

# **ASSIGNMENT: Design an interactive web portal for patient Registration , login and appointment dashboard for an online doctor appointment.**

## **OBJECTIVES:**

1. **Improve User Experience:** Create a user-friendly interface that simplifies the appointment booking process for patients, ensuring easy navigation and accessibility across devices.
2. **Real-time Availability:** Implement a system that displays real-time availability of doctors, enabling patients to book appointments based on their preferred time slots and reducing waiting times.
3. **Analytics and Reporting:** Integrate analytics tools to track appointment trends, patient demographics, and user behavior, enabling data-driven insights for optimization and decision-making.
4. **Security and Compliance:** Ensure compliance with healthcare regulations (such as HIPAA) and implement robust security measures to safeguard patient data and maintain confidentiality.
5. **Scalability:** Design a scalable architecture that accommodates growth in user base and functionalities, allowing for seamless expansion and integration with additional services or platforms.

## **TECHNOLOGIES USED:**

- Frontend: HTML , CSS , JavaScript
- Backend: PHP
- Database: MySQL

## **Features Implementation:**

- 1. User Registration and Authentication:** Allow users (patients and doctors) to register and securely authenticate themselves before accessing the dashboard.
- 2. Doctor Availability and Booking:** Display a list of available doctors along with their specialties, availability, and appointment slots. Patients can select their preferred doctor and book appointments accordingly.
- 3. Real-time Scheduling:** Provide real-time availability of doctors and appointment slots, allowing patients to book appointments instantly without conflicting with existing bookings.
- 4. Patient History and Profile:** Allow patients to create profiles containing their personal information, medical history, allergies, and insurance details for easy access by healthcare providers.
- 5. Appointment History and Analytics :** Provide patients and doctors with access to their appointment history and analytics, including appointment trends, patient demographics, and feedback analysis.
- 6. Feedback and Ratings:** Allow patients to provide feedback and ratings for their appointments, helping to improve service quality and doctor ratings.

## Implementation Details:

**Index.Html** : At first we designed the index page for patient.

Source code for Index.Html is given below.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <link rel="stylesheet" href="home.css">
    <title>Online Doctor Appointment</title>
</head>
<body>
    <header>
        <h1>Welcome to Online Doctor Appointment</h1>
    </header>
    <div id="login-container">
        <h2>New User Registration</h2>
        <form action="javascript:void(0);">

            <button id="login-button"
onclick="openLogin1()">Register</button>
        </form>
    </div>
    <div id="login-container">
        <h2>User Login</h2>
        <form action="javascript:void(0);">

            <button id="login-button"
onclick="openLogin()">Login</button>
        </form>
    </div>
    <script src="logbutton.js"></script>
    <footer>
        <p>&copy; 2024 Online Doctor Appointment</p>
    </footer>
</body>
</html>
```

Home.CSS: Source code for Home.CSS is given below.

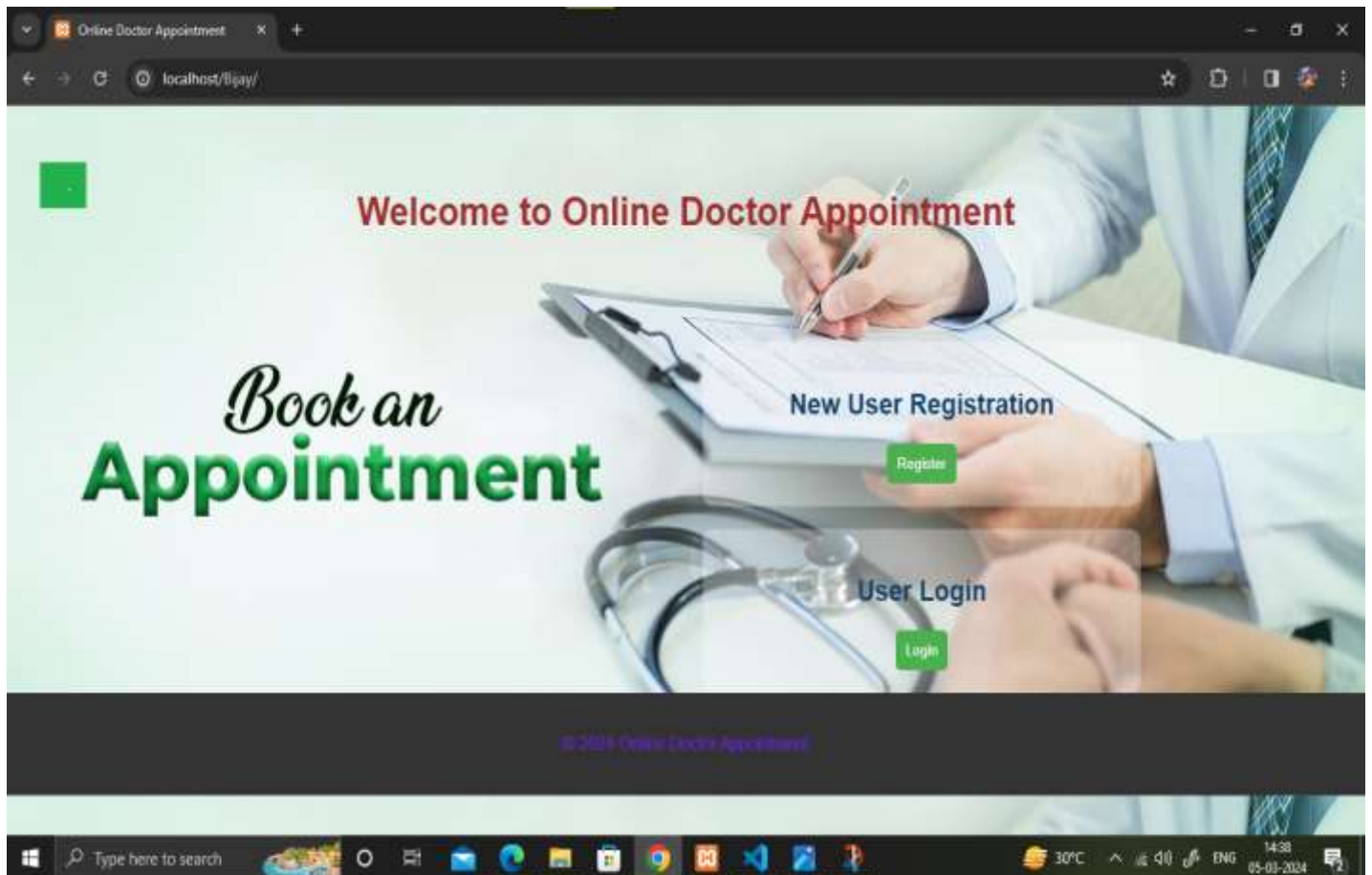
```
body
{
    margin: 0;
    padding: 0;
    font-family: 'Arial', sans-serif;
    background-image: url('homepage.jpg');
    background-size: cover;
    background-position: center;
    color: #fff;
}
header
{
    text-align: center;
    padding: 50px 0;
}
header h1
{
    font-size: 35px;
    color: #a32c2c;
}
#login-container
{
    display: flex;
    flex-direction: column;
    align-items: center;
    max-width: 400px;
    margin: auto;
    background: rgba(255, 255, 255, 0.3);
    padding: 20px;
    border-radius: 10px;
    margin-top: 20px;
    margin-left: 700px;
}
#login-container h2
{
    font-size: 25px;
    color: #0b416d;
    margin-bottom: 20px;
}
```

