

# GROUP PROJECT

## College management

### ***Team members***

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# COLLEGE MANAGEMENT

## DESCRIPTION

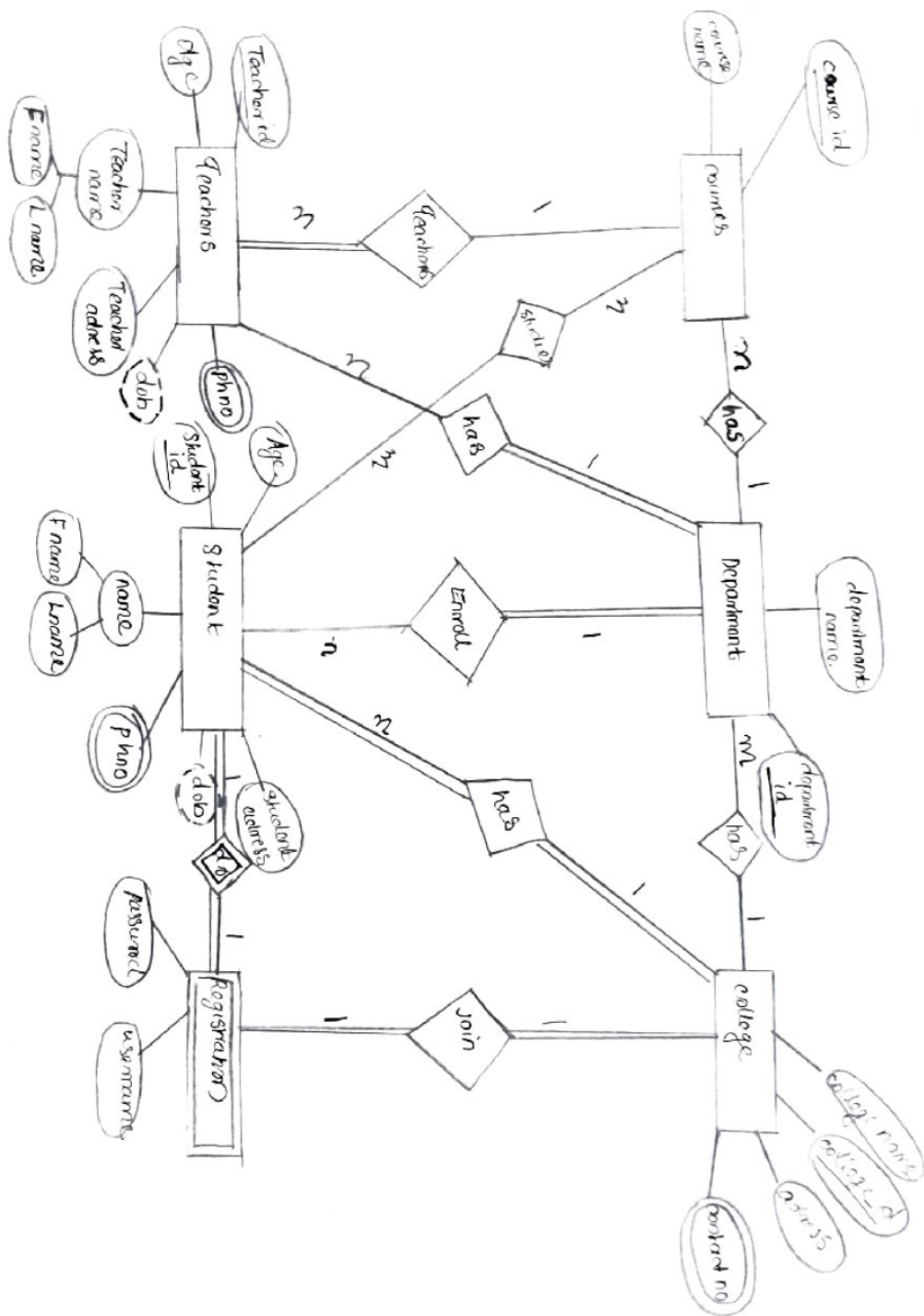
THE DETAILS OF COLLEGE IS STORED IN COLLEGE TABLE RESPECTIVE WITH ALL TABLES.

