VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belagavi – 590 018

A
Mini Project Report
on

"Student Management System"

Submitted in partial fulfillment of the requirement for the DBMS Laboratory with miniproject(18CSL58) of V Semester

Bachelor of Engineering
in
Computer Science and Engineering

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Department of Computer Science and Engineering

CERTIFICATE

Certified that the V Semester Mini Project in DBMS Laboratory with mini project Entitled **"Student Management System"** carried out by **Mr. ASHRITH S D**, bearing **USN 1GA18CS033** a bonafide student of Global Academy of Technology, in partial fulfillment for the award of the **BACHELOR OF ENGINEERING** in Computer Science and Engineering from **Visvesvaraya Technological University, Belagavi** during the year 2020-2021. It is certified that all the corrections/suggestions indicated for Internal Assessment have been incorporated in the report submitted in the Department Library. The DBMS Mini Project report has been approved as it satisfies the academic requirements in respect of the miniproject work prescribed for the said Degree.

Mrs. Vanishree M L Assistant Professor Dept. of CSE GAT, Bengaluru.	Dr. Srikanta Murthy K Professor & HOD Dept. of CSE GAT, Bengaluru.

Name of the Examiners	Signature with date
1. _____	_____
2. _____	_____

ABSTRACT

Our project **"Student Management System"** is a project that can be used in schools, colleges or coaching centers to manage their students.

In our project, we have provided two login options:

1.Admin Login

2.Student Login

Admin Login: When user clicks on admin login button it will redirect you to the admin login page where one can login using the admin login ID and password. When admin logs in using his/her correct user ID and password you will be redirected to admin dashboard page. Admin dashboard page is a simple admin panel where admin can manage his/her students.

Admin can:

1. View all students
2. Edit any student
3. Add a new Student
4. Delete any student
5. View all teachers

Student Login: Every student will have email ID and password to login to the website. A student can login using his/her correct email ID and password. When user clicks on the Student Login it will redirect you to the user login page, where any student can login into the website. When any student login to the website it will be redirected to the user dashboard page.

Student can:

1. View his/her details
2. Edit his/her details.

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Ashrith S D

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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION TO SQL

Structured **Q**uery **L**anguage or **SQL** is a standard Database language which is used to create, maintain and retrieve the data from relational databases like MySQL, Oracle, SQL Server, PostGre, etc. As the name suggests, it is used when we have structured data (in the form of tables). All databases that are not relational (or do not use fixed structure tables to store data) and therefore do not use SQL, are called NoSQL databases. Examples of NoSQL are MongoDB, DynamoDB, Cassandra, etc.

1.2 INTRODUCTION TO FRONT END SOFTWARE

HTML

HTML stands for **H**yper **T**ext **M**arkup **L**anguage. It is used to design web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. A markup language is used to define the text document within tag which defines the structure of web pages.

HTML is a markup language that is used by the browser to manipulate text, images, and other content to display it in the required format.

Characteristics of HTML:

- **Easy to understand:** It is the easiest language you can say, very easy to grasp this language and easy to develop.
- **Flexibility:** This language is so much flexible that you can create whatever you want, a flexible way to design web pages along with the text.
- **Linkable:** You can make linkable text like users can connect from one page to another page or website through these characteristics.
- **Limitless features:** You can add videos, gifs, pictures or sound anything you want that will make the website more attractive and understandable.

- **Support:** You can use this language to display the documents on any platform like Windows, Linux or Mac

CSS

Cascading **S**tyle **S**heets, fondly referred to as CSS, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page.

There are three types of CSS which are given below:

- Inline CSS
- Internal or Embedded CSS
- External CSS

Inline CSS: Inline CSS contains the CSS property in the body section attached with element is known as inline CSS. This kind of style is specified within an HTML tag using the style attribute.
Internal or Embedded CSS: This can be used when a single HTML document must be styled uniquely. The CSS rule set should be within the HTML file in the head section i.e the CSS is embedded within the HTML file.
External CSS: External CSS contains separate CSS file which contains only style property with the help of tag attributes (For example class, id, heading, … etc). CSS property written in a separate file with .css extension and should be linked to the HTML document using **link** tag. This means that for each element, style can be set only once and that will be applied across web pages.

Properties of CSS: Inline CSS has the highest priority, then comes Internal/Embedded followed by External CSS which has the least priority. Multiple style sheets can be defined on one page. If for an HTML tag, styles are defined in multiple style sheets then the below order will be followed.

- As Inline has the highest priority, any styles that are defined in the internal and external style sheets are overridden by Inline styles.
- Internal or Embedded stands second in the priority list and overrides the styles in the external style sheet.

- External style sheets have the least priority. If there are no styles defined either in inline or internal style sheet then external style sheet rules are applied for the HTML tags.

JavaScript

JavaScript is a lightweight, cross-platform and interpreted scripting language. It is well-known for the development of web pages, many non-browser environments also use it. JavaScript can be used for **Client-side** developments as well as **Server-side** developments.

Features of JavaScript: According to a recent survey conducted by **Stack Overflow**, JavaScript is the most popular language on earth.
With advances in browser technology and JavaScript having moved into the server with Node.js and other frameworks, JavaScript is capable of so much more. Here are a few things that we can do with JavaScript:

- JavaScript was created in the first place for DOM manipulation. Earlier websites were mostly static, after JS was created dynamic Web sites were made.
- Functions in JS are objects. They may have properties and methods just like another object. They can be passed as arguments in other functions.
- Can handle date and time.
- Performs Form Validation although the forms are created using HTML.
- No compiler needed.

1.3 PROJECT REPORT OUTLINE

The report is arranged in the following way:

Chapter 1: **INTRODUCTION**
Chapter 2: **REQUIREMENT SPECIFICATION**
Chapter 3: **OBJECTIVE OF THE PROJECT**
Chapter 4: **IMPLEMENTATION**
Chapter 5: **FRONT END DESIGN**
Chapter 6: **TESTING**
Chapter 7: **RESULTS**

CHAPTER 2

REQUIREMENT SPECIFICATION

2.1 SOFTWARE REQUIREMENTS

Operating System: Microsoft Windows

Database: Maria DB

Tools: **XAMPP (**Apache, MariaDB(Mysql), PHPMyAdmin and Perl**), HTML, CSS, JavaScript**

2.2 HARDWARE REQUIREMENTS

Processor : Any Processor above 500 MHz

RAM : 2-GB RAM

Hard Disk : 40 GB of free space or more is recommended

Compact Disk : N A

Input device : Keyboard ,Mouse

Output device : Monitor

CHAPTER 3

OBJECTIVE OF THE PROJECT

This project **"Student Management System"** provides us a simple interface for maintenance of student information. It can be used by educational institutes or colleges to maintain the records of students easily. Achieving this objective is difficult using a manual system as the information is scattered, can be redundant and collecting relevant information may be very time consuming. All these problems are solved using this project.

Throughout the project the focus has been on presenting information in an easy and intelligible manner. The project is very useful for those who want to know about Student Management System and want to develop software/websites based on the same concept.

The objective of **Student Management System** is to allow the administrator of any organization to edit and find out the personal details of a student and allows the student to keep his profile up to date. It will also facilitate keeping all the records of students such as their id, name, mailing address, password, phone number etc. So all the information about any student will be available in a few seconds.

The project provides facilities like online registration and profile creation of students thus reducing paperwork and automating the record generation process in an educational institution. Overall, it'll make Student Information Management an easier job for the administrator and the student of any organization.

CHAPTER 4

IMPLEMENTATION

4.1 ER DIAGRAM

ER Diagram is a visual representation of data describes how data is related to each other. In ER Model, Disintegrate data into entities, attributes and setup relationships between entities, all can be represented visually using the ER diagram.

Components of ER Diagram:

Entity, Attributes, Relationships etc form the components of ER Diagram and there are defined symbols and shapes to represent each one of them.

Entity -Simple rectangular box represents an Entity.

Relationships between Entities - Weak and Strong

Rhombus is used to setup relationships between two or more entities

Attributes for any Entity-

Ellipse is used to represent attributes of any entity. It is connected to the entity.

Weak Entity- A weak Entity is represented using double rectangular boxes. It is generally connected to another entity.

Key Attribute for any Entity-To represent a Key attribute, the attribute name inside the Ellipse is underlined.

Derived Attribute for any Entity-Derived attributes are those which are derived based on other attributes, for example, age can be derived from date of birth.

To represent a derived attribute, another dotted ellipse is created inside the main ellipse.

Multivalued Attribute for any Entity-Double Ellipse, one inside another, represents the attribute which can have multiple values.

Composite Attribute for any Entity-A composite attribute is the attribute, which also has attributes.