```

}
#login-button
{
    background-color: #4CAF50;
    color: #fff;
    padding: 10px;
    border: none;
    border-radius: 5px;
    cursor: pointer;
}
#login-button:hover
{
    background-color: #45a049;
}
footer
{
    text-align: center;
    color: #7517e0;
    padding: 20px 0;
    background-color: #333;
}

```

## View of Home Page:



**Reghtml.Html** : This html file is design for Registration purpose.

Source code for Index.Html is given below.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Registration Page</title>
    <link rel="stylesheet" href="login.css">
</head>
<body>
    <div class="login-container">
        <h2>Registration</h2>
        <form id="registrationForm" action="reg.php"
method="post">
            <label for="username">Username:</label>
            <input type="text" id="username"
name="username" required>

            <label for="email">Email:</label>
            <input type="email" id="email" name="email"
required>

            <label for="password">Password:</label>
            <input type="password" id="password"
name="password" required>

            <label for="confirmPassword">Confirm
Password:</label>
            <input type="password" id="confirmPassword"
name="confirmPassword" required>

            <input type="submit"
class="btn" name="rg" value="Register" >
        </form>
    </div>
    <script src="loginscript.js"></script>
</body>
</html>
```

**Login.CSS** : This CSS file is used for design purpose .Source code for login.CSS is given below.

```
body
{
    font-family: Arial, sans-serif;

    background-color: #fff;
    display: grid;
    text-align: center;
    align-items: center;
    justify-content: center;
    margin: 0;
    height: 100vh;
}
header, main, footer
{
    margin: 20px;
}
header h1
{
    color: #a32c2c;
}
section
{
    margin-bottom: 20px;
}
input, button
{
    margin-bottom: 10px;
}
footer
{
    text-align: center;
    color: #4a0ac0;
}
```

```
.login-container
{
    border-radius: 8px;
    vertical-align: middle;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    padding: 20px;
    width: 300px;
}
.login-container h2
{
    text-align: center;
    color: #4a0ac0;
}
.login-container label
{
    display: block;
    margin: 10px 0;
}
.login-container input
{
    width: 100%;
    padding: 8px;
    margin: 5px 0 15px;
    box-sizing: border-box;
    border: 1px solid #ccc;
    border-radius: 4px;
}
.login-container button
{
    background-color: #4caf50;
    color: #fff;
    padding: 10px;
    border: none;
    border-radius: 4px;
    cursor: pointer;
    width: 100%;
}
```



```
.login-container button:hover
{
    background-color: #45a049;
}
.dashboard
{
    background-color: #fff;
    border-radius: 8px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    padding: 20px;
    max-width: 600px;
    margin: auto;
}
h2
{
    text-align: center;
    color: #4caf50;
}
h4
{
    text-align: center;
    color: #a32c2c;
}
label
{
    display: block;
    margin: 10px 0;
}
input, select
{
    width: 100%;
    padding: 8px;
    margin: 5px 0 15px;
    box-sizing: border-box;
    border: 1px solid #ccc;
    border-radius: 4px;
}
```

```
button
{
    background-color: #4caf50;
    color: #fff;
    padding: 10px;
    border: none;
    border-radius: 4px;
    cursor: pointer;
    width: 100%;
}
button:hover
{
    background-color: #45a049;
}
#appointmentList
{
    margin-top: 20px;
}
ul
{
    list-style-type: none;
    padding: 0;
}
li
{
    background-color: #f9f9f9;
    margin: 5px 0;
    padding: 10px;
    border-radius: 4px;
    display: flex;
    justify-content: space-between;
    align-items: center;
}
```

**Reg.PHP** : Source code for reg.PHP is given below.

```

<?php
include('db_connect.php');
if($_POST['rg'])
{
    $username = $_POST['username'];
    $email = $_POST['email'];
    $password = $_POST['password'];
    $query="INSERT INTO
USERS(username,Email>Password)
VALUES('$username','$email','$password')";
    $data=mysqli_query($conn,$query);
    if($data)
    {
        echo "data recorded";
        header("Location: lghtml.html");

    }
    else{
        echo "failed";
    }

}

else {
    $query = "SELECT * FROM users WHERE
username=? OR email=?";
    $stmt = $conn->prepare($query);
    $stmt->bind_param("ss", $username,
$email);
    $stmt->execute();
    $result = $stmt->get_result();

    if ($result->num_rows > 0) {
        $error = "Username or email already
taken. Choose another.";
    } else {
        $query = "INSERT INTO users (User
Name, Email, Password) VALUES (?,?,:)";

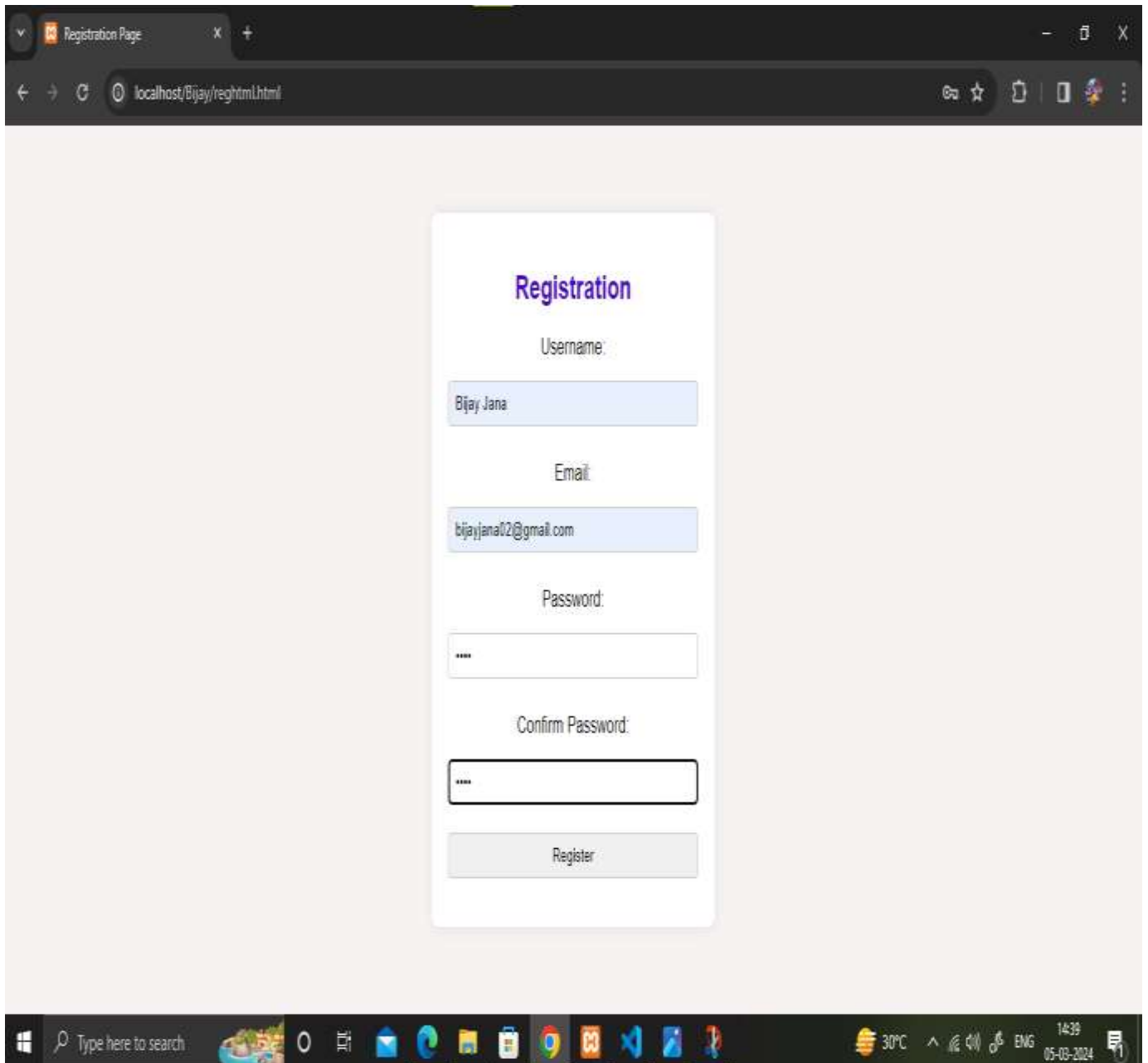
```

```

        $stmt = $conn-
>prepare($query);
        $hashed_password = md5($password);
        $stmt->bind_param("sss", $username,
$email, $hashed_password);
        $stmt->execute();
        header("Location: index.html");
        exit();
    }
    $stmt->close();
}
?>

