Library Database Management System

Topic Selection

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We have chosen to design and implement a library Database Management System (DBMS). Libraries are collection- and distribution- centers of physical books, electronic books (eBooks), audiobooks and other resources. From rural towns to sprawling metroplexes, libraries provide a universal servicedating back to the 7th century BCE. Modern-day libraries must be prepared to process large amounts of data: from materials-exchange to user information. Many libraries have begun using computers and cloud storage for resource management. For the modern library, establishing an automated, cloud-based, high-performing DBMS is essential to keeping costs down, improving user satisfaction, and promoting a happy and educated community.

There are many advantages that an automated and cloud-based library DBMS has over manual, analog information management. Several benefits of creating an online library database - that apply modern DBMS principles - include:

1. Improved visibility and accessibility of the library catalog: digitizing the library’s collections will allow users to easily search and access the library’s resources, regardless of location, while also providing accessibility to more users.
2. Advanced searching functionality: an online database can provide advanced searching, such as keyword-searching and filtering, to make it easier for users to find books.
3. Larger catalog at lower cost: digitizing the library database will enable the procurement of digital media, thereby increasing the total catalog without incurring the additional cost of physical storage.
4. Streamlined cataloging and classification: an online database can simplify the cataloging process and make it easier for librarians to manage and organize the collection.

Our database will improve the efficiency of library resource management, providing users with timely and sufficient information that they may not have had access to before.

Our database design can be used for any library that has online copies of their book, eBooks, and other digital resources. Users can obtain access to this database by subscription, via a public library card, or enrollment as in the case of a university library.

We hope that our database will provide accessibility to a larger range of users and simplify the process for those who are looking to utilize eBooks and other library resources.