

Library Computerization

Report

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Abstract

The purpose of this report is to illustrate the computerised library system's qualities. In addition, It also contains the requirement for automation and benefits that can be gained by implementing it in library management. The computerization facilitate the library member to look up books by author, title, subject, and release date. It also has the capability to access information about who borrowed a certain book or volume. This report explains how software can eliminate the need for manual labor.

Introduction

Earlier the community library was set up in a manual method in which the librarian had to manage the track and records physically and compile them on large bulky file cabinets. If the user has to check the availability of a book then it requires a library staff. The librarian has to do all the tasks manually on a card to keep the transactions up to date. The manual library system is, in fact, extremely expensive, time-consuming, and tiresome. Therefore in this system maintaining the record and entries was difficult and erroneous. In addition, the increment in the number of users and collection of books is making it tough to make available for the registered users of the library.

The community library includes a wide variety of books. It is tedious to sift through records merely to confirm your query data. The rapid advancement of technology played a significant role in the development of the library system. The automated library system was very beneficial because with just one click, a library, transaction, and query may be built. By switching from a humanly operated to a computerized system, it improves the quality of library procedures.

Objective

The objective of the computerized library system searching the book collection based on author title, and genre. This kind of search technique will maintain the uniqueness that will help to find the correct type of material. Additionally, the automated system will help to maintain the record for registered users including basic student information, book records, lists of borrowers, returned books, borrowed books, and librarian prescriptions. And it will authorize common tasks including adding, deleting, and modifying book details. This approach helps disseminate information easily and reduces the budget allocated for spending in the library.

Technological Goal

In this computerized library system, there will be a record for each registered user and they can search a book by their title, author, and subject category as well the publication date. Each book will have a special identification number as well as additional information, such as a rack number, that will aid in physically locating the book. There might be multiple copies of a book, and library users should be able to borrow and reserve any of them. Each copy of a book will be referred to as a book item. All these modules can help librarians manage the library more conveniently and in a more efficient way than library systems that are not computerized.

The application aims to automate the library by providing users with the means to locate the books they require while also giving the administrator or librarian the ability to issue and collect books from users and cancel user memberships. The software library management system consists of four main elements.

- User-friendly input screens for insertion into database modules.
- Attractive output screens for database module extraction.
- Borrowed book list and available book list on the Screen.
- Search for books and members.

Advantages of Computerized Library

1. Easy to fetch and manipulate data
Managing large number of books and study material can be difficult to handle. Therefore Using this library management can make your task simple and efficient to finish all the activities.
2. Fast performance
Acquiring information resources can be time taking if done manually. Hence automation can give fast access to the resources and will complete the task in less time.
3. Cheap implementation
Performing activities of library manually can increase the cost because it require human effort. But in computerized way human effort and maintenace will be minimal.

Implementation Requirements

The implementation of this software should satisfy functional requirement like user details, information addition and deletion etc. and nonfunctional requirements like efficiency, reliability, usability, organizational, etc. These are the main requirements:-

1. Every book will have a special identification number, along with additional information like the rack number, which will aid in finding the book in person.
2. Every book will have a special identification number, along with additional information like the rack number, which will aid in finding the book in person.
3. The system should be able to access details such as who borrowed a specific book and other informations.
4. According to the system, books returned beyond due date should subject to fine.
5. Unavailable books should be able to be reserved by library members.
6. A distinct barcode will be on every book and member card. The system will be able to read barcodes on library cards and books.
7. Meeting and smaller conference rooms in the library are available for hourly rental and can be arranged in advance through the library site.
8. A meeting room can hold three people at most, whereas a conference room can hold fifteen.

Conclusion

The focus of the excursion thus far has been the global impact of library computerization. Despite being economical, the outcome is thought to be a desirable one. Any library that relies on manual methods of service delivery in the current era of information explosion is thought to be unable to accomplish this goal. Although it was well-stated in this report that the only way to properly raise librarians and customers to the level of information consciousness is through proper library computerization. It is crucial that technology expertise and established library procedures coexist in harmony.