DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

REPORT FOR THE DBMS PROJECT

Title of the project: Hostel Grievance Management System

Under the guidance of

Prof. Tejaswini M

Project batch no: F1

Project Team:

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Signature of guide

(Prof. Tejaswini M)

Signature of HOD

(Dr. Mahanand BS)

Problem Statement: To build a website which facilitates easy grievance registration and solution of the hostel of different colleges.

Aim of the Project:

- This Project is aimed at automating the tedious manual grievance management system of the hostel. It eliminates the contact between hostel students and the administration.
  It helps to register and resolve grievances online via our portal

Objectives:

- This website will ease the grievance registration and resolution process by automating it.
- Help students to report their grievances online without manually entering it in the register.
- Helps the admin to access the grievances details and resolve them and also read the grievance description.
- Have a real time updation of the grievance status in the student portal.

Existing System:

Current system is as follows-

Student goes physically to the office and registers complaint in the register.

The admin checks the register for grievance which is slow and inefficient.

The admin sends a hostel employee to complete the work

The admin then strikes off the grievance from the register.

The employee completes the work and reports to admin

The student cannot check the status of his grievance if he is outside the hostel.

Proposed System:

The student can login and register his complaint online without going to the office.

The admin will be able to view the grievance and resolve it.

Student can report multiple Grievances at once.

Entries of Grievances will be stored in the table even if the admin resolves it since it works on a flag variable called G_status.

There is minimal contact between student and hostel office

Technology Used

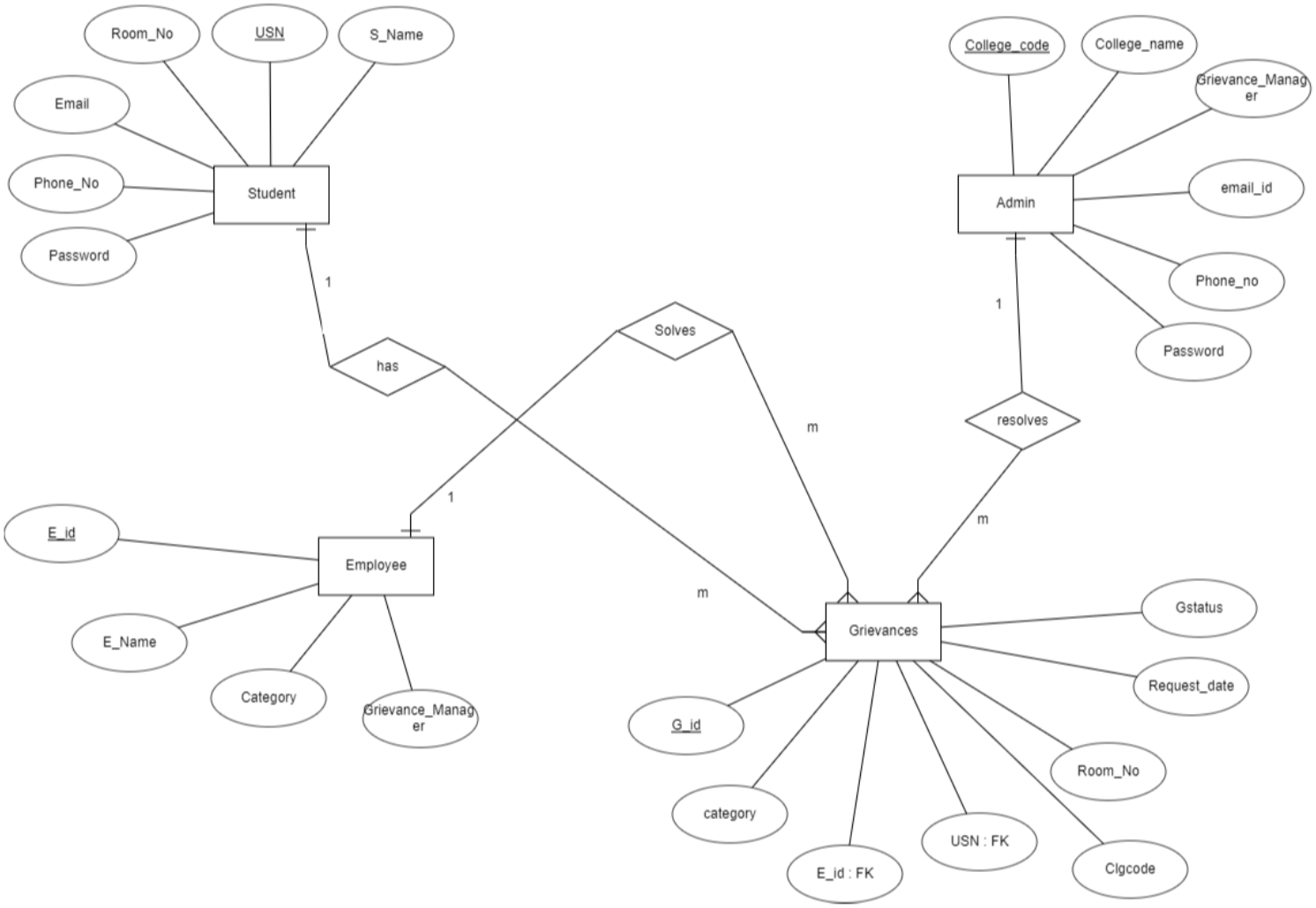
1. HTML , CS S ,BOOTSTRAP , EMBEDDED JAVASCRIPT- FRONTEND

2. NODE JS – BACKEND

3. CLEVER CLOUD MYSQL INSTANCE – DATABASE

3. EXPRESS JS, BODY PARSER, BYCRPT PASSWORD ENCRYTION, NODEMON - LIBRARIES

ER Diagram:


Room_No
USN
S_Name
Email
Phone_No
Password
Student
1
has
Solves
m
1
E_id
Employee
E_Name
Category
Grievance_Manager
m
Grievances
G_id
category
E_id : FK
USN : FK
Clgcode
Gstatus
Request_date
Room_No
College_code
College_name
Grievance_Manager
email_id
Phone_no
Password
Admin
1
resolves
m

Our Hostel Grievance Management System contains the following tables:

Admin:

College_code	College_name	Grievance_Manager	email_id	Phone_no	Password
123123	SJCEmysore	DRPmallu	DRPmallu@g	858585	$2b$05$u97XPUkcOMnbSosQYJq/m.lgifpFC7bfYQuOALtw4Sp...
19	Sjce	DrpMallu	b@d.com	+918191926434	$2b$05$uL1fKNNhHMTxQesP6YvqM.Jcmanvffx1VE2FyUyaYMr...