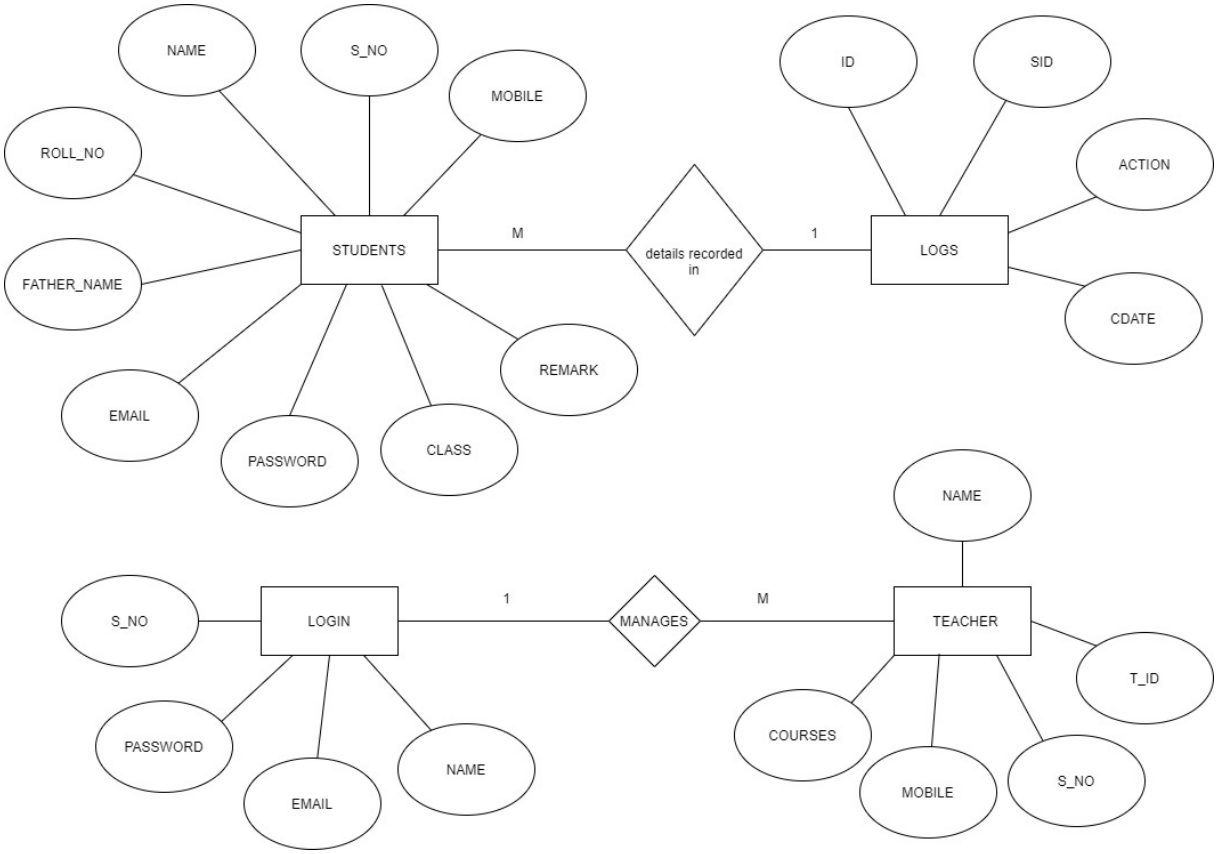


Fig 4.1 ER DIAGRAM OF STUDENT DATABASE

4.2 MAPPING OF ER DIAGRAM TO SCHEMA DIAGRAM

Students	S_No	Roll_no	Name	Father_Name	Class	Mobile	Email	Password	Remark

Logs	ID	SID	Action	C_Date

Login	S_No	Name	Email	Password

Teacher	S_No	T_Id	Name	Mobile	Courses

4.3 MAPPING OF THE ER SCHEMA TO RELATIONS

Students	S_No	Roll_no	Name	Father_Name	Class	Mobile	Email	Password	Remark

Logs	ID	SID	Action	C_Date

Login	S_No	Name	Email	Password

Teacher	S_No	T_Id	Name	Mobile	Courses

4.4 CREATION OF TABLES

1. Login:

```
CREATE TABLE `login` (
  `s_no` int(11) NOT NULL,
  `name` varchar(50) NOT NULL,
  `email` varchar(250) NOT NULL,
  `password` varchar(250) NOT NULL
);
```

2. Students:

```
CREATE TABLE `students` (
  `s_no` int(11) NOT NULL,
  `roll_no` int(11) NOT NULL,
  `name` varchar(100) NOT NULL,
  `father_name` varchar(100) NOT NULL,
  `class` int(11) NOT NULL,
  `mobile` varchar(25) NOT NULL,
  `email` varchar(100) NOT NULL,
  `password` varchar(100) NOT NULL,
  `remark` varchar(250) NOT NULL
);
```

3. Teachers:

```
CREATE TABLE `teachers` (
  `s_no` int(11) NOT NULL,
  `t_id` int(11) NOT NULL,
  `name` varchar(100) NOT NULL,
  `mobile` varchar(12) NOT NULL,
  `courses` varchar(250) NOT NULL
);
```

4. Logs:

```
CREATE TABLE `logs` (
  `id` int(11) NOT NULL,
  `sid` int(11) NOT NULL,
  `action` varchar(20) NOT NULL,
  `cdate` datetime NOT NULL
);
```

4.5 INSERTION OF TUPLES

1. Login:

```
INSERT INTO `login` (`s_no`, `name`, `email`, `password`) VALUES
(1, 'Admin', 'admin@gmail.com', 'admin@123');
```

2. Students:

```
INSERT INTO `students` (`s_no`, `roll_no`, `name`, `father_name`, `class`, `mo
bile`, `email`, `password`, `remark`) VALUES
(5, 1002, 'Pramod Sharma', 'Sohan Sharma', 10, '659874512', 'pramod@gmail.com'
, 'pramod@123', 'He is an intelligent guy.'),
(7, 1001, 'Vinod Kumar', 'XYZ', 12, '1234567789', 'vinod@gmail.com', 'vinod@12
3', 'Fine'),
(11, 1004, 'Mohan', 'Sohan', 12, '254587458', 'mohan@gmail.com', 'mohan@123',
'Great boy'),
(15, 1005, 'Arjun', 'Hemanth', 5, '7777777777', 'arjun@gmail.com', 'arjun@123'
, 'Need to improve');
(16, 1003, 'Rohit', 'Vipul', 5, '9444434444', 'rohit@gmail.com', 'rohit@123',
'Good');
```

3. Teachers:

```
INSERT INTO `teachers` (`s_no`, `t_id`, `name`, `mobile`, `courses`) VALUES
(1, 101, 'Shivam Yadav', '5484654878', 'Physics, Maths'),
(2, 102, 'Gopal Sharma', '9878452484', 'English, Reasoning, History'),
(103, 103, 'Hariom sain', '7887451254', 'Politics, History, Biology ');
```

4. Logs:

```
INSERT INTO `logs` (`id`, `sid`, `action`, `cdate`) VALUES
(1, 17, 'Inserted', '2021-01-01 19:47:00'),
(2, 17, 'Updated', '2021-01-01 19:50:15'),
(3, 17, 'Deleted', '2021-01-01 19:52:02'),
```

```
(4, 18, 'Inserted', '2021-01-04 16:17:30'),
(5, 19, 'Inserted', '2021-01-04 16:18:12');
```

4.6 CREATION OF TRIGGERS

CREATE TRIGGER insertLog AFTER INSERT ON `students` FOR EACH ROW

INSERT INTO logs VALUES (null, NEW.sid, "Inserted", NOW());

CREATE TRIGGER updateLog AFTER INSERT ON `students` FOR EACH ROW

INSERT INTO logs VALUES (null, NEW.sid, "Updated", NOW());

CREATE TRIGGER deletetLog BEFORE INSERT ON `students` FOR EACH

ROW INSERT INTO logs VALUES (null, OLD.sid, "Deleted", NOW());

CHAPTER 5

FRONT END DESIGN

5.1 CONNECTIVITY TO DATABASE

To Connect to MySQL Using PHP:

There are several methods for connecting to a MySQL database using PHP:

- MySQL Improved (mysqli) extension
- PDO (PHP Data Objects)
- Legacy MySQL (mysql_) functions
- Connecting to a remote MySQL database using PHP

Connecting to MySQL using the MySQL improved extention:

The MySQL Lmproved extension uses the mysqli class, which replaces the set of legacy MySQL functions.

To connect to MySQL using MySQL Improved extension, follow the steps:

1. Use the following PHP code to connect MySQL and selector database. Replace user name with your user name ,password with your password, and dbname with the database name:

```
<?php
$mysqli=new mysqli(“localhost”,”username”,”password”,”dbname”);
?>
```

2. After the code connects to MySQL and selects the database, can run SQL queries and perform other operations. For example, the following PHP code runs a SQL query that extracts the product_id from the product table, and stores the result in the $result variable:

```
<$php
$result=$mysqli->query(“SELECT product_id FROM product”);
/>
```

3. Finally, can close the connection. Although it isn’t strictly speaking necessary, PHP will automatically close the connection when the script ends.

```
<?php
//close the connection
```

```
Mysqli_close($mysqli);
?>
```

CONNECTIVITY BASIC CODE USED:

config.php:

```
<?php
$dbServername = “localhost”;
$dbUsername = “root”;
$dbPassword = “ ”;
$dbName = “sms”;
$conn = mysqli_connect($dbServername,$dbUsername,$dbPassword,$dbName);
if (mysqli_connect_error()) {
die("Database connection failed: " . mysqli_connect_error());
}
?>
```

5.2 FRONT END CODE

Systems design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could see it as the application of systems theory to product development. There is some overlap with the disciplines of systems analysis, systems architecture and systems engineering. If the broader topic of product development "blends the perspective of marketing, design, and manufacturing into a single approach to product development," then design is the act of taking the marketing information and creating the design of the product to be manufactured. Systems design is therefore the process of defining and developing systems to satisfy specified requirements of the user.

Until the 1990s systems design had a crucial and respected role in the data processing industry. In the 1990s standardization of hardware and software resulted in the ability to build modular systems. The increasing importance of software running on generic platforms has enhanced the discipline of software engineering.

