



Database Management System Project

Topic :- Student Fees Management System

Subject Code :- CS593

Group No :- 2

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ACKNOWLEDGEMENT

We take this occasion to thank God, almighty for blessing us with his grace and taking our endeavor to a successful culmination. We extend our sincere and heartfelt thanks to our esteemed guide, and we also take this opportunity to express a deep sense of gratitude to our course teacher VARSHA PODDAR, SUBARNA ROY mam for cordial support, valuable suggestions and guidance. We extend our sincere thanks to our parents for give us suggestions and guidance.

STUDENT'S SIGNATURE

SOUMYAK PAUL

DEBJIT CHATTOPADHYAY

PROBLEM STATEMENT

**A PROJECT ON “STUDENT FEES MANAGEMENT SYSTEM”
BASED ON DATABASE MANAGEMENT SYSTEM**

PROJECT IS DONE BY STUDENTS OF CSE-3D

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INTRODUCTION

Student Fees Management System is a project which aims in developing a computerized system to maintain all the daily work of an institutions finance department. This project has many features like facility of admin login through which the admin can monitor the whole system. The admin after logging into his account can generate various options such as add a new student, delete a student's records, add a students payment details and delete the payment details. Overall this project of ours is being developed to help staff of finance department to maintain finance records in the best way possible and also reduce the human effort.

Modern Generation is going to dependable on computer and through computer we use Software. Hence, we are learning java that's why we create an Application for managing fees system by using java. By using this, we can store a student's information, payment details and keep a record of the fees paid and the fees due to be paid. Mainly this application is used by Finance Department of any Institution.

By taking all the payment records digital on a database or on cloud, can help maintain consistency and allow different personnel to access them at the same time. The hassle of writing down every record is solved. Moreover wastage of paper is reduced to a great extent.

PURPOSE OF THE PROJECT

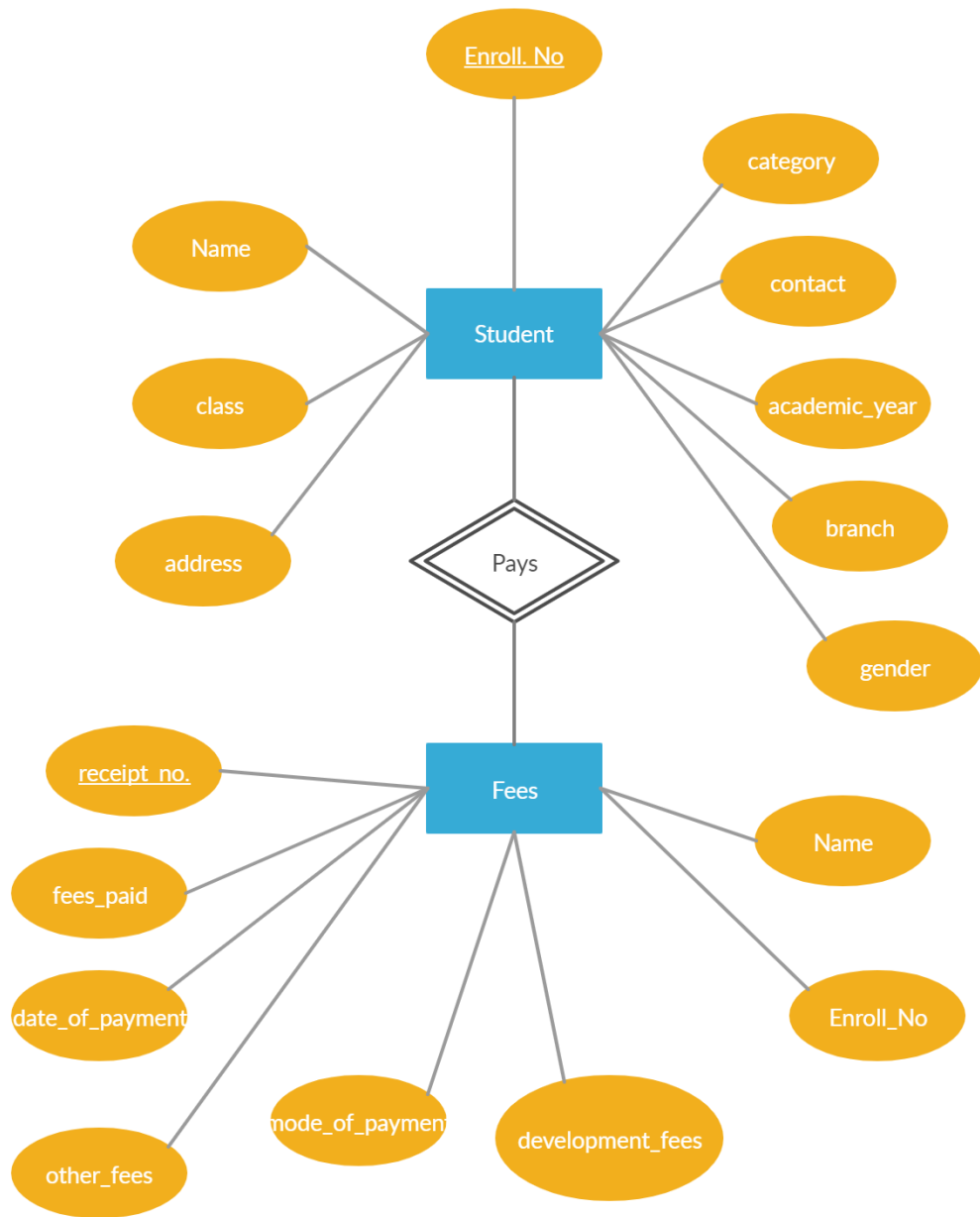
The aim of this project is to develop a system that can handle & manage the activities involved in the finance department of any educational institution in an efficient & reliable way. Less managing personnel & easy searching availability & user profile managing are major goals in this project. Develop a system that can replace the manual fees managing system.