THE DETAILS OF STUDENT ARE STORED IN STUDENT ,COURSES,TEACHERS ETC ARE STORED IN THEIR RESPECTIVE TABLES.

THE MAIN OBJECTIVE OF THE COLLEGE MANAGEMENT IS TO MANAGE THE DETAILS OF COLLEGE, TEACHERS, COURSES ETC.IT MANAGES ALL INFORMATION ABOUT THE COLLEGE , LIST OF STUDENTS IN THAT COLLEGE AND THEIR COURSES AND TEACHERS WHO ARE TEACHING THEM.STUDENTS CAN LOGIN THE WEBSITE THROUGH THEIR USERNAME AND PASSWORD AND THEY CAN SEE THEIR DETAILS ABOUT THEM AND THEIR COURSES AND THE TEACHER WHO ARE TEACHING THEM.IF FACULTIES LOGIN THROUGH THE PAGE THEY CAN ALSO SEE THEIR COURSES ,DEPARTMENT THEY BELONGS TO .IT MAINTAINS A COMPLETE RECORD OF THE STUDENTS AND TEACHERS.WE HAVE DEVELOPED THIS PROJECT USING JAVA AND MYSQL.

THERE ARE STUDENT LOGIN AND ADMIN LOGIN . STUDENT LOGIN CAN SEE THE DETAILS OF CORRESPONDING STUDENTS ONLY. ADMIN LOGIN CAN SEE THE DETAILS OF THE ALL STUDENTS

# ER - DIAGRAM



# RELATIONAL SCHEMA

Q Step 1: Mapping of regular entity types.

college

<u>collegid</u>	college name	C-address	contactno
-----------------	--------------	-----------	-----------

Department

<u>Departmentid</u>	Departmentname
---------------------	----------------

courses

<u>course id</u>	course name
------------------	-------------

Students

Age	<u>studentid</u>	Fname	Lname	phno	dob	student address
-----	------------------	-------	-------	------	-----	-----------------

Teachers

<u>Teacherid</u>	Fname	Lname	Teacheraddress	dob	phno	Age
------------------	-------	-------	----------------	-----	------	-----

Registration

password	user name
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Step 2:

mapping of weak entity

password	username	<u>studentid</u>
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# NORMALIZATION

1NF

- \* Attributes must be single valued
- \* Domain of the attributes must not be changed.
- \* Every column attributes must have unique name.

→ student (before normalization)

Student id	Fname	Lname	Age	pho	Yob	Student address	college id	course id
101	Anu	V	18	9847312 873215	2002	Kochi	1	331
102	MANU	M	19	732148 834897	2003	Kannur	1	332

Student (after normalization)

Student id	Fname	Lname	Age	Yob	Student address	college id	course id
101	Anu	V	18	2002	Kochi	1	331
102	MANU	M	19	2003	Kannur	1	332

Students details

Student id	Phno
101	9847312
101	873215
102	732148
102	834897

→ Teachers (before normalization)

Teacherid	Fname	Lname	Teacheraddress	Job	phno	Age	counselor
201	Manju	N	Trivandrum	1995	8342169, 98473128	28	331
301	RAM	TK	BANGLORE	1997	83211012, 93211037	36	330

Teachers (after Normalization)

Teacherid	Fname	Lname	Teacheraddress	Job	Age	counselor
201	Manju	N	Trivandrum	1995	28	331
301	RAM	TK	BANGLORE	1997	36	330

Teacherid	phno
201	8342169
201	98473128
301	832110128
301	93211037

→ college (before normalization)

collegeid	collegenam	c.address	contact no
1	idukki cec	idukki	984321828, 994433221

college (after normalization)

collegeid	collegenam	c.address
1	idukki cec	idukki

collegeid	contact no
1	984321828
1	994433221



2NF

\*Must be in 1NF

\*should not consist partial dependency

→ Student (before normalization)