Object-oriented analysis and design methods are becoming the most widely used methods for computer systems design.[citation needed] The UML has become the standard

language in object-oriented analysis and design.[citation needed] It is widely used for modeling software systems and is increasingly used for high designing non-software systems and organizations.[citation needed]

System design is one of the most important phases of software development process. The purpose of the design is to plan the solution of a problem specified by the requirement documentation. In other words the first step in the solution to the problem is the design of the project.

add_student.php

```
<?php
    $connection = mysqli_connect("localhost","root","");
    $db = mysqli_select_db($connection,"sms");
    $query = "insert into students values('',$_POST[roll_no],'$_POST[name]','$
_POST[father_name]',$_POST[class],'$_POST[mobile]','$_POST[email]','$_POST[pas
sword]','$_POST[remark]')";
    $query_run = mysqli_query($connection,$query);
?>
<script type="text/javascript">
    alert("Student added successfully.");
    window.location.href = "admin_dashboard.php";
</script>
```

admin_dashboard.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Admin Dashboard</title>
    <link rel="stylesheet" type="text/css" href="bootstrap-
4.4.1/css/bootstrap.min.css">
    <script type="text/javascript" src="bootstrap-
4.4.1/js/juqery_latest.js"></script>
    <script type="text/javascript" src="bootstrap-
4.4.1/js/bootstrap.min.js"></script>
    <style type="text/css">
        #header{
            height: 10%;
            width: 100%;
            top: 2%;
            background-color: black;
            position: fixed;
            color: white;
```

```
        }
        #left_side{
            height: 75%;
            width: 15%;
            top: 10%;
            position: fixed;
        }
        #right_side{
            height: 75%;
            width: 80%;
            background-color: whitesmoke;
            position: fixed;
            left: 17%;
            top: 21%;
            color: red;
            border: solid 1px black;
        }
        #top_span{
            top: 15%;
            width: 80%;
            left: 17%;
            position: fixed;
        }
        #td{
            border: 1px solid black;
            padding-left: 2px;
            text-align: left;
            width: 200px;
        }


    </style>
    <?php
        session_start();
        $name = "";
        $connection = mysqli_connect("localhost","root","");
        $db = mysqli_select_db($connection,"sms");
    ?>
</head>
<body>
    <div id="header"><br>
        <center>Student Management System       
Email: <?php echo $_SESSION['email'];?>      &nb
sp;Name:<?php echo $_SESSION['name'];?>
        <a href="logout.php">Logout</a>
        </center>
    </div>
```

```
    <span id="top_span"><marquee>Note:- This portal is open till 31 Jan 2021..
.Plz edit your information, if wrong.</marquee></span>
    <div id="left_side">
        <br><br><br><br><br><br><br>
        <form action="" method="post">
            <table style="margin-left:50px; ">
                <tr>
                    <td>
                        <input type="submit" name="search_student" value="Sear
ch Student">
                    </td>
                </tr>
                 
                <tr>
                    <td>
                        <input type="submit" name="edit_student" value="Edit S
tudent">
                    </td>
                </tr>
                <tr>
                    <td>
                        <input type="submit" name="add_new_student" value="Add
 New Student">
                    </td>
                </tr>
                <tr>
                    <td>
                        <input type="submit" name="delete_student" value="Dele
te Student">
                    </td>
                </tr>
                <tr>
                    <td>
                        <input type="submit" name="show teacher" value="Show T
eachers">
                    </td>
                </tr>
            </table>
        </form>
    </div>
    <div id="right_side"><br><br>
        <div id="demo">
        <!-- #Code for search student---Start-->
            <?php
                if(isset($_POST['search_student']))
                {
                    ?>
```

```
                    <center>
                    <form action="" method="post">
                      <b>Enter Roll No:</b>   <input type=
"text" name="roll_no">
                    <input type="submit" name="search_by_roll_no_for_search" v
alue="Search">
                    </form><br><br>
                    <h4><b><u>Student's details</u></b></h4><br><br>
                    </center>
                    <?php
                }
                if(isset($_POST['search_by_roll_no_for_search']))
                {
                    $query = "select * from students where roll_no = '$_POST[r
oll_no]'";
                    $query_run = mysqli_query($connection,$query);
                    while ($row = mysqli_fetch_assoc($query_run))
                    {
                        ?>
                        <table>
                            <tr>
                                <td>
                                    <b>Roll No:</b>
                                </td>
                                <td>
                                    <input type="text" value="<?php echo $row[
'roll_no']?>" disabled>
                                </td>
                            </tr>
                            <tr>
                                <td>
                                    <b>Name:</b>
                                </td>
                                <td>
                                    <input type="text" value="<?php echo $row[
'name']?>" disabled>
                                </td>
                            </tr>
                            <tr>
                                <td>
                                    <b>Father's Name:</b>
                                </td>
                                <td>
                                    <input type="text" value="<?php echo $row[
'father_name']?>" disabled>
                                </td>
                            </tr>
```

```
                            <tr>
                                <td>
                                    <b>Class:</b>
                                </td>
                                <td>
                                    <input type="text" value="<?php echo $row[
'class']?>" disabled>
                                </td>
                            </tr>
                            <tr>
                                <td>
                                    <b>Mobile:</b>
                                </td>
                                <td>
                                    <input type="text" value="<?php echo $row[
'mobile']?>" disabled>
                                </td>
                            </tr>
                            <tr>
                                <td>
                                    <b>Email:</b>
                                </td>
                                <td>
                                    <input type="text" value="<?php echo $row[
'email']?>" disabled>
                                </td>
                            </tr>
                            <tr>
                                <td>
                                    <b>Password:</b>
                                </td>
                                <td>
                                    <input type="password" value="<?php echo $
row['password']?>" disabled>
                                </td>
                            </tr>
                            <tr>
                                <td>
                                    <b>Remark:</b>
                                </td>
                                <td>
                                    <textarea rows="3" cols="40" disabled><?ph
p echo $row['remark']?></textarea>
                                </td>
                            </tr>
                        </table>
                        <?php
```

```
                    }
                }
            ?>
        <!-- #Code for edit student details---Start-->
        <?php
            if(isset($_POST['edit_student']))
            {
                ?>
                <center>
                <form action="" method="post">
                  <b>Enter Roll No:</b>   <input type="tex
t" name="roll_no">
                <input type="submit" name="search_by_roll_no_for_edit" value="
Search">
                </form><br><br>
                <h4><b><u>Student's details</u></b></h4><br><br>
                </center>
                <?php
            }
            if(isset($_POST['search_by_roll_no_for_edit']))
            {
                $query = "select * from students where roll_no = $_POST[roll_n
o]";
                $query_run = mysqli_query($connection,$query);
                while ($row = mysqli_fetch_assoc($query_run))
                {
                    ?>
                    <form action="admin_edit_student.php" method="post">
                        <table>
                        <tr>
                            <td>
                                <b>Roll No:</b>
                            </td>
                            <td>
                                <input type="text" name="roll_no" value="<?php
 echo $row['roll_no']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Name:</b>
                            </td>
                            <td>
                                <input type="text" name="name" value="<?php ec
ho $row['name']?>">
                            </td>
                        </tr>
```

```
                        <tr>
                            <td>
                                <b>Father's Name:</b>
                            </td>
                            <td>
                                <input type="text" name="father_name" value="<
?php echo $row['father_name']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Class:</b>
                            </td>
                            <td>
                                <input type="text" name="class" value="<?php e
cho $row['class']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Mobile:</b>
                            </td>
                            <td>
                                <input type="text" name="mobile" value="<?php
echo $row['mobile']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Email:</b>
                            </td>
                            <td>
                                <input type="text" name="email" value="<?php e
cho $row['email']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Password:</b>
                            </td>
                            <td>
                                <input type="password" name="password" value="
<?php echo $row['password']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
```

```
                                <b>Remark:</b>
                            </td>
                            <td>
                                <textarea rows="3" cols="40" name="remark"><?p
hp echo $row['remark']?></textarea>
                            </td>
                        </tr><br>
                        <tr>
                            <td></td>
                            <td>
                                <input type="submit" name="edit" value="Save">
                            </td>
                        </tr>
                    </table>
                    </form>
                    <?php
                }
            }
        ?>
        <!-- #Code for Delete student details---Start-->
        <?php
            if(isset($_POST['delete_student']))
            {
                ?>
                <center>
                <form action="delete_student.php" method="post">
                  <b>Enter Roll No:</b>   <input type="tex
t" name="roll_no">
                <input type="submit" name="search_by_roll_no_for_delete" value
="Delete">
                </form><br><br>
                </center>
                <?php
            }
            ?>

            <?php
                if(isset($_POST['add_new_student'])){
                    ?>
                    <center><h4>Fill the given details</h4></center>
                    <form action="add_student.php" method="post">
                        <table>
                        <tr>
                            <td>
                                <b>Roll No:</b>
                            </td>
                            <td>
```

```
                        <input type="text" name="roll_no" required>
                    </td>
                </tr>
                <tr>
                    <td>
                        <b>Name:</b>
                    </td>
                    <td>
                        <input type="text" name="name" required>
                    </td>
                </tr>
                <tr>
                    <td>
                        <b>Father's Name:</b>
                    </td>
                    <td>
                        <input type="text" name="father_name" required
>
                    </td>
                </tr>
                <tr>
                    <td>
                        <b>Class:</b>
                    </td>
                    <td>
                        <input type="text" name="class" required>
                    </td>
                </tr>
                <tr>
                    <td>
                        <b>Mobile:</b>
                    </td>
                    <td>
                        <input type="text" name="mobile" required>
                    </td>
                </tr>
                <tr>
                    <td>
                        <b>Email:</b>
                    </td>
                    <td>
                        <input type="text" name="email" required>
                    </td>
                </tr>
                <tr>
                    <td>
                        <b>Password:</b>
```

```
                            </td>
                            <td>
                                <input type="password" name="password" require
d>
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Remark:</b>
                            </td>
                            <td>
                                <textarea rows="3" cols="40" placeholder="Opti
onal" name="remark"></textarea>
                            </td>
                        </tr>
                        <tr>
                            <td></td>
                            <td><br><input type="submit" name="add" value="Add
 Student"></td>
                        </tr>
                    </table>
                    </form>
                    <?php
                }
            ?>
            <?php
                if(isset($_POST['show_teacher']))
                {
                    ?>
                    <center>
                        <h5>Teacher's Details</h5>
                        <table>
                            <tr>
                                <td id="td"><b>ID</b></td>
                                <td id="td"><b>Name</b></td>
                                <td id="td"><b>Mobile</b></td>
                                <td id="td"><b>Courses</b></td>
                                <!--<td id="td"><b>View Detail</b></td>-->
                            </tr>
                        </table>
                    </center>
                    <?php
                    $query = "select * from teachers";
                    $query_run = mysqli_query($connection,$query);
                    while ($row = mysqli_fetch_assoc($query_run))
                    {
                        ?>
```

```
                        <center>
                        <table style="border-
collapse: collapse;border: 1px solid black;">
                            <tr>
                                <td id="td"><?php echo $row['t_id']?></td>
                                <td id="td"><?php echo $row['name']?></td>
                                <td id="td"><?php echo $row['mobile']?></td>
                                <td id="td"><?php echo $row['courses']?></td>
                                <!--<td id="td"><a href="#">View</a></td>-->
                            </tr>
                        </table>
                        </center>
                        <?php
                    }
                }
            ?>
        </div>
    </div>
</body>
</html>
```

admin_edit_student.php

