|  |  |  |
| --- | --- | --- |
| D:\Aptech - FPT\semester 2\eProject\documentation\LogoAptech.png | D:\Aptech - FPT\semester 2\eProject\documentation\LogoAptech.png | D:\Aptech - FPT\semester 2\eProject\documentation\LogoAptech.png |

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**

|  |  |  |  |
| --- | --- | --- | --- |
| **Faculty:** |  | **Ms. Dao Ngoc Anh** |  |
| **Batch No:** |  | **F2131405T0** |  |
| **Group No.:** |  | **3** |  |
| **Students:** |  | **Fullname** | **Roll No.** |
|  | 1. | Hua Tran Huu Trung | Student812912 |
|  | 2. | Tra Phuc Vinh Uy | Student800173 |
|  | 3. | Nguyen Minh Nhat | 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**

LPS will accept the details of the customer like his address, organization, gross salary etc. and then process the loan. The user will be able to choose the type of loan, loan amount, period and the branch from which the loan is asked. The system will then process the monthly installments based on the interest rates. The interest rates vary for different types of loans and the period. The system will also keep a track of the installments paid by the customer.

The customer details would be stored in the system and user be allowed to edit only the profile.

1. **Function Of Application**
2. Login/Logout: allow Customer, Senior Manager, Staffs login/logout into System. For each level of member, there will be the respective rights.
3. Server configuration: Senior Manager can configure Server for corresponding with each environment.
4. Change Password: allow Customer, Senior Manager, Staffs can change their Password.
5. Accept: allow Staff input Customer’s Information and details of loan requirement. The System will store Customer’s information and details of loan requirement.
6. Generate Account No: generate unique loan account no. for each new Customer.
7. Approved loans: Senior Manager will agree/disagree the loan requirement.
8. Process the loan: this should include the calculating the loan eligibility for the customer based on the details given.
9. Create Monthly Installment Table to customer base on interest rates.

|  |  |  |  |
| --- | --- | --- | --- |
| Sr. No | Type of loan | Period | Interest rate  (per Year) |
| 1 | Vehicle loan | 6 Months | 15.6% |
| 2 | 1 Year | 13 % |
| 3 | Personal loan | 6 Months | 20.4% |
| 4 | 1 Year | 18% |
| 5 | Home Loan | 1 Year | 10% |
| 6 | 2 Years | 8.4% |
| 7 | Educational | 1 Year | 5% |
| 8 | 2 Years | 4.8% |

1. Keep a track of the installment paid by customer.
2. Process the fine:

|  |  |  |
| --- | --- | --- |
| Sr. No | Criteria | Fine |
| 1 | 1< installment < 5000 | 2% |
| 2 | 5001< installment< 20,000 | 5% |
| 3 | 20,001< installment | 8% |

1. Generate report for Customer:

* All customer report: this will provide the details of customer as name, contact details, loan amount, date of disbursal of loan, monthly installment, no. of installments paid till date, balance to be paid and duration of the loan.
* Payment due report: This will provide the details of customers for whom the date of payment has already passed but the payment is not yet done.
* Fine report: This will provide the details of the fine collected for the month with details of customer.

1. Search: The user will be able to perform search based on the loan account no, amount of loan and duration of loan.
2. Help: help option which will make the user aware of the various functions of the system.
3. **The Roles of Application**
4. **All member:**

* Login.
* Change Password.
* Search.

1. **Manager:**

* Branch Management (View, Insert, Update).
* Department Management (View, Update).
* Staff Management (View, Insert, Update).
* Approved loans (Agree/Disagree).
* Lock Staff’s Account.

1. **Staff:**

* Create Account No.
* Customer Management (View, Insert, Delete).
* Register for loan.
* Create Monthly Installment Table to customer.
* Keep a track of the installment paid by customer.
* Create report, View Report.

1. **Customers:**

* View Customer’s Information, Monthly Installment Table, reports.

# View Approved status of the loan requirements.