Employee:

E_id	E_Name	Category	Grievance_Manager
1	Mahesh	Electric	DRPMallu
2	Rajesh	wifi	DRPMallu
3	Suresh	carpenter	DRPMallu
4	puneet	others	DRPMallu

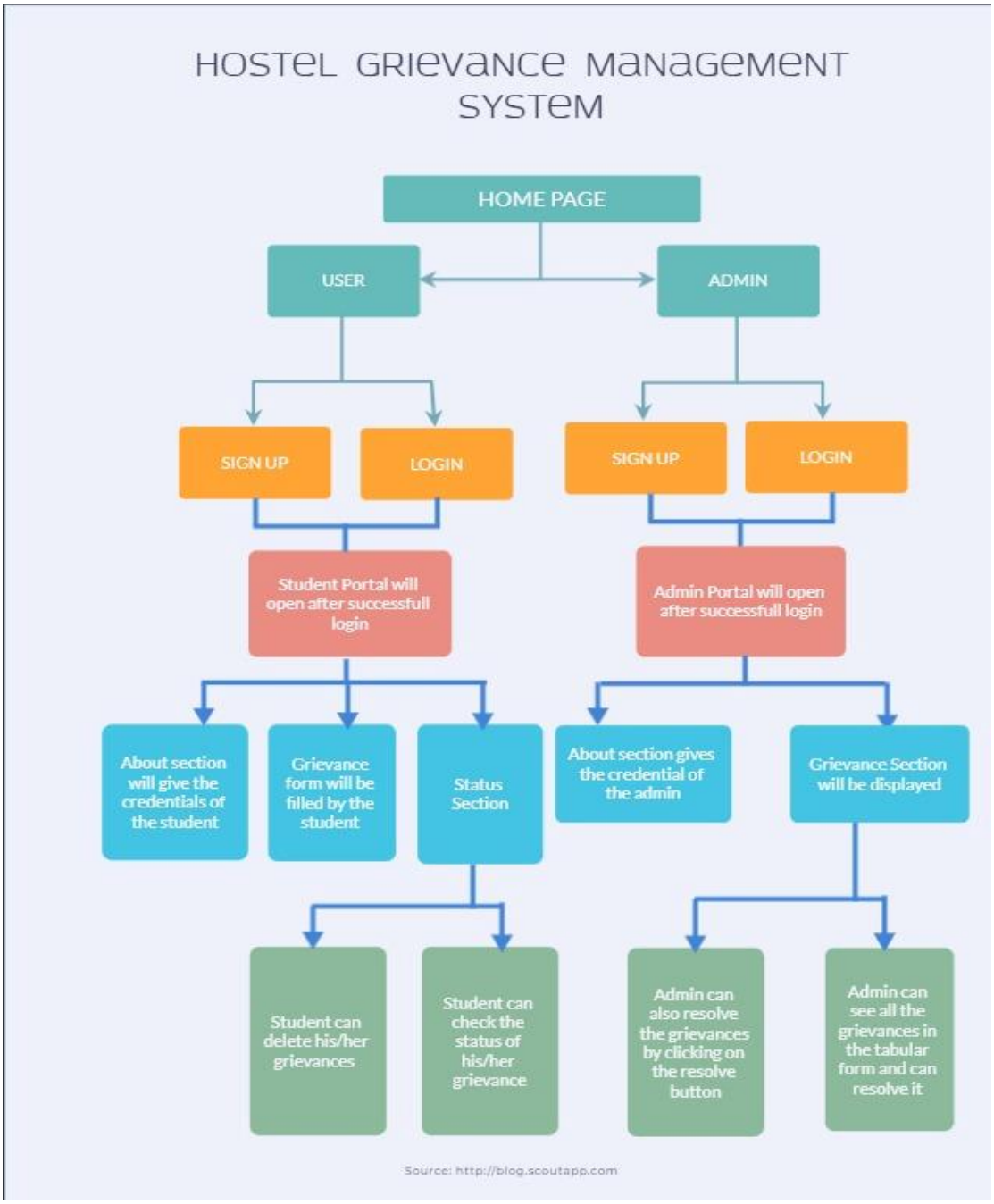
Grievance:

G_id	category	E_id	USN	Room_No	Request_date	Gstatus	message	Clgcode
66L404	Others	4	01jst	L404	27/1/2022	1	hello	19
67L404	Electric	4	01jst	L404	27/1/2022	0	k	123123

Student:

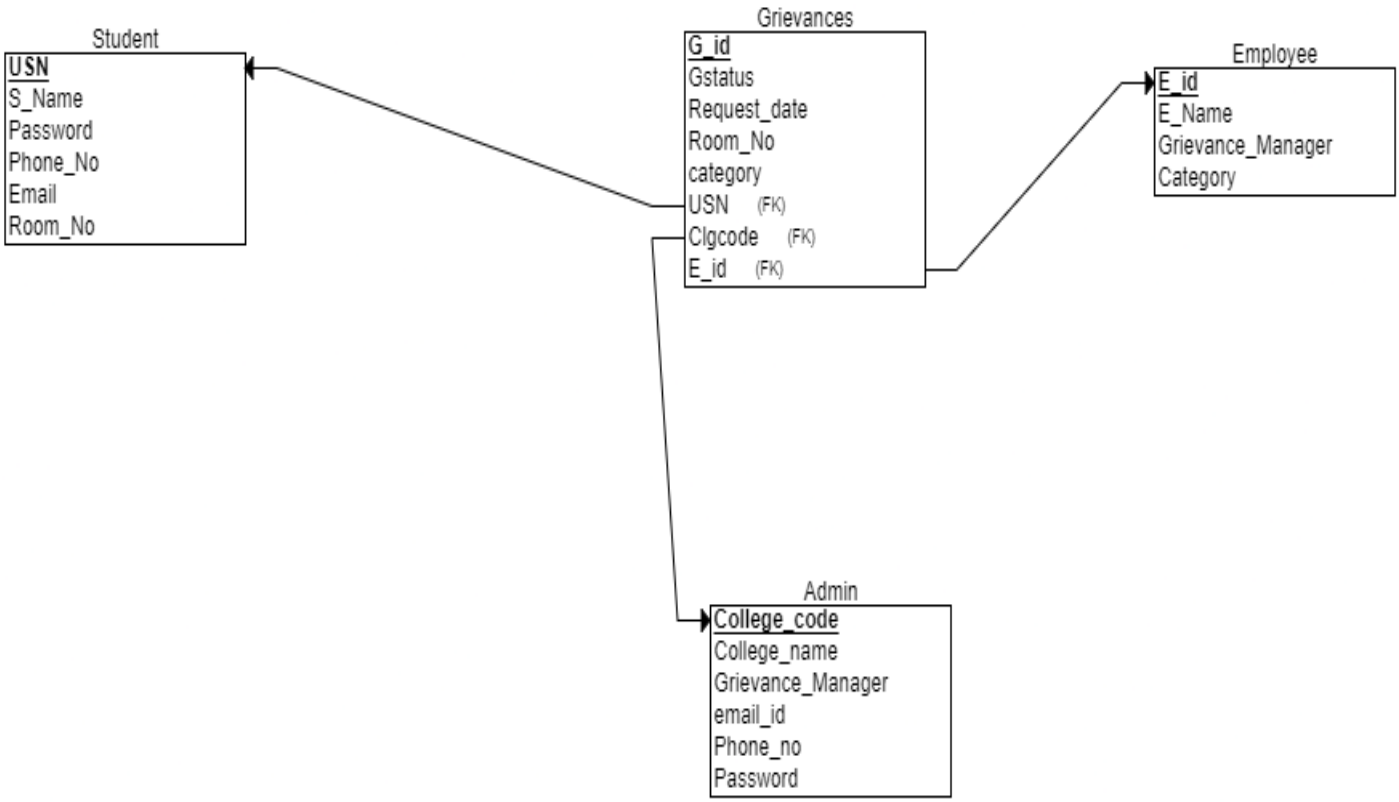
USN	S_Name	Room_No	Email	Phone_No	Password
01jst	dummy	L404	dummy@g	1111111111	$2b$05$ZVSM8SlHMNOCg4rT9IalYul3tVu15JwMocP3kPCDT6V...
01jst19	Mohit	M32	m@g	749749	$2b$05$YlRJD1bWJfev2Av7XbrfoO/2BBHc2GvpBavF8E1G/s/...
01jstdummy2	dummy2	M99	dummy2@g	85858585	$2b$05$kH5z2gQh740ncfi2OSpEkOVZFL2VK4/OHDNU91JZytu...

DATA FLOW DIAGRAM

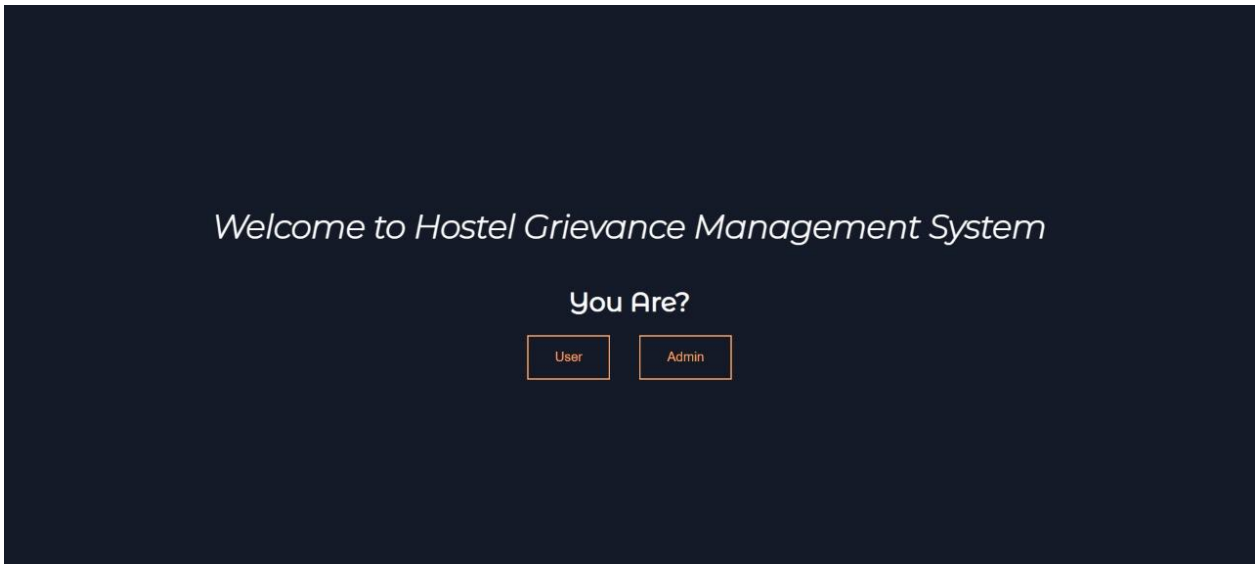


JSS Mahavidyapeetha
JSS Science And Technology University
(Established Under JSS Science and Technology University Act No. 43 of 2013)
(Formerly Known as SJCE)