```
<?php
    $connection = mysqli_connect("localhost","root","");
    $db = mysqli_select_db($connection,"sms");
    $query = "update students set name='$_POST[name]',father_name='$_POST[fath
er_name]',class=$_POST[class],mobile='$_POST[mobile]',email='$_POST[email]',pa
ssword='$_POST[password]',remark='$_POST[remark]' where roll_no = $_POST[roll_
no]";
    $query_run = mysqli_query($connection,$query);
?>
<script type="text/javascript">
    alert("Details edited successfully.");
    window.location.href = "admin_dashboard.php";
</script>
```

admin_login.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Admin Login</title>
    <link rel="stylesheet" type="text/css" href="bootstrap-
4.4.1/css/bootstrap.min.css">
    <script type="text/javascript" src="bootstrap-
4.4.1/js/juqery_latest.js"></script>
```

```
    <script type="text/javascript" src="bootstrap-
4.4.1/js/bootstrap.min.js"></script>
</head>
<body style="background: url(https://img.freepik.com/free-photo/woman-typing-
keyboard-laptop-account-login-screen-working-office-table-background-safety-
concepts-about-internet-use_2034-1339.jpg?size=626&ext=jpg); background-
repeat: no-repeat; background-size: cover; ">
    <center><br><br>
        <h3>Admin LogIn Page</h3><br>
        <form action="" method="post">
            Email ID: <input type="text" name="email" required><br><br>
            Password: <input type="password" name="password" required><br><br>
            <input type="submit" name="submit" value="LogIn">
        </form><br>

        <?php
            session_start();
            if(isset($_POST['submit'])){
                $connection = mysqli_connect("localhost","root","");
                $db = mysqli_select_db($connection,"sms");
                $query = "select * from login where email = '$_POST[email]'";
                $query_run = mysqli_query($connection,$query);
                while ($row = mysqli_fetch_assoc($query_run)) {
                    if($row['email'] == $_POST['email']){
                        if($row['password'] == $_POST['password']){
                            $_SESSION['name'] =  $row['name'];
                            $_SESSION['email'] =  $row['email'];
                            header("Location: admin_dashboard.php");
                        }
                        else
                        {
                            ?>
                            <span>Wrong Password !!</span>
                            <?php
                        }
                    }
                        else
                    {
                        ?>
                        <span>Wrong UserName !!</span>
                        <?php
                }
            }


        }
        ?>
```

```
    </center>
</body>
</html>
```

delete_student.php

```
<script type="text/javascript">
    if(confirm("Are you sure want to delete ?"))
    {
        document.write("<?php
        $connection = mysqli_connect("localhost","root","");
        $db = mysqli_select_db($connection,"sms");
        $query = "delete from students where roll_no = $_POST[roll_no]";
        $query_run = mysqli_query($connection,$query);
        ?>");
        window.location.href = "admin_dashboard.php";
    }
    else
    {
        window.location.href = "admin_dashboard.php";
    }
</script>
```

edit_student.php

```
<?php
    $connection = mysqli_connect("localhost","root","");
    $db = mysqli_select_db($connection,"sms");
    $query = "update students set name='$_POST[name]',father_name='$_POST[fath
er_name]',class=$_POST[class],mobile='$_POST[mobile]',email='$_POST[email]',pa
ssword='$_POST[password]',remark='$_POST[remark]' where roll_no = $_POST[roll_
no]";
    $query_run = mysqli_query($connection,$query);
?>
<script type="text/javascript">
    alert("Details edited successfully.");
    window.location.href = "student_dashboard.php";
</script>
```

login.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Login Page</title>
```

```
    <link rel="stylesheet" type="text/css" href="bootstrap-
4.4.1/css/bootstrap.min.css">
    <script type="text/javascript" src="bootstrap-
4.4.1/js/juqery_latest.js"></script>
    <script type="text/javascript" src="bootstrap-
4.4.1/js/bootstrap.min.js"></script>
</head>
<body style="background: url(https://ii1.pepperfry.com/media/catalog/product/f
/o/1100x1210/foldable-multi-purpose-laptop-table-by-story-home-foldable-multi-
purpose-laptop-table-by-story-home-2wzv71.jpg); background-repeat: no-
repeat; background-size: cover; ">
    <center><br><br>
    <h3>Student Management System</h3><br>
    <form action="" method="POST">
        <input type="submit" name="admin_login" value="Admin Login" required>
        <input type="submit" name="student_login" value="Student Login" requir
ed>
    </form>
    <?php
        if(isset($_POST['admin_login'])){
            header("Location: admin_login.php");
        }
        if(isset($_POST['student_login'])){
            header("Location: student_login.php");
        }
    ?>
    </center>
</body>
</html>
```

logout.php

```
<?php
    session_unset();
    session_destroy();
    header("Location: login.php");
?>
```

student_dashboard.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Admin Dashboard</title>
    <link rel="stylesheet" type="text/css" href="bootstrap-
4.4.1/css/bootstrap.min.css">
```

```
    <script type="text/javascript" src="bootstrap-
4.4.1/js/juqery_latest.js"></script>
    <script type="text/javascript" src="bootstrap-
4.4.1/js/bootstrap.min.js"></script>
    <style type="text/css">
        #header{
            height: 10%;
            width: 100%;
            top: 2%;
            background-color: black;
            position: fixed;
            color: white;
        }
        #left_side{
            height: 75%;
            width: 15%;
            top: 10%;
            position: fixed;
        }
        #right_side{
            height: 75%;
            width: 80%;
            background-color: whitesmoke;
            position: fixed;
            left: 17%;
            top: 21%;
            color: red;
            border: solid 1px black;
        }
        #top_span{
            top: 15%;
            width: 80%;
            left: 17%;
            position: fixed;
        }
    </style>
    <?php
        session_start();
        $connection = mysqli_connect("localhost","root","");
        $db = mysqli_select_db($connection,"sms");
    ?>
</head>
<body>
    <div id="header"><br>
        <center>Student Management System       
Email: <?php echo $_SESSION['email'];?>      &nb
sp;Name:<?php echo $_SESSION['name'];?>
```

```
        <a href="logout.php">Logout</a>
        </center>
    </div>
    <span id="top_span"><marquee>Note:- This portal is open till 31 January 20
21...Plz edit your information, if wrong.</marquee></span>
    <div id="left_side">
        <br><br><br>
        <form action="" method="post">

            <table>
                <tr>
                    <td>
                        <input type="submit" name="edit_detail" value="Edit De
tail">
                    </td>
                </tr>
                <tr>
                    <td>
                        <input type="submit" name="show_detail" value="Show De
tail">
                    </td>
                </tr>
            </table>
        </form>
    </div>
    <div id="right_side"><br><br>
        <div id="demo">
            <?php
            if(isset($_POST['show_detail']))
            {
                $query = "select * from students where email = '$_SESSION[emai
l]'";
                $query_run = mysqli_query($connection,$query);
                while ($row = mysqli_fetch_assoc($query_run))
                {
            ?>
                <table>
                    <tr>
                        <td>
                            <b>Roll No:</b>
                        </td>
                        <td>
                            <input type="text" value="<?php echo $row['roll_no
']?>" disabled>
                        </td>
                    </tr>
                    <tr>
```

```
                        <td>
                            <b>Name:</b>
                        </td>
                        <td>
                            <input type="text" value="<?php echo $row['name']?
>" disabled>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <b>Father's Name:</b>
                        </td>
                        <td>
                            <input type="text" value="<?php echo $row['father_
name']?>" disabled>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <b>Class:</b>
                        </td>
                        <td>
                            <input type="text" value="<?php echo $row['class']
?>" disabled>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <b>Mobile:</b>
                        </td>
                        <td>
                            <input type="text" value="<?php echo $row['mobile'
]?>" disabled>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <b>Email:</b>
                        </td>
                        <td>
                            <input type="text" value="<?php echo $row['email']
?>" disabled>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <b>Password:</b>
```

```
                        </td>
                        <td>
                            <input type="password" value="<?php echo $row['pas
sword']?>" disabled>
                        </td>
                    </tr>
                    <tr>
                        <td>
                            <b>Remark:</b>
                        </td>
                        <td>
                            <textarea rows="3" cols="40" disabled><?php echo $
row['remark']?></textarea>
                        </td>
                    </tr>
                </table>
                <?php
                }
            }
            ?>

            <?php
            if(isset($_POST['edit_detail']))
            {
                $query = "select * from students where email = '$_SESSION[emai
l]'";
                $query_run = mysqli_query($connection,$query);
                while ($row = mysqli_fetch_assoc($query_run))
                {
                    ?>
                    <form action="edit_student.php" method="post">
                        <table>
                        <tr>
                            <td>
                                <b>Roll No:</b>
                            </td>
                            <td>
                                <input type="text" name="roll_no" value="<?php
 echo $row['roll_no']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Name:</b>
                            </td>
                            <td>
```

```
                                <input type="text" name="name" value="<?php ec
ho $row['name']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Father's Name:</b>
                            </td>
                            <td>
                                <input type="text" name="father_name" value="<
?php echo $row['father_name']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Class:</b>
                            </td>
                            <td>
                                <input type="text" name="class" value="<?php e
cho $row['class']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Mobile:</b>
                            </td>
                            <td>
                                <input type="text" name="mobile" value="<?php
echo $row['mobile']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Email:</b>
                            </td>
                            <td>
                                <input type="text" name="email" value="<?php e
cho $row['email']?>">
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Password:</b>
                            </td>
                            <td>
                                <input type="password" name="password" value="
<?php echo $row['password']?>">
```

```
                            </td>
                        </tr>
                        <tr>
                            <td>
                                <b>Remark:</b>
                            </td>
                            <td>
                                <textarea rows="3" cols="40" name="remark"><?p
hp echo $row['remark']?></textarea>
                            </td>
                        </tr><br>
                        <tr>
                            <td></td>
                            <td>
                                <input type="submit" value="Save">
                            </td>
                        </tr>
                    </table>
                    </form>
                    <?php
                }
            }
            ?>
        </div>
    </div>
</body>
</html>
```

student_login.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Student Login</title>
    <link rel="stylesheet" type="text/css" href="bootstrap-
4.4.1/css/bootstrap.min.css">
    <script type="text/javascript" src="bootstrap-
4.4.1/js/juqery_latest.js"></script>
    <script type="text/javascript" src="bootstrap-
4.4.1/js/bootstrap.min.js"></script>
</head>
<body style="background: url(https://ausexamination.ac.in/public/themes/studen
t/global/img/login/1.jpg); background-repeat: no-repeat; background-
size: cover; ">
    <center><br><br>
        <h3>Student LogIn Page</h3><br>
        <form action="" method="post">
```

