

A Survey on Online Book Renewal using E-Library

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Abstract— As the numbers of users are rising there is a need of effective management of library, one such effective system is our E-Library. It can help user to manage the transaction or record more effectively and it is time-saving. The maintenance of the records are stored in SQL server which can be retrieved easily afterwards. The transactions like login, register, add, search, renewals are provided. The Library Management System stores the all details like name, ID number, address and contact number of members working in the library and users of library. The book details such as title, book ID, subject to which it belongs, author of book, book edition, year of publication and the total number of books that are present in the library etc. are also stored.

Key words: E-Library, Library management system, books, user, admin, online book renew, Barcode, Barcode Scanner

I. INTRODUCTION

E-Library system is a web based computerized system which helps user and librarian to manage library daily activity in electronic format. One such effective system is our E-Library. This project has facilities like user login and Admin login which are not available in existing library management systems. It has a facility of admin login through which admin can monitor the whole system of the library. It also provides a facility of user login in their accounts and they can access library. User can check his account like no. of issued books, issue date and return date. User can search book in different categories of book, view all book details. User can renew an issued book by scanning barcode of book & send to server. User can suggest new requirement to librarian as per the syllabus's demand. E-Library system is a project whose aim is renew book through the internet. E-Library system provides e-book facility to make books available when there is scarcity of books in the library. Admin can generate reports such as report of student, issued book, renewed book, available book. Overall this project is developed to help the students as well as staff of library to keep maintenance of the library system and also reduce the human efforts. The aim of our project is to efficiently utilize the library resources. It uses indexing to locate documents for searching very fast which relate to query. Main aim of online Library system is renewal of book by provides highly relevant data or documents in very short period after giving query. The Library Management System is gives more importance as the numbers of its users are increasing rapidly. When number is rising then there is a need of effective management of E-library.

II. LITERATURE SURVEY

Library management system is a computerized system which helps user and librarian to manage library daily activity in electronic format. It can help user to manage the transaction data or record more effectively and it is time-saving. We study and analyse about the developing process of Library Management System including the software requirement

specification and comparison between existing and proposed system [1]. The Dynamic access Policy was categorized mainly on following Parameters (a) Quantity/ no. of books in library (b) No. of User issue the particular book, (c) Preferred author category [2]. Book recommendation system provides a new way for the librarians to acquire the user's demands. Users will be redirected to the suggestion pages when they can't find the required book in the library [3].

III. EXISTING SYSTEM

The existing system includes manual transactions of books. Thus, more time is required for various transactions like book issue or returning a book and also for searching of members and books. Along with this, more time is required for prepare all library books borrowed and the available books in the library.

IV. PROPOSED SYSTEM

E-Library System is the process where student first have to login with registered username & password. If a student is not registered then he /she have to register first. After login student can access library database & check availability of books. Student can renew their books by sending barcode of book with Barcode scanner application. Student will get notification about new books in library. Also student can suggest for new books as per requirement. In proposed system, user can do various things online such as add members, search members, search books, renew books quickly. Student & Admin can search books present library in various book categories. Admin can add new category of book and add book in those category. It will be helpful for user as well as admin to search book & view book details.