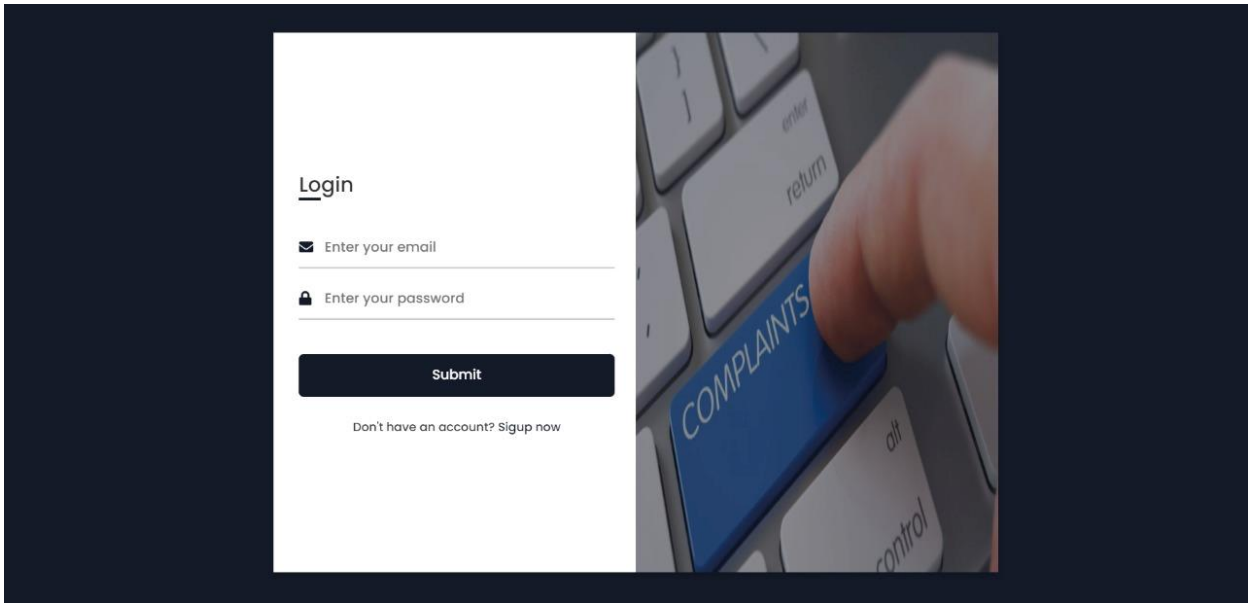
RELATIONAL SCHEMA



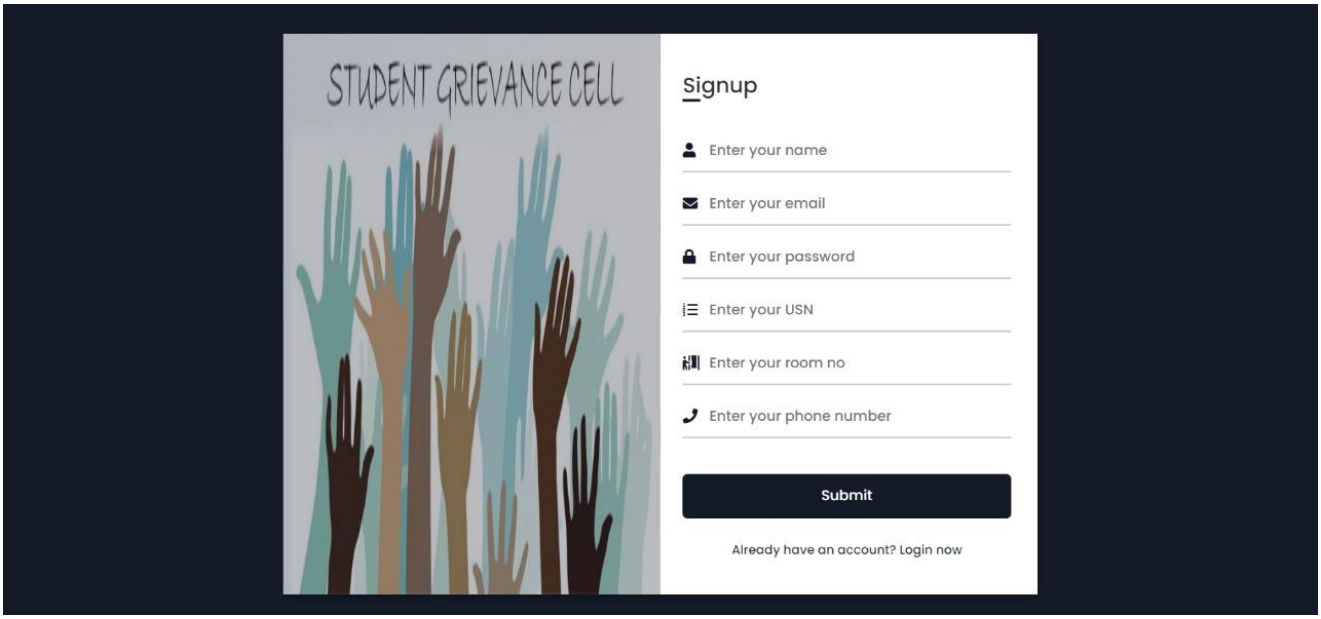
Home Page



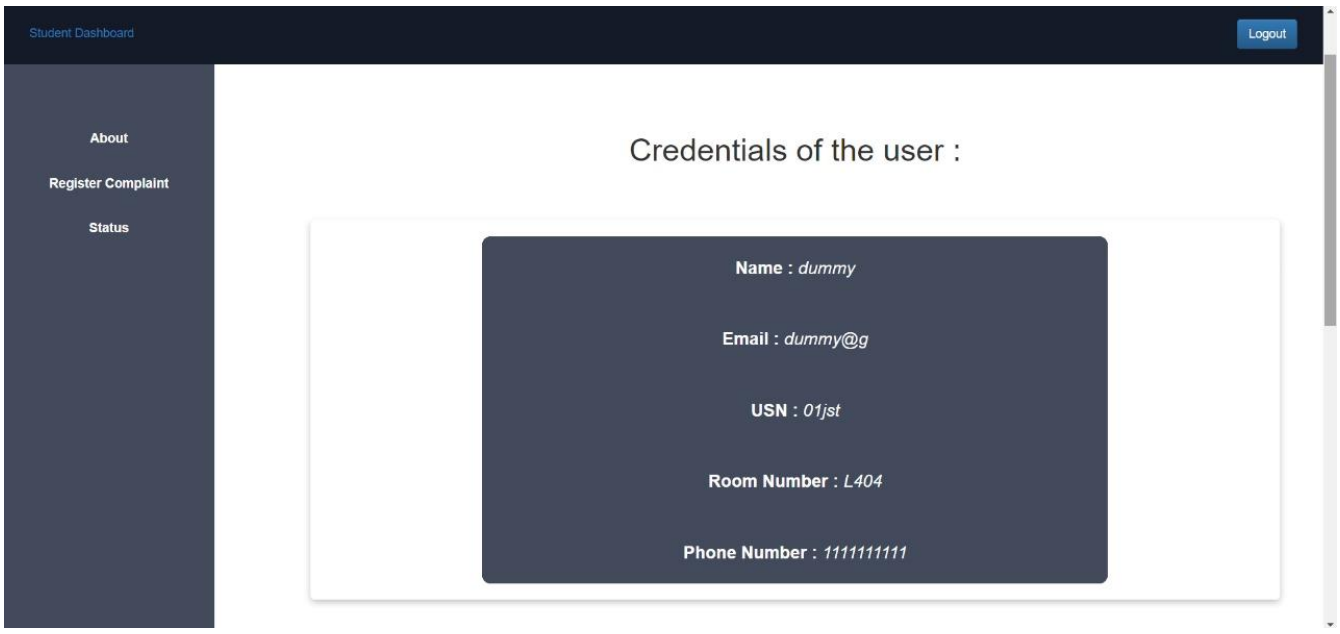
Student Login



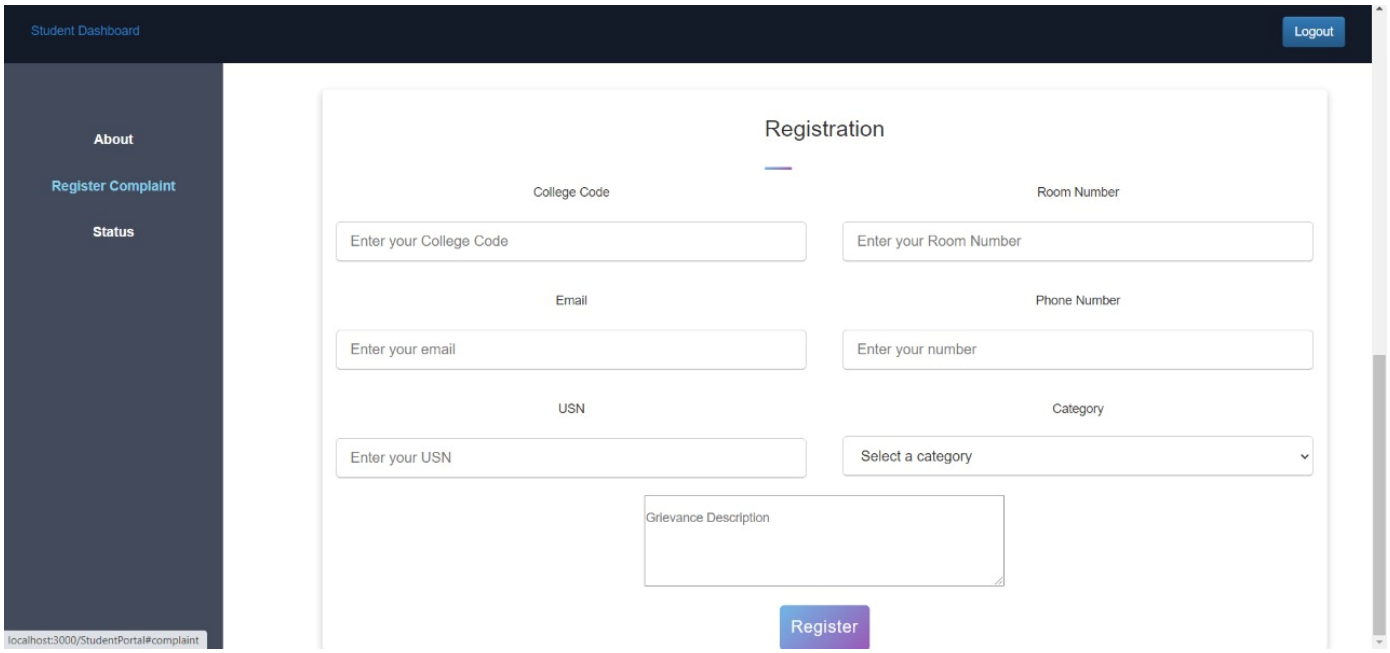
Student Signup



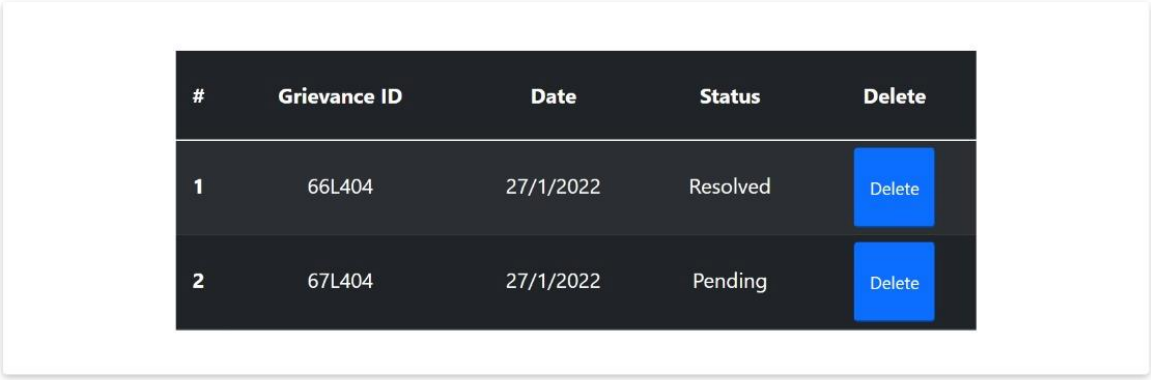
Student Dashboard



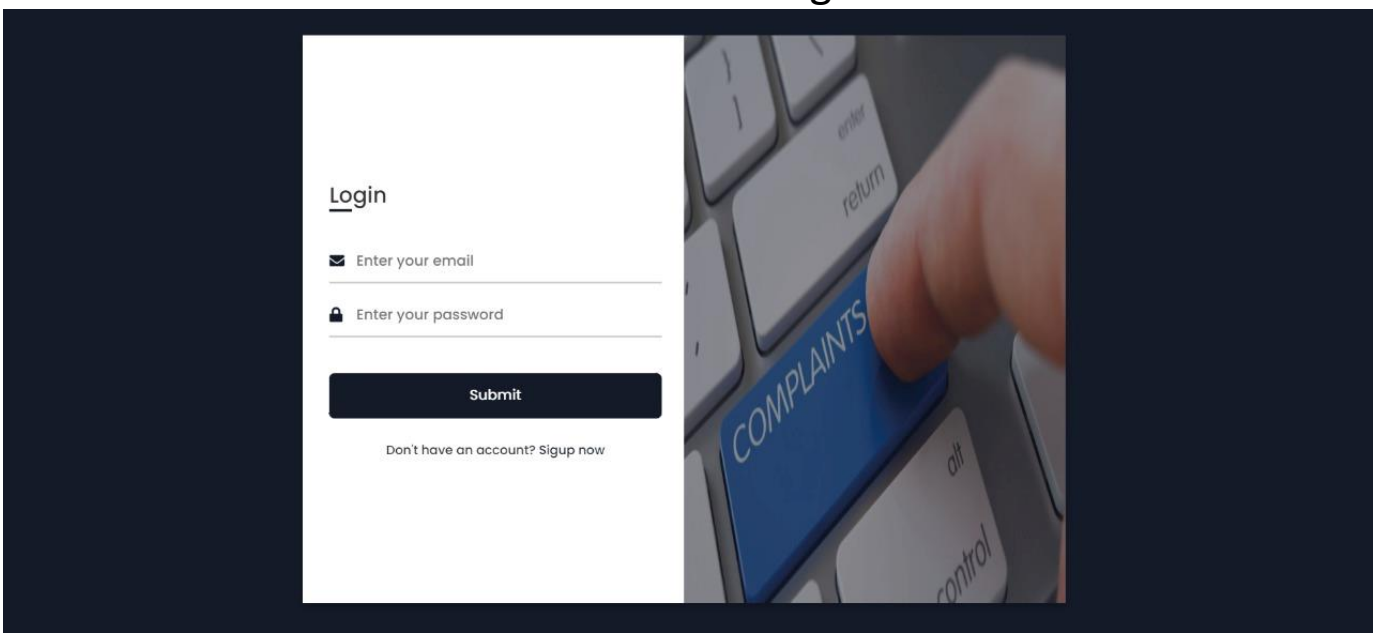
Student Grievance Registration Form



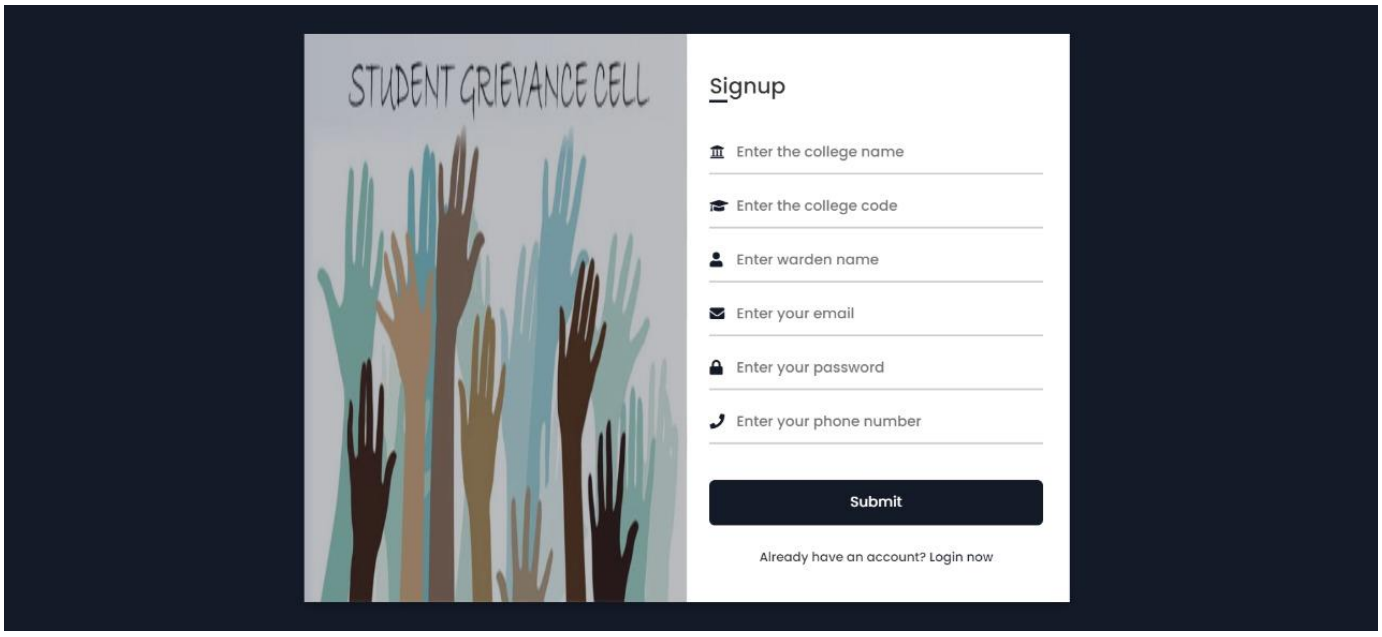
Status of student's grievances



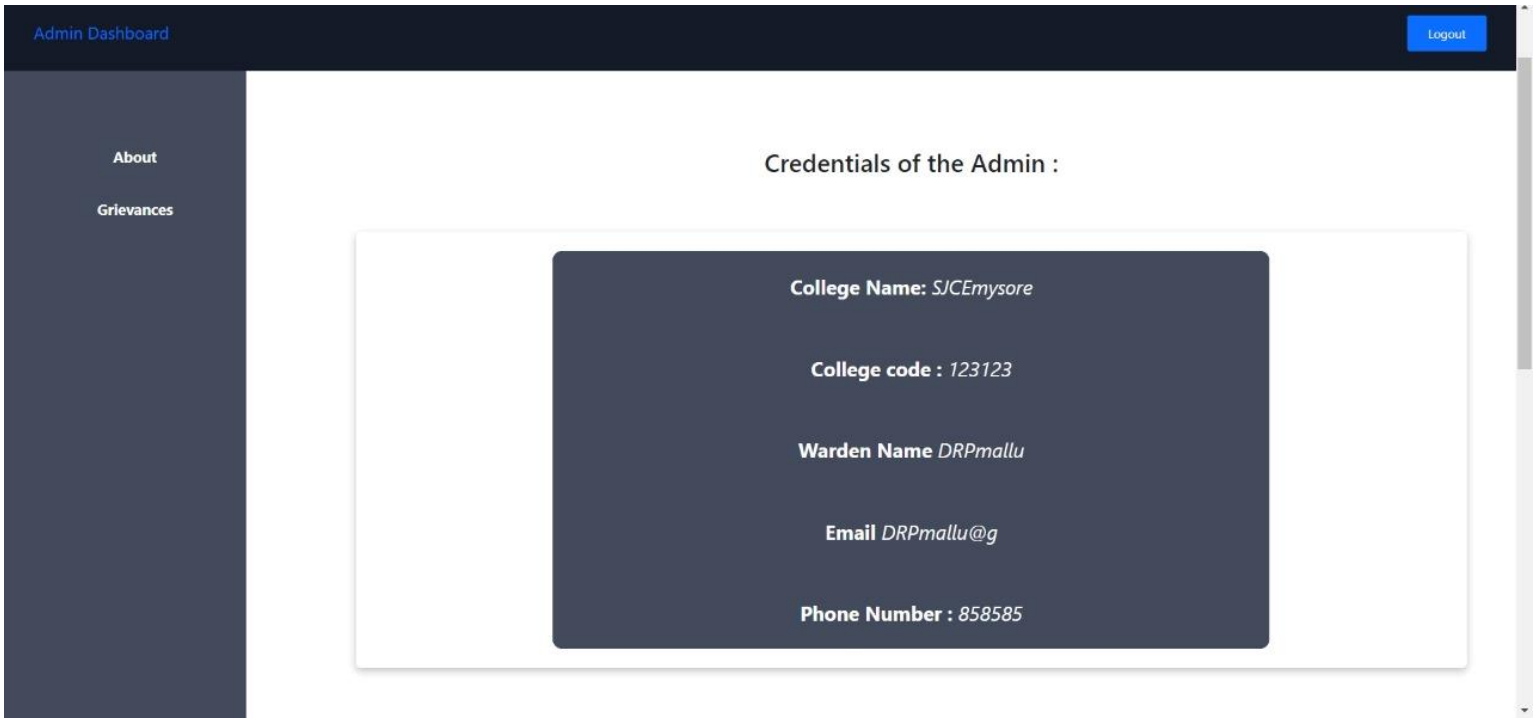
Admin Login



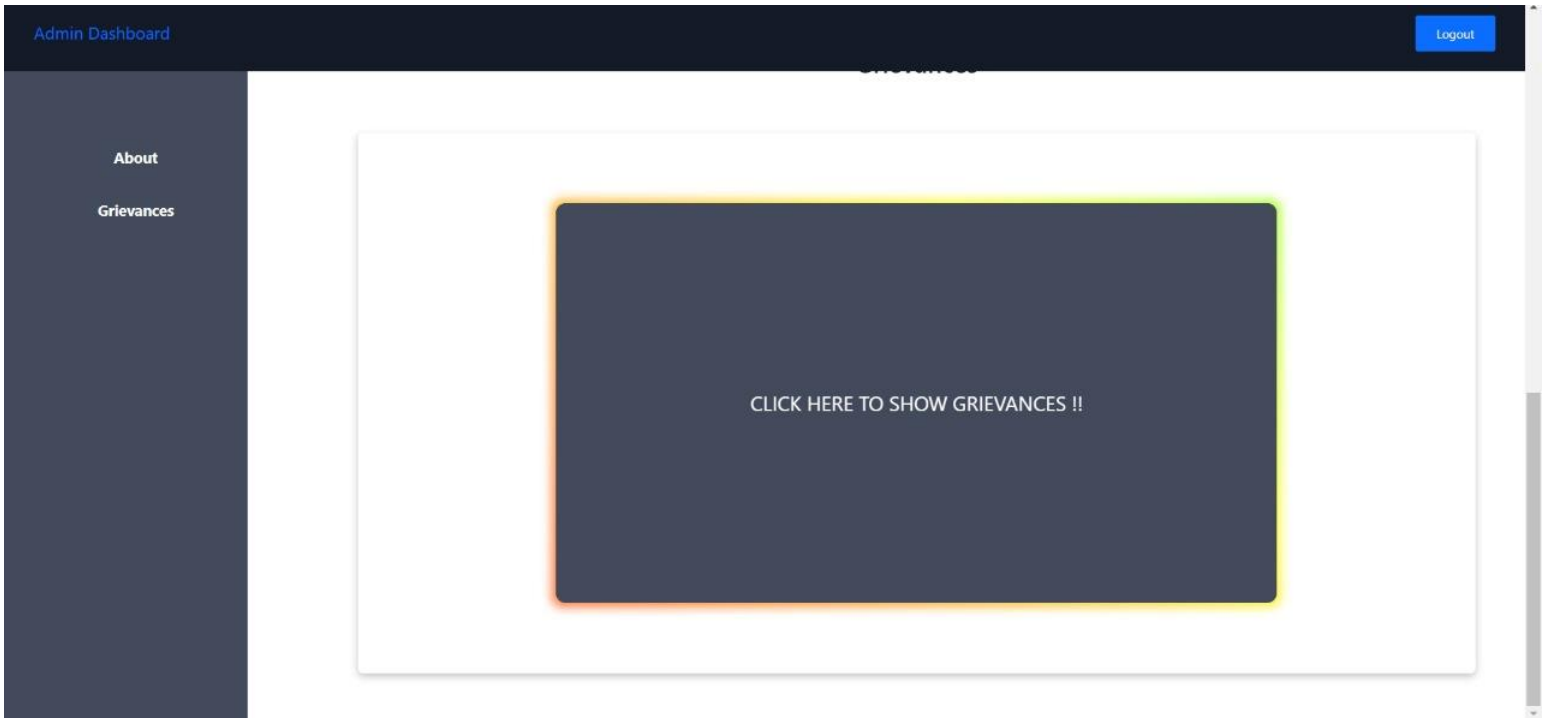
Admin Signup



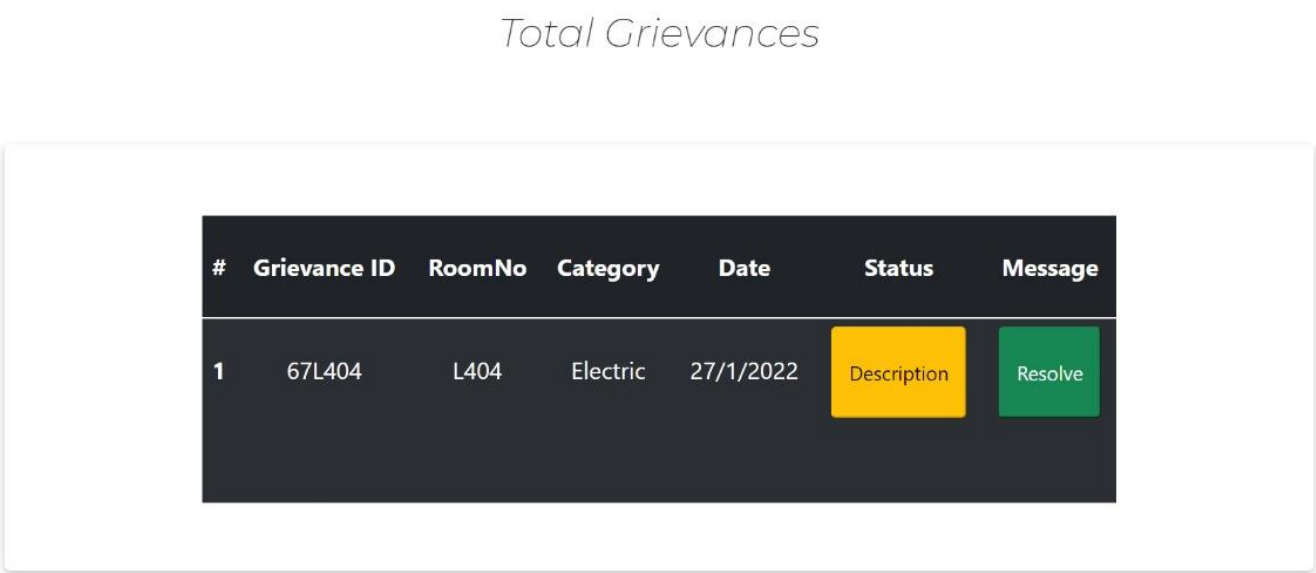
Admin Credentials



Grievances Button



Total Grievances of college with resolve and description button



