

# SMS Alerts Framework For Journal Book Maintenance in Tamil Nadu Schools and Colleges Library

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**Abstract:** The SMS alerts to maintenance journals, books, in schools and college library framework is software which can become the backbone for the libraries. This software is very useful for monitoring and controlling the library books in an easy manner. The purpose of the application is automation of both library and student details. This application solve the issues faced by the people those who have taken the books and forgot to renew it. This application will remind the person about the renewal date through an SMS. So it will be convenient for him/her. An additional feature of this application is the updating of the book details are automatically intimated to the students through an SMS. So they can easily aware of the books available in library till now.

**Keywords:** SMS alerts, Library

## 1. INTRODUCTION

This framework provides better and efficient service to students. It helps the librarian to remind about the books to the students. These systems can faster retrieval of information about the desired book. Provide facility for proper monitoring reduces paper work and provide data security. All details will be available on a click for both user and librarian.

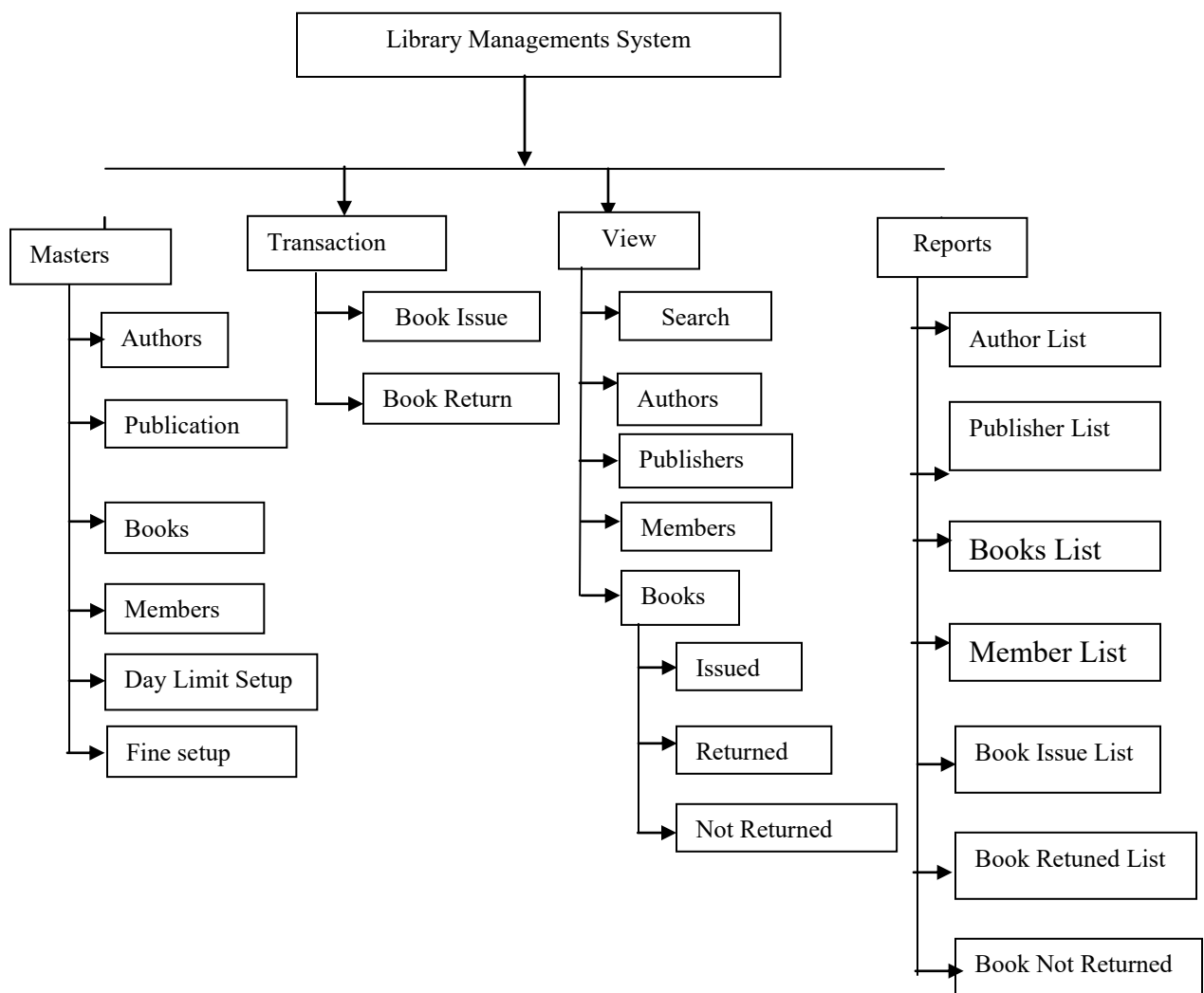
**Problem Definition:** This research aims to implement the effective framework for school and college student can use library effectively using front end C# and back end SQL server 2008 [1-5]. This project is divided into four modules Insertion to the database, Extraction to the database, Searching module, SMS alerts for Due Dates, Book Updates, Waiting List. The first module is fully controlled by the administrator; here he can add a new book section. When he adds the books in the library, a list is created automatically in which the librarian SMS the students who are all registered for SMS. The second module deals with issuing book or return book. While issuing the book, the librarian will enter the book Id to know the status of the book is to be issued or not, after checking the status he will enter the user Id to whom the book is to be issued. Then the librarian can send SMS to them remind their due dates. The final module deals with the Search, Update Alerts, and Waiting List. The student can search book in four ways such as Author name, Book name, Department name, Publisher name. When specified books is added then update alerts specifies the SMS. To be sent to the students, who are all registered in the alerts table. Waiting list specifies searching book is not available in the library the students are registered in the table. When the book status is updated "Available", then the librarian will SMS the registered students.