```

## Views of Registration Page:



The screenshot shows a web browser window with the title 'Registration Page' and the address bar displaying 'localhost/Bijay/reghtml.html'. The main content area features a registration form with the following fields and elements:

- Registration** (Title)
- Username:** Input field containing 'Bijay Jana'.
- Email:** Input field containing 'bijayjana02@gmail.com'.
- Password:** Input field with masked characters '....'.
- Confirm Password:** Input field with masked characters '....'.
- Register** (Submit Button)

The Windows taskbar at the bottom shows the system clock as 14:39 on 05-03-2024, with a temperature of 30°C and various system icons.

**Lghtml.HTML** : This html file is design for Login purpose . Source code for lghtml.HTML is given below.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Login Page</title>
    <link rel="stylesheet" href="login.css">
</head>
<body>
    <div class="login-container">
        <h2>Login</h2>
        <form id="loginForm" action="log.php"
method="post">
            <label for="username">Username:</label>
            <input type="text" id="username"
name="username" required>

            <label for="password">Password:</label>
            <input type="password" id="password"
name="password" required>

            <input type="submit" value="Login"
class="btn" name="login" >
        </form>
    </div>
    <script src="logscript.js"></script>
</body>
</html>
```

**Log.PHP** : Source code for log.PHP is given below.

```
<?php
session_start();
if (isset($_POST['login'])) {
    include('db_connect.php');
    $username = $_POST['username'];
    $password = $_POST['password'];
```

```

$query = "SELECT * FROM users WHERE
username='$username' && Password='$password'";
$data=mysqli_query($conn,$query);
$total=mysqli_num_rows($data);
if($total<1)
{
    echo "<script> var confirmation =
confirm('You did not fill the form.');
```

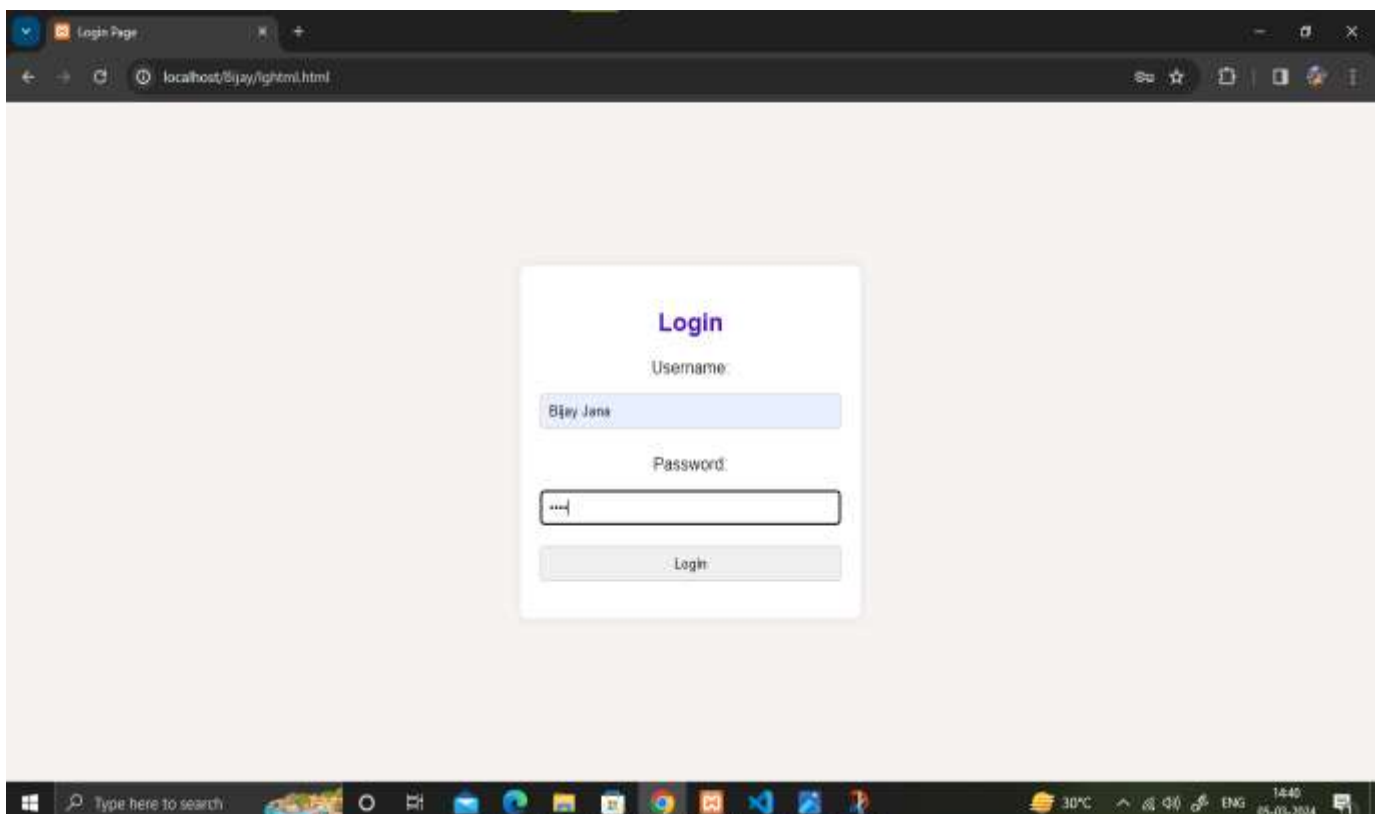
```

    if(confirmation){
        window.location.href ='reghtml.html'
    }
    </script>";
}
else{
    $user_data = mysqli_fetch_assoc($data);
    $_SESSION['user_data'] =
$user_data;
    header("Location: profile.php");
    exit();
}

?>

```

## Views of Login Page:



Profile.PHP : This file is used for show user profile. Source code for profile.PHP is given below.

```
<?php
session_start();
if (!isset($_SESSION['user_data'])) {
    header("Location: login.html");
    exit();
}
include('db_connect.php');
$user_data = $_SESSION['user_data'];
$username = $user_data['username'];
$query = "SELECT * FROM appointment_details WHERE
username = '$username'";
$result = mysqli_query($conn, $query);
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>User Profile</title>
    <link rel="stylesheet" href="login.css">
    <style>
        body{
            background-size: cover;
            background-position: center;
            background-image: url('bigstock-
Medical-physician-doctor-woma-101147165.jpg');
        }
        .user-appointments li {
            cursor: pointer;
        }
        .appointment-details {
            display: none;
            padding-left: 20px;
        }
    </style>
</head>
<body>
    <div class="user-appointments">
        <div class="appointment">
            <div class="appointment-details">
                <div class="appointment-header">
                    <div class="appointment-title">
                        <h3>Appointment Details</h3>
                    </div>
                    <div class="appointment-date">
                        <span>Date: </span>
                    </div>
                    <div class="appointment-time">
                        <span>Time: </span>
                    </div>
                    <div class="appointment-location">
                        <span>Location: </span>
                    </div>
                </div>
                <div class="appointment-body">
                    <div class="appointment-description">
                        <p>Appointment Description</p>
                    </div>
                    <div class="appointment-status">
                        <span>Status: </span>
                    </div>
                </div>
            </div>
        </div>
    </div>
</body>
</html>
```

