

Project for the Degree of B.Sc. Engineering

Project On: Library Management System

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Library Management System

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Abstract:

The Project titled "Library Management System" is Library management software for library. My Project based on C programming. This project is very useful for manage the library system. This project of "Library Management System" of gives us the complete information about the library. User can see the record of new books and also can see the details of books available in the library. Admin can issue the books to the students and maintain their records and also check how many books are issued and stock available in the library. Admin can delete any book if any book lost or remove in library.

Acknowledgment

In this very special moment, first and foremost I would like to express my heartiest gratitude to the almighty God for allowing me to accomplish this project successfully. It is my first project. I am really thankful for the enormous blessings that the Almighty has bestowed upon me not only my student life but also throughout my whole life. Then I like to give many thanks to my project supervisor F.M Rahat Hasan Robi, Lecturer, Department of Computer Science and Engineering, who encouraged, supervised and supplied necessary requirements and guideline in performing this work. In achieving the gigantic goal, I have gone through the interactions with and help from internet and would like to extend my deepest appreciation to those who have contributed to this dissertation itself in an essential way.

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Basically, this app contains three items. It is a secret password which is only known by Admin. First item is Admin Section. This means that admin can add unlimited number of books which are store in library. Second item is User section which is that if anyone have library id, he/she can see the record of new books and also can see the details of books available in the library. Third item is Developers. You can see who developed the softwere. And there are many options in admin and user menu. Like adding book, removing book, modifying book record, adding user, changing password etc.

There are many apps like Library management, that apps are given below:

- 1. Hospital management
- 2. Cricket score management
- 3. Phone book management

From these apps idea, anyone can develop this app. Library manager are the target user of this app. Also, all classes of people can use this app for enjoy library management. In this digital country, it is very odd for register the student information for issue book. For this it is very essential.

How does project work:

- 1. Add books (any new books should entry on this project if it is available on your library).
- 2. Delete books (if any books lost in the library you should delete this book).
- 3. View all books (you can see all books which are available on your library).
- 4. User can see the record of new books and also can see the details of books available in the library

Chapter 4:

- 1. Admin:
- 2. Users:
- 3. Devloper Info:

Main Page:

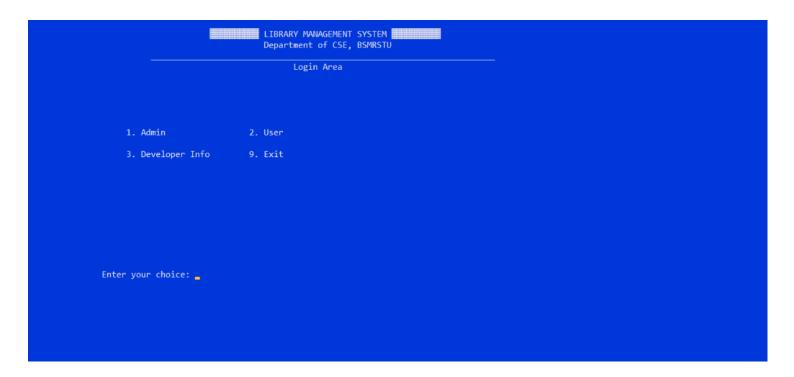


Fig no. 1

When we run the software, first page is look like this(Fig no. 1).

There is three option Admin, User and Developer Info.

Admin Workspace

- 1. Book Info
- 2. User Info
- 3. Change User Password

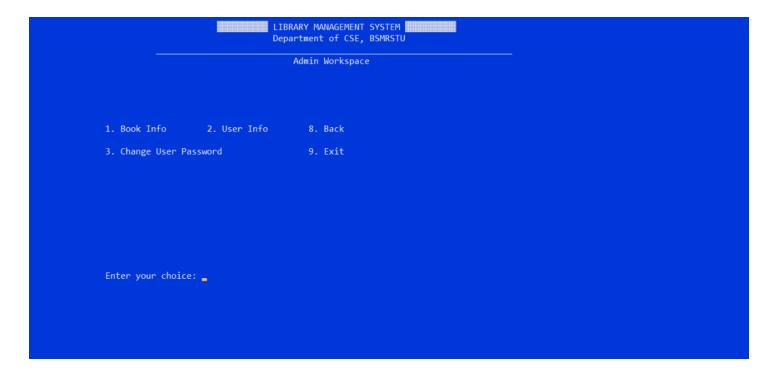


Fig no. 2

If we select option 1, admin workspace will open like this(Fig no. 2). There is also three option these are Book Info, User Info and Change User Password

