E-Library Management System using Web Programming

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Abstract:- **The library is a collection of books. With the help of library people can gain more knowledge. It defines for use or borrowing the books by the students. In traditional library, books can be accessible only within the library premises, and if student wants to read or borrow a book, need to contact librarian and it must be done physically. Only few books can be allowed to take out. So, to solve this problem, e-LMS is introduced. The e-LMS defines that student can access books on the internet at any time without limit. It picturizes the library digitally. The e-LMS is very useful for the University students. This e-library broadly categorized with various genres of the books which are in our respective library. The students are able to select their category of learning and can find the respective book through search bar. This e-library allows the students to pin their respective books as their wish list, without following nostalgic search. The students can also enjoy with to-do list application by planning the topics to finish on the particular day. They can immensely penetrate into the responsiveness of the e-library design. There is also other feature, where they can make the notes simultaneously while reading eBook. It is very secured in storing the credential of the users.**

Keywords: e-Library, eBook, Wishlist, To-Do List, Notes, Responsive Design, Full Stack, Internet

I. INTRODUCTION:

A library is a place where a collection of books is available which can access by the users. It enhances the various parts of knowledge and civilization among the students. It guides students to promote their views. It always needs human support to do any activities in a traditional library. The details of books are scribbled on the paper for reference. To examine any data, they have to refer to the notebooks. They have to align books on the shelves and mark them. Missing or theft the book will be a serious confusion disaster for librarians. Therefore, it causes monotonous among the staff. Consequently, it builds headaches among the students due to the slow process of staff. To bring the library into a technological way, we presented a process called the e-Library Management System. It is an automatic system that reduces work burden with a single click. It will manage, organize, and variants the library tasks. This e-Library Management System supports the librarian and makes students concentrate even when they are away from the library. On account of this, the user can access the library at anytime, anywhere if they have internet access. It features a familiar and well-thought-out, attractive user interface. This application is easy for both beginners and advanced users. e-

LMS has seven main things to know like attractive user-experienced design, wish listing or pinning application of books, application of bookmarking the page, To-Do list application, Notes application, search bar, and genres of books which can be visible in the form of separate boxes.

II. PROBLEM STATEMENT:

Libraries are used to store books, but require a system to go through a specific book or specific content within a book. A library database system is an infrastructure that allows users to search books. E-Library is a collection of information that is stored and accessed digitally. In a traditional library, students can have access only within the library, after coming out, they can't have a chance to look over the book that they wish for. To study the books further, they need to carry the books with the help of a librarian. Whereas in digital libraries, they don't have that problem, they can pin the respective books and can start reading in the future. The e-Library means to provide a central location for accessing books on a particular topic. The e-Library must keep topics separate, otherwise, it would be useless. The e-Library should also have a user interface that is easy to use.

III. LITERATURE SURVEY:

The e-Library Management System which helps librarian by [1] Abir Roy, AninditaMridha, Dibyajyoti Paul, Jewel Dutta, SubhojyotiMondal, Susmitha Giri. This is an application which refers to library systems which are generally have no source to maintain the library. It is used by librarian to manage the library using a computerized systems where he/she can add new books, videos, and page sources. Books and student maintenance models are also included in this system which would keep track of the students using the library and also a detailed description about the books which library contains. All these applications help librarian to manage the library with more convenience and in a more efficient way as compared to library systems which are not engraved with technology.

The e-Library Management System which manage the information present in the books by [2] Pankaj Keshari, Priya Maurya, Dr.P. Gururama Senthivel. This application is the online platform where multiple books are available user can read books online and also, they can download from the site, nowadays it helps for all the people to read books without carrying it. And there are so many features available

such as users can read a book, add books to their dashboard, and also download it.

Library Management System which is a huge collection of books and resources are available by the users by [3] A.P. Shanmugam, A. Ramalakshmi, G. Sasthri, S. Balachandran. This application is an automatic system that reduces the work burden of the staff/librarians through a single click. It will manage, organize and understands the library task. The e-LMS supports the librarian to manage details from the library stock. Here we mix up all library data into the SQL server. Preliminarily the librarian has to add student and book details through the Library Management System. Due to this, the user can access the library at any time.