- Develop a database which stores student details & their respective fees details.
- Give reliable search facility for the users.
- Administrator should have logins.
- Create an easy to understand user friendly environment.

SIGNIFICANCE OF THE PROJECT

Fees Management System is an application which refers to fees systems which are generally small or medium in size. It is used by accountant to manage the fees using a computerized system where he/she can record various transactions like adding new student records, recording new payment entry, delete certain students from the database, delete any payment records if necessary. With this computerized system there will be no loss of fees record or member record which generally happens when a non computerized system is used. All these modules are able to help accountant to manage the finance department with more convenience and in a more efficient way as compared to fees systems which are not computerized.

ER DIAGRAM



CODING SECTION –SQL QUERIES

Enter password: *****

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MariaDB connection id is 9

Server version: 10.4.7-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> show databases;

+-----+

| Database |

+-----+

| information_schema |

| mysql |

```
| per for mance_schema |
```

```
| test |
```

```
+-----+
```

```
4 rows in set (0.201 sec)
```

```
MariaDB [(none)]> use test;
```

```
Database changed
```

```
MariaDB [test]>
```

```
Mar iaDB [test]> show tables;
```

```
Empty set (0.048 sec)
```

```
MariaDB [test]> show databases;
```

```
+-----+
```

```
| Database |
```

```
+-----+
```

```
| infor mation_schema |
```

```
| mysql |
```

```
| per for mance_schema |
```

```
| test |
```

```
+-----+
```

```
4 rows in set (0.001 sec)
```

MariaDB [test]> create database Library;

Query OK, 1 row affected (0.122 sec)

MariaDB [test]> show databases;

```
+-----+
| Database      |
+-----+
| information_schema |
| library       |
| mysql         |
| performance_schema |
| test          |
+-----+
```

5 rows in set (0.001 sec)

MariaDB [test]> use Library;

Database changed

MariaDB [Library]> show tables;

Empty set (0.001 sec)

```
MariaDB [Library]> create table book(ISBN int(30),title  
varchar(50),author varchar(30),publication varchar(30),year  
year,price int(5),availability bool);
```

```
Query OK, 0 rows affected (1.001 sec)
```

```
MariaDB [Library]> show tables;
```

```
+-----+
```

```
| Tables_in_library |
```

```
+-----+
```

```
| book      |
```

```
+-----+
```

```
1 row in set (0.001 sec)
```

```
MariaDB [Library]> show details book;
```

```
ERROR 1064 (42000): You have an error in your SQL syntax;  
check the manual that corresponds to your MariaDB server version  
for the right syntax to use near 'details book' at line 1
```

```
MariaDB [Library]> describe book;
```

```
+-----+-----+-----+-----+-----+-----+
```

```
| Field      | Type      | Null | Key | Default | Extra |
```

```
+-----+-----+-----+-----+-----+-----+
```

```
| ISBN      | int(30)   | YES  |     | NULL    |      |
```

title	varchar(50)	YES		NULL		
author	varchar(30)	YES		NULL		
publication	varchar(30)	YES		NULL		
year	year(4)	YES		NULL		
price	int(5)	YES		NULL		
availability	tinyint(1)	YES		NULL		

