

Synopsis

Library Management System

Introduction :

The purpose of a library management system is to operate a library with efficiency and at reduced costs. The system being entirely automated streamlines all the tasks involved in operations of the library. The activities of book purchasing, cataloging, indexing, circulation recording and stock checking are done by the software. Such software eliminates the need for repetitive manual work and minimizes the chances of errors. The library management system software helps in reducing operational costs. Managing a library manually is labor intensive and an immense amount of paperwork is involved. An automated system reduces the need for manpower and stationery. This leads to lower operational costs.

Objective:

The objective of library management system is effectively managing the data in a library. The library database includes all relevant information regarding assets to membership details. The software records details on all reading and reference material available for reading and lending. Membership information, lending details and renewal dates are managed by the software. This data includes books, student, teacher etc.

Methodology:

Software Requirements:-

1. Microsoft Visual Studio 2008
2. Microsoft SQL server 2008

Languages to be used:

Front End :Visual Basic.net

Back End : SQL (Structured Query Language)

Module Description:

Books: This module consist the details of the books available in library and their categories. It also contains the list of books in each category and their details.

Member Account: To issue an book from the library, one should have a account in the library. The registration contains all the details about the member like registration number, name, address, contact number etc.

Book Request: This module is used by the member to request a book from the library. The search can be performed by using name of the book, author name, and subject name.

Issue of books: This module is used by the librarian to issue a book based on the request made by the member.

Returning Books: In this module the librarian maintains the details of the books returned by the member, which also includes the fine details, damage book details, lost book details.

History: In this module the member can view the details about the previous issued books, requested books and returned books etc.

Reports: This module includes the details about the issued books, returned books, member reports, fine reports, or any damage to the book or details of the book which are not returned.

Table: Login

- Administrator/Student
- User Name
- Password Table: Book
- Name of the book
- Book no
- Book Category
- Publish Year
- Name of the Author
- Number of copies available
- Price
- Purchase Date
- Publisher

Table: Staff Account

- Staff ID
- Staff Name
- D.O.B
- Contact number of the staff
- Address of the staff
- Pincode.

Table: Student Account

- Student ID
- Student Name
- D.O.B
- Contact number of the Student
- Address of the Student
- Pincode.

Table: Book Request

- Student ID
- Book Number
- Issued Date
- Table: Book Return
- Member ID
- Book Number
- Issued Date Returned Date Penalty to be paid if any damage to the book.
- Remark if book lost/damaged

Future scope of the project:

In future we can make this application online so that members will be able to search the book from any places as well as can send book request. Book reading facility can be provided through on-line . Also we can Machine Learning and provide video related to their past search.

Annexure:

Case Report:

- It generates report on Student, Book, Fine.
- It provides filtered report on Issues, Librarian and Members.
- You can easily export pdf for Student, Book, Fine.
- You can easily export excel file for Issues, Librarian, Members.
- You can easily export in csv file format.

References:

- www.google.com
- <https://www.w3schools.com/>
- www.skoolbeep.com/blog/library-management-system/