



JIS COLLEGE OF ENGINEERING Central Library Management System

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Abstract: Online Library Management System is a system which 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 system will also allow the students and the faculties to issue, return, and to check the statistics of a book. 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. This computerization of the library helps in many instances of its maintenance. It reduces the workload of management as most of the manual work done is reduced.

Index Terms - JavaScript, HTML, CSS, React JS

INTRODUCTION

The library management system will help the students/faculties of our college to issue, return, or to check the statistics of a book in the college library. Also, the admin can maintain the books and the students in this system. By this system the students don't need to stand in a long queue and to fill-up a form for issuing a book. Just by sitting at home they can complete the form fill-up and can collect the book from the college library in the given time.

SOFTWARE TOOLS USED:

The front end is designed using of html, CSS, JavaScript.

HTML- HTML or HyperText Markup Language is the main markup language for creating web pages and other information that can be displayed in a web browser. HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like (<html>)). The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page. HTML elements form the building blocks of all websites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages.

CSS- Cascading Style Sheets (CSS) is a style sheet language used for describing the look and formatting of a document written in a markup language. While most often used to style web pages and interfaces written in HTML and XHTML, the language can be applied to any kind of XML document, including plain XML, SVG and XUL. CSS is a cornerstone specification of the web and almost all web pages use CSS style sheets to describe their presentation. CSS is designed primarily to enable the separation of document content from document presentation, including elements such as the layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification. CSS can also allow the same markup page to be presented in different styles for different rendering methods, such as on-screen, in print, by voice (when read out by a speech-based browser or screen reader) and on Braille-based, tactile devices. It can also be used to allow the web page to display differently depending on the screen size or device on which it is being viewed. While the author of a document typically links that document to a CSS file, readers can use a different style sheet, perhaps one on their own computer, to override the one the author has specified. However, if the author or the reader did not link the document to a specific style sheet the default style of the browser will be applied. CSS specifies a priority scheme to determine which style rules apply if more than one rule matches against a particular element. In this so-called cascade, priorities or weights are calculated and assigned to rules, so that the results are predictable.

JAVA SCRIPT- JavaScript (JS) is a dynamic computer programming language. It is most commonly used as part of web browsers, whose implementations allow client-side scripts to interact with the user, control the browser, communicate asynchronously, and alter the document content that is displayed. It is also being used in server-side programming, game development and the creation of desktop and mobile applications. JavaScript is a prototype-based scripting language with dynamic typing and has first-class functions. Its syntax was influenced by C. JavaScript copies many names and naming conventions from Java, but the two languages are otherwise unrelated and have very different semantics. The key design principles within JavaScript are taken from the Self and Scheme programming languages. It is a multi paradigm language, supporting object-oriented, imperative, and functional programming styles. The application of JavaScript to use outside of web pages—for example, in PDF documents, site-specific browsers, and desktop widgets—is also significant. Newer and faster JavaScript VMs and platforms built upon them (notably Node.js) have also increased the popularity of JavaScript for server-side web applications.

REACT JS - React.js is an open-source JavaScript library that is used for building user interfaces specifically for single-page applications. It's used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components. React allows developers to create large web applications that can change data, without reloading the page. The main purpose of React is to be fast, scalable, and simple. It works only on user interfaces in the application. This corresponds to the view in the MVC template. It can be used with a combination of other JavaScript libraries or frameworks, such as Angular JS in MVC.

SCREENSHOT OF PAGES

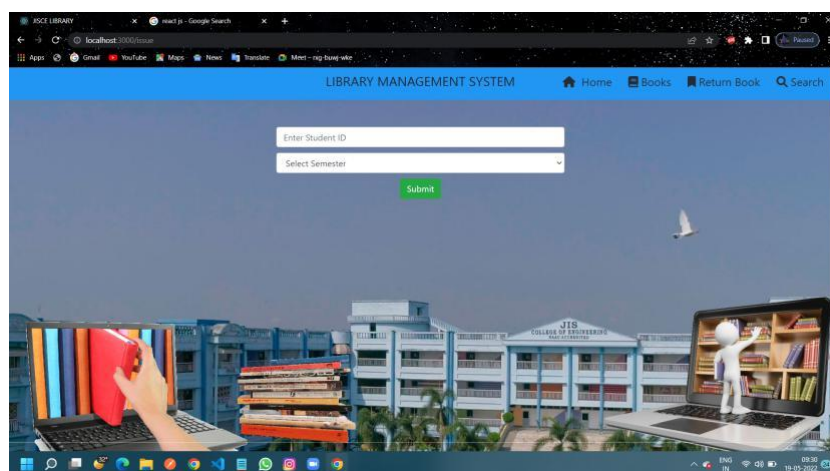
Home Page

This is the home page of the web page.