+-----+-----+-----+-----+-----+-----+

7 rows in set (0.214 sec)

MariaDB [Library]> create table reader(ID int(10),name
varchar(30),address varchar(100),contact varchar(15));

Query OK, 0 rows affected (0.238 sec)

MariaDB [Library]> show tables

-> ;

+-----+

Tables_in_library

+-----+

book	
reader	

+-----+

2 rows in set (0.001 sec)

MariaDB [Library]> describe book;

Field	Type	Null	Key	Default	Extra
ISBN	int(30)	YES		NULL	
title	varchar(50)	YES		NULL	
author	varchar(30)	YES		NULL	
publication	varchar(30)	YES		NULL	
year	year(4)	YES		NULL	
price	int(5)	YES		NULL	
availability	tinyint(1)	YES		NULL	

7 rows in set (0.083 sec)

MariaDB [Library]> describe reader;

Field	Type	Null	Key	Default	Extra
ID	int(10)	YES		NULL	

```

| name | var char (30) | YES | | NULL | |
| addr ess | var char (100) | YES | | NULL | |
| contact | var char (15) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 r ows in set (0.042 sec)

```

MariaDB [Libr ary]>

MariaDB [Libr ary]>

MariaDB [Libr ary]>

MariaDB [Libr ary]>

MariaDB [libr ary]> show tables;

```

+-----+
| Tables_in_libr ary |
+-----+
| book          |
| reader        |
+-----+

```

2 r ows in set (0.070 sec)

MariaDB [libr ary]> cr eate table;

ERROR 1064 (42000): You have an err or in your SQL syntax;

check the manual that corresponds to your MariaDB server version
for the right syntax to use near '' at line 1

MariaDB [library]> describe book;

```
+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| ISBN       | int(30)   | YES  |     | NULL    |       |
| title      | varchar(50) | YES  |     | NULL    |       |
| author     | varchar(30) | YES  |     | NULL    |       |
| publication | varchar(30) | YES  |     | NULL    |       |
| year       | year(4)   | YES  |     | NULL    |       |
| price      | int(5)    | YES  |     | NULL    |       |
| availability | tinyint(1) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+

7 rows in set (0.116 sec)
```

MariaDB [library]> describe reader;

```
+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| ID         | int(10)   | YES  |     | NULL    |       |
```


name	varchar(30)	YES		NULL		
------	-------------	-----	--	------	--	--

address	varchar(100)	YES		NULL		
---------	--------------	-----	--	------	--	--

contact	varchar(15)	YES		NULL		
---------	-------------	-----	--	------	--	--

+-----+-----+-----+-----+-----+-----+

4 rows in set (0.031 sec)

MariaDB [library]> create table record(record_ID int(15) primary key,ISBN int(30),issue_date date,due_date date,due bool,return_date date);

Query OK, 0 rows affected (0.418 sec)

MariaDB [library]> describe record;

+-----+-----+-----+-----+-----+-----+

Field	Type	Null	Key	Default	Extra	
-------	------	------	-----	---------	-------	--

+-----+-----+-----+-----+-----+-----+

record_ID	int(15)	NO	PRI	NULL		
-----------	---------	----	-----	------	--	--

ISBN	int(30)	YES		NULL		
------	---------	-----	--	------	--	--

issue_date	date	YES		NULL		
------------	------	-----	--	------	--	--

due_date	date	YES		NULL		
----------	------	-----	--	------	--	--

due	tinyint(1)	YES		NULL		
-----	------------	-----	--	------	--	--

return_date	date	YES		NULL		
-------------	------	-----	--	------	--	--

+-----+-----+-----+-----+-----+-----+

6 rows in set (0.090 sec)

**MariaDB [library]> create table admin(name varchar(30),user_id
varchar(20) primary key,password varchar(20),contact
varchar(15),adress varchar(100));**

Query OK, 0 rows affected (0.209 sec)

MariaDB [library]> describe admin;