Book Info:

-	LIBRARY MANAGEMENT SYSTEM Department of CSE, BSMRSTU
	Admin Area
1. Add Book	
2. Search Book	
3. Modify Book Record	
4. Delete Book Record	
5. View book list	
8. Back 9. Exit	
Enter your choice: _	

Fig no. 3

Then by pressing 1 in admin workspace this page comes(Fig no. 3).

And there is five option Add Book, Search Book, Modify Book Record, Delete Book Record and View book list.

Add Book:

```
LIBRARY MANAGEMENT SYSTEM
Department of CSE, BSMRSTU

*******SELECT CATEGOIES******

1. 1st Year 1st Semester
2. 1st Year 2nd Semester
3. 2nd Year 1st Semester
4. 2nd Year 2nd Semester
5. 3nd Year 1st Semester
6. 3rd Year 2nd Semester
7. 4th Year 2nd Semester
8. 4th Year 2nd Semester
9. Back

Enter your choice:
```

Fig no. 4

If we want add book, we have to select option 1, the this page shows(Fig no. 4). And there these categories will come and we have to select categories.

Search Books:

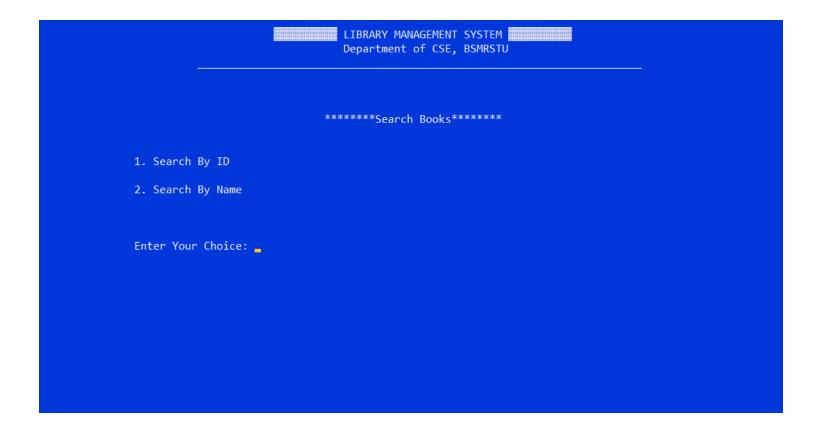


Fig no. 5

Search book option open like this(Fig no. 5). There is two option Search By ID and Search By Name. We can search books by typing book id or book name.

View Book List:

