

# Project Proposal

## Project Name:

### JAVA Library Management System - JAVA + MySQL

## Abstract:

Today most of the library is using either manual system for tracking the day to day activity or they are using desktop, spread sheet like MS Excel application to manage the day to day activity. In this proposed Library Management System it will run in client server mode and user can check the book availability, they can search the books, library staff can issue, receive book, and management can check the report. System will store historical data. Management can anytime view the total book status, library card status. The P2P Library Management System is used to overcome the entire problem which they are facing currently, and making complete atomization of manual or semi automatic process of library management system. This project of "LIBRARY MANAGEMENT SYSTEM" of gives us the complete information about the library. We can enter the record of new books and retrieve the details of books available in the library. We can issue the books to the students and maintain their records and can also check how many books are issued and stock available in the library.

Throughout the project the focus has been on presenting information and comments in an easy and intelligible manner. The project is very useful for those who want to know about Library Management System.

## Features and Modules:

### Master and Security module

Master and security module includes user security management, login security, book details, member master, library card, library transaction.

- **Login** – Check the user by user name and password, All user needs to enter user name and password to access the system, system check the user name and password and give access the system resource only valid user.
- **Main Screen** – It display available options, menus and toolbars to the logged user. System display option as per user rights. It also show the name of user currently logged in.
- **New Book** – This form used to enter new book details, system generates book id,. User enters book title, book author, publisher name, book description, no of pages, book category.

To buy complete ready to submit synopsis, project report, source code, and data base script.

Please contact **R. M. Solution.** 📞 +91-9920329254, 📠 +91-22-28550428,

✉ : [info@readymadeproject.com](mailto:info@readymadeproject.com) or [ajprofessionals@gmail.com](mailto:ajprofessionals@gmail.com)

🌐 [www.readymadeproject.com](http://www.readymadeproject.com)

- **Display Book** – It displays all books in grid, user can short the book by book title, book author, category. User can also print all or selected book details from this screen.
- **Modify Book** – User can edit previously saved book details in this screen.
- **Search Book** – Library system needs powerful book search facilities to find any book. System provides two types of search facilities one is normal search facilities where user enter book title, author name, category, keyword, system perform pattern search and display the result in grid.
- **New Member** – This form used to create new library member, user enter library member details. System generates member id.
- **Modify Member** – In this screen system users modify existing member details
- **Search Member** – System provide powerful search facility to search library member, user can search card by giving various search input like member id, member name. System can search single for single search condition or all condition. After search results will display in grid.
- **Change Password** – Currently logged user can change his or her password from this form, before system validate old password.
- **Create New User** – Administrator can creates new system users from this form, Administrator enters new user name, password and selects user type to create new user.

### Transaction module

Transaction module includes issuing, receiving book and transaction report.

- **Issuing Book** – This form used to issue book to the member. In this screen user selects book id, and member id, system display the book and card history. If book is already issued it display message and details of last issued details. Same way system display card history for the member id, if book already available it shows the message. If book is available and there is no book pending for received then book is issued and system saves the details. System also has powerful search facility to find the book and member id.
- **Receive Book**– In this screen user enters the book issued transaction no, system displays the transaction details and book received status. User also checks the book condition and enters the remark if needed.

To buy complete ready to submit synopsis, project report, source code, and data base script.

Please contact **R. M. Solution.** 📞 +91-9920329254, 📠 +91-22-28550428,

✉️ : [info@readymadeproject.com](mailto:info@readymadeproject.com) or [ajprofessionals@gmail.com](mailto:ajprofessionals@gmail.com)

🌐 [www.readymadeproject.com](http://www.readymadeproject.com)

- **Transaction History** – In this report system user can generate book issue and book received details for single member/all members, for single book/ all books, for the selected date or all days. User can also sort the record by transaction no, type, book id, member id



### Software Requirements:

- JAVA
- NetBeans
- MySQL

### Hardware Requirements:

Processor: Preferably 3.0 GHz or Greater.  
RAM : 1 GB or Greater.

### Limitations of the Software:

This project was developed to fulfill user requirements; however, there are lots of scope to improve the performance of the Java Library System in the area of user interface, database performance, and query processing time. Etc.

### Future Enhancements:

- Linking and integration of other systems for accounting systems.
- SMS and email facility for cab booking notification

### Project Details:

- No of Forms, Pages, Reports in project source : **13**
- No of database tables : **5**
- No of pages in project report : **140**

### Project Demo:

<https://youtu.be/hsjnl3Tdf7E>

### For buy this project:

<https://readymadeproject.com/FullProjectDetail?id=95>

<https://readymadeproject.com/QuickPay?id=95&type=cs>

To buy complete ready to submit synopsis, project report, source code, and data base script.

Please contact **R. M. Solution**. 📞 +91-9920329254, 📠 +91-22-28550428,

✉ : [info@readymadeproject.com](mailto:info@readymadeproject.com) or [ajprofessionals@gmail.com](mailto:ajprofessionals@gmail.com)

🌐 [www.readymadeproject.com](http://www.readymadeproject.com)

