**UNIVERSITY MANAGEMENT SYSTEM**

Mini Project Report

Submitted

In Partial Fulfillment of the Requirements for The Degree of

**Bachelor of Technology**

In

Computer Science & Engineering

Submitted by:

**ABHISHEK SINGH**

Under the Supervision of:

# Mr. Gyanendra Kumar (Assistant Professor)



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**MANAGEMENT-054, LUCKNOW, INDIA DEC,**

**2023**

## DECLARATION

I hereby declare that the Project Report titled **“IMAGE COMPRESSOR”** is an authentic record of the research work carried out by me under the supervision of Mr. Gyanendra Kumar, Department of Computer Science & Engineering , for the period from Sep,2023 to Dec,2023 at BBDITM, Lucknow. No part of this synopsis has been presented elsewhere for any other degree or diploma earlier.

I declare that I have faithfully acknowledged and referred to the works of other researchers wherever their published works have been cited in the synopsis. I further certify that I have not willfully taken other's work, para, text, data, results, tables, figures etc. reported in the journals, books, magazines, reports, Project Report, theses, etc., or available at web-sites without their permission, and have not included those in this B Tech synopsis citing as my own work.

Date:14.12.2023 Signature

STUDENT NAME: Abhishek Singh

ROLL NO: 2100540100009

**Certificate**

This is to certify that **Abhishek Singh** (Roll. No. 2100540100009) ha**s** carried out the work presented in the Project Report titled **“IMAGE COMPRESSOR”** submitted for partial fulfillment for the award of the **Bachelor of Technology In Computer Science & Engineering** from **BBDITM, Lucknow** under my supervision.

It is also certified that:

1. This Project Report embodies the original work of the candidate and has not been earlier submitted elsewhere for the award of any degree/diploma/certificate.
2. The candidate has worked under my supervision for the prescribed period.
3. The Project Report fulfills the requirements of the norms and standards prescribed by the AKTU and BBDITM, Lucknow, India.
4. No published work (figure, data, table etc) has been reproduced in the Project Report without express permission of the copyright owner(s).

Therefore, I deem this work fit and recommend for submission for the award of the aforesaid degree.

Mr. Gyanendra Kumar Dr. Anurag Tiwari Project Report Guide

H.O.D

(Assistant Professor) Department of CSE ,

Department of CSE, BBDITM, Lucknow

BBDITM, Lucknow Abhishek Singh

**Acknowledgement**

I express my sincere gratitude and appreciation to all those who have contributed to the successful completion of this mini project on the "IMAGE COMPRESSOR" using HTML, CSS and JavaScript.

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I extend my gratitude to BBDITM for providing the necessary resources, including access to the library, computer labs, and databases, which were crucial for the research and implementation phases of the project.

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I would also like to express my appreciation to the online communities, forums, and resources that I referred to for additional knowledge and troubleshooting throughout the development process.

Lastly, I am deeply grateful to my family for their unwavering support, understanding, and encouragement during the course of this project. Their encouragement and patience were vital in overcoming the challenges and ensuring the successful completion of the mini project.

This project has been a significant learning experience, and I am thankful to all those who have been a part of this journey.

Abhishek Singh

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# ABSTRACT

The "IMAGE COMPRESSOR" is a Java-based software application designed to streamline and enhance the administrative processes within a university. The system is specifically crafted to cater to the needs of administrators by providing a secure and efficient platform for managing student records, course details, and other vital information.

The primary objective of this mini project is to create a user-friendly and robust system that allows only authorized administrators, with secure credentials, to log in, access, and make changes to the database. The system leverages Java for its backend functionality and SQL for database management, ensuring a seamless and scalable solution.

The key features of the University Management System include a secure admin login mechanism, which requires a valid username and password for access. Once authenticated, administrators gain the ability to view and modify student information, manage course details, and generate reports. The system prioritizes data security by implementing encryption and authentication measures to safeguard sensitive information.

The project addresses the challenges of university management, providing a comprehensive solution to enhance the efficiency of administrative tasks. Through the implementation of a secure login system, the system ensures that only authorized personnel can access and manipulate the data, thereby maintaining the integrity and confidentiality of university records.

The abstract encapsulates the core functionalities and objectives of the University Management System mini project, emphasizing the importance of security, efficiency, and user-friendly design in the context of university administration.

# INTRODUCTION

UNIVERSITY MANAGEMENT SYSTEM (UMS) is a flagship product of Easy Solution which covers all aspects of Universities, Colleges or Schools. UMS covers every minute aspects of a universities work flow and integrates all processes with user friendly interface. With hundreds of satisfied customers UMS is first choice of several state, governments/semigovernment universities and institutions. UMS is an outcome of hard work done by our expert technical team in supervision of several renowned educationists which includes Controller of examination, faculties. UMS is a rare combination of experience and precision. UMS streamline path of information flow in organization by taking care of following departments:

* Fee Department
* Examination Department
* Attendance
* Faculty information portal
* Student information portal

## 1.1 Objective of Internship

The primary objective of this internship is to design and implement a comprehensive University Management System using Java and SQL. The internship aims to provide a hands-on experience for understanding the practical aspects of software development, database management, and system integration. By working on this project, the interns will gain valuable insights into the complexities of managing diverse functionalities within an educational institution. **Purpose:**

* Drive operational efficiency.
* Self-service systems with simple to use with little or no training.
* Elimination of duplicate data entry processes.
* Integrated with Online Application workflow with unified data model.
* Monitoring and decision support system.
* Automation of all the Academic / Examination / Administration operations.
* Ease and accuracy of reporting.

**1.2 Area Chosen for Study:**

The chosen area of study for this internship is the development of a University Management System. This system encompasses a wide range of features, including student information management, course scheduling, faculty management, examination tracking, and result processing.

The focus is on creating a robust, user-friendly, and scalable software solution that addresses the

1

unique challenges faced by educational institutions in their day-to-day operations.

**1.2 Scope:**

This project deals with the various functioning in College management process. The main idea is to implement a proper process to system. In our existing system contains a many operations registration, student search, fees, attendance, exam records, performance of the student etc. All these activity takeout manually by administrator.

* 1. **Problem Statement:**

In the context of university management, there exists a need for a centralized and automated system to streamline administrative tasks, enhance data accuracy, and improve overall efficiency. The lack of such a system often

leads to challenges in managing student records, faculty information, and academic processes. The problem statement for this project is to develop a University Management System that addresses these issues and provides a reliable platform for the effective administration of educational institutions.