```
            Email ID: <input type="text" name="email" required><br><br>
            Password: <input type="password" name="password" required><br><br>
            <input type="submit" name="submit" value="LogIn">
        </form><br>
        <?php
            session_start();
            if(isset($_POST['submit']))
            {
                $connection = mysqli_connect("localhost","root","");
                $db = mysqli_select_db($connection,"sms");
                $query = "select * from students where email = '$_POST[email]'
";
                $query_run = mysqli_query($connection,$query);
                while ($row = mysqli_fetch_assoc($query_run))
                {
                    if($row['email'] == $_POST['email'])
                    {
                        if($row['password'] == $_POST['password'])
                        {
                            $_SESSION['name'] =  $row['name'];
                            $_SESSION['email'] =  $row['email'];
                            header("Location: student_dashboard.php");
                        }
                        else{
                            ?>
                            <span>Wrong Password !!</span>
                            <?php
                            }
                    }
                    else
                    {
                        ?>
                        <span>Wrong UserName !!</span>
                        <?php
                    }
                }
            }
        ?>
    </center>
</body>
</html>
```

CHAPTER 6

TESTING

This chapter gives the outline of all testing methods that are carried out to get a bug free system. Quality can be achieved by testing the product using different techniques at different phases of the project development. The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components sub assemblies and/or a finished product. It is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

6.1 TESTING PROCESS

Testing is an integral part of software development. Testing process certifies whether the product that is developed compiles with the standards that it was designed to. Testing process involves building of test cases against which the product has to be tested.

6.2 TESTING OBJECTIVES

The main objectives of testing process are as follows.

- Testing is a process of executing a program with the intent of finding an error.
- A good test case is one that has high probability of finding undiscovered error.
- A successful test is one that uncovers the undiscovered error.

6.3 TEST CASES

The test cases provided here test the most important features of the project.

6.3.1 Test cases for the project

Table 6.1 ------- Test Case

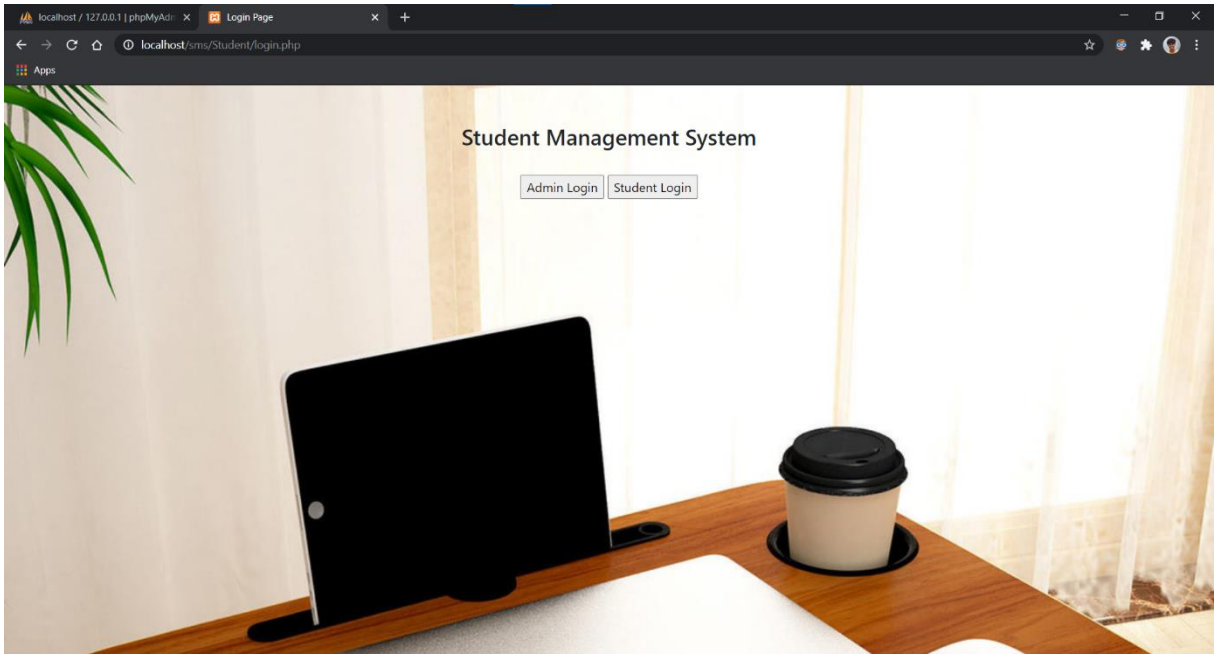
Sl No	Test Input	Expected Results	Observed Results	Remarks
1	Invalid Password	Wrong Password	Wrong Password	Pass