Set of Operations

STUDENT SECTION

1.Insertion of credentials into student table

```
var sql1=`INSERT INTO student VALUES ('${usn}','${name}','${room}','${email}','${phone}','${hash}')`;
```

2.Selection of student credentials from student table

```
var sql1="SELECT Email, Password FROM student WHERE Email='"+Email+"'";
db.query(sql1,function(err,result){
  console.log(result);

  if(!result.length){
    Smessage="Wrong Credentials";
    res.redirect("/StudentLoginSignup");
   }

  else{

    var hash=result[0].Password;
    console.log(hash);
    bcrypt.compare(pass, hash, function(err, result) {
      if(result==true){
        Smessage='';
        var sql2 = "SELECT * from student WHERE Email='"+Email+"'";
        db.query(sql2,function(err,results){
          var name=results[0].S_Name;
          var usn=results[0].USN;
          var room=results[0].Room_No;
          var ph=results[0].Phone_No;
          res.render("StudentPortal",{name:name,Email:Email,Room:room,Usn:usn,phone:ph});
         });

      }
      else{
        Smessage="Wrong Credentials";
```

3.Insertion of grievance into grievance table

```
var sql1=`INSERT INTO Grievances VALUES ('${G_id +room}','${cate}','${emp_id}','${usn}','${room}','${date}','${status}','${message}','${Ccode}')`;
```

4.Selection of grievances from grievance table

```
var sql_status="Select * from Grievances where USN=?";
```