* 1. **Literature Review/Theoretical Background:**

To lay the foundation for the project, a thorough literature review has been conducted to understand the theoretical underpinnings of university management systems. This section explores existing research, frameworks, and methodologies relevant to the development of educational software solutions. The review will guide the project in adopting best practices and leveraging established concepts to build a robust and effective University Management System.

## REQUIREMENT SPECIFICATIONS

**2.1 Hardware Requirements :**

Processor Brand : Intel

Processor Type : Core i3

Processor Speed : 2 GHz

Processor Count : 1

RAM Size : 2 GB

Memory Technology : DDR3

Computer Memory Type : DDR3 SDRAM

Hard Drive Size : 160 GB

**2.2 Software Requirements :**

Operating system : Windows 11

Application server : php(Hypertext Preprocessor)

Front end : JAVA

Connectivity : JDBC Driver

Database connectivity : XAMPP (MYSQL Console)

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## LEARNED SKILLS

### Overview of Front End

An important issue for the development of a project is the selection of suitable frontend and back-end. When we decided to develop the project we went through an extensive study to determine the most suitable platform that suits the needs of the organization as well as helps in development of the project.

The aspects of our study included the following factors.

Front-end selection:

1. It must have a graphical user interface that assists employees that are not from IT background.
2. Scalability and extensibility.
3. Flexibility.
4. Robustness.
5. According to the organization requirement and the culture.
6. Must provide excellent reporting features with good printing support.
7. Platform independent.
8. Easy to debug and maintain.
9. Event driven programming facility.
10. Front end must support some popular back end like MySQL.

According to the above stated features we selected PHP and CSS as the front-end for developing.

**About Java:**

Java is a general-purpose, class-based, object-oriented programming language designed for having lesser implementation dependencies. It is a computing platform for application development. Java is fast, secure, and reliable, therefore. It is widely used for developing Java applications in laptops, data centers, game consoles, scientific supercomputers, cell phones, etc.

Here are some important Java applications:

* + It is used for developing Android Apps
  + Helps you to create Enterprise Software
  + Wide range of Mobile java Applications
  + Scientific Computing Applications
  + Use for Big Data Analytics
  + Java Programming of Hardware devices
  + Used for Server-Side Technologies like Apache, JBoss, GlassFish, etc.

**Overview of Back End** Back End Selection:

1. Multiple user support.
2. Efficient data handling.
3. Provide inherent features for security.
4. Efficient data retrieval and maintenance.
5. Stored procedures.
6. Popularity.
7. Operating System compatible.
8. Easy to install.
9. Various drivers must be available.
10. Easy to implant with the Front-end.

According to above stated features we selected MySQL as the backend.

The technical feasibility is frequently the most difficult area encountered at this stage. It is essential that the process of analysis and definition be conducted in parallel with an assessment to technical feasibility. It centers on the existing computer system (hardware, software etc.) and to what extent it can support the proposed system.

**About SQL:**

SQL is Structured Query Language, which is a computer language for storing, manipulating and retrieving data stored in a relational database.

SQL is the standard language for Relational Database System. All the Relational Database Management Systems (RDMS) like MySQL, MS Access, Oracle, Sybase, Informix, Postgres and SQL Server use SQL as their standard database language.

MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons.[1]

MySQL is released under an open-source license. So you have nothing to pay to use it. MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages. MySQL uses a standard form of the well-known SQL data language. MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.

MySQL works very quickly and works well even with large data sets. MySQL is very friendly to PHP, the most appreciated language for web development. MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).

Also, they are using different dialects, such as −

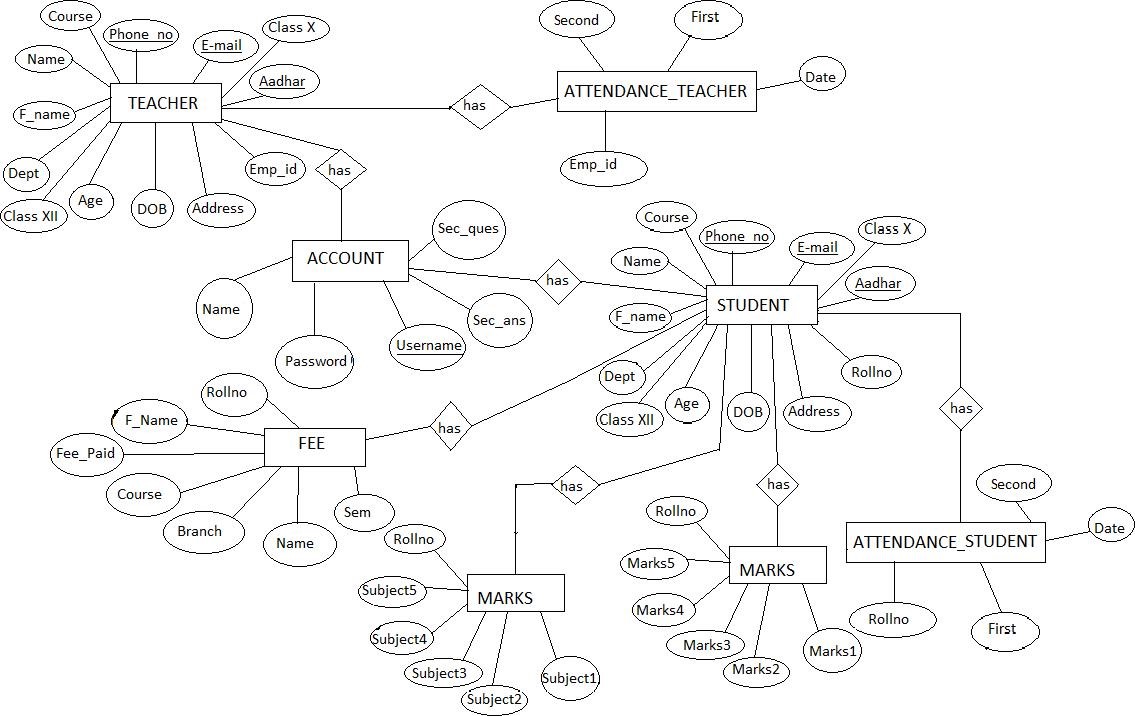
* Oracle using PL/SQL,.
* SQL is widely popular because it offers the following advantages −  Allows users to access data in the database management systems.
* Allows users to describe the data.relational
* Allows users to define the data in a database and manipulate that data.
* Allows to embed within other languages using SQL modules, libraries & pre-compilers.
* Allows users to create and drop databases and tables.
* Allows users to create view, stored procedure, functions in a database.
* Allows users to set permissions on tables, procedures and views.