```
    }  
    .login-container {  
      background-color: rgba(255, 255, 255, 0.2);  
      border-radius: 8px;  
      vertical-align: middle;  
      box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);  
      padding: 20px;  
      width: 300px;  
    }  
    .login-container h1 {  
      text-align: center;  
      color: darkred;  
    }  
    .login-container h2 {  
      text-align: center;  
      color: #4a0ac0;  
    }  
    .login-container label {  
      display: block;  
      margin: 10px 0;  
    }  
    .login-container input {  
      width: 100%;  
      padding: 8px;  
      margin: 5px 0 15px;  
      box-sizing: border-box;  
      border: 1px solid #ccc;  
      border-radius: 4px;  
    }  
    .login-container button {  
      background-color: #4caf50;  
      color: #fff;  
      padding: 10px;  
      border: none;  
      border-radius: 4px;  
      cursor: pointer;  
      width: 100%;  
    }  
  }  
}
```



```
}
.login-container button:hover {
    background-color: #45a049;
}

</style>
</head>
<body>
    <div class="login-container">
        <h1>User Profile</h1>

        <section class="user-info">
            <h2>Your Profile Information:</h2>
            <p><strong>Username:</strong> <?php
echo $user_data['username']; ?></p>

        </section>

        <section class="user-appointments">

            <ul>
                <button
onclick="location.href='but.php'">Previous
Appointment</button>
            </ul>
        </section>

        <button
onclick="location.href='appointment.html'">Add
Appointment</button>

        <a href="logout.php">Logout</a>
    </div>
```

```

<script>
    function toggleDetails(item) {
        var details =
item.querySelector('.appointment-details');
        details.style.display =
details.style.display === 'none' ? 'block' :
'none';
    }
</script>
</body>
</html>

```

Views of User Profile Page:



**appointment.Html:** This file is design for doctor's appointment purpose.

Source code for appointment.Html is given below.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>Appointment Dashboard</title>
    <link rel="stylesheet" href="login.css">
</head>
<body>
    <div class="dashboard">
        <h2>Appointment Dashboard</h2>
        <h4>Patient Information</h4>
        <form id="registrationForm"
action="appointment.php" method="post">
            <label for="name">User Name:</label>
            <input type="text" id="name"
name="username">
            <label
for="appointmentDate">Appointment Date:</label>
            <input type="date"
id="appointmentDate" name="date">
            <label for="select">Preferred
Physician:</label>
            <div class="custom_select">
                <select name="physician" >
                    <option value="Dr.
Anderson">Dr. Anderson</option>
                    <option value="Dr. Jones">Dr.
Jones</option>
                    <option value="Dr. Patel">Dr.
Patel</option>
                    <option value="Dr. Smith">Dr.
Smith</option>
                    <option value="No
Preference">No Preference</option>
                </select>
            </div>
        </form>
    </div>
</body>
</html>
```

```

        </div>
        <label
for="appointmentTime">Appointment Time:</label>
        <input type="time"
id="appointmentTime" name="time">
        <label
for="appointmentTitle">Appointment Title:</label>
        <input type="text"
id="appointmentTitle" name="apt_title">
        <input type="submit"
value="Appointment" name="appointment" class="btn"
onclick="addAppointment()">
        <div
id="appointmentList">
                <ul
id="appointments">
                </ul>
        </div>
    </form>
</div>
</body>
</html>

```

**appointment.PHP** : Source code for appointment.PHP is given below.

```

<?php
include('db_connect.php');
if ($_POST['appointment']) {
    $username = $_POST['username'];
    $date = $_POST['date'];
    $physician = $_POST['physician'];
    $time = $_POST['time'];
    $apt_title = $_POST['apt_title'];
    $user_check_query = "SELECT * FROM users WHERE
username='$username'";
    $user_check_result = mysqli_query($conn,
$user_check_query);

    if (mysqli_num_rows($user_check_result) > 0) {

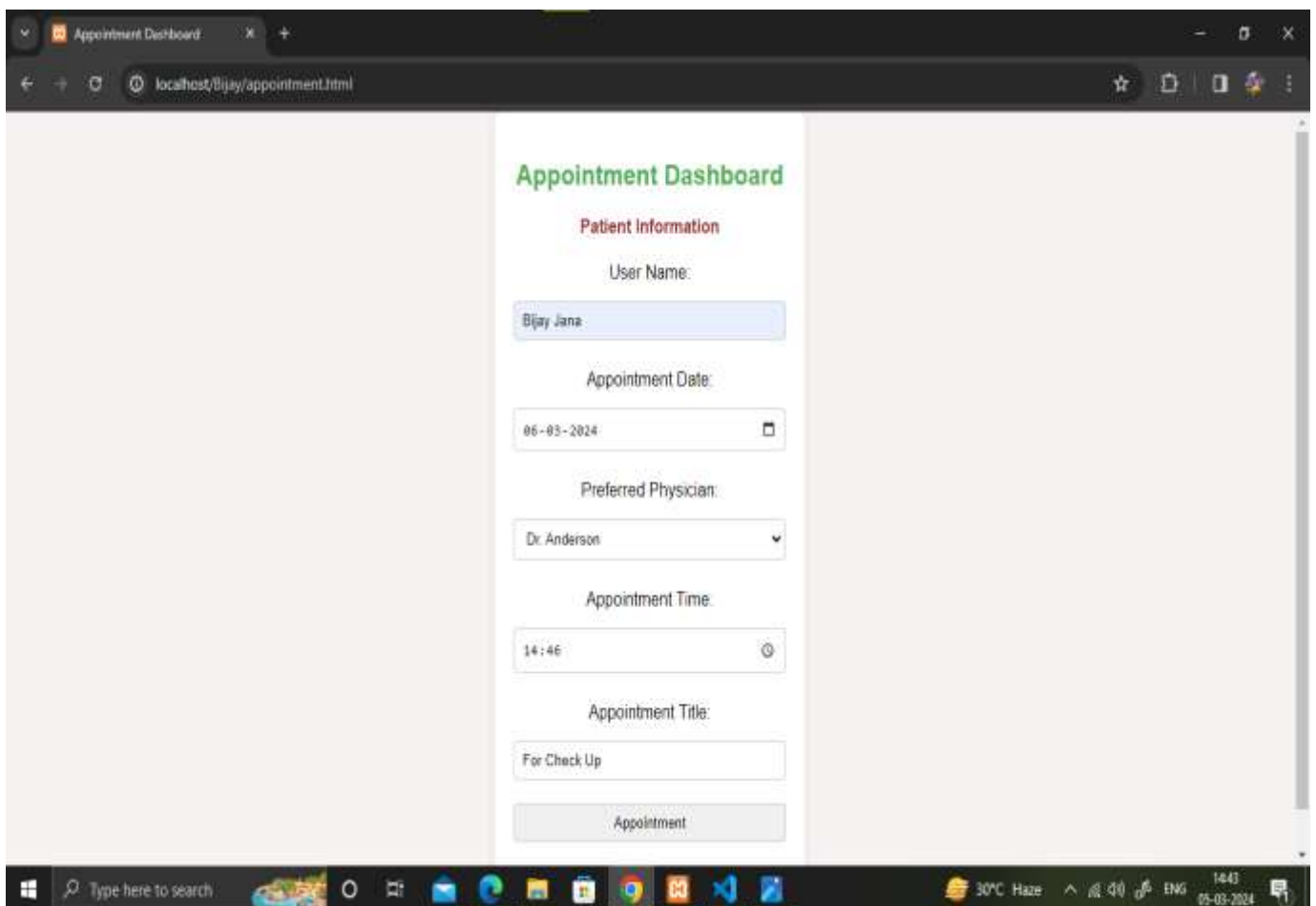
```

```

    $apt_id = rand(10000, 99999);
    $query = "INSERT INTO appointment_details
(username, apt_id, date, physician, time, apt_title)
VALUES ('$username', '$apt_id',
'$date', '$physician', '$time', '$apt_title')";
    $result = mysqli_query($conn, $query);
    if ($result) {
        echo "<script>
        alert('Appointment added successfully.');"
        window.location.href = 'profile.php';
        </script>";
    } else {
        echo "Error: " . mysqli_error($conn);
    }
} else {
    echo "<script>alert('Username
incorrect.');"</script>";
}
}
mysqli_close($conn);
?>