2	Insert a Record	New tuple should be inserted	Query Ok 1 row affected or inserted	Pass
3	Insert a Record	New tuple must be inserted	Error	Fail
4	Delete a record	Delete the record	Query Ok 1 row affected or Deleted	Pass
5	Edit a record	Tuple should be edited	Query Ok 1 row updated	Pass
6	Edit a record	Tuple should be edited	Error	Fail

CHAPTER 7

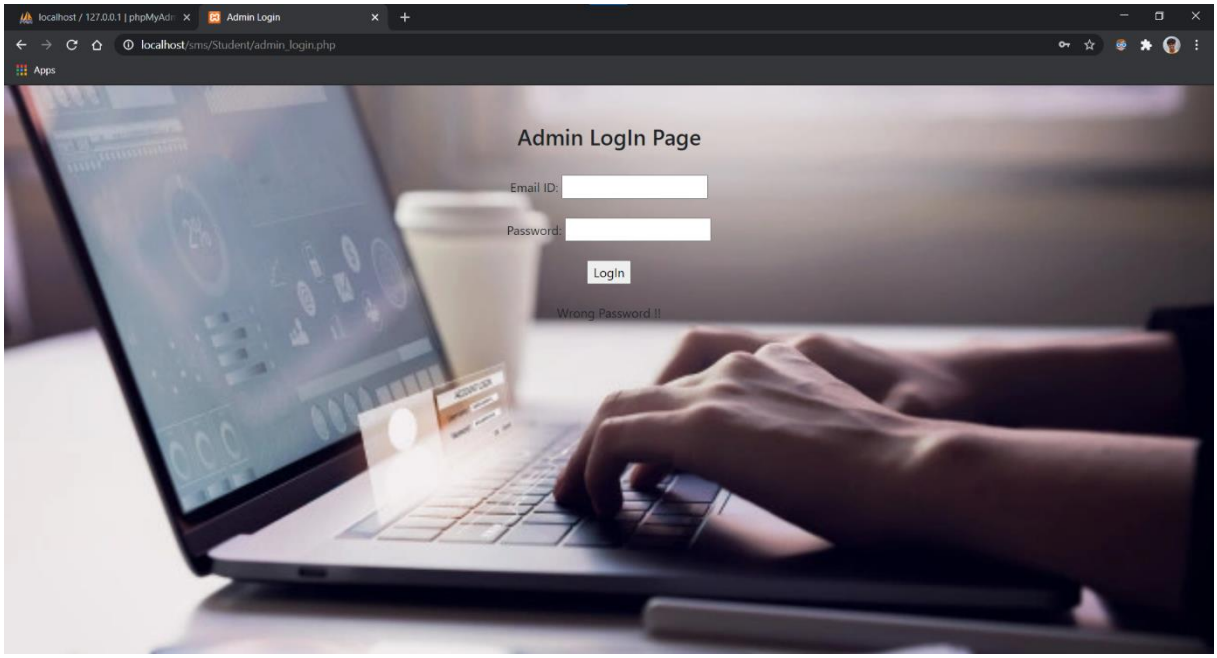
RESULTS

This section describes the screens of the **"Student Management System"**. The snapshots are shown below for each module.

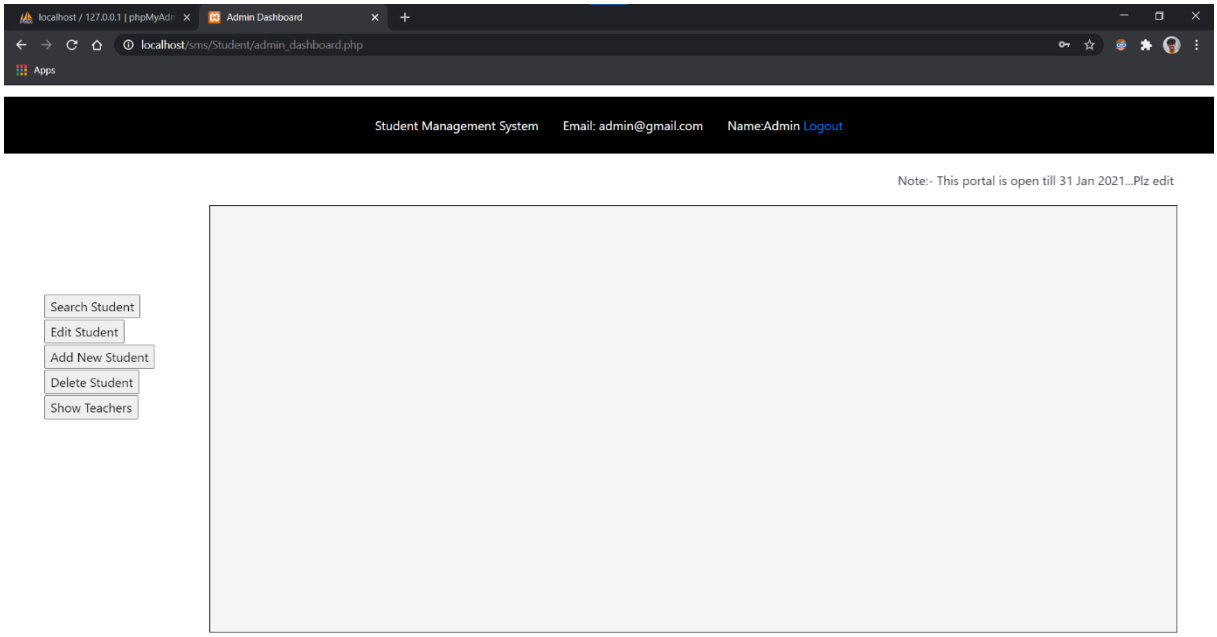
7.1 SNAPSHOTS



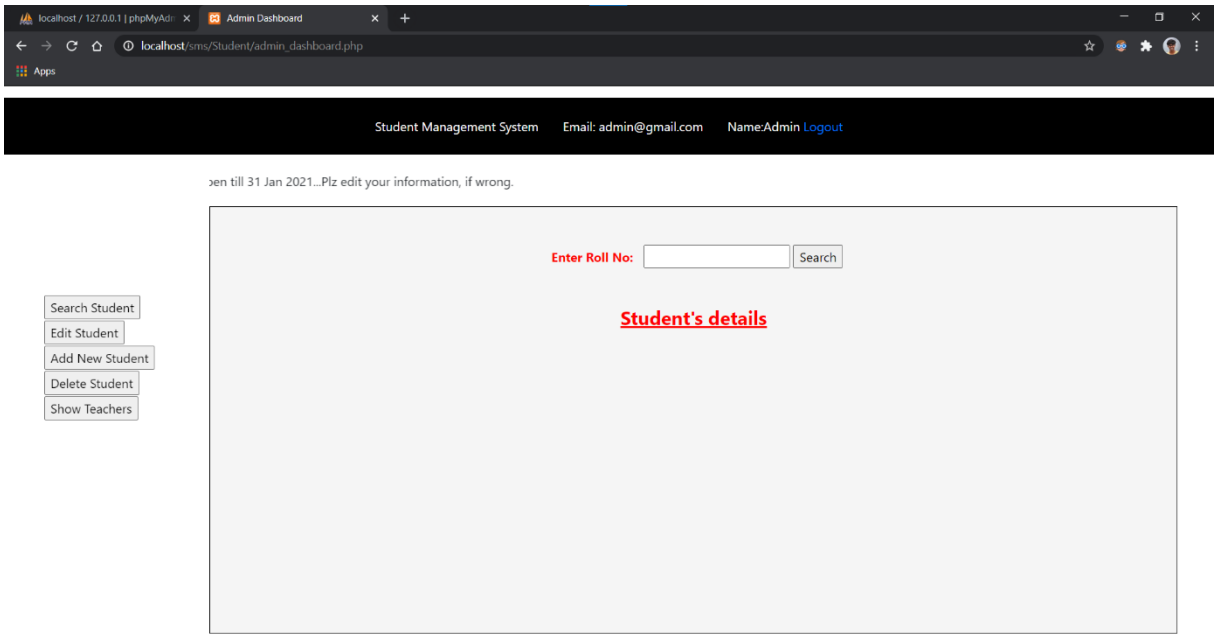
Snapshot 7.1: Login Page



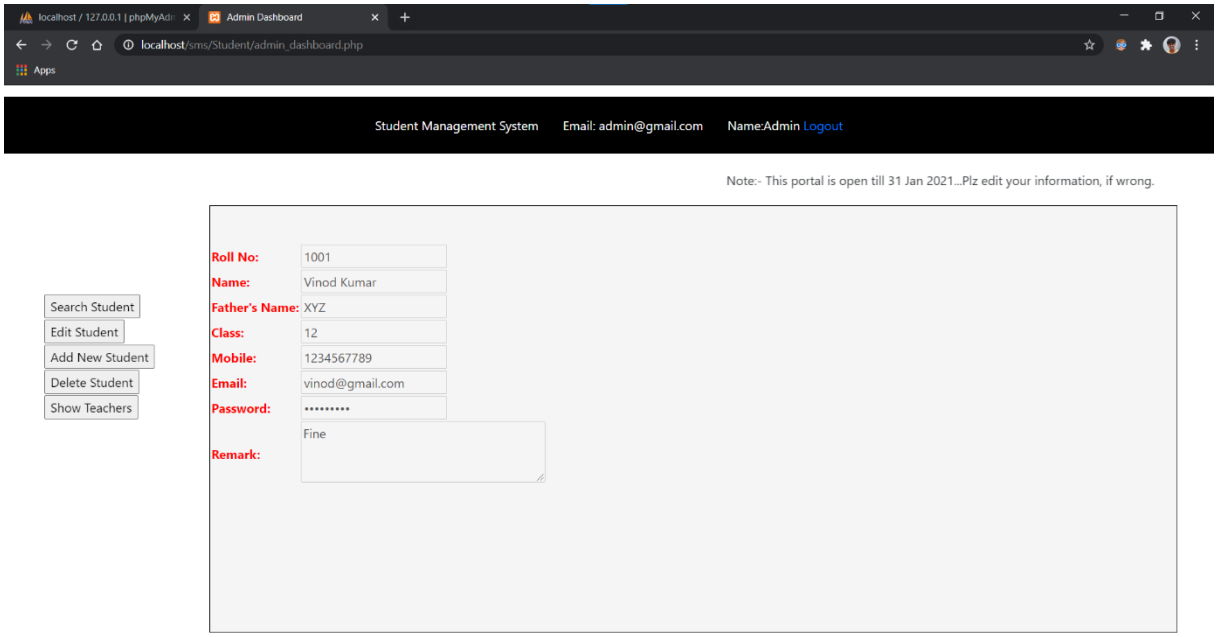
Snapshot 7.2: Admin Login Page



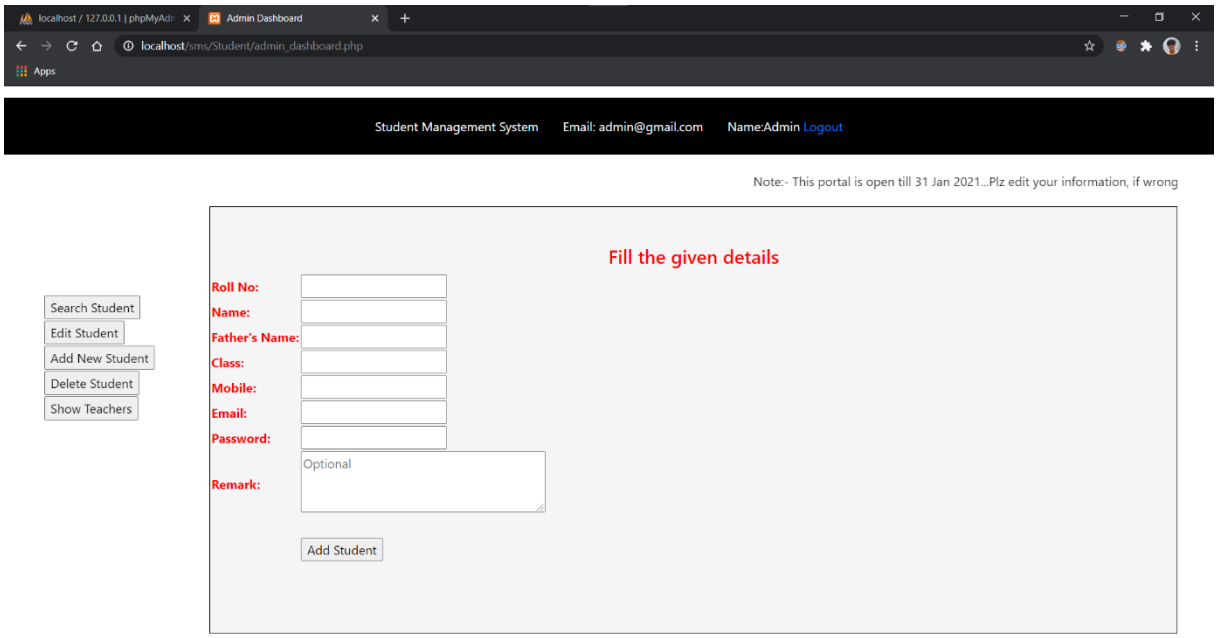
Snapshot 7.3: Admin Dashboard Page



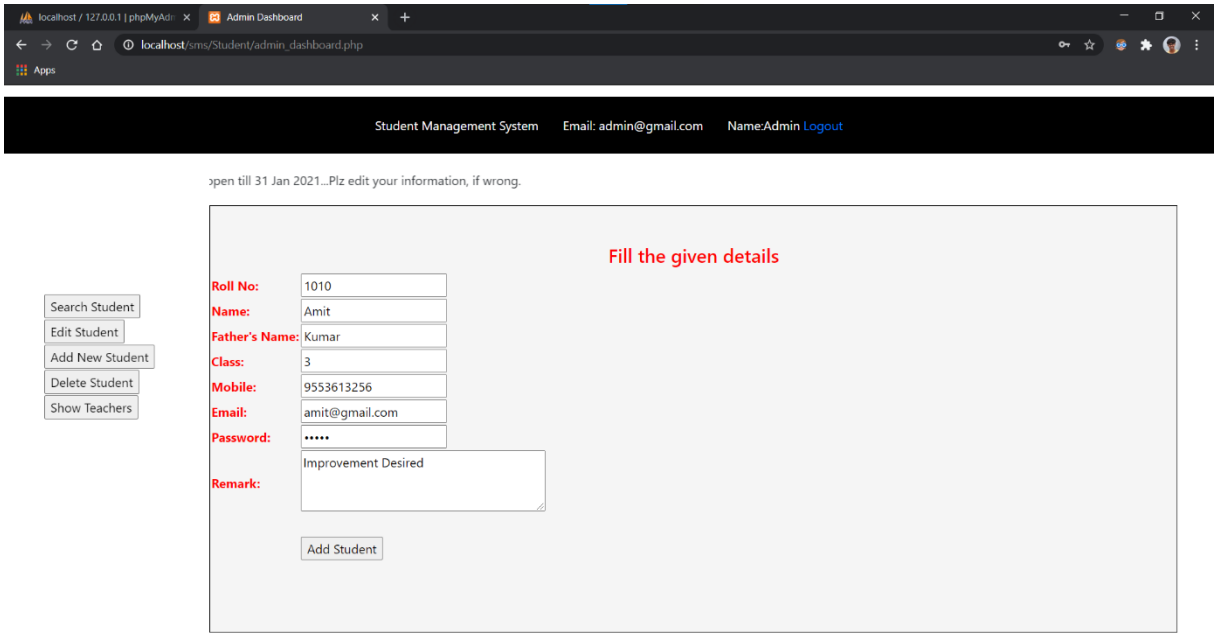
Snapshot 7.4: Student Search Page



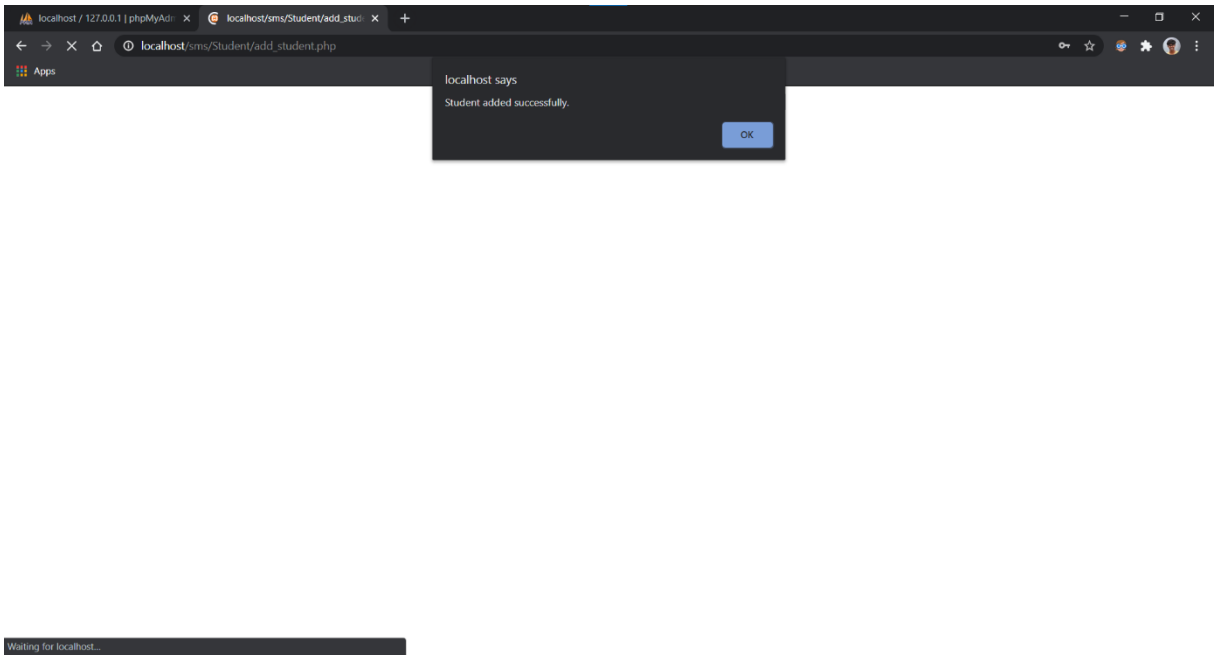
Snapshot 7.5: Displaying Student Details



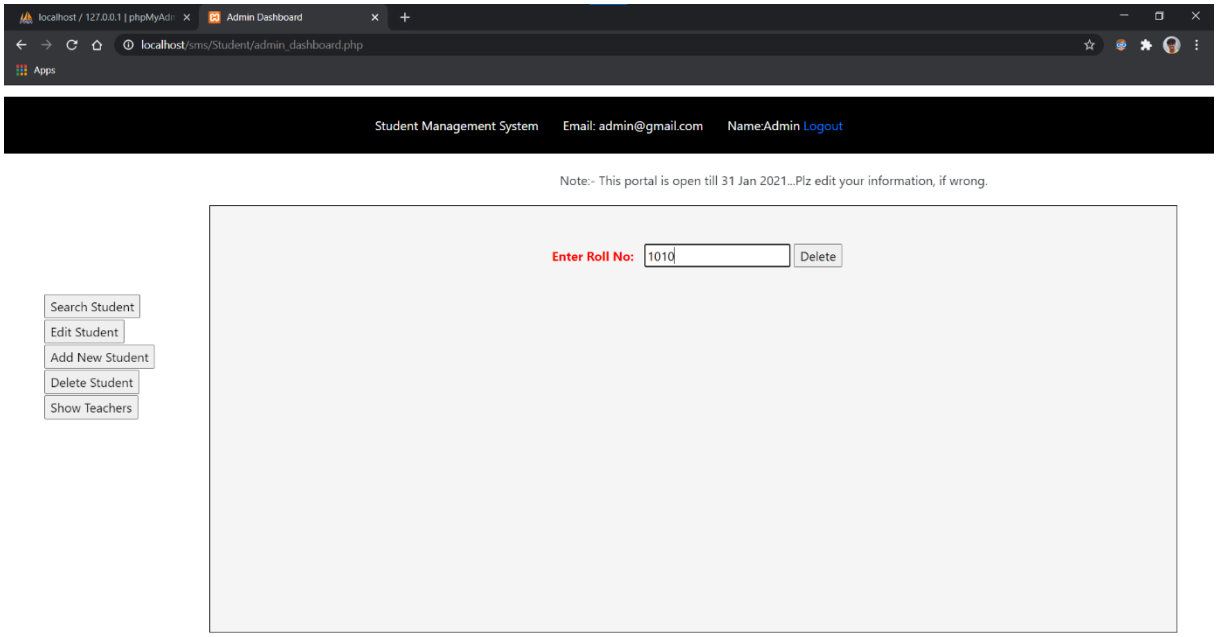
Snapshot 7.6: Student Adding Page



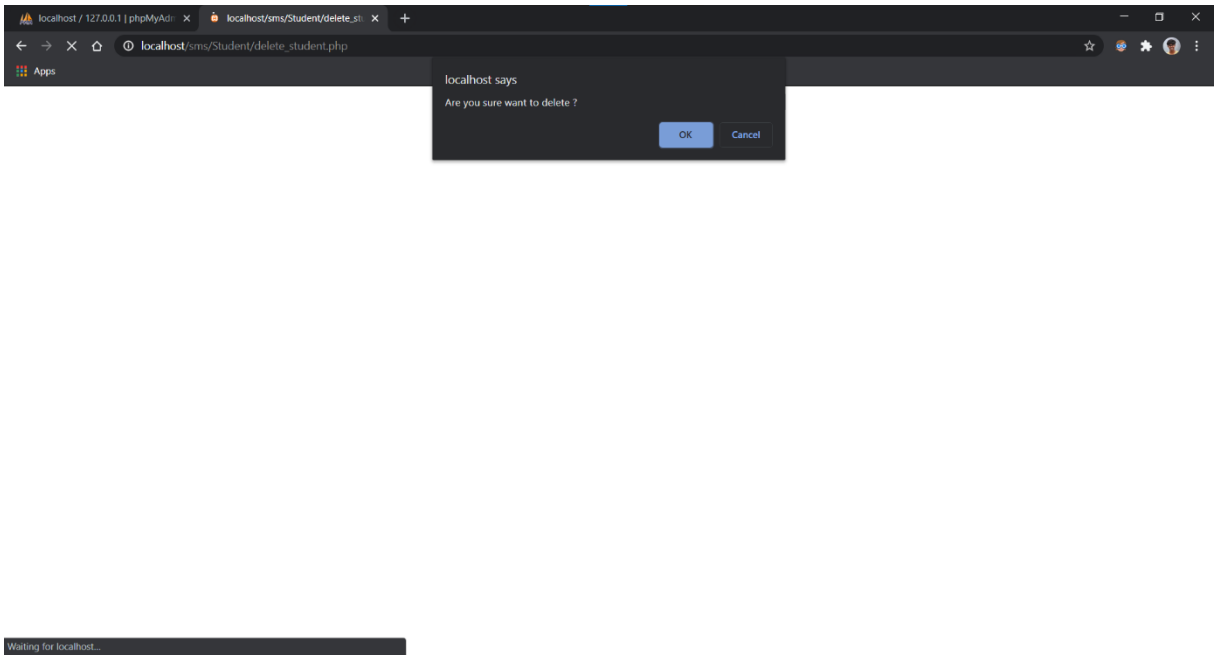
Snapshot 7.7: Adding New Student



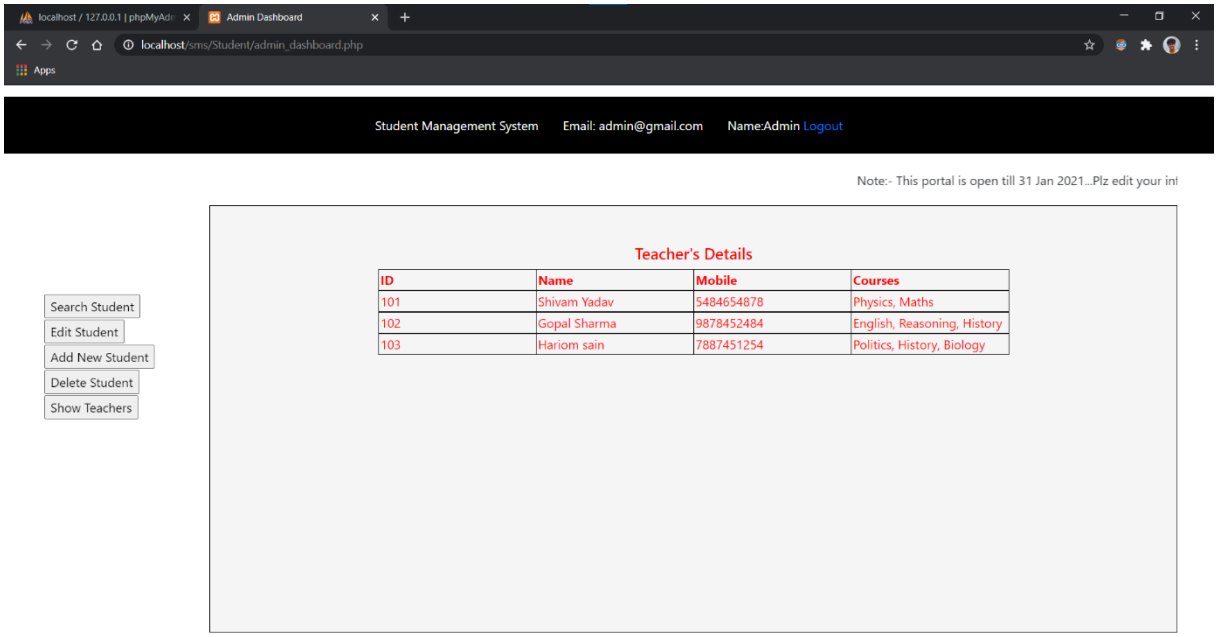
Snapshot 7.8: Webpage displays 'Student added successfully'



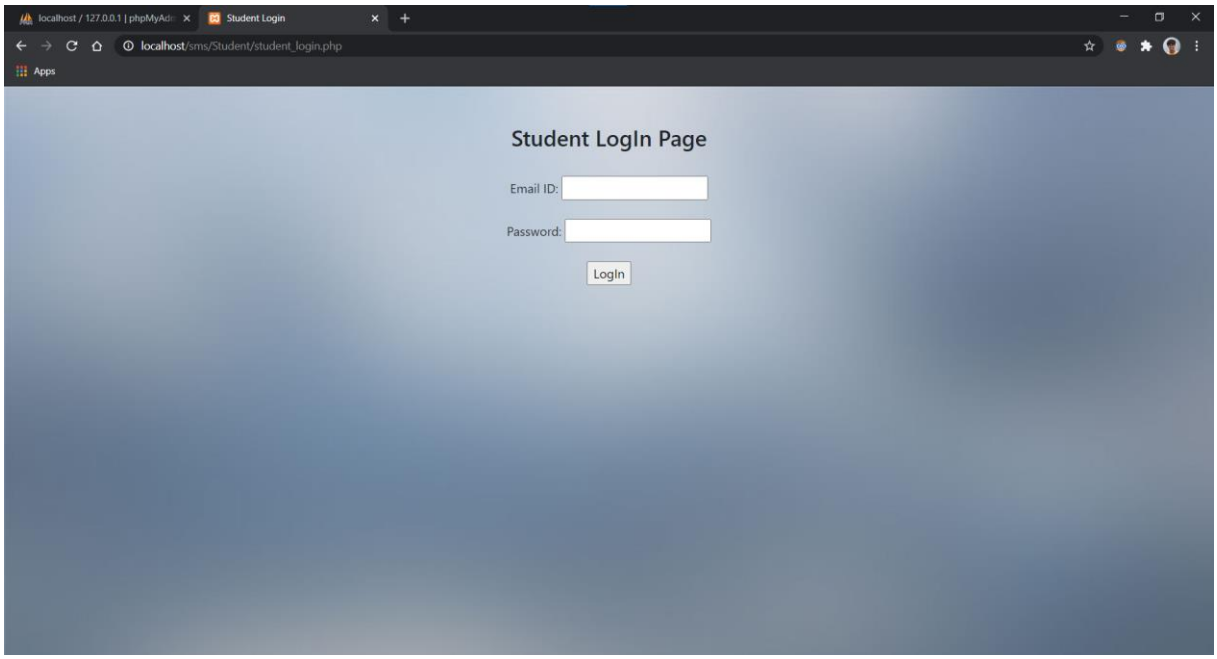
Snapshot 7.9: Deleting a Student



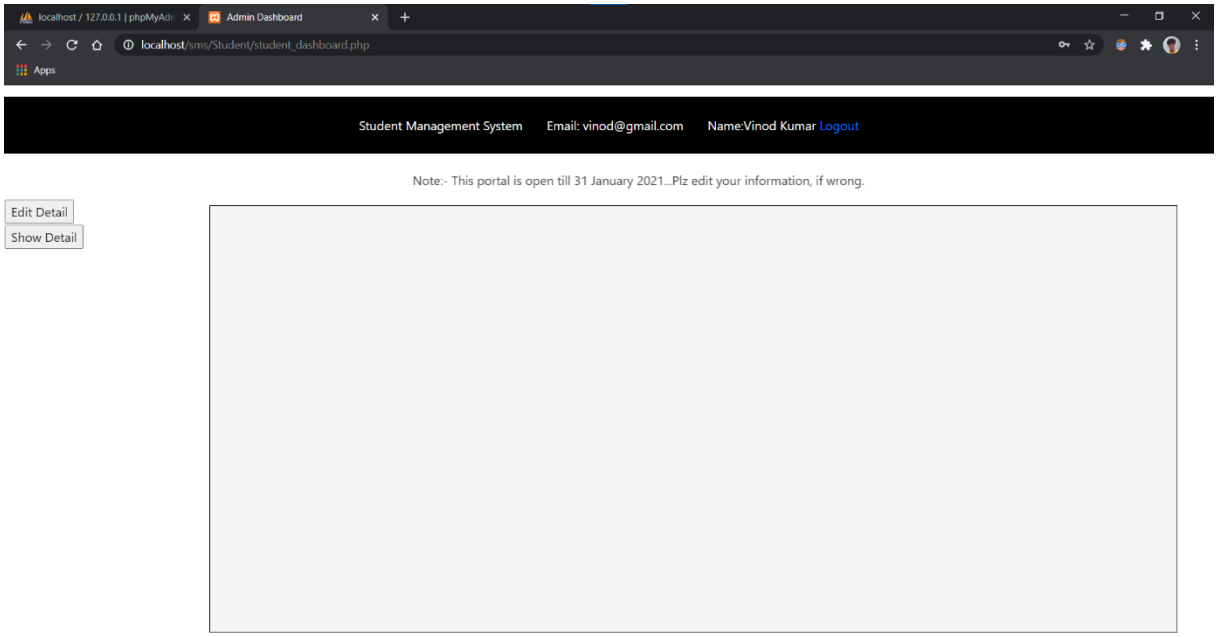
Snapshot 7.10: Student deleted successfully



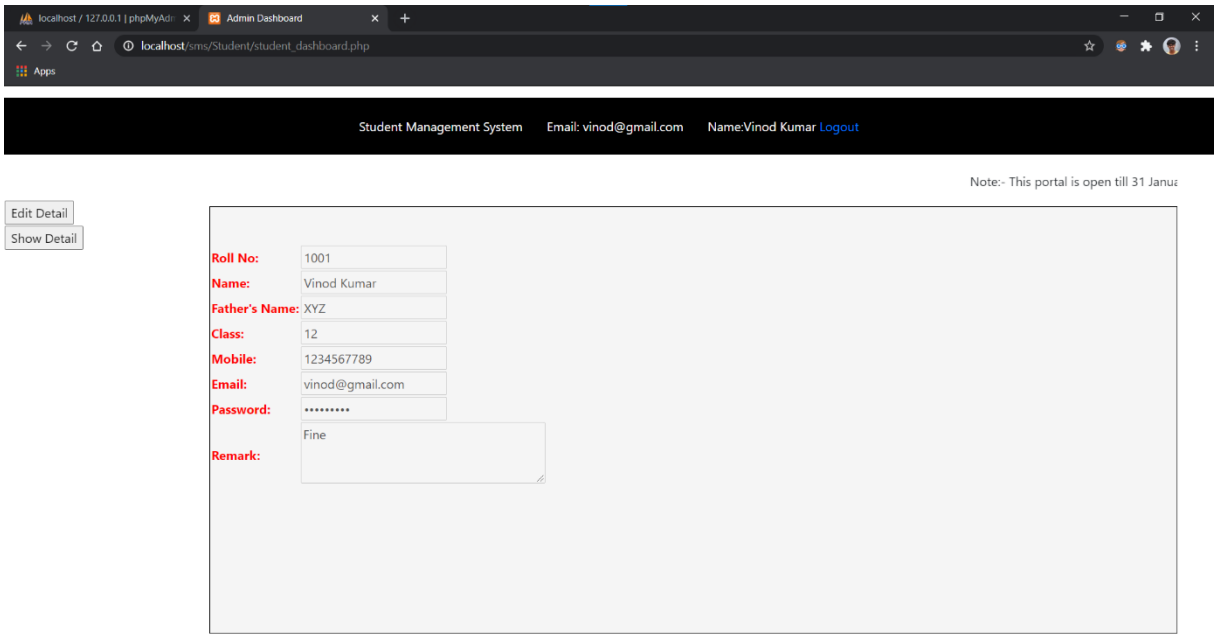
Snapshot 7.11: Teachers details Page