## MODULES

### REQUIREMENT ANALYSIS

**E-R DIAGRAM:**

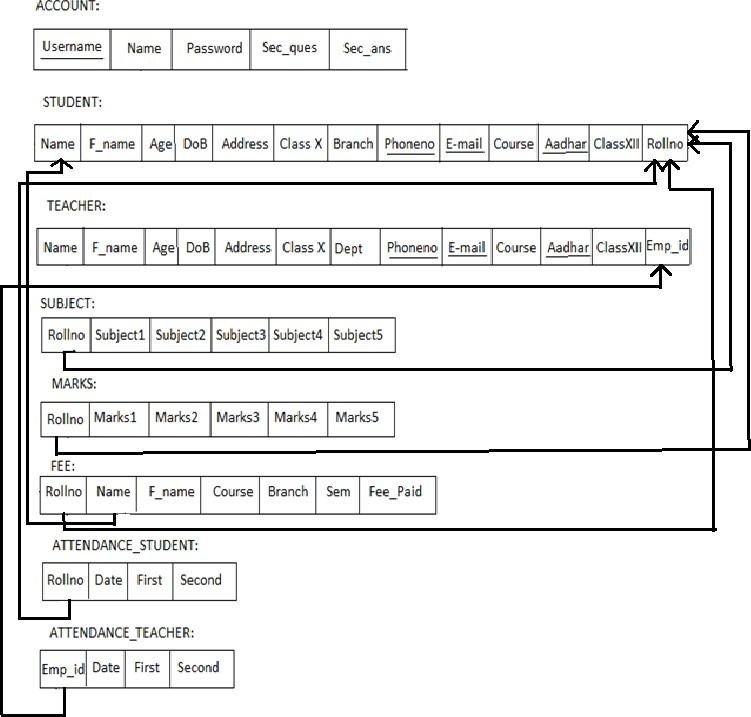
**ER Diagram:** ER Diagram is a high-level conceptual data model diagram. Entity-Relation model is based on the notion of real-world entities and the relationship between them. ER modelling helps you to analyse data requirements systematically to produce a well-designed database.



#### Figure 1: ER Diagram for Smartphone Management Arena

**SCHEMA DIAGRAM:**

**Schema diagram** A schema diagram is the skeleton structure that represents the logical view of the entire database. It contains a descriptive detail of the database.



**Figure 2: Schema Diagram for Smartphone Management System**

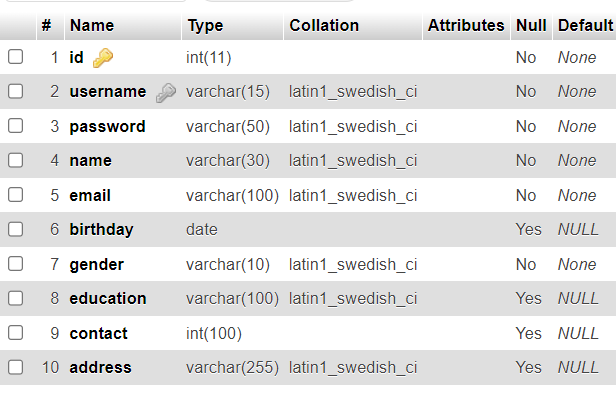
### TABLE DESCRIPTION

**Database Design**

### ACCOUNT TABLE

**Account Table**: Account table consists of five attributes which are Username, Name, Password, Sec\_ques, Sec\_ans.Username is used as Primary key.

Desc account;



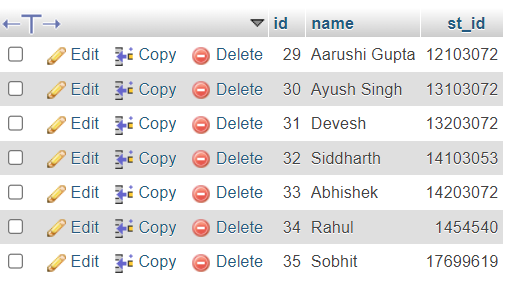
### Fig 3 Account table description

#### STUDENT TABLE

**Student table :**Student table is used to add the details of new student like

Name,phoneno.,DoB,course,Branch etc...Phoneno. ,E-mail and Aadhar are used as Primary key.

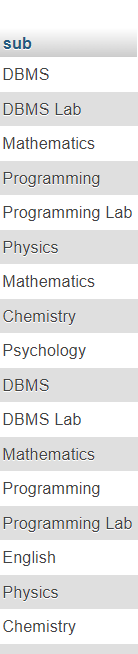
Desc student;



**Fig 4 Student table description.**

#### SUBJECT TABLE

**Subject table :**Subject table is used to add the subjects of the student in that particular sem with the attributes like rollno and five subjects.

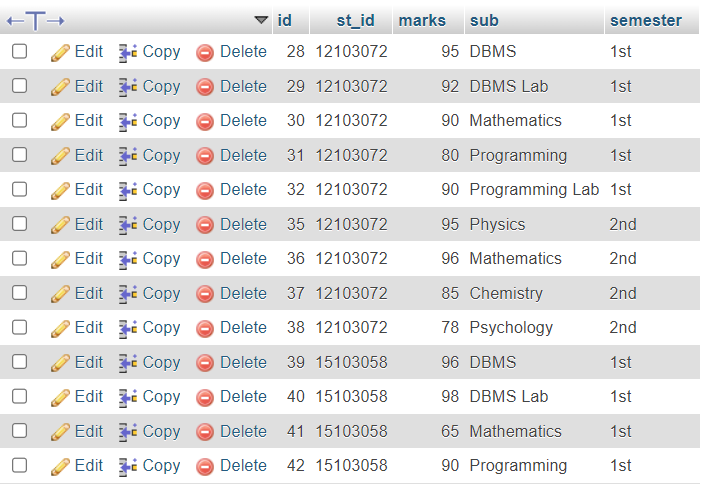


**Fig 6 Subject table description.**

#### MARKS TABLE

**Marks table :**Marks table is used to add the marks of the particular subjects of the student in a particular sem and the attributes used are rollno and five subject marks.