Student id	Fname	Lname	Age	Yob	Student address	college id	course id
101	Arnu	V	18	2004	Kochi	1	331
102	MANU	M	19	2003	Kannur	1	332

Student (After normalization)

Student id	Age	Yob	Student id	College id	course id	Student id	Fname	Lname
101	18	2004	101	1	331	101	Arnu	V
102	19	2003	102	1	332	102	MANU	M

→ Teacher (before normalization)

Teacher id	Fname	Lname	Teacher address	Yob	Age	course id
201	MANJU	N	Tiruvanchuram	1995	28	331
301	RPM	TK	BANGLORE	1987	36	330

Teacher id	Age	Yob	Teacher id	Fname	Lname	Teacher id	Teacher Address
201	28	1995	201	MANJU	N	201	Tiruvanchuram
301	36	1987	301	RPM	TK	301	BANGLORE

3NF

\* Must be in 2NF

\* None of the non-primary key attributes transitively depend on their primary key.

⇒ Student (before normalization)

Student id	Fname	Age	Yob
101	Anu	18	2004
102	MANU	19	2003

Student After normalization.

Studentid	Fname	Age	Yob
101	Anu	18	2004
102	MANU	19	2003

⇒ Teachers (before normalization)

Teacherid	Age	Fname	Yob
201	28	MANJU	1995
301	36	RAM	1987

Teachers (After normalization)

Teacherid	Fname	Age	Yob
201	MANJU	28	1995
301	RAM	36	1987



# PROGRAM CODE

```
package dhaheen.dbms.collegemanagement;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import java.util.ArrayList;
import javax.swing.JOptionPane;
public class DataBase {
    private Connection connection = null;
    public static String currentDep="";
    public static String userid="";
    public static DataBase db=new DataBase();
    public DataBase(){
        try {
            // below two lines are used for connectivity.
            Class.forName("com.mysql.cj.jdbc.Driver");
            connection = DriverManager.getConnection(
                "jdbc:mysql://localhost:3306/collegemanagement",
                "root", "Hafi@1234");
        }catch(Exception e){}
    }
    Boolean SignIn(String name,String pass){
        String query="select * from student_login where user_name='"+name+"' and
password='"+pass+"'";
        System.out.print(query);
        try{
            ResultSet rs=connection.createStatement().executeQuery(query);
            if(rs.next()){
                userid=name;
                return true;
            }
        }
        catch(Exception e){e.printStackTrace();}
        return false;
    }
    Boolean SignInadmin(String name,String pass){
        String query="select * from admin_login where user_name='"+name+"' and
password='"+pass+"'";
        System.out.print(query);
        try{
            ResultSet rs=connection.createStatement().executeQuery(query);
```

```

        if(rs.next()){
            userid=name;
            return true;
        }
    }
    catch(Exception e){e.printStackTrace();}
    return false;
}

Boolean SignUp(String uname,String password){
    String query="insert into student_login values('"+uname+"','"+password+"')";
    try{
        connection.createStatement().executeUpdate(query);
        userid=uname;
        return true;
    }
    catch(Exception e){
        e.printStackTrace();
        return false;}
}

ArrayList getDetails(){
    String query="select * from student join department on
student.dept_id=department.Dept_id where id='"+userid+"'";
    ArrayList list= new ArrayList();
    try{
        ResultSet res=connection.createStatement().executeQuery(query);
        if(res.next()){

            list.add(res.getString(2));
            list.add(res.getString(3));
            list.add(res.getString(4));
            list.add(res.getString(5));
            list.add(res.getString(6));
            list.add(res.getString(7));
            list.add(res.getString(10));
        }
        return list;
    }
    catch(Exception e){
        e.printStackTrace();
    }
    return null;
}

Boolean addDetails(String fname , String lname , String age , String dob , String
pnum, String addr, String deptid){
    String query="insert into student
values('"+userid+"','"+fname+"','"+lname+"','"+age+"','"+dob+"','"+pnum+"','"+addr+"','"+d
eptid+"')";