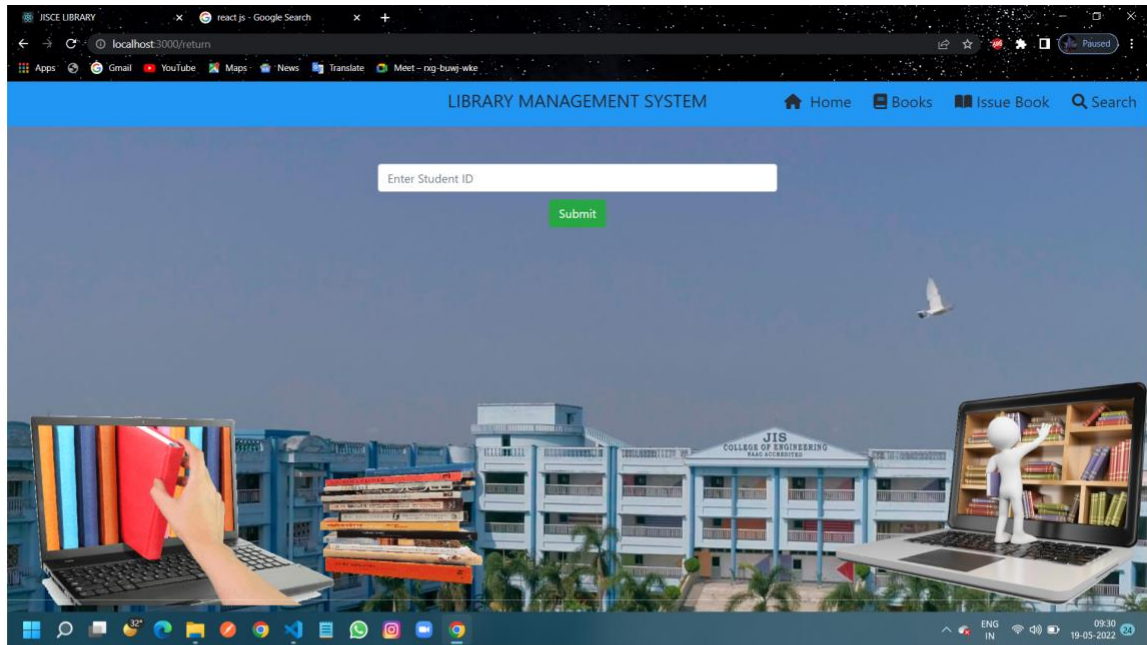
Issue Page

In the issue page a student can login by using their college id, select the semester and can look for the books available.



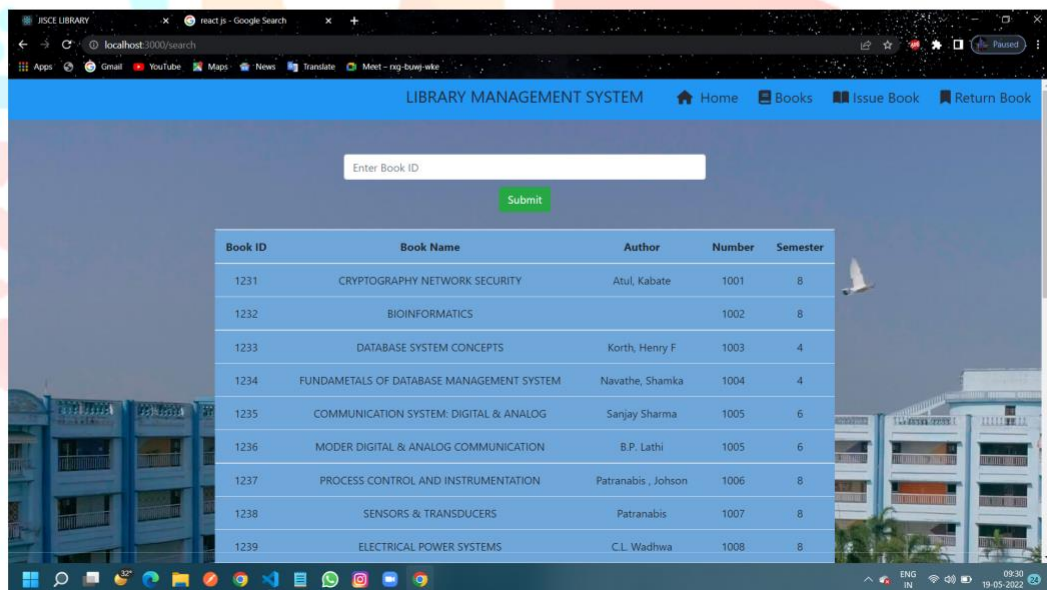
Return Page

In the return page a student can look for the books that he/she have issued and can easily return the books.



Search Page

In the search page a student can easily search for book and check the status of the book.



IV. CONCLUSION

This website provides a computerized version of the library management system which will benefit the students as well as the staff of the library. It makes the entire process online where students can search books, staff can generate reports and do book transactions. It also has a facility for student login where students can login and can see status of books issued as well as request for books.

V. FUTURE SCOPE

In future the admin side will also be developed in which the admin can login to the portal and can easily upload the data of the new books of the library. They can easily look for the status of the students that have logged in to the portal for the books and can maintain the books and the students in the portal for the proper maintenance of the library.

There is a future scope of this facility that many more features such as online lectures video tutorials can be added by teachers as well as online assignments submission facility, a feature of group chat where students can discuss various issues of engineering can be added to this project thus making it more interactive more user friendly and project which fulfills each user need in the best way possible.

VI. REFERENCES

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