

BOOK HUNT

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ABSTRACT

Well a library is a vast collection of books. This requires a proper arrangement and placement of books in an order that makes it easy for the user to find a particular book. But in very large libraries having a huge collection, locating a particular book becomes quite a task. Even though all books are arranged in categories, the location of category must first be known so that the user gets to know where that particular category of books are placed. In such a condition there needs to be a way through user can precisely locate the location of any book by just typing its name. Here we are introducing a server based system using an android application to achieve this task. The library operator/developer just needs to add the location of a book in the system such as "3rd row| Right side | History Section | Fourth Book" and a map of the book along with its status of whether it is currently available or issued to someone else. All this data is stored on the server. Now members are provided an android application that serves the book finding purpose. Whenever user within wifi range of server types the book name through the android device, it sends a request to server for the particular book location. The server thus queries the database and returns the book location details and availability to the android user. Thus it allows to automate the library book finding as well as availability checking functionality in a library.

Keyword :-XML, JAVA,.NET,MICROSOFT MYSQL

1.INTRODUCTION

system Analysis is a detailed study of the various operations performed by a system and their relationships within and outside of the system. Here the key question is- what all problems exist in the present system? What must be done to solve the problem? Analysis begins when a user or manager begins a study of the program using existing system.

In our existing system all the transaction of books are done manually, So taking more time for a transaction like borrowing a book or returning a book and also for searching of members and books. Another major disadvantage is that to preparing the list of books borrowed and the available books in the library will take more time, currently it is doing as a one day process for verifying all records. So after conducting the feasibility study we decided to make the manual Library management system to be computerized.

2. DOMAINS USED

2.1Java

Goal of Java is object oriented programming language and portability, which means that programs written for the Java platform must run similarly on any combination of hardware and operating system with adequate runtime support. This is achieved by compiling the Java language code to an intermediate representation called Java byte-code, instead of directly to architecture-specific machine code. Java bytecode instructions are analogous to machine code, but they are intended to be executed by a virtual machine (VM) written specifically for the host hardware. End users commonly use

a Java Runtime Environment (JRE) installed on their own machine for standalone Java applications, or in a web browser for Java applets. Standard libraries provide a generic way to access host-specific features such as graphics, threading, and networking. The use of universal bytecode makes porting simple. However, the overhead of interpreting bytecode into machine instructions made interpreted programs almost always run more slowly than native executables. Just-in-time (JIT) compilers that compile bytecodes to machine code during runtime were introduced from an early stage. Java itself is platform-independent, and is adapted to the particular platform it is to run on by a Java virtual machine for it, which translates the Java bytecode into the platform’s machine language.

2.2.MICROSOFT MYSLite:-

SQLite is an in-process library that implements a self-contained, server less, zero-configuration, transactional SQL database engine. The code for SQLite is in the public domain and is thus free for use for any purpose, commercial or private.

SQLite is an embedded SQL database engine. Unlike most other SQL databases, SQLite does not have a separate server process. SQLite is a compact library. With all features enabled, the library size can be less than 500KiB.

2.3.NET

The .NET Framework is a technology that supports building and running the next generation of apps and XML Web services. The .NET Framework consists of the common language runtime (CLR) and the .NET Framework class library. The common language runtime is the foundation of the .NET Framework. Think of the runtime as an agent that manages code at execution time, providing core services such as memory management, thread management, and remoting, while also enforcing strict type safety and other forms of code accuracy that promote security and robustness. In fact, the concept of code management is a fundamental principle of the runtime. Code that targets the runtime is known as managed code, while code that doesn’t target the runtime is known as unmanaged code. The class library is a comprehensive, object-oriented collection of reusable types that you use to develop apps ranging from traditional command-line or graphical user interface (GUI) apps to apps based on the latest innovations provided by ASP.NET, such as Web Forms and XML Web services.

The .NET Framework can be hosted by unmanaged components that load the common language runtime into their processes and initiate the execution of managed code, thereby creating a software environment that exploits both managed and unmanaged features. The .NET Framework not only provides several runtime hosts but also supports the development of third-party runtime hosts. For example, ASP.NET hosts the runtime to provide a scalable, server-side environment for managed code. ASP.NET works directly with the runtime to enable ASP.NET apps and XML Web services, both of which are discussed later in this topic.

3. ARCHITECTURE DIAGRAM

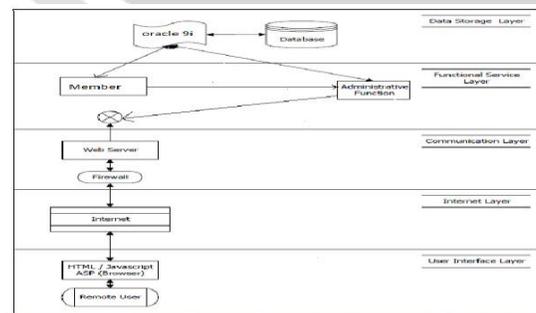


Fig-1: Architecture Diagram

4. MODULES

4.1 Server Data Storage

A storage server is a type of server that is used to store, access, secure and manage digital data, files and services. It is a purpose built server used for storing and accessing small to large amount of data over a shared network or through the Internet.

A storage server may also be called a file server.

4.2 Admin Login

Admin (*Librarian*) will have to enter books and its place.

4.3 Tracking the user record

The system can track the period for which the book has been issued to user and calculates fine if the book is not returned on time.

4.4 Quantity Update

The quantity is updated by the system depending on the quantity ordered.

4.5 Fine calculation

If the user is unable to return the book, the system automatically calculates the fine that the user has to pay for subsequent days.

4.6 View date info

The user can view the date when he has issued the book as well as the expiry date of the book and can view fine to be paid that is calculated by the system.

5. EXISTING AND PROPOSED SYSTEM:

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In our existing system all the transaction of books are done manually, So taking more time for a transaction like borrowing a book or returning a book and also for searching of members and books. Another major disadvantage is that to preparing the list of books borrowed and the available books in the library will take more time, currently it is doing as a one day process for verifying all records. So after conducting the feasibility study we decided to make the manual Library management system to be computerized

- In Library Management System, the processing of transactions is done with the help of computer.
- Through Library Management System updating data to the database is very efficient and instantly done by the librarian
- Through this app we are taking the details of each student for providing information based on their request (Requesting a book, if the user forgot the login details, user wants to communicate with librarian,)
- It provides a login for the members to view details about the total number of books, available books and allows them to search for a particular book.
- If the particular book is not available, the user can send the request of that book and immediately the librarian send the details of that book like when it will be available.
- Library Management System provides security (i.e. only the administrator can update any information to the database)

- Here, we are providing a location of the book along with book details i.e. providing a book location, it is very useful to identify the book easily with the help of this app.

6.FUTURE ENHANCEMENT

This android app provides a computerized version of library management system which will benefit the students as well as the staff of the library. It makes entire process online where student can search books, staff can generate reports and do book transactions. It also has a facility for student login where student can login and can see status of books issued as well request for book or give some suggestions. It has a facility of admin/librarian login where admin can send the necessary messages for the requested book to the user and also add new categories/new books in the database with book details and location of the particular book. There is a future scope of this facility that many more features such as a barcode scanner by this feature the user/student can directly check the book status and book availabilities and no need to login using the login details and this module will also be useful for the admin he will directly access the request and see the availability books and send the message directly by just clicking on the request, 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 users need in the best way possible

7.REFERENCES

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8.CONCLUSION

Thus basing on this project we strongly believe that we can reduce the risk of maintaining the log book for the library management system. Thus through our app we can help the society in moving in the further digital world where the technology will be one of the family member