```

```

try{
    System.out.print(query);
    connection.createStatement().executeUpdate(query);
    return true;
}
catch(Exception e){
    e.printStackTrace();
    return false;
}
}

```

```

Boolean addDetailteacher(String id ,String fname , String lname , String age , String
dob , String pnum, String addr, String deptid){
    String query="insert into teacher
values('"+id+"','"+fname+"','"+lname+"','"+age+"','"+dob+"','"+pnum+"','"+dob+"','"+deptid
+"')";

```

```

try{
    System.out.print(query);
    connection.createStatement().executeUpdate(query);
    return true;
}
catch(Exception e){
    e.printStackTrace();
    return false;
}
}

```

```

ArrayList getCourses(){
    String query="select * from courses where dept_id='"+currentDep+"'";
    ArrayList list = new ArrayList();
    try{
        ResultSet res=connection.createStatement().executeQuery(query);
        while(res.next()){
            Object obj[]={
                res.getString(1),
                res.getString(2);
            };
            list.add(obj);
        }
        return list;
    }
    catch(Exception e){
        return null;
    }
}

```

```

ArrayList getFaculty(){
    String query="select * from teacher where dept_id='"+currentDep+"'";
    ArrayList list = new ArrayList();
    try{

```

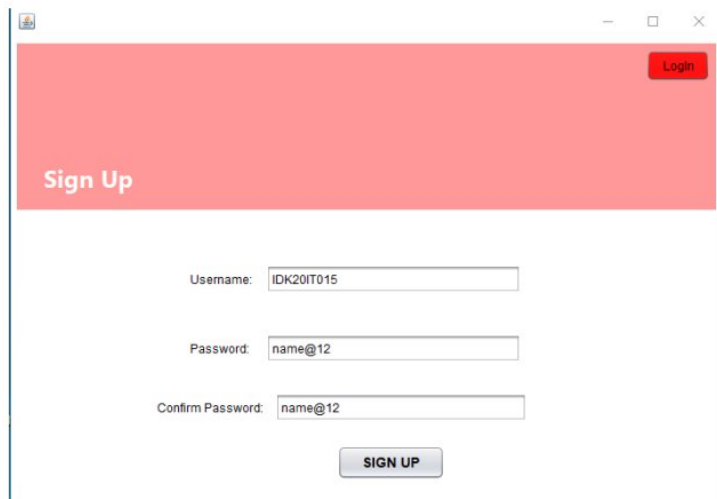
```

        ResultSet res=connection.createStatement().executeQuery(query);
        while(res.next()){
            Object obj[]={
                res.getString(1),
                res.getString(2),
                res.getString(3),
                res.getString(4),
                res.getString(5),
                res.getString(6),
                res.getString(7)};
            list.add(obj);
        }
        return list;
    }
    catch(Exception e){
        return null;
    }
}

ArrayList getStudent(){
    String query="select * from student where dept_id='"+currentDep+"'";
    ArrayList list = new ArrayList();
    try{
        ResultSet res=connection.createStatement().executeQuery(query);
        while(res.next()){
            Object obj[]={
                res.getString(1),
                res.getString(2),
                res.getString(3),
                res.getString(4),
                res.getString(5),
                res.getString(6),
                res.getString(7)};
            list.add(obj);
        }
        return list;
    }
    catch(Exception e){
        return null;
    }
}
}

```

# SCREEN SHORTS



Sign Up

Login

Username:

Password:

Confirm Password:

**SIGN UP**



**ENTER DETAILS**

FIRST NAME:

LAST NAME:

AGE:

