calculated and added to the profile.

[2.6] Notification is an important feature that allows the users to be updated with all the important details of the library. The feature of this notification can be set to on or off as per the requirement. Every addition or deletion of new book is updated along with any change in the management.

[2.6.a] The user can **request** the required book to the library. The moment it gets available and the librarian updates the book list in the dashboard. The notification pops up on the user's profile.

[2.6.b] The user also gets a list where they can select to their field of their interest. Hence, any updation of books in their **department** can easily be conveyed as a notification popup to the user.

[2.7]

[2.7.a] The analysis chart is made up on the basis of **issued book**. This is available at the librarian end such that he is able to co-up the with maximum no. of books being issued and keeps up the record of availability of the books.

[2.7.b] The analysis chart is also made for the most **request book** and hence made available at the librarian end so that he would maintain the books in the library. The data/information is represented in the form a graph.

Requirement analysis

- **Software requirement**
 - **Frontend**
 - Atomic and wireframe(software)
 - Html5
 - Css3
 - Material design
 - Material icon
 - Reactjs
 - Webstorm
 - Visual studio
 - Brackets
 - Draw.io
 - Google docs
 - Mysql
 - Mongodb
 - flexbox
- **Hardware requirement**
 - Heroku (testing server)
 - Godaddy (domain name)
 - Dev dependencies
 - Ubuntu
 - Aws (deployment server)
 - Web-hosting
 - Db hosting

Layouts