**************************************	Programming_In_ANCI_C A_Textbook_of_Electrical_Technology Introductory_Circuit_Analysis Differential_Calculus Exercise_In_Reading_Comprehension Ausamapta_Atmajiboni C++_The_Complete_Reference Discrete_Mathematics_And_Its_Applications Principle_Of_Electronics Data_Structures_And_Algorithms Data_Structures_Fundamentals Introduction_To_JAVA_Programming JAVA_AFX_Programming_Cookbook Introduction_To_The_Theory_Of_Computation Element_Of_The_Theory_Of_Computation Introduction_To_Algorithms Complex Variables	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	QTY 0 1 2 3 4 5 6 7 8 9 10 11 12	PRICE 0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00	RackNo 0 1 2 3 4 5 6 7 8
t Year 1st Semester 1 t Year 1st Semester 2 t Year 1st Semester 3 t Year 1st Semester 4 t Year 1st Semester 4 t Year 1st Semester 5 t Year 2nd Semester 6 t Year 2nd Semester 7 t Year 2nd Semester 8 t Year 2nd Semester 9 d Year 1st Semester 10 d Year 1st Semester 11 d Year 1st Semester 11 d Year 1st Semester 12 d Year 2nd Semester 13 d Year 2nd Semester 15 d Year 2nd Semester 14 d Year 2nd Semester 15 d Year 2nd Semester 16 d Year 2nd Semester 17 d Year 2nd Semester 17 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 19 d Year 1st Semester 20	Programming_In_ANCI_C A_Textbook_Of_Electrical_Technology Introductory_Circuit_Analysis Differential_Calculus Exercise_In_Reading_Comprehension Ausamapta_Atmajiboni C++_The_Complete_Reference Discrete_Mathematics_And_Its_Applications Principle_Of_Electronics Data_Structures_And_Algorithms Data_Structures_Fundamentals Introduction_To_JAVA_Programming JAVA_AFX_Programming_Cookbook Introduction_To_The_Theory_Of_Computation Element_Of_The_Theory_Of_Computation Introduction_To_Algorithms	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	0 1 2 3 4 5 6 7 8 9 10 11 12	0.00 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00	0 1 2 3 4 5 6 7 8
t Year 1st Semester 2 t Year 1st Semester 3 t Year 1st Semester 4 t Year 1st Semester 5 t Year 2nd Semester 6 t Year 2nd Semester 7 t Year 2nd Semester 8 t Year 2nd Semester 9 d Year 1st Semester 10 d Year 1st Semester 11 d Year 1st Semester 12 d Year 1st Semester 12 d Year 1st Semester 13 d Year 2nd Semester 14 d Year 2nd Semester 15 d Year 2nd Semester 16 d Year 2nd Semester 16 d Year 2nd Semester 17 d Year 1st Semester 17 d Year 1st Semester 18 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 20 d Year 1st Semester 20	A_Textbook_Of_Electrical_Technology Introductory_Circuit_Analysis Differential_Calculus Exercise_In_Reading_Comprehension Ausamapta_Atmajiboni C++_The_Complete_Reference Discrete_Mathematics_And_Its_Applications Principle_Of_Electronics Data_Structures_And_Algorithms Data_Structures_Fundamentals Introduction_To_JAVA_Programming JAVA_AFX_Programming_Cookbook Introduction_To_The_Theory_Of_Computation Element_Of_The_Theory_Of_Computation Introduction_To_Algorithms	N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	1 2 3 4 5 6 7 8 9 10 11	1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00	1 2 3 4 5 6 7 8
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d Year 1st Semester 13 d Year 2nd Semester 14 d Year 2nd Semester 15 d Year 2nd Semester 16 d Year 2nd Semester 17 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21	Introduction_To_JAVA_Programming JAVA_AFX_Programming_Cookbook Introduction_To_The_Theory_Of_Computation Element_Of_The_Theory_Of_Computation Introduction_To_Algorithms	N/A N/A	12	44 00	10
d Year 2nd Semester 14 d Year 2nd Semester 15 d Year 2nd Semester 16 d Year 2nd Semester 17 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21	JAVA_AFX_Programming_Cookbook Introduction_To_The_Theory_Of_Computation Element_Of_The_Theory_Of_Computation Introduction_To_Algorithms	N/A		11.00	11
d Year 2nd Semester 15 d Year 2nd Semester 16 d Year 2nd Semester 17 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21	<pre>Introduction_To_The_Theory_Of_Computation Element_Of_The_Theory_Of_Computation Introduction_To_Algorithms</pre>			12.00	12
d Year 2nd Semester 16 d Year 2nd Semester 17 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21	Element_Of_The_Theory_Of_Computation Introduction_To_Algorithms	N/A	13	13.00	13
d Year 2nd Semester 16 d Year 2nd Semester 17 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21	Introduction_To_Algorithms		14	14.00	
d Year 2nd Semester 17 d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21		N/A	15	15.00	
d Year 1st Semester 18 d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21		N/A	16	16.00	
d Year 1st Semester 19 d Year 1st Semester 20 d Year 1st Semester 21	Computer Organization And Design	N/A	17	17.00	
d Year 1st Semester 20 d Year 1st Semester 21	Compuer Networks	N/A	18	18.00	
d Year 1st Semester 21	Database_System_Concepts	N/A	19	19.00	
	Modern Database Management	N/A	20	20.00	
	Operating System Concepts	N/A	21	21.00	
d Year 1st Semester 23	Analysis And Design Of Information System	N/A	22	22.00	
d Year 2nd Semester 24	Compiler Design	N/A	23	23.00	
d Year 2nd Semester 24	Computer_Design Computer_Graphics	N/A	24	24.00	
d Year 2nd Semester 25	JAVA How To Program	N/A N/A	25	25.00	
d Year 2nd Semester 20 d Year 2nd Semester 27	Assembly Language Programming And Organization Of The IBM PC		26	26.00	
d Year 2nd Semester 27	Softwere Engineering A Practitioner's Approach	N/A N/A	26 27	27.00	
h Year 1st Semester 28		N/A N/A	27 28	27.00	
	Data_Communications_And_Networking				
h Year 1st Semester 30	Computer_Simulation	N/A	29	29.00	
h Year 1st Semester 31	Digital_Signal_Processing	N/A	30	30.00	
h Year 1st Semester 32	Parallel_Processing	N/A	31	31.00	
h Year 1st Semester 33	E-Commerce	N/A	32	32.00	
h Year 1st Semester 34	Web_Engineering	N/A	33	33.00	
h Year 1st Semester 35	Web_Security	N/A	34	34.00	
h Year 2nd Semester 36	Prolog_Programming_For_Artificial_Intelligence	N/A	35	35.00	
h Year 2nd Semester 37	Cryptography_And_Network_Security	N/A	36	36.00	
h Year 2nd Semester 38 h Year 2nd Semester 39	Digital_Image_Processing Machine Learning	N/A N/A	37 38	37.00 38.00	