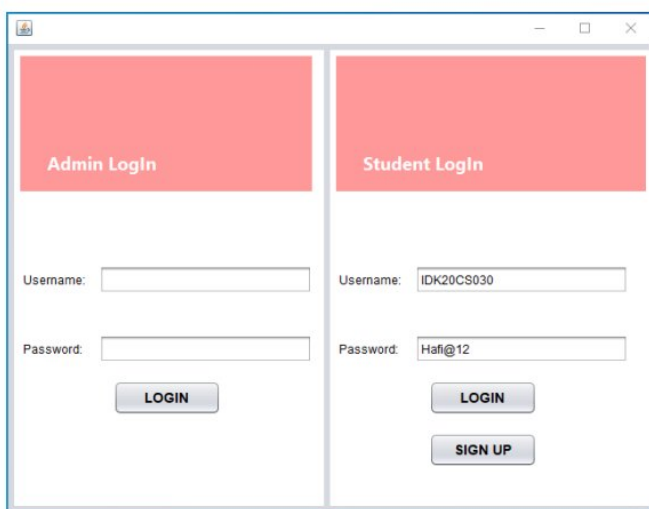
DATE OF BIRTH(YYYY-MM-DD):

PHONE NUMBER:

DEPARTMENT ID:

ADDRESS:

**SAVE**



**Admin Login**

Username:

Password:

**LOGIN**

**Student Login**

Username:

Password:

**LOGIN**

**SIGN UP**



**PROFILE**

LogOut

KTU ID: IDK20CS030

FULL NAME: HafisMuhammed

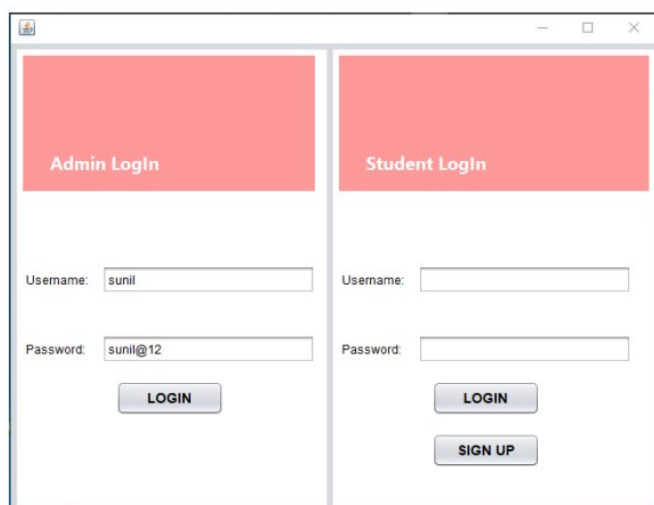
AGE: 22

DATE OF BIRTH: 2001-01-21

PHONE NUMBER: 9562360898

DEPARTMENT: Kuttikkattoor

ADDRESS: computer science



**Admin Login**

Username:

Password:

**LOGIN**

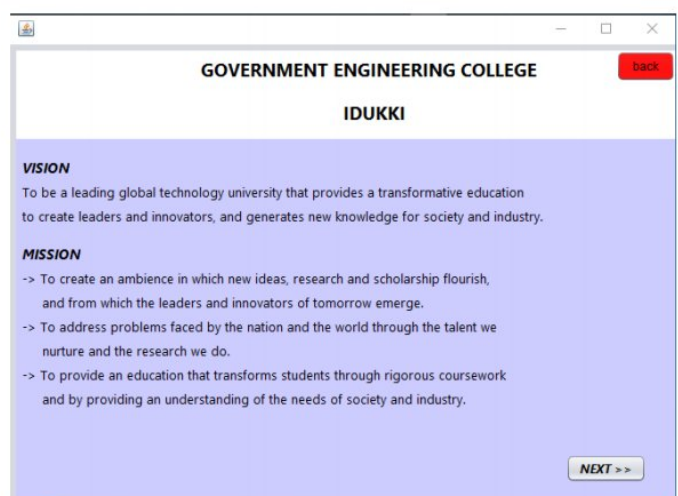
**Student Login**

Username:

Password:

**LOGIN**

**SIGN UP**



**GOVERNMENT ENGINEERING COLLEGE**

**IDUKKI**

**VISION**

To be a leading global technology university that provides a transformative education to create leaders and innovators, and generates new knowledge for society and industry.