+-----+-----+-----+-----+-----+-----+

Field	Type	Null	Key	Default	Extra
-------	------	------	-----	---------	-------

+-----+-----+-----+-----+-----+-----+

name	varchar(30)	YES		NULL	
------	-------------	-----	--	------	--

user_id	varchar(20)	NO	PRI	NULL	
---------	-------------	----	-----	------	--

password	varchar(20)	YES		NULL	
----------	-------------	-----	--	------	--

contact	varchar(15)	YES		NULL	
---------	-------------	-----	--	------	--

adress	varchar(100)	YES		NULL	
--------	--------------	-----	--	------	--

+-----+-----+-----+-----+-----+-----+

5 rows in set (0.095 sec)

MariaDB [library]> alter table reader

-> add primary key(ID)

-> modify name var char(30) NOT NULL

-> modify address varchar(100) NOT NULL

-> modify address varchar(15) NOT NULL;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'modify name varchar(30) NOT NULL

modify address varchar(100) NOT NULL

modify add' at line 3

MariaDB [library]> describe reader;

Field	Type	Null	Key	Default	Extra
ID	int(10)	YES		NULL	
name	varchar(30)	YES		NULL	
address	varchar(100)	YES		NULL	
contact	varchar(15)	YES		NULL	

4 rows in set (0.034 sec)

MariaDB [library]> alter table reader;

Query OK, 0 rows affected (0.071 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table reader

-> ADD PRIMARY KEY(ID);

Query OK, 0 rows affected (0.830 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table reader

-> modify name varchar(30)NOT NULL;

Query OK, 0 rows affected (0.699 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table reader

-> modify address varchar(100)NOT NULL;

Query OK, 0 rows affected (0.782 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table reader

-> modify contact varchar(15)NOT NULL;

Query OK, 0 rows affected (0.555 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> describe reader;

Field	Type	Null	Key	Default	Extra
ID	int(10)	NO	PRI	NULL	
name	varchar(30)	NO		NULL	
address	varchar(100)	NO		NULL	
contact	varchar(15)	NO		NULL	

4 rows in set (0.030 sec)

MariaDB [library]> alter table reader

-> ADD fine float(5) DEFAULT 0;

Query OK, 0 rows affected (0.242 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> describe reader;

Field	Type	Null	Key	Default	Extra
-------	------	------	-----	---------	-------

```

+-----+-----+-----+-----+-----+
| ID    | int(10)  | NO   | PRI | NULL |   |
| name  | varchar(30) | NO   |     | NULL |   |
| address | varchar(100) | NO   |     | NULL |   |
| contact | varchar(15) | NO   |     | NULL |   |
| fine  | float    | YES  |     | 0     |   |
+-----+-----+-----+-----+-----+

```

5 rows in set (0.084 sec)

MariaDB [library]> describe book;

ERROR 2006 (HY000): MySQL server has gone away

No connection. Trying to reconnect...

Connection id: 12

Current database: library

```

+-----+-----+-----+-----+-----+
| Field    | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| ISBN     | int(30)   | YES  |     | NULL    |       |
| title    | varchar(50) | YES  |     | NULL    |       |
| author   | varchar(30) | YES  |     | NULL    |       |

```

publication	varchar(30)	YES		NULL		
year	year(4)	YES		NULL		
price	int(5)	YES		NULL		
availability	tinyint(1)	YES		NULL		

+-----+-----+-----+-----+-----+

7 rows in set (0.081 sec)

MariaDB [library]> alter table book

-> add primary key(ISBN);

Query OK, 0 rows affected (0.592 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table

-> modify title varchar(50) NOT NULL

-> modify author varchar(30) NOT NULL;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'varchar(50) NOT NULL

modify author varchar(30) NOT NULL' at line 2

MariaDB [library]> alter table

-> modify title varchar(50) NOT NULL;

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'varchar(50) NOT NULL' at line 2

MariaDB [library]> alter table book

-> modify title varchar(50) NOT NULL;

Query OK, 0 rows affected (0.868 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table book

-> modify author varchar(30) NOT NULL;

Query OK, 0 rows affected (0.632 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table book

-> modify publication varchar(50) DEFAULT 'Unknown';

Query OK, 0 rows affected (0.195 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table book

-> modify year year(4) NOT NULL;

Query OK, 0 rows affected (0.591 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table book

-> modify price float(5) NOT NULL;