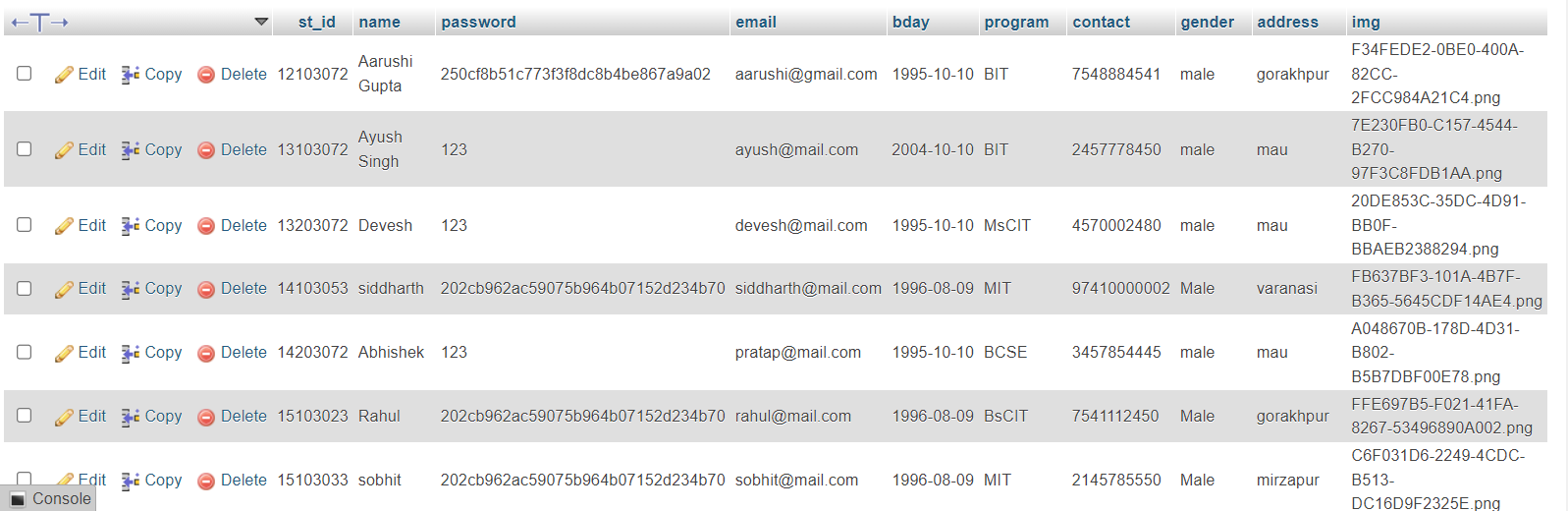
Desc Marks;



**Fig 7 Marks table description.**

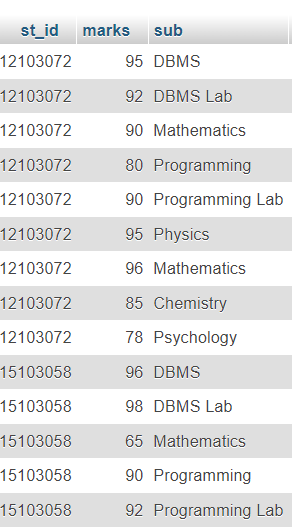
#### TABLE WITH VALUES

**Student table:** Student table is used to add the details of new student like

Name,phoneno.,DoB,course,Branch etc...Phoneno.E-mail and Aadhar are used as Primary key. Select \* from student; 

### Table 9 Student table

**Marks table :**Markstable is used to add the marks of the particular subjects of the student in a particular sem and the attributes used are rollno and five subject marks.



Select \* from Marks;

### Table 11 Marks table

#### IMPLEMENTATION

**Sample code :**

<!Doctype html>

<html class="no-js" lang="">

    <head>

        <meta charset="utf-8">

        <meta http-equiv="x-ua-compatible" content="ie=edge">

        <title><?php echo $pageTitle; ?></title>

        <meta name="description" content="University Management system">

        <meta name="author" content="Aarushi">

        <meta name="viewport" content="width=device-width, initial-scale=1">

        <!-- Place favicon.ico in the root directory -->

        <link rel="stylesheet" href="css/normalize.css">

        <link rel="stylesheet" href="font-awesome/css/font-awesome.min.css">

        <link rel="stylesheet" href="fonts/stylesheet.css">

        <link rel="stylesheet" href="css/main.css">

        <script src="js/vendor/modernizr-2.8.3.min.js"></script>

    </head>

    <body>

        <!-- Add your site or application content here -->

        <header class="container header\_area fix" >

            <div id="sticker">

                <div class="head">

                    <a href="#"><div class="logo fix">

                        <img src="img/logo.png" alt="" />

                    </div></a>

                    <div class="uniname fix">

                        <h2>University Management System</h2>

                    </div>

                </div>

                <div class="menu fix">

                    <div class="dateshow fix"><p><?php echo "Date : ".date("d M Y"); ?></p></div>

                <!--    <ul>

                        <li><a href="#"><i class="fa fa-home" aria-hidden="true"></i> Home</a></li>

                        <li><a href="#"><i class="fa fa-user" aria-hidden="true"></i> User</a></li>

                    </ul>

                -->

                </div>

            </div>

        </header>

        <div class="maincontent container fix">

            <div id="stickerside">

                <div class="sidebar fix" >

                        <ul>

                            <li><span class="spcl"><i class="fa fa-server" aria-hidden="true"></i> Administrator</span></li>

                                <ul>

                                    <li><a href="index.php"><i class="fa fa-sign-in" aria-hidden="true"></i> Login</a></li>

                                </ul>

                            <li><span class="spcl"><i class="fa fa-male" aria-hidden="true"></i> Faculty Area</span></li>

                                <ul>

                                    <li><a href="facultylogin.php"><i class="fa fa-sign-in" aria-hidden="true"></i> Login</a></li>

                                    <li><a href="fct\_single\_profile.php"><i class="fa fa-user" aria-hidden="true"></i> Profile</a></li>

                                    <li><a href="class\_att.php"><i class="fa fa-database" aria-hidden="true"></i> Class Attendance</a></li>

                                </ul>

                            <li><span class="spcl"><i class="fa fa-graduation-cap" aria-hidden="true"></i> Student Area</span></li>

                                <ul>

                                    <li><a href="st\_login.php"><i class="fa fa-sign-in" aria-hidden="true"></i> Login</a></li>

                                    <li><a href="st\_reg.php"><i class="fa fa-user-plus" aria-hidden="true"></i> Register</a></li>

                                    <li><a href="st\_profile.php"><i class="fa fa-user" aria-hidden="true"></i> Profile</a></li>