```

## Views of Add new appointment pages:



The screenshot shows a web browser window titled "Appointment Dashboard" with the URL "localhost/Bijay/appointment.html". The page displays a form for adding a new appointment. The form is titled "Appointment Dashboard" in green. Below the title, there is a section for "Patient Information" in red. The form contains the following fields:

- User Name:** A text input field containing "Bijay Jana".
- Appointment Date:** A date picker field showing "06-03-2024".
- Preferred Physician:** A dropdown menu showing "Dr. Anderson".
- Appointment Time:** A time picker field showing "14:46".
- Appointment Title:** A text input field containing "For Check Up".

At the bottom of the form, there is a button labeled "Appointment". The browser's taskbar at the bottom shows the Windows logo, a search bar, and various application icons. The system tray on the right shows the temperature (30°C), weather (Haze), and the date and time (14:43, 05-03-2024).

**but.PHP** : This file is used for show previous appointment details.

Source code for but.PHP is given below.

```
<link rel="stylesheet" href="login.css">
<?php
    session_start();
    if (!isset($_SESSION['user_data'])) {
        header("Location: login.html");
        exit();
    }
    include('db_connect.php');
    $user_data = $_SESSION['user_data'];
    $username = $user_data['username'];
    $query = "SELECT * FROM appointment_details
WHERE username = '$username'";
    $result = mysqli_query($conn, $query);
    if (mysqli_num_rows($result) > 0) {
        echo "<link rel='stylesheet'
type='text/css' href='prev.css'>";
        echo "<ul class='appointment-
list'>";
        while ($appointment =
mysqli_fetch_assoc($result)) {
            echo "<li class='appointment-item'
onclick='toggleDetails(this)' >";
            echo "<p><strong>Appointment
ID:</strong> " . $appointment['apt_id'] . "</p>";
            echo "<div class='appointment-
details'>";
            echo "<p><strong>Date:</strong> " .
$appointment['date'] . "</p>";
            echo "<p><strong>Physician:</strong> "
. $appointment['physician'] . "</p>";
            echo "<p><strong>Time:</strong> " .
$appointment['time'] . "</p>";
            echo "</div>";
            echo "</li>";
        }
    }
}
```

```

    }
    echo "</ul>";
} else {
    echo "<p>No Previous Appointments</p>";
}
?>

```

**Prev.CSS:** Source code for prev.CSS is given below.

```

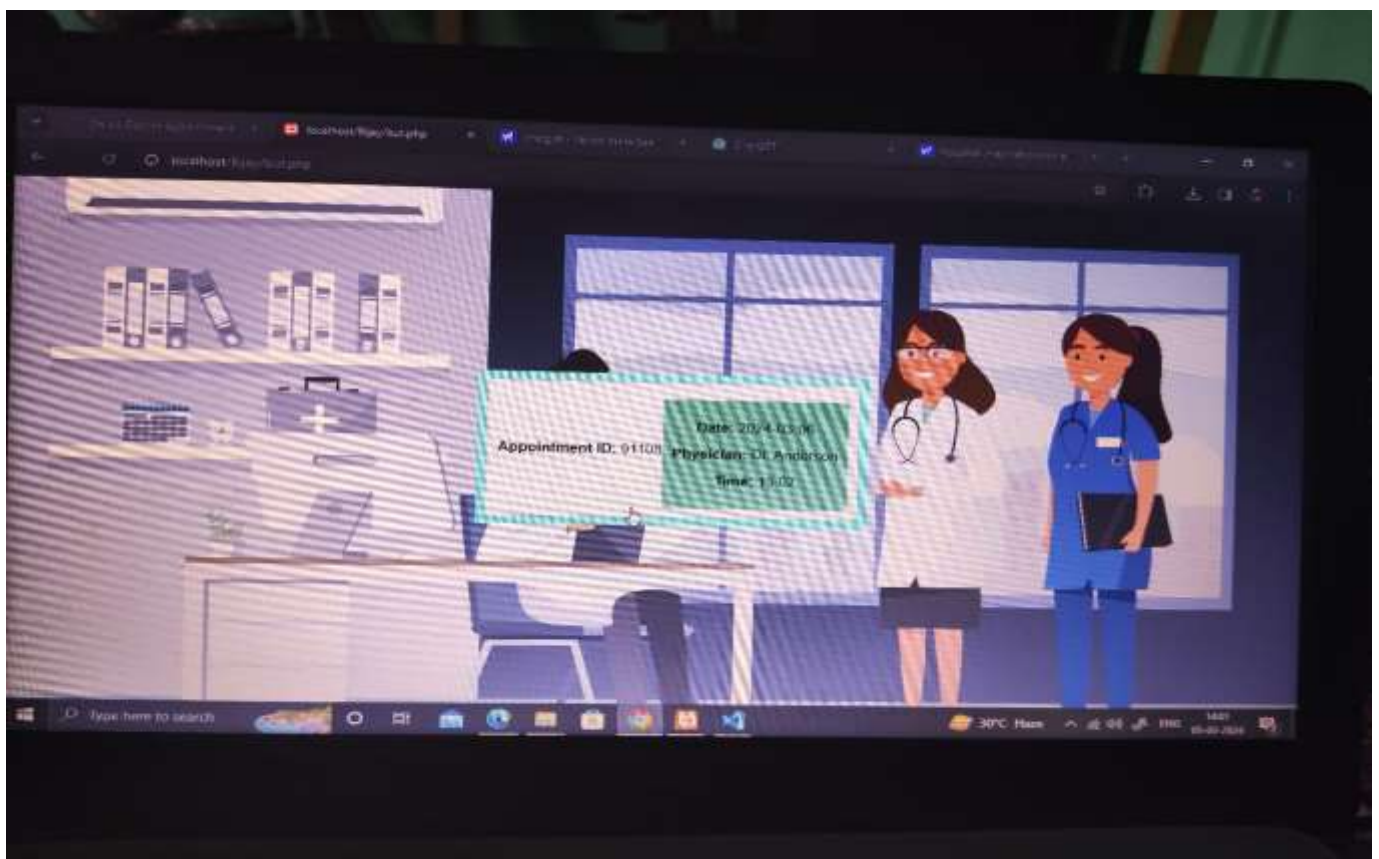
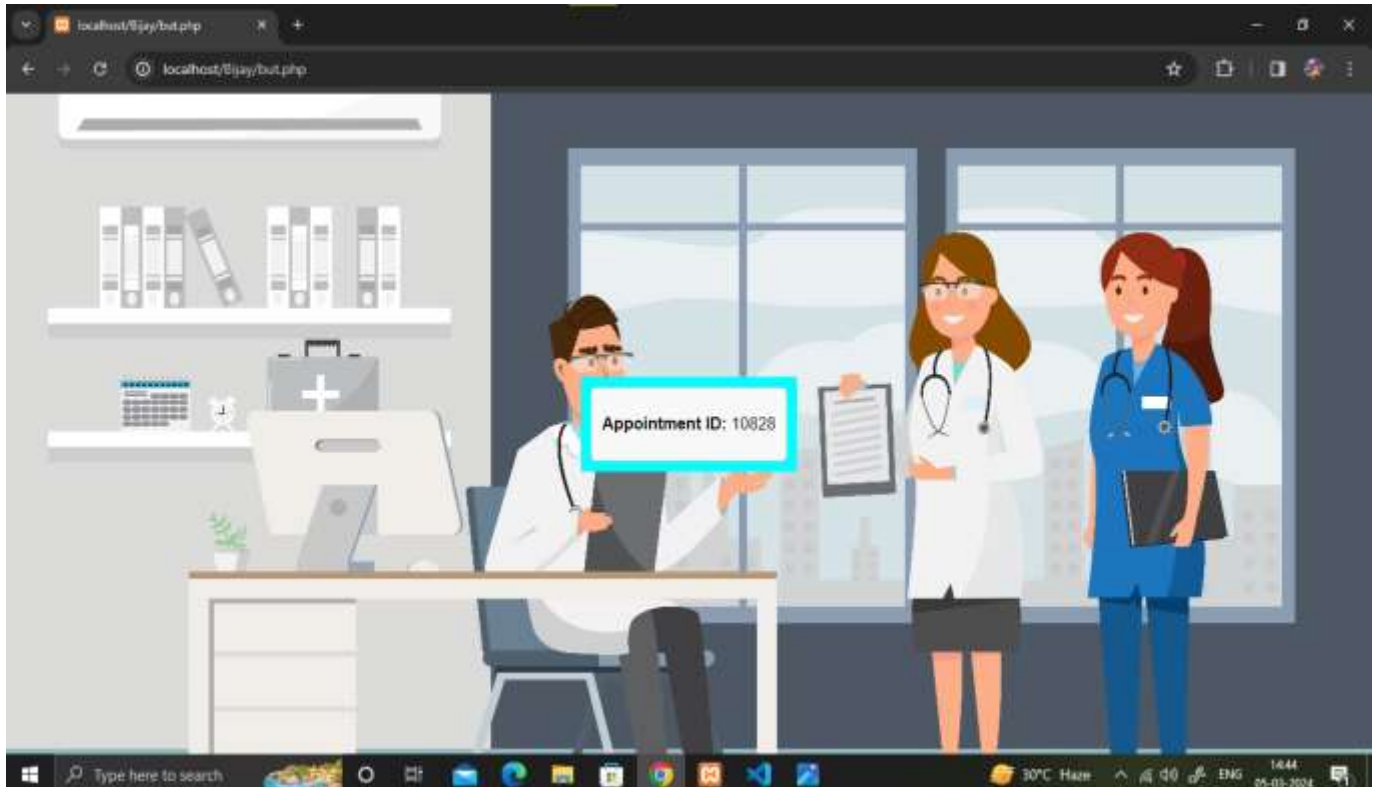
body{
    background-size: cover;
    background-position: center;
    background-image: url('vector-medical-concept-with-
doctor-and-patients-in-flat-cartoon-at-hospital-
hall.jpg');
}
.appointment-list {
    background-color: aqua;
    list-style-type: none;
    padding: 0;
}
.appointment-item {
    border: 1px solid #ccc;
    margin: 10px;
    padding: 10px;
    cursor: pointer;
    border-radius: 5px;
}
.appointment-details {

    display: none;
    margin-top: 10px;
    padding: 10px;
    border: 1px solid #ddd;
    border-radius: 5px;
    background-color: #63e2ad;
}
.appointment-item:hover .appointment-details {
    display: block;
}