Query OK, 0 rows affected (1.005 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table book

-> modify availability bool DEFAULT 1;

Query OK, 0 rows affected (0.090 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> describe book;

```
+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| ISBN       | int(30)   | NO   | PRI | NULL    |      |
| title      | varchar(50) | NO   |     | NULL    |      |
| author     | varchar(30) | NO   |     | NULL    |      |
| publication | varchar(50) | YES  |     | Unknown |      |
| year       | year(4)   | NO   |     | NULL    |      |
```

price	float	NO		NULL		
availability	tinyint(1)	YES		1		
+-----+-----+-----+-----+-----+-----+						

7 rows in set (0.031 sec)

MariaDB [library]> describe admin;

+-----+-----+-----+-----+-----+-----+						
Field	Type	Null	Key	Default	Extra	
+-----+-----+-----+-----+-----+-----+						
name	varchar(30)	YES		NULL		
user_id	varchar(20)	NO	PRI	NULL		
password	varchar(20)	YES		NULL		
contact	varchar(15)	YES		NULL		
address	varchar(100)	YES		NULL		
+-----+-----+-----+-----+-----+-----+						

5 rows in set (0.036 sec)

MariaDB [library]> alter table admin

-> modify name varchar(30) NOT NULL;

Query OK, 0 rows affected (0.566 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table admin

-> modify password varchar(20) NOT NULL;

Query OK, 0 rows affected (0.912 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table admin

-> modify contact varchar(15) NOT NULL;

Query OK, 0 rows affected (0.877 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table admin

-> drop address varchar(100);

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'varchar(100)' at line 2

MariaDB [library]> alter table admin

-> drop address;

Query OK, 0 rows affected (0.118 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [libr ary]> alter table admin

->ADDaddressvarchar(100)not null;

Quer y OK, 0 r ows affected (0.134 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [libr ary]> descr ibe admin;

```
+-----+-----+-----+-----+-----+
| Field  | Type      | Null | Key | Default | Extr a|
+-----+-----+-----+-----+-----+
| name   | varchar(30) | NO   |     | NULL    |      |
| user_id | varchar(20) | NO   | PRI | NULL    |      |
| password | varchar(20) | NO   |     | NULL    |      |
| contact | var char(15) | NO   |     | NULL    |      |
| address | varchar(100) | NO   |     | NULL    |      |
+-----+-----+-----+-----+-----+
```

5 r ows in set (0.031 sec)

MariaDB [libr ary]> descr ibe r ecor d;

```
+-----+-----+-----+-----+-----+
| Field  | Type      | Null | Key | Default | Extr a|
+-----+-----+-----+-----+-----+
```

record_ID	int(15)	NO	PRI	NULL		
ISBN	int(30)	YES		NULL		
issue_date	date	YES		NULL		
due_date	date	YES		NULL		
due	tinyint(1)	YES		NULL		
return_date	date	YES		NULL		

+-----+-----+-----+-----+-----+-----+

6 rows in set (0.033 sec)

MariaDB [library]> alter table record

-> add foreign key(ISBN) references book(ISBN);

Query OK, 0 rows affected (0.838 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table record

-> modify issue_date date NOT NULL;

Query OK, 0 rows affected (0.611 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table record

-> modify due tinyint(1) default 0;

Query OK, 0 rows affected (0.128 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table record

->add borrower_id int(10) foreign key references reader(ID);

MariaDB [library]> alter table record

-> add bor r ower _id int(10);

Query OK, 0 rows affected (0.132 sec)

Records: 0 Duplicates: 0 Warnings: 0

MariaDB [library]> alter table record

->add foreign key(borrower_id) references reader(ID);

Query OK, 0 rows affected (1.225 sec)

Records: 0 Duplicates: 0 Warnings: 0

FUTURE SCOPE OF THE PROJECT

We have much scope for developing our Application. We can make this application as Server based application. In our application we don't have student's interaction to this application. We can make this happen in future. We can make this application as an android application which is very helpful to the user and the library authority.

CONCLUSION

In this application we can entry a new book which has a specific id, price, pages, book name, and publisher. We also add a student's information such as name, id, father's name, and batch, semester which is help admin when a student issue a book & return a book. If admin wants to see the details information of returning or issuing a book with date, he needs to click just a button on our application.

REMARKS

TEACHER'S SIGNATURE