### 3. EXISTING SYSTEM

In existing system the alerts about due date of the student who had taken in the library is intimated through an email. The transactions are made in Microsoft excel. If the student doesn't have internet connection then he will not be aware of this intimation. Data from all locations cannot be consolidated easily. Accuracy regarding the calculations cannot be assured. Manual transactions are more prone to loss information.

Drawbacks of Existing System are:

- Each student need to often visit library to check whether the issued book is returned back or not
- Students are completely unaware of the new arrivals in the library until they visit.
- Some students may not check email periodically so the alert about the due date via email is not efficient here.
- Maintaining about the due dates and collecting fine amount from the student is a tedious work for librarian.
- Librarian can easily retrieve the books that are no longer returned by contacting and intimating the students properly.



#### 4. PROPOSED FRAMEWORK

The proposed architecture is shown in Fig.1. Login Process module is helpful to permit admin to login and only authorizes owner for accessing data in library management system. In this module, only admin can add the books information and transaction information. The admin can also maintain the book details for every transaction process. Admin can access and view all the transactions. It is possible to modify any records by an admin. User other than the admin cannot sign in into the admin phase of an application and further process.

Librarian Process perform the book insertion, book issue, book return, book renewal, SMS alerts, view and student registration. Returning and renewal functions are highly dependent on Book Issue function. Because a book can be returned until the book issue function get invoked. Also this function is the reverse process of issue.

Fig.1 Architecture of the proposed systems

Book renewal function changes Issue and Due-date of the book issue table. A librarian can send various types SMS to the students. If a student takes a book from the library, the librarian can send SMS to the student to remind about their due date to avoid the fine for the student, also to maintain the books in the library efficiently. A student can search the book in the library computer before searching it in the stack. When the searched book is not available i.e. somebody had already taken the book, then he can enroll his roll no and the book that he needs in the waiting list menu. After that librarian will send a SMS when the demanded book is returned to the library. Fig.2 shows the example of the book search form.



Fig.2 Book Search Form

#### 5. CONCLUSION AND FUTURE ENHANCEMENTS

In this paper, SMS alerts to maintenance journals, books, in schools and college library framework has been implemented and it can handle the issues in the existing system. The alerts for the library management are always in an active state. It can reduce man power easily intimate the details to the concerned student. It can generate the types of reports based

on the requirements. This system serves as a very important task in book issuing and returning. Searching and updating easily. This is solution software to handle all the books which are no longer returned. We are planning to provide mobile alerts through an automated phone call. This will greatly reduce the librarian's work. And this will be a good updated solution in future for issuing and retrieval of books.

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