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Center Name: ACE-HCMC-2-FPT (VN.033).

Address: 590 Cach Mang Thang 8 Street, District 3, Ho Chi Minh City, Vietnam.



**LIBRARY MANAGEMENT SYSTEM**

**Design Document**

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| **Faculty:** |  | **Ms. Dao Ngoc Anh** |  |
| **Batch No:** |  | **F2131405T0** |  |
| **Group No.:** |  | **3** |  |
| **Students:** |  | **Fullname** | **Roll No.** |
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|  | 3. | To Thanh Dat | Student813016 |

**Dec, 2014**

# 

# REVIEW 1

1. **Introduction**

The main objective of the Library Management system project is discipline of the planning, organizing and managing the library tasks. Our project aims at making the task of library easy.

Library Management is entering the records of new book and retrieving the details of book available in the library. We can issue book to the library member and maintain their records and can also checks how many book are issued and stock available in the library. In the project we can maintain the late fine of library member who return the issued book after the due date.

1. **Existing Scenario**

* Currently in library, all records are managed on paper. It is hardly for Staffs to manage them when somebody issues or returns the books, how many total of books in each category, etc.
* Each of the staffs of separate department handle the different duties in library such as Book account: manage the books in library, IR account: manage issuing/returning the books. Member account: manage members of library. Accounting account: manage fine fee. Admin account: manage staff account and all functions in system.
* Managers have to maintain list of books along with details such as author name, book’s title, book’s category, etc. When the books are to be issued, they have to manually search for that book and again for issuing book they have to maintain a register which will have details of book issued such as book’s title, staff’s detail, date of issue, date of return, etc.

1. **Proposed Solution**

Proposed system is an automated Library Management System. Through our software, user can add members, add books or search books, search members with multi conditionals or edit member’s information, edit book’s information, borrow and return books in quick time. Our proposed system has the following advantages:

* + - User friendly interface
    - Fast access to database
    - Less error
    - More Storage Capacity
    - Look and Feel Environment
    - Quick transaction

All the manual difficulties in managing the Library have been rectified by implementing computerization.

1. **Function Of Application**
2. Login/Logout: allow Users (Staffs in Library) login/logout into System. For each level of user, there will be the respective rights.
3. Change Password: allow Users can change their Password.
4. Management Member’s account: allow Member account manages member’s information.
5. Management Staff’s account: allow Admin account manages Staff’s information.
6. Management Book: allow Book account manages books in library.
7. Management Category: allow Admin account manages categories of Book.
8. Management Language: allow Admin account manage language of Book.
9. Issue Book: allow IR account can issues books for member who has requested if those books are available.
10. Return Book: allow IR account can accept returned book from member. And check due date of that book is legal or not. If it is not legal, member must pay fee fine depend how many days pass over.
11. Accept fine: allow Accounting account can accept fine fee from member, and update status member paid fee for library, and can continue for being issued book later.
12. Generate report for Book account: this will provide how many books depend on their category and total books which the Library has.
13. Generate report for Member account: This will provide the details of issuing member as member name, book’s title, book’s id, issue date, return date.
14. Generate report for IR account: This will provide the details of issuing/returning book as book’s ISBN, book’s title, total issue, total return.
15. Generate report for Accounting account: This will provide the details of paying member as member name, book’ title, book’s id, issue date, return date, amount day later, amount fine fee, fine status.
16. Search: The user will be able to perform search multi conditionals based on member’s name, book’s id, book’s title, issue date, returning date, category.
17. **The Roles of Application**
18. **All member:**

* Login.
* Change Password.
* Search.

1. **Admin Account:**

* Staff Management (View, Insert, Update).
* Category’s book Management (View, Insert, Update, Delete).
* Language’s book Management (View, Insert, Update, Delete).
* Create/View all report.

1. **Book Account:**

* Book Management (View, Insert, Update, Delete).
* Create/View Category-Book report.

1. **Member Account:**

* Member Management (View, Insert, Update).
* Create/View Member-Issue report.

1. **IR Account:**

* Issue Management (View, Issue, Update).
* Return Management (View, Return, Update).
* Create/View Book-Issue-Return report.

1. **Accounting Account:**

* Fine Management
* Accept fine fee from member (View, Update).
* Create/View Member-Issue/Return-Fine report.

1. **Function Diagram**
2. **Login function**



1. **Change password function**



1. **Register function**



1. **Issue function**



1. **Return function**



1. **Pay fine function**



1. **Hardware/Software Requirements**
2. **Hardware**

* A minimum computer system that will help you access all the tools in the courses is a Pentium 4 or better
* 512 MB of RAM or better
* HDD 10G free space available or better

1. **Software**

* Operating system: Windows XP (or higher if possible)
* Netbeans 8.0.1
* JDK 1.7
* SQL Server 2012
* JDBC Driver 4

1. **Task sheet**

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| **Project Ref.No: 3** | | **Project Title:**  **Library Management System** | **Date of Preparation of Activity Plan** | | | |
| **Sr. No.** | **Task** | | **Actual Start Date** | **Actual Days** | **Team Member Names** | **Status** |
| 01 | Introduction | | Dec, 22, 2014 | 4 | All Members | Completed |
| 02 | Exiting Scenario | | All Members | Completed |
| 03 | Proposed Solution | | All Members | Completed |
| 04 | Function Of Application and The Roles of Application | | All Members | Completed |
| 05 | Function Diagram | | All Members | Completed |
| 06 | Hardware/Software Requirements | | All Members | Completed |
| 07 | Task sheet | | All Members | Completed |

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| --- | --- | --- |
|  | Prepare By: Group 3 | Approved By: Faculty |
| Date: Dec, 2014 | Team Leader  **Hua Tran Huu Trung** | **Dao Ngoc Anh** |