                                    <li><a href="#"><i class="fa fa-outdent" aria-hidden="true"></i> Result</a></li>

                                </ul>

                        </ul>

                    </div>

                </div>

                <div class="content fix">

<?php

class login\_registration\_class{

    public function \_\_construct(){

        $db = new databaseConnection();

    }

    //All function for Student

    //function for student registration

    public function st\_registration($st\_id,$st\_name,$st\_pass,$st\_email,$bday,$st\_dept,$st\_contact,$st\_gender,$st\_add){

        global $conn;

        $query = $conn->query("select st\_id from st\_info where st\_id='$st\_id' or email ='$st\_email' ");

        $num = $query->num\_rows;

        $in\_sql = "INSERT INTO st\_info (st\_id,name,password,email,bday,program,contact,gender,address) VALUES ('$st\_id','$st\_name','$st\_pass','$st\_email','$bday','$st\_dept','$st\_contact','$st\_gender','$st\_add') ";

        if($num == 0){

            $conn->query($in\_sql);

            return true;

        }else{

            return false;

        }

    }

    //function for student login

    public function st\_userlogin($st\_id, $st\_pass){

        global $conn;

        $sql = "SELECT st\_id,name FROM st\_info WHERE st\_id='$st\_id' and password='$st\_pass'";

        $result = $conn->query($sql);

        $userdata = $result->fetch\_assoc();

        $count = $result->num\_rows;

        if($count == 1){

            session\_start();

            $\_SESSION['st\_login'] = true;

            $\_SESSION['sid'] = $userdata['st\_id'];

            $\_SESSION['sname'] = $userdata['name'];

            //$\_SESSION['login\_msg'] = "Login Success";

            return true;

        }else{

            return false;

        }

    }

    //function for get student Name

    public function getusername($sid){

        global $conn;

        $query = $conn->query("select name from st\_info where st\_id='$sid'");

        $result = $query->fetch\_assoc();

        echo $result['name'];

    }

    // Get all info of a specific student by Student ID

    public function getuserbyid($st\_id){

        global $conn;

        $query = $conn->query("select \* from st\_info where st\_id='$st\_id'");

        return $query;

    }

    //Update Student Profile

    public function updateprofile($sid,$st\_name,$st\_email,$st\_dept,$st\_gender,$st\_contact,$st\_add,$file){

        global $conn;

        $query = $conn->query("update st\_info set name='$st\_name',email='$st\_email',program='$st\_dept',gender='$st\_gender',contact='$st\_contact', address='$st\_add',img='$file' where st\_id='$sid'");

        return true;

    }

    //Change Student Password

    public function updatePassword($sid, $newpass, $oldpass){

        global $conn;

        $query = $conn->query("select st\_id from st\_info where st\_id='$sid' and password='$oldpass' ");

        $count = $query->num\_rows;

        if($count == 0){

            return print("<p style='color:red;text-align:center'>old password not exist.</p>");

        }else{

            $update = $conn->query("update st\_info set password='$newpass' where st\_id='$sid' ");

            return print("<p style='color:green;text-align:center'>Password changed successfully.</p>");

        }

    }

    //Session Unset for Student info //Log out option

    public function st\_logout(){

        $\_SESSION['st\_login'] = false;

        unset($\_SESSION['sid']);

        unset($\_SESSION['sname']);

        unset($\_SESSION['st\_login']);

        //session\_destroy();

    }

    public function getsession(){

        return @$\_SESSION['st\_login'];

    }

    //Ends student releted function

    /\*\*

    ---------------------------------

    All functions for faculty section

    ---------------------------------

    \*\*/

    public function fct\_registration($name,$uname, $pass,$email, $bday,$gender,$edu,$contact,$address){

        global $conn;

        $fct = $conn->query("select id from faculty where username='$uname' ");

        $count = $fct->num\_rows;

        if($count == 0){

            $sql = "insert into faculty(name,username,password,email,birthday,gender,education,contact,address) values('$name','$uname','$pass','$email','$bday','$gender','$edu','$contact','$address')";

            $result = $conn->query($sql);

            return true;

        }else{

            return false;

        }

    }

    //get faculty

    public function get\_faculty\_by\_username($uname){

        global $conn;

        $sql = "select \* from faculty where username='$uname'";

        $result = $conn->query($sql);

        return $result;

    }

    public function get\_faculty(){

        global $conn;

        $sql = "select \* from faculty order by id ASC";

        $result = $conn->query($sql);

        return $result;

    }

    //login for faculty

    public function fct\_login($uname, $pass){

        global $conn;

        $sql = "select id,username,name from faculty where username='$uname' and password='$pass' ";

        $result = $conn->query($sql);

        $count = $result->num\_rows;

        $fctinfo = $result->fetch\_assoc();

        if($count == 1){

            session\_start();

            $\_SESSION['fct\_login'] = true;

            $\_SESSION['f\_id'] = $fctinfo['id'];

            $\_SESSION['f\_uname'] = $fctinfo['username'];

            $\_SESSION['f\_name'] = $fctinfo['name'];

            return true;

        }else{

            return false;

        }

    }

    public function faculty\_logout(){

        $\_SESSION['fct\_login'] = false;

        unset($\_SESSION['f\_id']);

        unset($\_SESSION['f\_uname']);

        unset($\_SESSION['f\_name']);

        unset($\_SESSION['fct\_login']);

    }

    public function get\_faculty\_session(){

        return @$\_SESSION['fct\_login'];

    }

    /\*

    \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

    ----------------------

    All functions for Admin

    ----------------------

    \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

    \*/

    //for getting All student infomation

    public function get\_all\_student(){

        global $conn;

        $sql = "select \* from st\_info order by st\_id ASC";

        $query = $conn->query($sql);

        return $query;

    }

    //search student

    //Search Query

    public function search($query){

        global $conn;

        $result = $conn->query("SELECT \* FROM st\_info WHERE (st\_id LIKE '%".$query."%'

                            OR name LIKE '%".$query."%'

                                OR contact LIKE '%".$query."%'

                                    OR email LIKE '%".$query."%') order by st\_id");

        return $result;

    }

    //Admin log in function

    public function admin\_userlogin($username, $password){

        global $conn;

        $sql  = "select id,username from admin where username='$username' and password='$password'";

        $result = $conn->query($sql);

        $admin\_info = $result->fetch\_assoc();

        $count = $result->num\_rows;

        if($count == 1){

            session\_start();

            $\_SESSION['admin\_login'] = true;