```



## Views of previous appointment details:



**Logout.PHP** : This file is used for logout purpose .Source code for logout.PHP is given below.



```

<?php
session_start();
$_SESSION = array();
session_destroy();
header("Location: lghtml.html");
exit();
?>

```

**db\_connect.PHP** : Source code for db\_connect.PHP is given below.

```

<?php
error_reporting(0);
$host = "localhost";
$username = "root";
$password = "";
$database = "appointment";
$conn = mysqli_connect($host, $username,
$password, $database);
if ($conn->connect_error) {
    die("Connection failed: " . $conn-
>connect_error);
} else {
}
?>

```

**Logbutton.js**: This file is used for opening another window file. Source code for logbutton.js is given below.

```

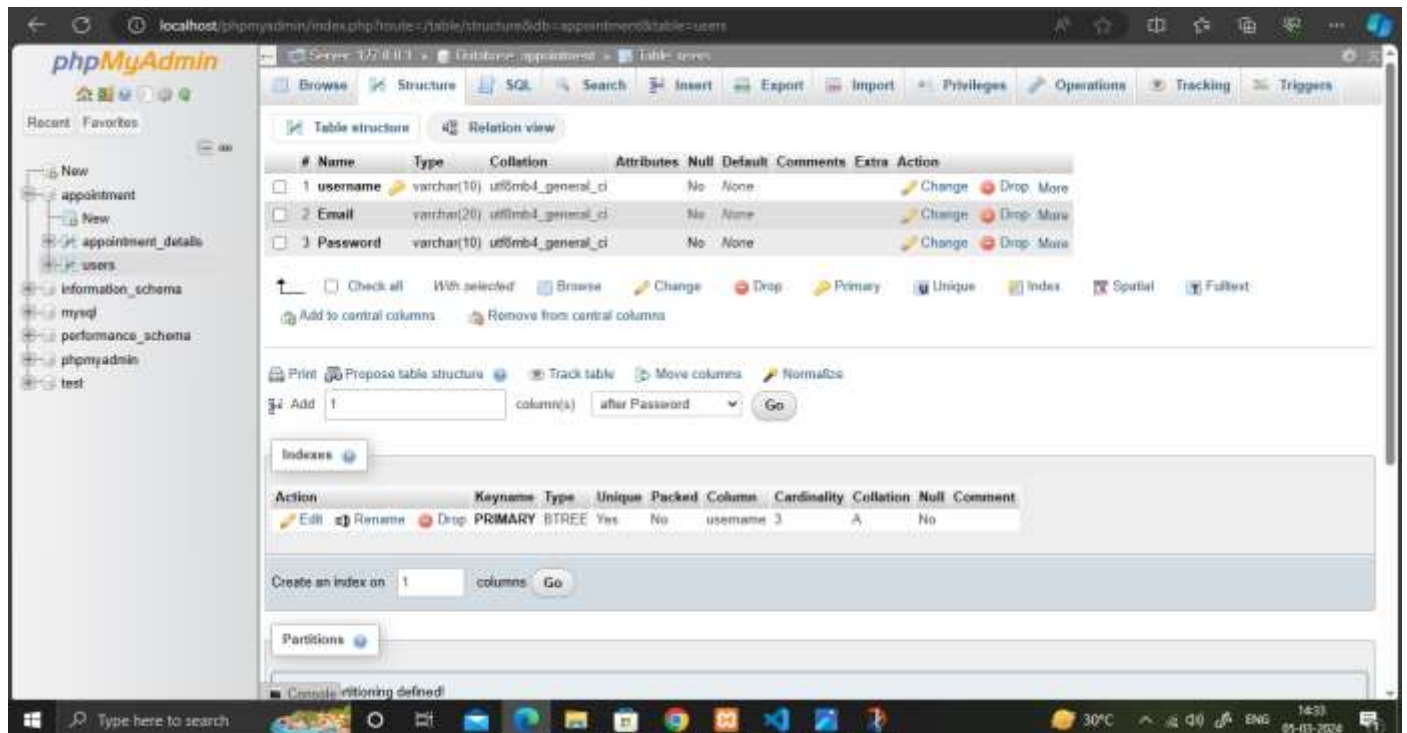
function openLogin() {
    window.location.href = 'lghtml.html';
}
function openLogin1() {
    window.location.href = 'reghtml.html';
}
function openLogin2() {
    window.location.href = 'appointment.html';
}