Drawbacks:

- The existing system does not contain attractive features.
- Students need to search for a particular book after logging in every time.
- Students cannot organize or make a wish list of books.
- Students need to scroll the pages without having the bookmark.

IV. PROPOSED SYSTEM:

The system to be developed here is an e-Library facility. It is the web development sector. This e-Library management system is designed with many features like making wish lists, covering the respective topics with the help of to-do lists, and interpreting in between reading the books with the help of the notes feature. These features are not present in the existing system. The system is developed by using front-end and back-end web development. The existing system has fewer features compared to the proposed system. The proposed system is an automated library management system. Through our software users can search books according to the given genres. The difficulties in managing the library have been rectified by implementing the application with the technology.

Advantages:

- User-friendly interface
- Fast access to the database
- Less error
- More storage capacity
- Search facility
- Look and feel the environment
- Quick transaction

V. SYSTEM ARCHITECTURE

In system architecture, we can understand that students need to log in or register through their ID and students can find the search bar and different categories section of the books and students can select their respective book. They can make a wish list, or to-do list, and interpret the note's application. Students can use all these applications to make their reading way and they can log in back with their registration ID and password and can find their wish-listed books on their notes.
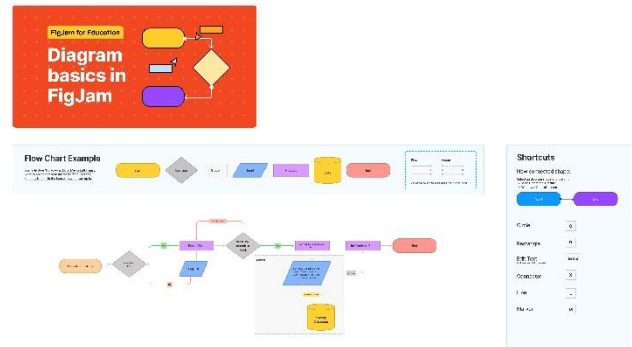

Fig: 1-eLibrary System Architecture

Implementation:

This system is implemented by full-stack web development. It is organized with front-end web development and back-end web development. The Front-end part contains the structure and appearance of the e-Library, and the Back-end part contains the database and working condition of the website, for privacy, and login credentials, uses API and other security sectors.

VI. RESULTS AND OUTPUT:

"Libraries store the energy that fuels the imagination. They open up windows to the world and inspire us to explore and achieve, and contribute to improving our quality of life."
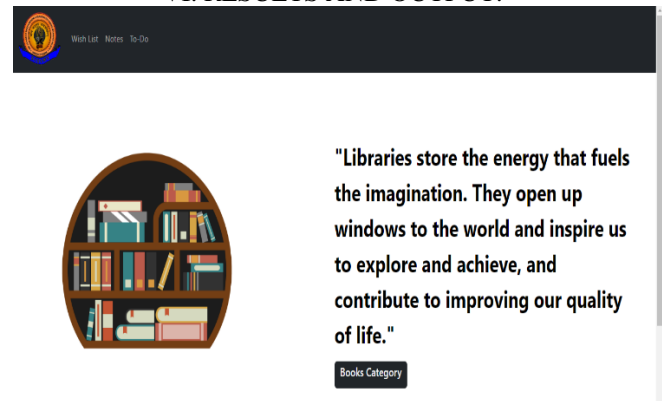
Books Category

Fig: 2-Main Site Page

The above figure mainly describes about the home site of eLMS. It is the site helps students to go on to the other parts of the overall site. It also appears with the book category button where that takes place to category-wise books, and from that students can choose.