            $\_SESSION['admin\_id'] = $admin\_info['id'];

            $\_SESSION['admin\_name'] = $admin\_info['username'];

            return true;

        }else{

            return false;

        }

    }

    public function get\_admin\_session(){

        return @$\_SESSION['admin\_login'];

    }

    //admin logout

    public function admin\_logout(){

        $\_SESSION['admin\_login'] = false;

        unset($\_SESSION['admin\_id']);

        unset($\_SESSION['admin\_name']);

        unset($\_SESSION['admin\_login']);

    }

    //delete student

    public function delete\_student($st\_id){

        global $conn;

        $sql = "delete from st\_info where st\_id='$st\_id' ";

        $result = $conn->query($sql);

        if($result){

            return true;

        }else{

            return false;

        }

    }

    //attendance system

    public function attn\_student(){

        global $conn;

        $sql = "select \* from at\_student";

        $result = $conn->query($sql);

        return $result;

    }

    public function add\_attn\_student($name,$stid){

        global $conn;

        $sql = "insert into at\_student(name,st\_id) values('$name','$stid')";

        $result = $conn->query($sql);

        $sql2 = "insert into attn(st\_id) values('$stid')";

        $result = $conn->query($sql2);

        return $result;

    }

    public function insertattn($cur\_date,$atten = array()){

        global $conn;

        $sql = "select distinct at\_date from attn";

        $result = $conn->query($sql);

        while($row = $result->fetch\_assoc()){

            $db\_date = $row['at\_date'];

            if($cur\_date == $db\_date){

                return false;

            }

        }

        foreach($atten as $key =>$attn\_value ){

            if($attn\_value == "present"){

                $sql = "insert into attn(st\_id,atten,at\_date) values('$key','present','$cur\_date')";

                $att\_res = $conn->query($sql);

            }elseif($attn\_value == "absent"){

                $sql = "insert into attn(st\_id,atten,at\_date) values('$key','absent','$cur\_date')";

                $att\_res = $conn->query($sql);

            }

        }

        if($att\_res){

            return true;

        }else{

            return false;

        }

    }

    public function delete\_atn\_student($at\_id){

        global $conn;

        $res = $conn->query("delete from at\_student where id = '$at\_id' ");

        return $res;

    }

    public function get\_attn\_date(){

        global $conn;

        $res = $conn->query("select distinct at\_date from attn ");

        return $res;

    }

    public function attn\_all\_student($date){

        global $conn;

        $res = $conn->query("select at\_student.name, attn.\*

            from at\_student

            inner join attn

            on at\_student.st\_id = attn.st\_id

            where at\_date = '$date' ");

        return $res;

    }

    public function update\_attn($date,$atten){

        global $conn;

        foreach($atten as $key =>$attn\_value ){

            if($attn\_value == "present"){

                $sql = "update attn set atten='present' where st\_id='$key' and at\_date='$date' ";

                $att\_res = $conn->query($sql);

            }elseif($attn\_value == "absent"){

                $sql = "update attn set atten='absent' where st\_id='$key' and at\_date='$date' ";

                $att\_res = $conn->query($sql);

            }

        }

        if($att\_res){

            return true;

        }else{

            return false;

        }

    }

    //grading system

    public function add\_marks($stid,$subject,$semester,$marks){

        global $conn;

        $qry = "select \* from result where st\_id='$stid' and sub='$subject' and semester='$semester' ";

        $query = $conn->query($qry);

        $count = $query->num\_rows;

        if($count>0){

            return false;

        }else{

        $sql = "insert into result(st\_id,marks,sub,semester) values('$stid','$marks','$subject','$semester')";

        $result = $conn->query($sql);

        return $result;

        }

    }

    //show marks

    public function show\_marks($stid,$semester){

        global $conn;

        $result = $conn->query("select \* from result where st\_id='$stid' and semester='$semester' ");

        $count = $result->num\_rows;

        if($count>0){

            return $result;

        }else{

            return false;

        }

    }

    //update student result

    public function update\_result($stid,$subject = array(),$semester){

        global $conn;

        foreach($subject as $key =>$mark ){

            $sql = "update result set marks='$mark' where st\_id='$stid' and semester='$semester' and sub='$key' ";

                $result = $conn->query($sql);

        }

        if($result){

            return true;

        }else{

            return false;

        }

    }

    public function view\_cgpa($stid){

        global $conn;

        $sql = "select \* from result where st\_id='$stid'";

        $result = $conn->query($sql);

        return $result;

    }

    /\* Total average marks

    public function sgpa(){

        global $conn;

        $sql = "SELECT avg(marks) as sgpa from result where st\_id=12103072 and semester='1st'";

        $result = $conn->query($sql);

        return $result;

    }

    \*/

//end class

};

?>

<?php

ob\_start ();

session\_start();

require "php/config.php";

require\_once "php/functions.php";

$user = new login\_registration\_class();

if($user->get\_admin\_session()){

    header('Location: admin.php');

    exit();

}

?>

<?php

    $pageTitle = "Admin Login";

?>

<?php include "header.php"; ?>

    <div class="loginform fix">

        <div class="msg "><h3><i class="fa fa-user" aria-hidden="true"></i>  Admin login</h3></div>

        <div class="access">

            <?php

                    if($\_SERVER['REQUEST\_METHOD'] == "POST"){

                        $username     = $\_POST['username'];

                        $password = $\_POST['password'];

                        if(empty($username) or empty($password)){

                            echo "<p style='color:red;text-align:center;'>Field must not be empty.</p>";

                        }else{

                            $password = md5($password);

                            $login = $user->admin\_userlogin($username, $password);

                            if($login){

                                header('Location: admin.php');

                            }else{

                                echo "<p style='color:red;text-align:center'>Incorrect username or password</p>";