```

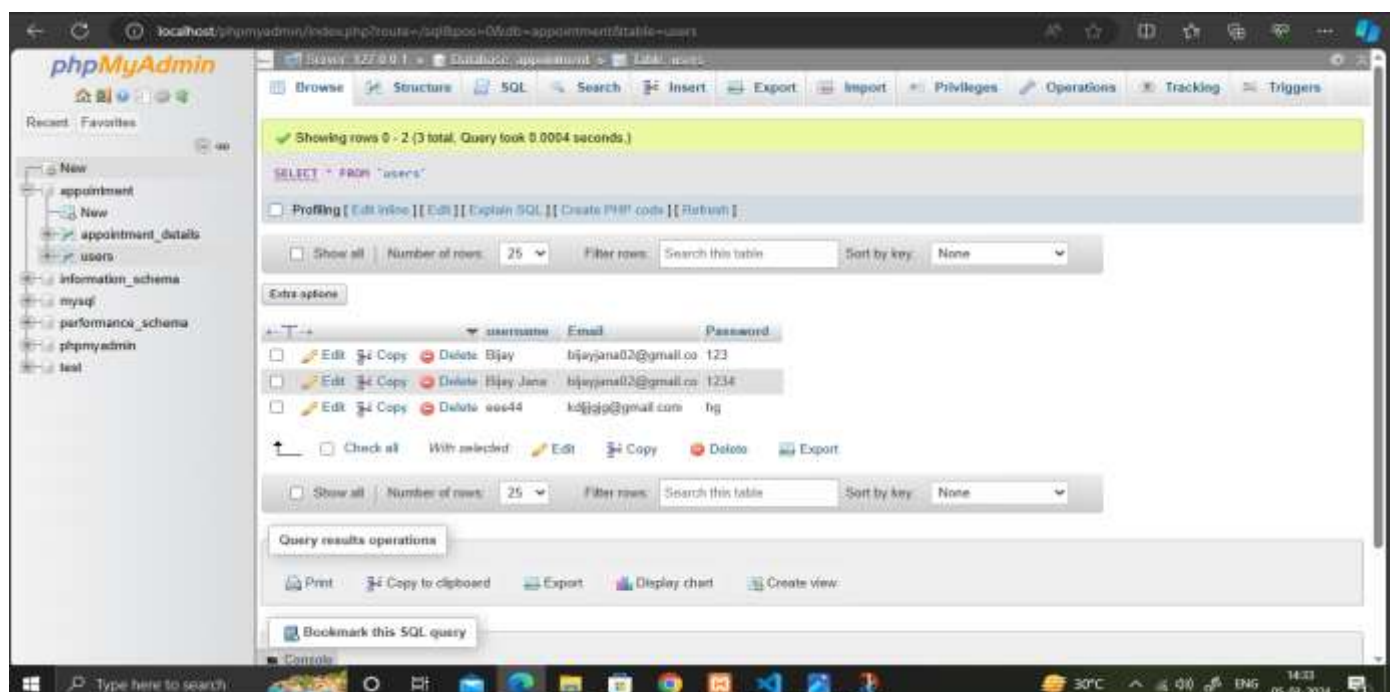
# Database Background Profile and Structure Views:

## 1. User Profile and Structure Views:

**Database Structure:** In the Users table there are three attributes are present. Which are **username** , **Email** and **Password**. **Username** is the primary key in this table.