5.Deletion of grievances from grievance table using G_id

```
var sql_status="Delete  from Grievances where G_id=?";
```

ADMIN SECTION

1.Insertion of credentials into admin table

```
var sql1=`INSERT INTO Admin VALUES ('${code}','${cname}','${wname}','${email}','${phone}','${hash}')`;
```

2.Selection of credentials from admin table

```
var sql1="SELECT email_id, Password FROM Admin WHERE email_id='"+Email+"'";
db.query(sql1,function(err,result){
  if(!result.length){
    Amessage="Wrong Credentials";
    res.redirect("/AdminLoginSignup");
  }

  else{
        var hash= result[0].Password;
        console.log(hash);
        bcrypt.compare(pass, hash, function(err, result) {
         if(result==true){
           Amessage='';
           var sql2 = "SELECT * from Admin WHERE email_id='"+Email+"'";
```

3.Displaying total grievances of a particular college from grievance table

```
var sql_grv= "SELECT * from Grievances where Gstatus=? and Clgcode=?";
```

4.Updation of grievance from grievance table

```
var sql_resolve= "UPDATE Grievances set Gstatus=? where G_id=?";
```

Scope for improvements:

- Currently this project is not concerned about security that much so in future we can make this project more secure.
- We haven't focus on front end part much since it was the DBMS project so we were more focused in writing SQL queries . In future we will make this site more good looking.