                            }

                        }

                    }

                ?>

            <form action="" method="post">

                <input type="text" name="username" placeholder="Username" />

                <input type="password" name="password" placeholder="Password" />

                <input type="submit" value="Login" />

            </form>

        </div>

    </div>

<?php include "footer.php"; ?>

## RESULT

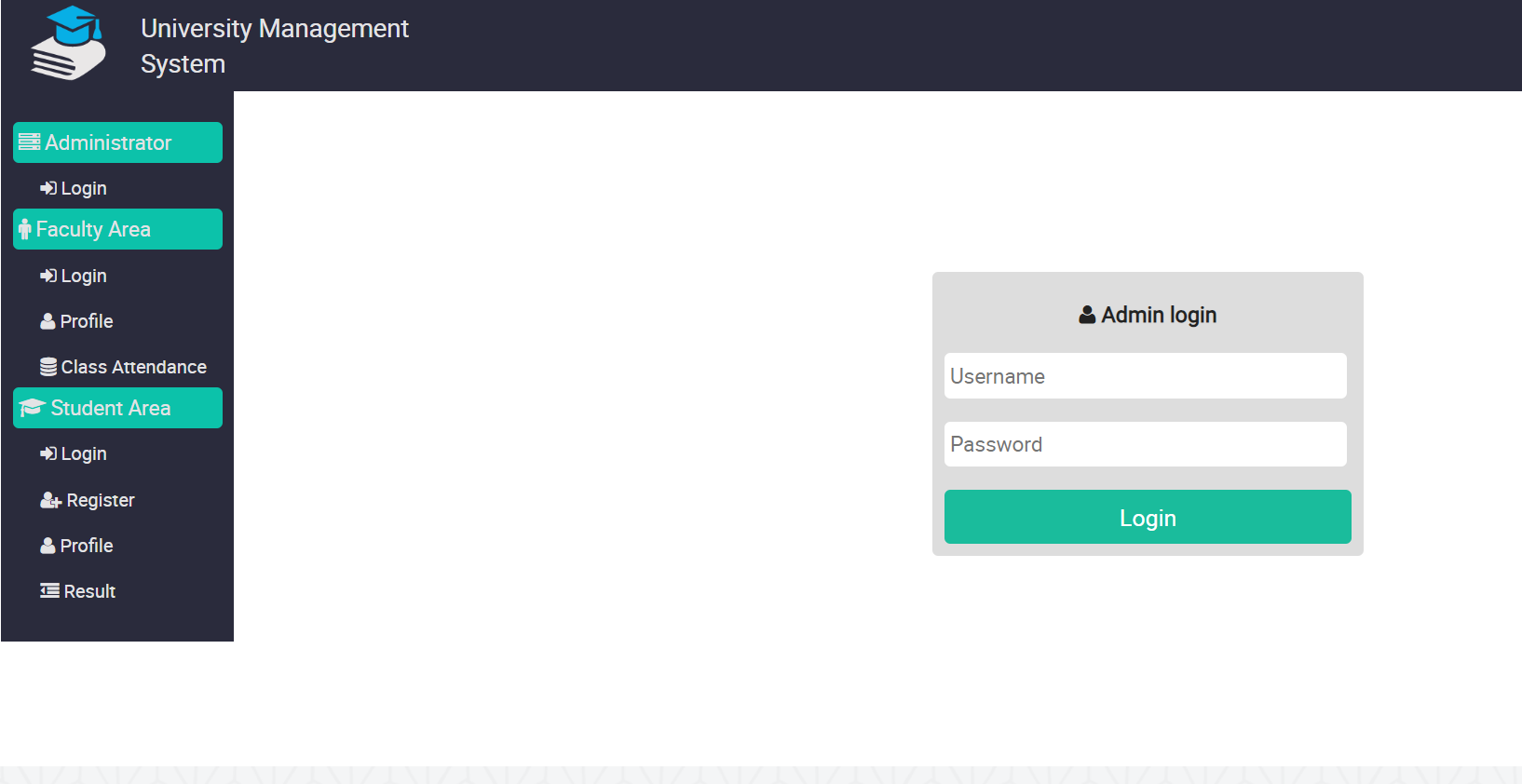
**1. Signup page:** This page represents signing up to website. It leads to registering to website making username and password, it takes the up username, password and security question. These information are mandatory .The signup page serves as the gateway to the website, offering users the opportunity to establish their presence within the platform. This pivotal step involves the creation of a personalized account, requiring essential information to ensure security and a tailored user experience.

1. User Registration:

The initiation of the signup process involves the provision of basic details necessary for account creation. Users are prompted to input their chosen username, a unique identifier that distinguishes them within the community. This ensures a personalized touch to their online presence.

1. Crafting a Secure Password:

Security is paramount in the digital realm. The signup page necessitates the creation of a robust password, safeguarding the user's account against unauthorized access. Guidelines for a strong password may be provided, encouraging a combination of letters, numbers, and special characters to enhance security.

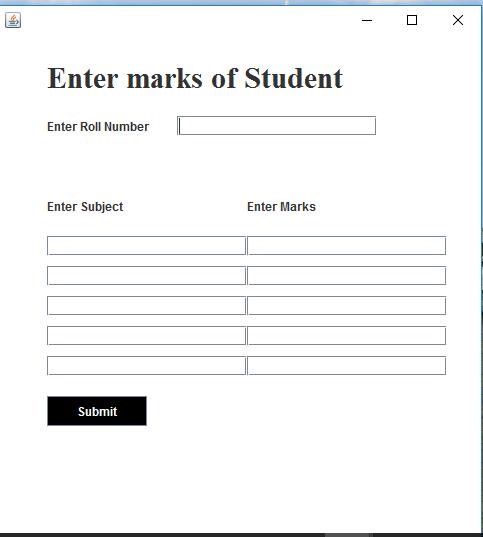


**Figure 9: Signup page**

**3.Student form :** In this we can add the new student details which will be stored in back end of user.This details further can updated in the update page.

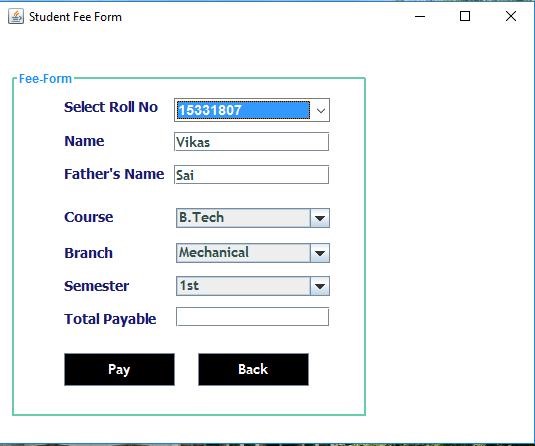
**4.Teacher form:** In this we can add the new teacher details which will be stored in back end of user.This details further can updated in the update page

**5.Marks and Subject page :** In this page we can enter the subjects and marks scored in that particular subject along the rollno.



