Library Management System

The abstract of a **library management system** is one that organizes and saves books' information electronically to meet the needs of students.

Both students and library managers benefit from the system, which allows them to keep track of all of the books available in the library at all times. It allows both the administrator and the student to look for the book they want.

Colleges must now keep a constant eye on the books they issue and return, as well as the transaction records. If this operation is completed manually, it will be time-consuming and prone to errors.

Enabling the system to maintain track of information including the date or borrowing, the date or book return, and even detailed book information eliminates the manual recording of this information and most importantly it reduced the risk of errors.

As a result, this method greatly lowers manual effort and allows for a seamless flow of library activities by eliminating the possibility of errors in the details.

List of Modules:

- **Book Information Recording**: All the information of each books should be recorded into the system to provide the borrowers or the students the book references that they want to borrow.
- **Administrator Login**: The admin login will require the school librarian their username and password to have the main access to the system and secure every information ang transaction done in the system.
- **Users/Borrowers' Login**: This will also require the staff or students their username and password provided when they were registered into the system. Their username and password will serve as their access to the system in terms of borrowing books or inquiring for books.

- **Book Monitoring and Updates**: The system should save the borrowers info and the count of books that are borrowed. These records should also be updatable when the books are returned.
- **View and Check Information**: The admin can view and check the books that are borrowed and who were the students that borrowed them. Students can also view their borrowing transactions just like the book information, date of book borrowing and returning.
- **Borrowing Information**: The borrowing information should consist the important details of the borrowers and the books borrowed by each borrowers. This information should also record the day of borrowing as well as the returning of the book.
- **Borrowing Records:** This will record all the transaction made and are stored for a period of time to serve as reference for important matters.

SOFTWARE AND HARDWARE REQUIREMENTS

This section describes the software and hardware requirements of the system

SOFTWARE REQUIREMENTS

Operating system- Windows 10 is used as the operating system as it is stable and supports more features and is more user friendly.

Database- MYSQL-MYSQL is used as database as it easy to maintain and retrieve records by simple queries which are in English language which are easy to understand and easy to write.

Development tools and Programming language- PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language.
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DATA FLOW DIAGRAMS DATA FLOW DIAGRAM FOR TEACHER LOGIN

After entering to the home page of the website , teacher can choose the TEACHER LOGIN option where they are asked to enter username & password , and if he/she is a valid user then a teacher login page will be displayed.

DATA FLOW DIAGRAM FOR STUDENT LOGIN

After entering to the home page of the website , student can choose the STUDENT LOGIN option where they are asked to enter username & password , and if he/she is a valid user then a student login page will be displayed.
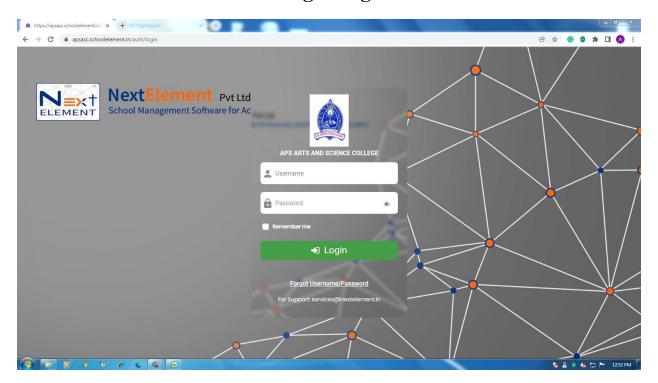
FUTURE SCOPE