Education
In this Section, you'll be getting all the books related to education.
Go to Books

Horror
In this Section, you'll be getting all the books related to horror stories and critical life incidents.
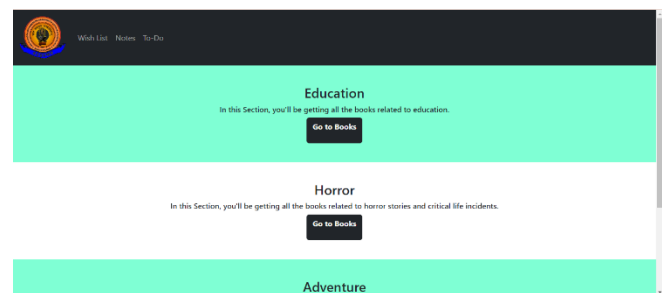Go to Books

Adventure

Fig: 3-Category Site Page

The above figure helps students to select the respective category in reading. According the category, books will be

appeared. So, it helps students to go faster into knowing books without searching for longer times and sorting out.
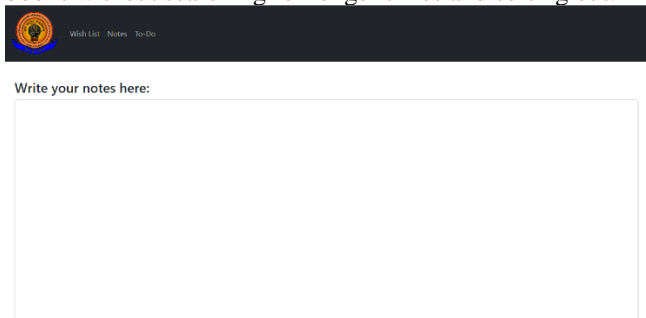

Fig: 4-Notes Site Page

The above figure describes about the interpretation area, known as notes. This helps students to get scope on the topics they learnt without vanishing those from the brain. So, they can even look over it after many days without any loss in data. This helps student to memorize the topics which they learnt from the eBook.
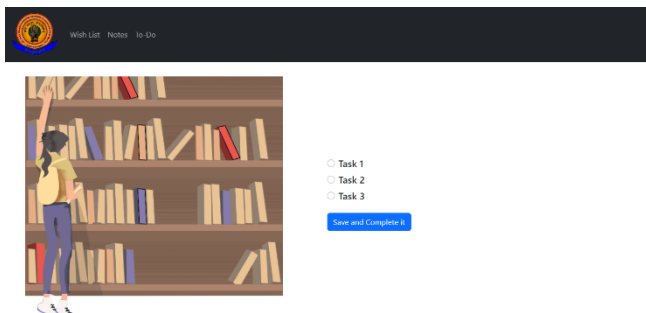

Fig: 5-Task Site Page

The following figure is the easy way to students to be productive. They can make it as tasks of some topics. Likewise, they can start learning from topic to topic.
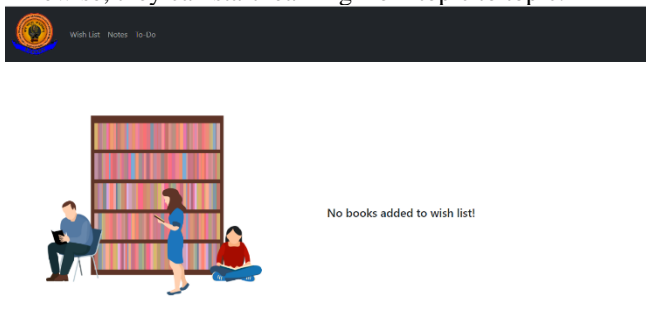

Fig: 6-Wish list Site

The above following site defines the wish listing of books. If student wants to read further, they can pin the books and can continue reading. This helps to reduce the search of books which they missed.

VII. CONCLUSION AND FUTURE ENHANCEMENT:

This e-Library management system supplication is a very useful website for university students. This application broadly categorized various genres of books which are in our respective libraries. This application allows the students to pin their respective books on their wish lists. This application helps students to learn in a user-friendly way. It is now developed with the web application that is mostly connected to front-end and back-end web. In the future, it can be implemented well with a user interface and user-experienced design.

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