BIOS : Jurnal Informatika dan Sains

SEAN INSTITUTE
VOL : 1 No: 2 TAHUN 2023
E-ISSN: 2988-6910

WEB-BASED SCHOOL LIBRARY INFORMATION SYSTEM

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Abstract. As we know that the library is a place to maintain and improve the quality of education, because the management of library information systems that are carried out manually has many shortcomings in terms of retrieving borrower and return data, which makes students sometimes not get the books they want to borrow because they don't know information about the library when they come to the library. And also library administrators are overwhelmed in compiling and searching for borrower data while processing book return data, because the focus of the author's focus is to overcome the shortcomings contained in the library's manual information system, and keep up with the times by using technology utilization using a computer technology-based information system or CBIS (Computer Based Information System). The author takes the title "WEB-BASED SCHOOL LIBRARY INFORMATION SYSTEM" with the hope that through this web-based library information system can help students and also provide convenience for library administrators in managing and monitoring information about the library online.

Keywords.
Libraries
Technology
Information
Universities
Web
Systems

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INTRODUCTION

The library is a place that serves to maintain and enhance the quality of education. Inside the library, there is a well-organized collection of books to facilitate the learning process of students. Usually, the library is a building that can be directly accessed by students when they want to read or borrow books. However, there are sometimes some constraints, such as books being borrowed or a lack of information about the list of books available in the library.

In the development of time, libraries have also undergone advancements. To overcome these constraints, technology can be utilized by using a computer-based information system or Computer Based Information System (CBIS). The creation of this library information system aims to efficiently utilize technology in the library's operations. In addition to facilitating students in obtaining information about the

library, this system also helps library administrators manage and monitor loans online, anytime and anywhere.

The main focus in the development of this web-based system is to facilitate students and library administrators in managing library information. Therefore, the author chose the title "Web-Based School Library Information System" with the hope that through this web-based library information system, students can easily access information about the library, and library administrators can easily manage and monitor library information online, anywhere and anytime.

METHOD

In the design of a school library administrator information system website, there are several methods that can be used. Here are some commonly used methods in the design process:

1. User Needs Analysis: This method involves interacting with potential system users, such as school library administrators, to understand their needs. It involves interviews, observations, and discussions with users to identify the required features and functionalities of the system.
2. User Interface (UI) Design: This method involves designing a user interface that is easy to use, intuitive, and visually appealing for library administrators. It involves creating sketches, prototypes, and visual designs that depict the layout, navigation, and other UI elements.
3. Database Design: This method involves designing an appropriate database structure to store library data, such as book information, loan transactions, and others. It involves identifying entities, attributes, and relationships between entities, as well as designing tables and database schemas.
4. System Development: This method involves developing software to implement the functionalities of the library administrator information system. Common software development methods include the waterfall model, the spiral model, or agile methods such as Scrum. It involves programming, testing, and integrating system components.
5. Testing and Validation: This method involves testing the library administrator information system to ensure its quality and reliability. It includes functionality testing, integration testing, performance testing, and validation involving system users.
6. Implementation and Launch: After development and testing are completed, the library administrator information system can be implemented and officially launched.
7. Maintenance and Support: After the launch, the library administrator information system needs to be continuously maintained and supported. This

involves monitoring system performance, handling issues, improving functionalities, and providing technical support to users.

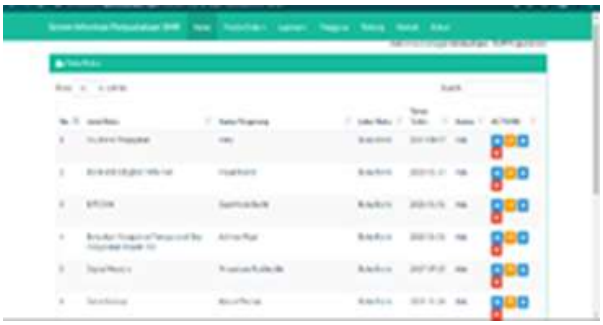
RESULTS AND DISCUSSION

First, the admin will enter their username and password to access the system. The following are the tasks that the admin can perform in the system:

- View the borrowing and returning history of books
- Manipulate book data
- Report borrowings and returns in the system
- Print book borrowing reports.

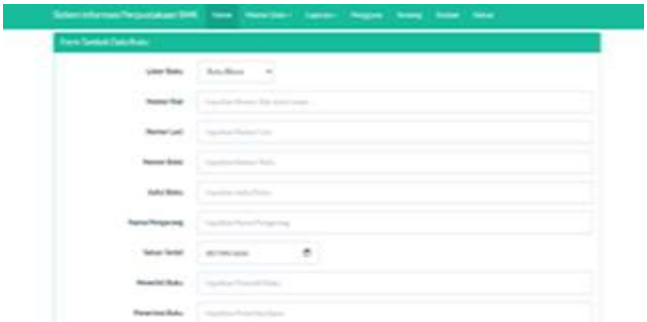
Web visitors can only view the available book data in the library.

1. Page Design for searching.



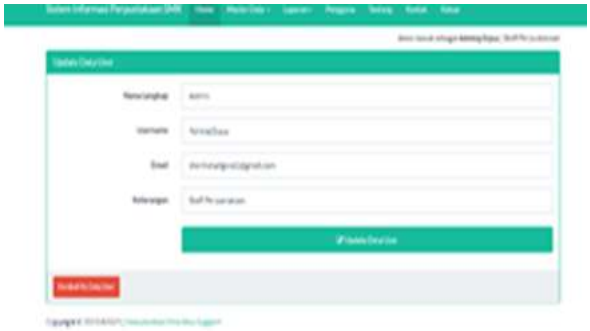
Picture 1 Page design for searching.

2. Page Design for Entering Book Data



Picture 2 Page design for entering book data

3. Page Design for Loan Transactions



Picture 3 .Page design for loan transactions

4. Page Design for Return Transactions

Picture 4. Page design for return transactions

5. Member Page

The member page is a part of the website intended for the public to interact with the database or administrator. In this system, there is an interactive page for searching the available book collections in the library

Picture 5 *Library Home Page for SMK Library*

CONCLUSION

The development of a web-based information system for school libraries is an effective solution to overcome the constraints and issues often encountered in traditional library management. In this context, a web-based library information system can help students access library-related information online, including the list of available books and borrowing status. Moreover, the system provides convenience for library administrators to efficiently manage and monitor book borrowings. In web application development, PHP (Hyper Text Preprocessor) is one of the commonly used programming languages. PHP is used to build dynamic websites and process commands in PHP scripts on the web server. Additionally, the use of tools such as XAMPP, which integrates the Apache web server, PHP, and MySQL, can facilitate the installation and configuration of the web server. Overall, the development of a web-based library information system is a solution that can enhance efficiency and accessibility in school library management. With the provided website, students can easily access library information online, while library administrators can efficiently manage and monitor book borrowings.

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