This 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 as well request for book or give some suggestions.
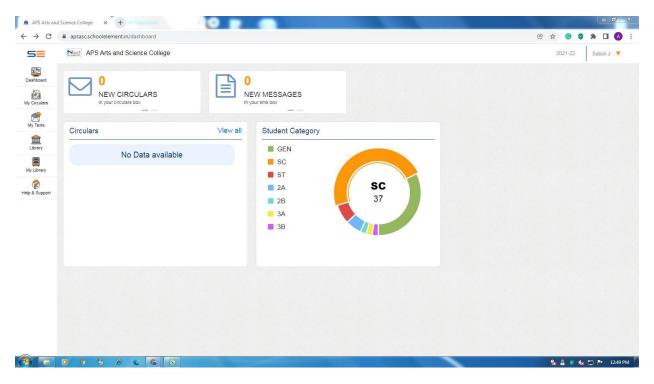
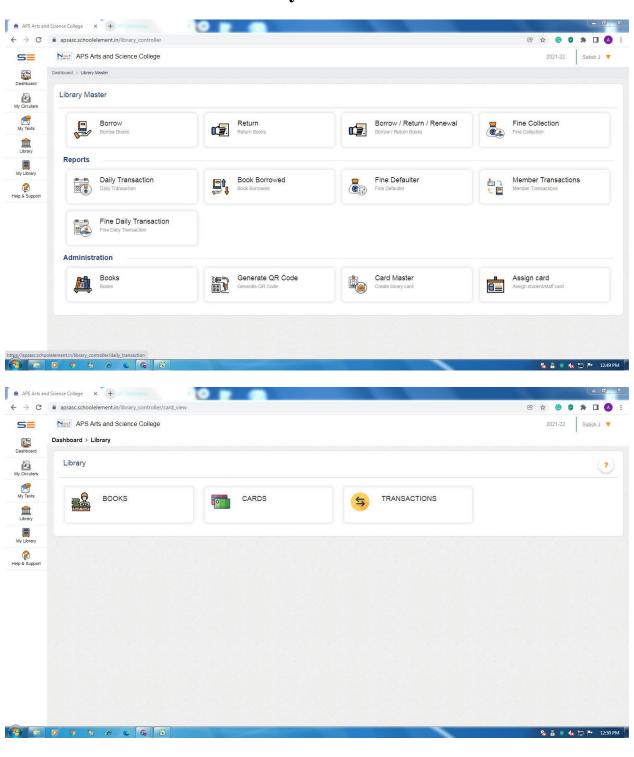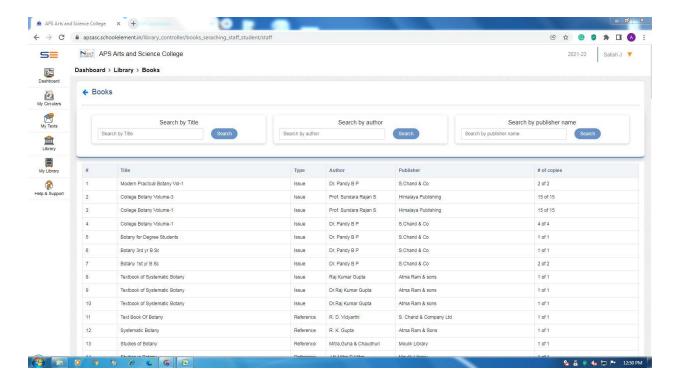Thank you,

MAHESH H.S

Screenshot

Login Page

Home Page

Library User Menu

APS Arts and Science College

Dashboard > Library Master

Library Master

Borrow Borrow Books	**Return** Return Books	**Borrow / Return / Renewal** Borrow / Return Books	**Fine Collection** Fine Collection

Reports

Daily Transaction Daily Transaction	**Book Borrowed** Book Borrowed	**Fine Defaulter** Fine Defaulter	**Member Transactions** Member Transactions
Fine Daily Transaction Fine Daily Transaction			

Administration

Books Books	**Generate QR Code** Generate QR Code	**Card Master** Create library card	**Assign card** Assign student/staff card

https://apsasc.schoolelement.in/library_controller/daily_transaction

APS Arts and Science College

Dashboard > Library

Library

BOOKS	**CARDS**	**TRANSACTIONS**

Books Menu

Borrow Book Page