Workflow of student:-

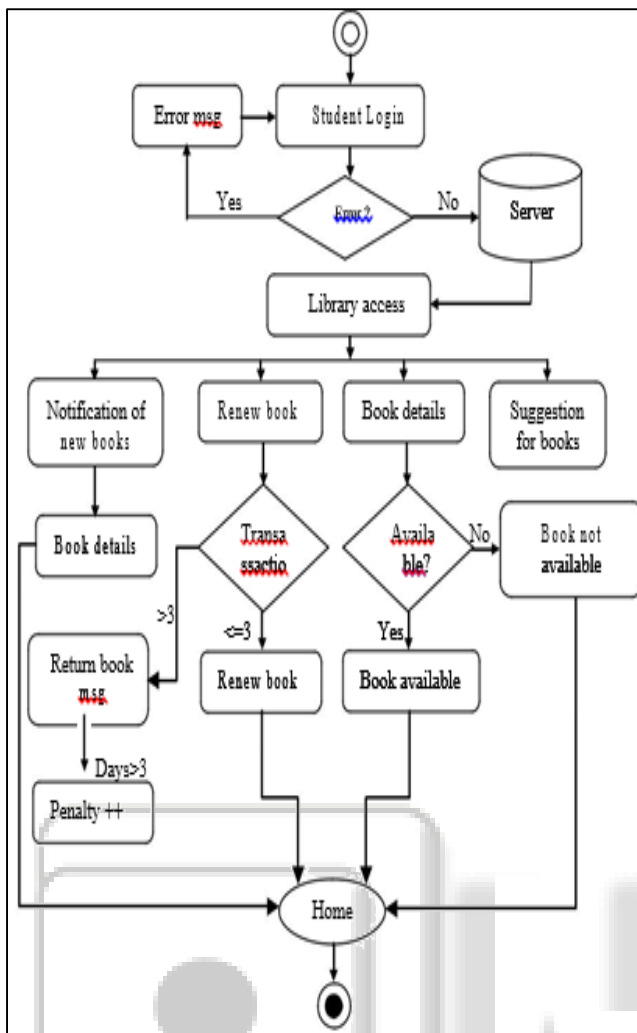


Fig. 1:

Workflow of Admin:

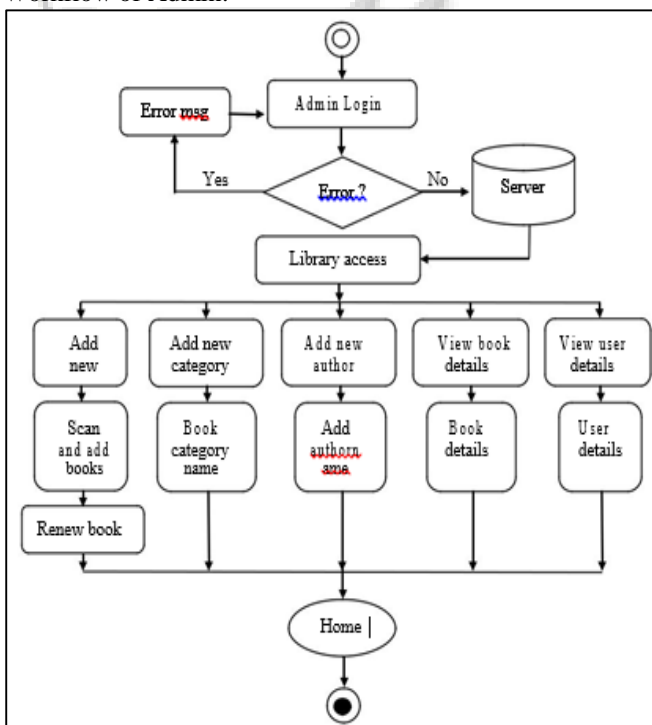


Fig. 2:

In Library system, there are two separate authentications for user & admin. User can login his account with registered username & password and access library system. There are various facilities available like view Book details for all books which is present at library. View User account details like total no of issued book, details of issued book, issued date, renewed date and next renewal period. An application will show an alert message when your renew period getting expired. User can renew an issued book 3 times online by scanning barcode of book with barcode scanner and send to server for processing. If renew transactions are more than three times then user have to return the issued book or he/she have to pay penalty. User can suggest new books as per requirements of syllabus. Admin have some additional facilities with above one like admin can add new user by new user registration, add new book, add new category of book so user can easily access the book from category of book. Admin can add new author for make separation of book by author.

A. Barcode Scanner:

Barcode scanner is a technology which is implemented in the libraries. Barcode is self-contained machine-readable identification labels. There are information is encoded in a series of black bars and white spaces and varying widths that represent in digits and other punctuation symbols. Barcode is readable only through a scanner or a reader. A basic bar code scanner consists of a decoder or a scanner. The technology of bar code is originated out of the need and big industries to track down inventory errors in a faster way. The E-library supports all operations like Renewals, Membership of new users, Issue return books, generate reminders overdue etc. The barcodes are scanned by Scanner and then it displayed details of book on the screen. Also there are reduces the error at the circulation counter and transactions of circulation is done very fast and saving the time. All details of students are display by enter the Roll number or ID of students.



Fig. 3: General Barcode arrangement

B. Advantages:

- User friendly interface to access the E-library.
- Fast access to the database
- Less time consuming
- Storage Capacity is more
- Search facilities
- Look and Feel the Environment

C. Disadvantages:

- Network connection problem Mobile camera

V. CONCLUSION & FUTURE SCOPE:

This E-library system provides a computerized version which will benefit for students as well as the staff. This system

makes entire process online and student can search books, staff can generate reports and do book transactions on Android Smartphone. There is facility for student login where student can login and can issue, renew books or give some suggestions on books. There is also facility of Admin login where teachers can add lectures notes, give necessary suggestion to library and also add info about events or workshop happening in our college or nearby colleges. Now student can access only books and ebooks in pdf format but in future teachers might be able to arranging online seminar for student, online lectures might be possible for student and video tutorials can be added by teachers.

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