**MISSION**

- > To create an ambience in which new ideas, research and scholarship flourish, and from which the leaders and innovators of tomorrow emerge.
- > To address problems faced by the nation and the world through the talent we nurture and the research we do.
- > To provide an education that transforms students through rigorous coursework and by providing an understanding of the needs of society and industry.

**back**

**NEXT >>**

Logout

COMPUTER SCIENCE & ENGINEERING

INFORMATION TECHNOLOGY

ELECTRICAL & ELECTRONICS ENGINEERING

ELECTRONICS AND COMMUNICATION ENGINEERING

MECHANICAL ENGINEERING

back

GOVERNMENT ENGINEERING COLLEGE IDUKKI

FACULTIES

STUDENTS

COURSES

faculty details

ADD FACULTY

menu

ID	FIRST NAME	LAST NAME	AGE	DOB	PHONE NO	ADDRESS
IDKCS01	Sunil	Ks	40	1970-09-14	9315360183	Thodupuzha
IDKCS02	Aneesh	A	45	1965-09-15	9315028183	Thodupuzha
IDKCS03	Reena	S	43	1968-04-15	9391828183	Kozhikode
IDKCS04	Aleena	L	39	1971-07-03	9391829203	tvm
IDKCS05	Kezhiya	K	39	1971-06-08	9871839203	kannur

ENTER DETAILS OF TEACHER

back

TEACHER ID:

CST09

FIRST NAME :

Anandhu

LAST NAME :

S

AGE :

40

DATE OF BIRTH (YYYY-MM-DD) :

2071-03-08

PHONE NUMBER :

7382983671

ADDRESS :

kozhikode

DEPARTMENT ID :

CST

ADD

Student details

menu

ID	FIRST NAME	LAST NAME	AGE	DOB	PHONE NO	ADDRESS
IDK20CS030	Hafis	Muhammed	22	2001-01-21	9562360898	Kuttikkalloor
IDK20CS002	Abhiram	ns	20	2003-03-18	7392746248	Kollam

Course details

menu

ID	NAME
CST301	FLAT
CST303	CN
CST305	SS
CST307	MM
CST309	MSS
MNC308	DM



# TABLES

```
mysql> select * from student_login;
```

user_name	password
IDK20CS030	Hafi@12
IDK20CS008	Vazha
IDK20CS002	furry
IDK20IT015	name@12

```
4 rows in set (0.00 sec)
```

```
mysql> select * from teacher;
```

id	Fname	Lname	age	dob	phone_no	address	Dept_id
IDKCS01	Sunil	Ks	40	1970-09-14	9315360183	Thodupuzha	CST
IDKCS02	Aneesh	A	45	1965-09-15	9315028183	Thodupuzha	CST
IDKCS03	Reena	S	43	1968-04-15	9391828183	Kozhikode	CST
IDKCS04	Aleena	L	39	1971-07-03	9391829203	tvm	CST
IDKCS05	Kezhiya	K	39	1971-06-08	9871839203	kannur	CST
CST09	Anandhu	S	40	2071-03-08	7382983671	kodhikode	CST

```
6 rows in set (0.00 sec)
```

```
mysql> select * from admin_login;
```

user_name	password
sunil	sunil@12
unnikrishnan	unni@123
linsa	linsa@1
aleena	aleena@1

```
4 rows in set (0.00 sec)
```

```
mysql> select * from courses;
```

id	name	dept_id
CST301	FLAT	CST
CST303	CN	CST
CST305	SS	CST
CST307	MM	CST
CST309	MSS	CST
MNC308	DM	CST

```
6 rows in set (0.00 sec)
```

```
mysql> select * from department;
```

dept_id	name
CST	computer science
ITE	Information technology
ECE	Electronics and communication
EEE	Electrical and electronics
ME	Mechanical engineering

```
5 rows in set (0.00 sec)
```