## Project Report TOC:

Topic / Contents	Page No.
<u>ABSTARCT</u>	7
<u>Scope and Features</u>	9
<u>Master and Security module</u>	9
<u>Transaction module</u>	11
<u>Drawbacks of Present System</u>	12
<u>Proposed System</u>	12
<u>Out of Scope</u>	13
<u>Goal and objective</u>	14
<u>Solution Concept</u>	14
<u>Problem Statement</u>	15
<u>Requirements Summary</u>	15
<u>Business Requirements</u>	15
<u>User Requirements</u>	15
<u>Operational Requirements</u>	16
<u>Literature Review</u>	17
<u>System Architecture</u>	19
<u>High Level Solution Architecture</u>	19
<u>Data Flow and Process Flow Chart</u>	20
<u>User Profiles</u>	21
<u>Usage Summary</u>	22
<u>Software and Hardware Requirement</u>	23
<u>General Requirement for Server/Client:</u>	23
<u>Development Tools and Technologies</u>	24
<u>Front End</u>	24
<u>Back End</u>	24
<u>Development Environment</u>	25
<u>Design Goals and Constraints</u>	26
<u>Performance</u>	26
<u>Availability</u>	26
<u>Reliability</u>	26
<u>Scalability</u>	26
<u>Security</u>	26
<u>Interoperability</u>	26
<u>Location</u>	26
<u>Setup/Installation</u>	26
<u>System Requirement and Specification SRS</u>	27

To buy complete ready to submit synopsis, project report, source code, and data base script.

Please contact **R. M. Solution.** 📞 +91-9920329254, 📠 +91-22-28550428,

✉️ : [info@readymadeproject.com](mailto:info@readymadeproject.com) or [ajprofessionals@gmail.com](mailto:ajprofessionals@gmail.com)

🌐 [www.readymadeproject.com](http://www.readymadeproject.com)

<u>Use Case</u>	29
<u>Manage Users</u>	29
<u>Description</u>	29
<u>Business Need</u>	29
<u>Priority</u>	29
<u>Manage Members</u>	29
<u>Description</u>	29
<u>Business Need</u>	29
<u>Priority</u>	29
<u>Issue Book</u>	30
<u>Description</u>	30
<u>Business Need</u>	30
<u>Priority</u>	30
<u>Receive Book</u>	30
<u>Description</u>	30
<u>Business Need</u>	30
<u>Priority</u>	30
<u>Library Management System Data Dictionary</u>	39
<u>1. LIB_USER</u>	39
<u>2. LIB_MEM_MASTER</u>	40
<u>3. LIB_BOOK_CATEGORY</u>	41
<u>4. LIB_BOOK_MASTER</u>	42
<u>5. LIB_TRANSACTION</u>	43
<u>P2P Library ER Diagram</u>	44
<u>P2P Library DFD (Data Flow Diagram)</u>	44
<u>P2P Library DFD (Data Flow Diagram)</u>	45
<u>Context Level DFD</u>	45
<u>0 Level Data Flow Diagram</u>	45
<u>Class Diagram</u>	47
<u>Planning and Scheduling</u>	48
<u>Planning</u>	48
<u>User Interfaces</u>	48
<u>Hardware Interfaces</u>	48
<u>Scheduling</u>	49
<u>Gantt chart:</u>	50
<u>PERT chart:</u>	51
<u>Coding and Interface</u>	52
<u>Library Management System : Login</u>	52
<u>Library Management System : Main Screen</u>	58
<u>Library Management System : User Master</u>	66

To buy complete ready to submit synopsis, project report, source code, and data base script.

Please contact **R. M. Solution.** 📞 +91-9920329254, 📠 +91-22-28550428,

✉️ : [info@readymadeproject.com](mailto:info@readymadeproject.com) or [ajprofessionals@gmail.com](mailto:ajprofessionals@gmail.com)

🌐 [www.readymadeproject.com](http://www.readymadeproject.com)

<a href="#">Library Management System : Change Password</a>	73
<a href="#">Library Management System : Change Password</a>	73
<a href="#">Library Management System : Book Master</a>	78
<a href="#">Library Management System : Book Master</a>	78
<a href="#">Library Management System : Search Book</a>	91
<a href="#">Library Management System : Book Status</a>	94
<a href="#">Library Management System : MemberMaster</a>	97
<a href="#">Library Management System : Search Member</a>	110
<a href="#">Library Management System : Issue Book</a>	117
<a href="#">Library Management System : Receive Book</a>	128
<a href="#">Library Management System : Transaction Report</a>	136
<a href="#">Library Management System : About</a>	142
<a href="#">Library Management System Test Plan</a>	143
<a href="#">Introduction</a>	143
<a href="#">Test Scope</a>	143
<a href="#">Test Strategy</a>	143
<a href="#">Preconditions</a>	144
<a href="#">Test Priorities</a>	144
<a href="#">Test Techniques</a>	145
<a href="#">Test Organization</a>	145
<a href="#">Roles and Responsibilities</a>	145
<a href="#">Deliverables</a>	145
<a href="#">Test Environment</a>	146
<a href="#">Hardware and Software</a>	146
<a href="#">Testing Automation Software</a>	146
<a href="#">Application Configuration</a>	146
<a href="#">Test Management</a>	147
<a href="#">Testing Schedules</a>	147
<a href="#">Threats to Testing</a>	147
<a href="#">Conclusion and future enhancement</a>	148
<a href="#">Bibliography</a>	149
<a href="#">Websites</a>	149
<a href="#">Books</a>	149

To buy complete ready to submit synopsis, project report, source code, and data base script.

Please contact **R. M. Solution.** 📞 +91-9920329254, 📠 +91-22-28550428,

✉ : [info@readymadeproject.com](mailto:info@readymadeproject.com) or [ajprofessionals@gmail.com](mailto:ajprofessionals@gmail.com)

🌐 [www.readymadeproject.com](http://www.readymadeproject.com)

To buy complete ready to submit synopsis, project report, source code, and data base script.

Please contact **R. M. Solution.** 📞 +91-9920329254, 📠 +91-22-28550428,

✉ : [info@readymadeproject.com](mailto:info@readymadeproject.com) or [ajprofessionals@gmail.com](mailto:ajprofessionals@gmail.com)

🌐 [www.readymadeproject.com](http://www.readymadeproject.com)