

Topic: Library Management System

Abstract:

Library management system is a project which aims in developing a computerized system to maintain all the daily work of library. This project has many features such as the facility of admin login through which the admin can monitor the whole system. It also has a facility of student login and a facility of staff login. The librarian after logging into his account ie admin account can generate various reports such as student report, issue or return report, fine report, staff report and book report. Students after logging in their accounts can see list of books issued and its issue date and return date and the fine. They can also search books if not available reserve for it.

Overall this project of ours is being developed to help the students as well as staff of library to maintain the library in the best way possible and also reduce the human efforts.

MODULES

1.ADMIN

- > Add student details
- ➤ Add book details
- Search book
- ➤ Issue or return book
- ➤ Collect Fine

2.Members (Student and staff)

- > Search book
- ➤ Issue or return book report
- > Fine report

Use Case Diagram Add Book Details Update Book Details Issue Book student Return Book Fine Report Admin Isssue/Return Report Search Book Staff

Table Design

1.tbl_login

Primary key: mbr_id

Field	Data Type	Description
mbr_id	int	Id of the member
User name	Varchar(20)	Name of the user
Password	Varchar(20)	Password of the user
Role	Varchar(10)	Set the role as admin or member

${\bf 2.\ tbl_sdt_reg}$

Primary key: sdt_reg

Foreign Key: sem_id references from tbl_sem

Field	Data Type	Description
sdt_id	Int	Id of the student
F_name	Varchar(20)	First name of the student
L_name	Varchar(20)	Last name of the student
Gender	Varchar(20)	Gender of the student
Sem_id	Int	Id of the semester
Ph_no	Varchar(15)	Contact number of the student
E_mail	Varchar(20)	Email of the student

3.tbl_teacher_reg

Primary Key: teacher_id

Foreign Key:dept_id references from tbl_dept

Field	Data Type	Description
Teacher_id	Int	Id of the teacher
F_name	Varchar(20)	First name of the teacher
L_name	Varchar(20)	Last name of the teacher
Gender	Varchar(20)	Gender of the teacher
Dept_id	Int	Id of the department
Ph_no	Varchar(15)	Contact number of the teacher
E_mail	Varchar(20)	Email of the teacher

4.tbl_dept

Primary Key:dept_id

Field	Data Type	Description
Dept_id	Int	Id of the department
Dept_name	Varchar(20)	Name of the department
Status	int	

5.tbl_branch

Primary key:branch_id

Foreign key:dept_id references from tbl_dept

Field	Data Type	Description
Branch_id	int	Id of the branch
Branch_name	Varchar(20)	Name of the branch
Dept_id	int	Id of the department
Status	int	

6.tbl_batch

Primary Key:batch_id

Foreign Key:branch_id references from tbl_branch

Field	Data Dype	Description
Batch_id	int	Id of the batch
Batch_name	Varchar(20)	Name of the batch
Branch_id	int	Id of the branch
Status	int	

7.tbl_sem

Primary key: sem_id

Foreign key: batch_id references from tbl_batch

Field	Data type	Description
Sem_id	int	Id of the semester
Sem_name	Varchar(20)	Name of the semester
Batch_id	int	Id of the batch
Status	int	

8.tbl_shelf

Primary key:shelf_id

Field	Data type	Descriptio
Shelf_id	int	Id of the shelf
Floor	int	Floor number

9.tbl_book

Primary key:book_id

Foreign key:shelf_id references from tbl_shelf

Field	Data Type	Description
Book_id	int	Id of the book
Book_name	Varchar(50)	Name of the book
Author	Varchar(20)	Author of the book
Publisher	Varchar(20)	Publisher of the book
Pub_date	date	Date of publishing
Edition	Varchar(20)	Edition of the book
Book_copy	int	Number of copies of a book
Price	float	Price of the book
Shelf_id	int	Id of the shelf

10.tbl_issue

Primary key: issue_id

Foreign key:book_id references from tbl_book

Field	Data type	Description
Issue_id	int	Id of each book issue
Book_id	int	Id of each book
Mbr_id	int	Id of each member
Issue_date	date	Date of book issueing

11.tbl_return

Primary key:rtn_book

Foreign key:issue_id references from tbl_issue

Field	Data type	Description
Rtn_id	int	Id of the book return
Issue_id	Int	Id of the each book issue
Rtn_date	Date	Date of book return
Subtd_date	Date	Date of book submit
Days_delay	Int	Number of book delays
Fine	Float	Penalty charged

12.tbl_bookcount

Primary key:count_id

Foreign key:mbr_id references from tbl_login and dept_id references from tbl_dept

Field	Data type	Description
Count_id	Int	Id of book count
dept_id	Int	Id of the department
Mbr_id	Int	Id of each member
Count	Int	Number of books taken

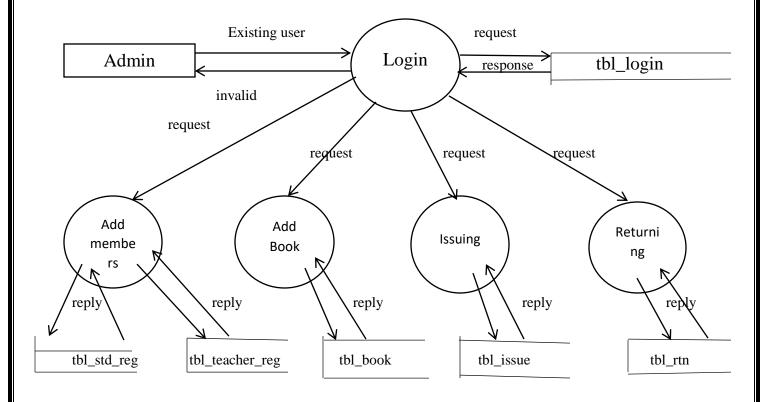
Data Flow Diagram

Context Level



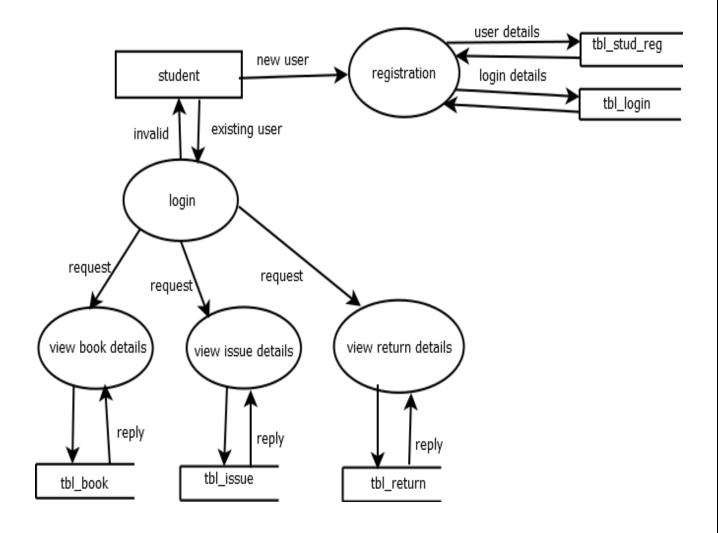
Level 1

Admin



Level 1

Student



Level 1
Teacher