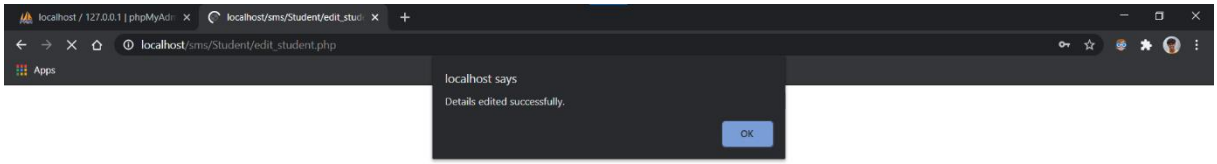
Snapshot 7.12: Student Login Page



Snapshot 7.13: Student Dashboard Page



Snapshot 7.14: Student Details Editing Page



Snapshot 7.15: Webpage shows 'Details edited successfully'

CONCLUSION

Simplicity is never simple. As we have seen in this project, the process of creating a user- friendly and straightforward platform that facilitates the administrator's job is one filled with complexity. From understanding user requirements to system design and finally system prototype and finalization, every step requires in-depth understanding and commitment towards achieving the objectives of the project.

Although the student database management module is not fully integrated to the system and used on real time, the system prototype demonstrates easy navigation and data are stored in a systematic way. Overall, efficiency has improved and work processes simplified. Although all the objectives have been met, the system still has room for improvement. The system is robust and flexible enough for future upgrade using advanced technology and devices.

It was a wonderful learning experience for us while working on this project. This software is very easy to use so all educational institutions can use this frequently to maintain student records easily and efficiently.

REFERENCES

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[3] https://www.w3schools.com/

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