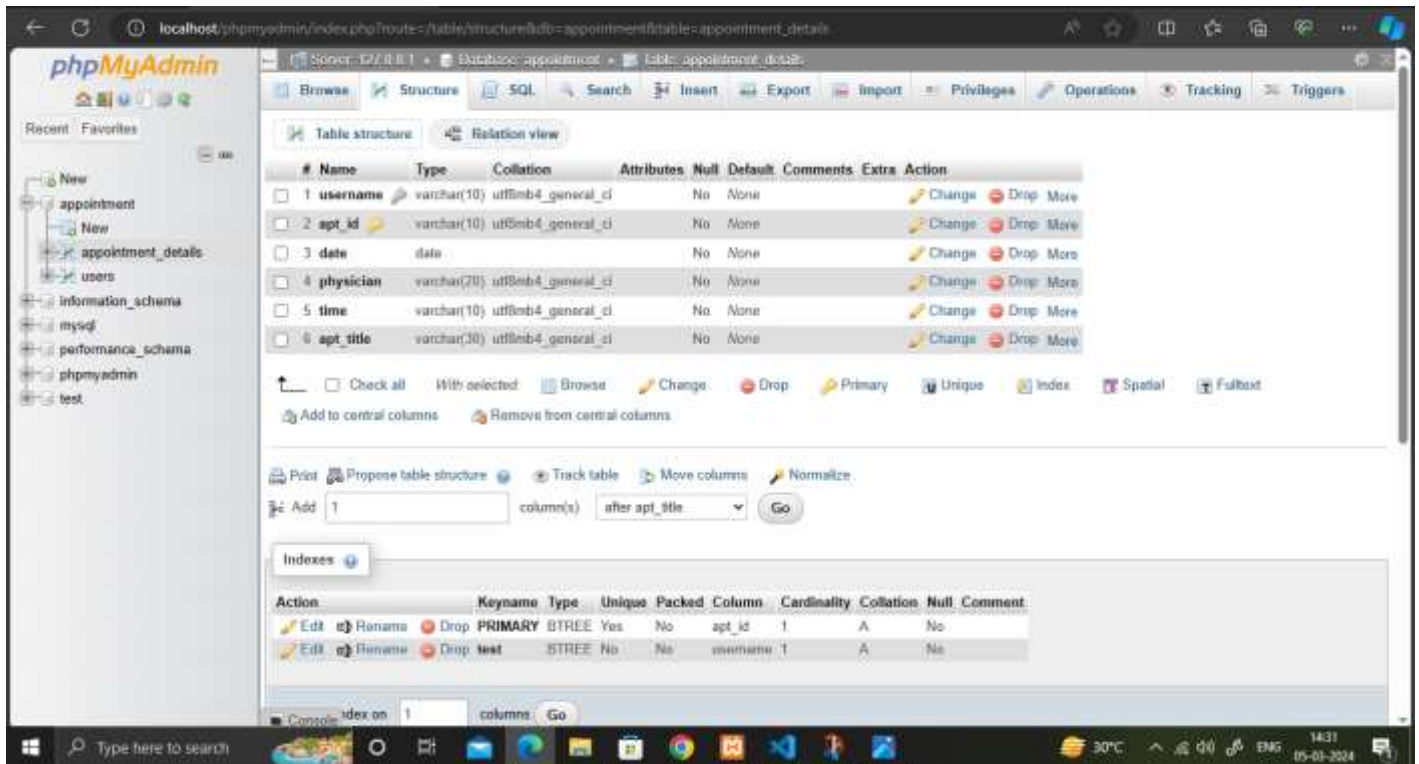


**Data Storage Structure:** When we fill the registration form , the Data are store in the users database.

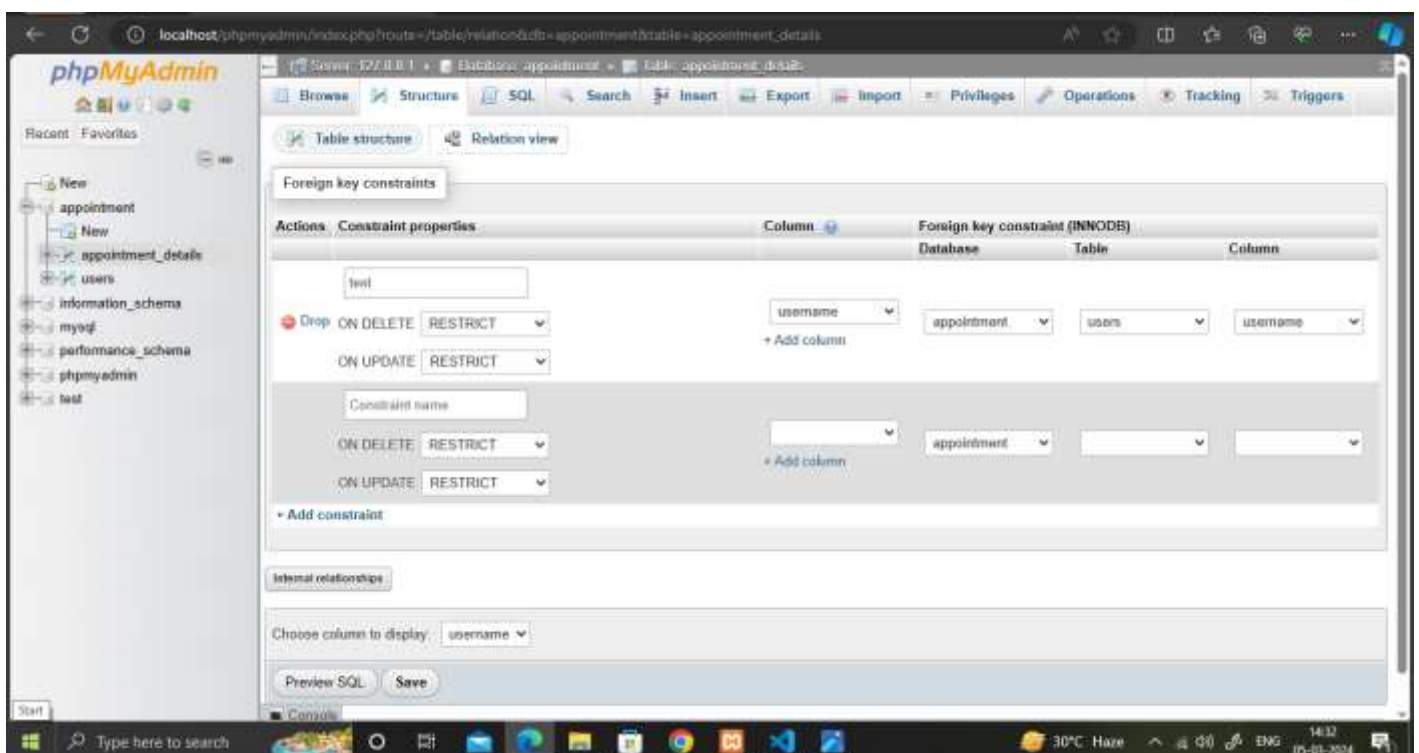


## 2.Appointment Profile and Structure Views:

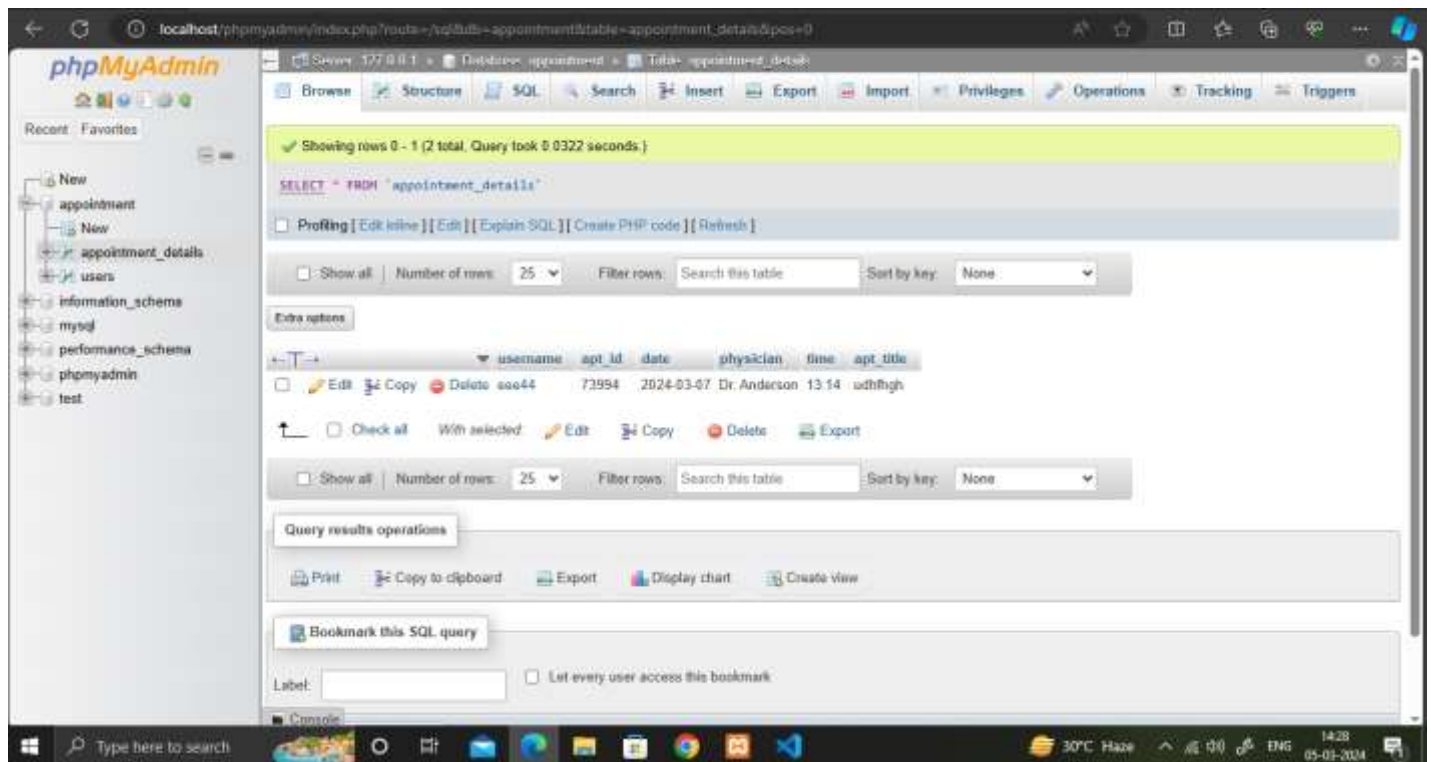
**Database Structure:** In the appointment\_details table there are six attributes present. Which are **username** , **apt\_id** , **date** , **physician** , **time** , **apt\_title** . **Username** is the Foreign key and **apt\_id** is the Primary key in this table .



**username** in the appointment\_details table take references from the users table where **username** is the primary key.



**Data Storage Structure:** When patient fill it's details through click **add appointment** button, the data is store in the database. Patient can see it's previous appointment details through click the previous appointment button.



## References:

- PHP Manual- :  
<https://www.php.net/manual/en/>(<https://www.php.net/manual/en/>)
- MySQL Documentation:  
<https://dev.mysql.com/doc/>(<https://dev.mysql.com/doc/>)
- W3Schools:  
<https://www.w3schools.com/>(<https://www.w3schools.com/>)

## Conclusion:

we successfully made a website for an online doctor appointment dashboard. It can store and show the information patient fill out. We used PHP, HTML, CSS, MySQL, and JavaScript to do this.