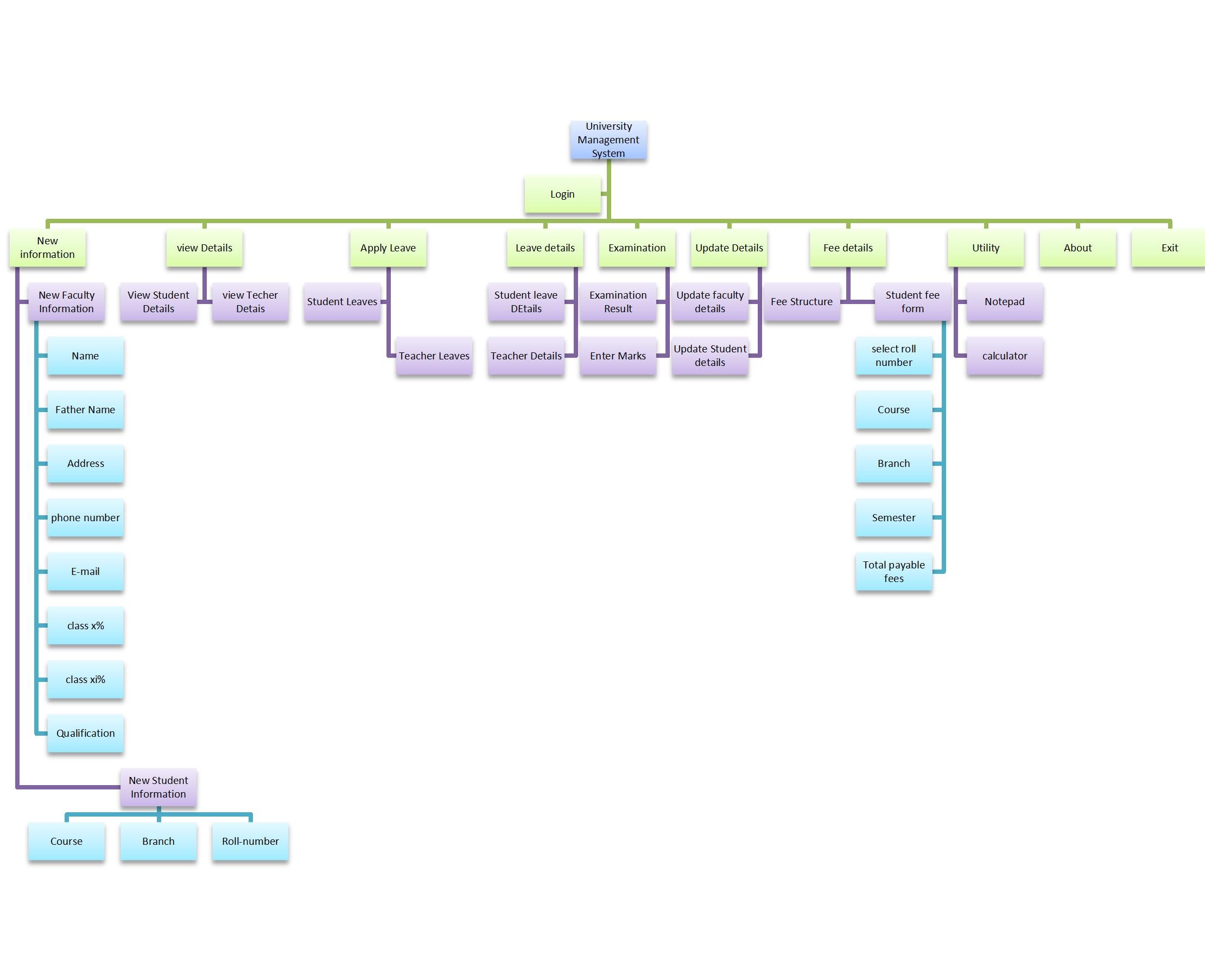
### Figure 13: Marks and Subject page

**6.Fee payment page :** In this page we can the pay the fee dues of the particular student which uses rollno,course,branch and sem to pay the fee.



**Figure 14: Fee payment page**

#### Data Flow Diagram

a simple representation of a Data Flow Diagram (DFD) for a University Management System with an admin login feature using Java and SQL.

**External Entity 1: Admin Login (Administrator): External entity representing the admin login process.**

**Data Store 1: Admin Credentials (Database): Stores admin login credentials securely.**

**Admin Authentication: Verifies the admin's credentials (username and password) against the stored data in the**

**University Management database.**

**Data Store 2: Session Data (Database): Stores session data once the admin is authenticated.**

**Admin Actions: Represents various actions that the admin can perform after successful login, such as viewing student data, modifying course information, and generating reports.**

**Data Store 3: Student Data (Database): Stores data related to student profiles, enrolled courses, and grades.**

**Data Store 4: Course Information (Database): Stores data related to courses, schedules, and faculty assignments. Data Store 5: Reports (Database): Stores generated reports.**

**Conclusion**

The project entitled as **IMAGE COMPRESSOR** is the system that deals with the issues related to a particular institution.

Image compression is a vital process in the digital world, enabling efficient storage, transmission, and processing of visual data. Various image compression techniques exist, ranging from lossless to lossy methods, each with its own set of advantages and trade-offs.

Lossless compression algorithms retain all original image data, ensuring perfect reconstruction upon decompression. These are suitable for scenarios where preserving every detail is crucial, such as medical imaging or archival purposes. However, lossless compression tends to achieve lower compression ratios compared to lossy methods.

On the other hand, lossy compression algorithms selectively discard less critical information, achieving higher compression ratios but introducing some degree of quality loss. This trade-off is acceptable in many applications, including web graphics, where reducing file size without significant visual degradation is the primary goal.

JPEG, PNG, and GIF are among the most common image compression formats, each tailored to specific use cases. JPEG excels in photographic images with smooth gradients, PNG is preferred for lossless compression with support for transparency, and GIF is suitable for simple graphics and animations.

Recent advancements in image compression technology have led to the development of more sophisticated algorithms, such as WebP and BPG, aiming to strike a balance between compression efficiency and image quality. These newer formats often leverage advanced encoding techniques, including predictive coding, transform coding, and entropy coding, to achieve better compression ratios without compromising visual fidelity excessively.

It's essential to consider the specific requirements of a given application when selecting an image compression method. While storage and bandwidth savings are critical in many scenarios, maintaining acceptable visual quality is equally important. Additionally, ongoing research and innovation in the field continue to push the boundaries of image compression, promising even more efficient solutions in the future. As technology evolves, the choice of image compressors will likely depend on a dynamic interplay between compression ratios, quality preservation, and the specific needs of diverse digital applications.

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