Fig no. 6

If we want to view all books then we have to press five and book list will shows like this(Fig no. 6).

Developer Info:

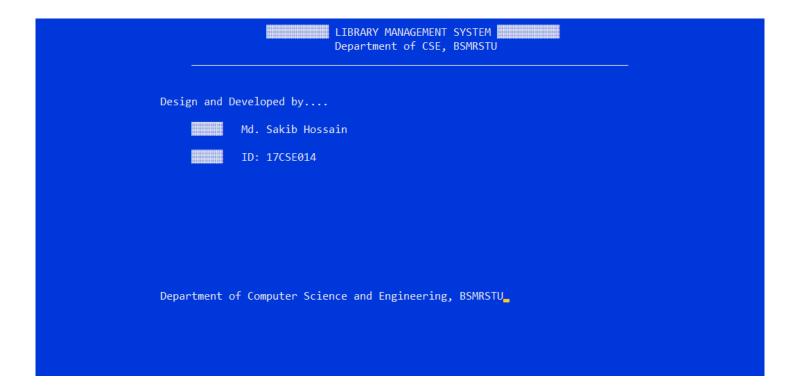


Fig no. 7

If we press 3 in main page then this page opens(Fig no. 7). It shows who developed the software.

This project is now many restricted. It is now use for only one department and it is very useful. In future I will develop it for any library management. In future, by using this app any library can be managed. This application can be easily implemented under various situations. We can add new features as and when we require. Reusability impossible as and when require in this application. Reusability is possible as and when require in this application. We can update it next version. Reusable software reduces design, coding and testing cost by amortizing effort over several designs. Reducing the amount of code also simplifies understanding, which increases the likelihood that the code is correct. We follow up both types of reusability.

Chapter 6: CONCLUSION

Library Management System allows the user to store the book details and the customer details. This software package allows storing the details of all the data related to library. The system is strong enough to withstand regressive yearly operations under conditions where the database is maintained and cleared over a certain time of span. The implementation of the system in the organization will considerably reduce data entry, time and also provide readily calculated reports.

References:

- 1. https://www.google.com/
- 2. https://www.wikipedia.org/
- 3. https://github.com/