Attendance Tracker System

This project is a web-based **Attendance Tracker System** designed for professors to manage student attendance, view detailed reports, and perform administrative tasks like adding/removing students. The system ensures a streamlined user experience with easy navigation and dynamic interaction.

Technologies Used

- **HTML**: For structuring the web pages.
- **CSS**: For styling the web pages and making them responsive.
- **Bootstrap**: For designing a clean and modern layout with mobile responsiveness.
- **PHP**: For server-side scripting, including user authentication, database interaction, and form submissions.
- **SQLite3**: For storing and managing data related to students and attendance records.
- **XAMPP**: For running the local development environment.

Key Features

1. User Authentication

- **Login Page**: Professors can enter their credentials (username and password) to access the system.
- **Forgot Password**: Professors can reset their password via email if they forget it.

2. Navigation Bar

- **Personalized Welcome**: Shows the professor's profile picture and name after login.
- **Navigation Links**:
    - Manage Students
    - Mark Attendance
    - View Reports
    - Raise Queries
    - Logout

3. Dashboard Cards

- **Manage Students**: Allows professors to manage student details.
- **Mark Attendance**: Lets professors mark attendance for each student.
- **View Reports**: Displays detailed attendance reports.
- **Raise Query**: Professors can submit queries or concerns related to students or classes.

4. Student Management

- **Search and Filter Students**: Professors can search for students by name or ID and filter by division (e.g., Div A, Div B).
- **Add/Edit Students**: Professors can add new students or edit existing student information.
- **Remove Students**: Professors can remove students from the system when needed.
- **Pagination**: Ensures smooth navigation for large databases.

5. Attendance Management

- **Mark Attendance**: Professors can mark students as "Present" or "Absent."
- **Dynamic Student List**: Displays students' details in a table for easy attendance marking.
- **Attendance Summary**: Shows a summary of present, absent, and total students.
- **Success Message**: After submitting attendance, a confirmation message is shown.

6. Attendance Reports

- **Overall Attendance**: Displays each student's total attendance, including present and absent days.
- **Monthly Attendance Data**: Tracks attendance on a monthly basis.
- **Defaulter Detection**: Marks students with more than 2 absences as defaulters.
- **Raise Red Flag**: Professors can flag students for attendance issues.
- **Dynamic Table**: Attendance data is dynamically populated in the table from the database.
- **Chart Visualization**: A bar chart visualizes attendance trends over multiple months.

7. Responsive Design

- The layout adapts to different screen sizes using Bootstrap, ensuring a good user experience on both desktop and mobile devices.

8. Interactive Modal

- **Raise Red Flag Modal**: Professors can raise a red flag for students via a modal popup by entering their name and ID.

9. Footer

- The footer contains copyright information and contact details for support.

Installation Instructions

1. Clone the Repository

```bash
bash
CopyEdit
git clone <repository_url>
```

2. Set Up XAMPP (or Local Server)

- Download and install **XAMPP** (or your preferred server solution).
- Start Apache and MySQL from the XAMPP control panel.

3. Create Database

- Open **phpMyAdmin** (usually accessible at `http://localhost/phpmyadmin/`).
- Create a new database named **attendance_tracker**.
- Use the following SQL queries to create tables:

```sql
sql
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CREATE TABLE students (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    name TEXT NOT NULL,
    division TEXT NOT NULL
);

CREATE TABLE attendance (
    id INTEGER PRIMARY KEY AUTOINCREMENT,
    student_id INTEGER NOT NULL,
    date TEXT NOT NULL,
    status TEXT NOT NULL,
    FOREIGN KEY (student_id) REFERENCES students(id)
);
```

4. Update Database Configuration

- Open the `config.php` file and configure the database connection:

```php
php
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define('DB_PATH', 'sqlite:attendance_tracker.db'); // Path to your
SQLite database
```

5. Run the Project

- Place the project files in the `htdocs` folder (for XAMPP) or the equivalent directory for your local server.
- Access the project through your browser by visiting `http://localhost/your_project_folder`.

Usage

1. Login

- Professors should enter their credentials (username and password) to access the system.

2. Dashboard

- Once logged in, professors can use the dashboard to manage students, mark attendance, view reports, and raise queries.

3. Attendance Marking

- Navigate to the "Mark Attendance" section, select the students, and mark them as "Present" or "Absent."

4. Reports

- Professors can view attendance reports, track monthly attendance, and check for defaulters.

5. Raise Query

- Use the "Raise a Query" button to submit any concerns or questions regarding students or attendance.

Project Structure

```
arduino
CopyEdit
/Attendance-Tracker
    /css
        styles.css        // Custom styles
    /js
        scripts.js        // Custom JavaScript functions
    /uploads
```

```
     (student profile images if applicable)
config.php            // Database connection configuration
dashboard.php         // Dashboard page
index.php             // Login page
attendance.php        // Attendance marking page
report.php            // Attendance report page
students.php          // Manage students page
raise_query.php       // Query submission page
logout.php            // Log out functionality
verify_student.php    // Backend for red flag authentication
```
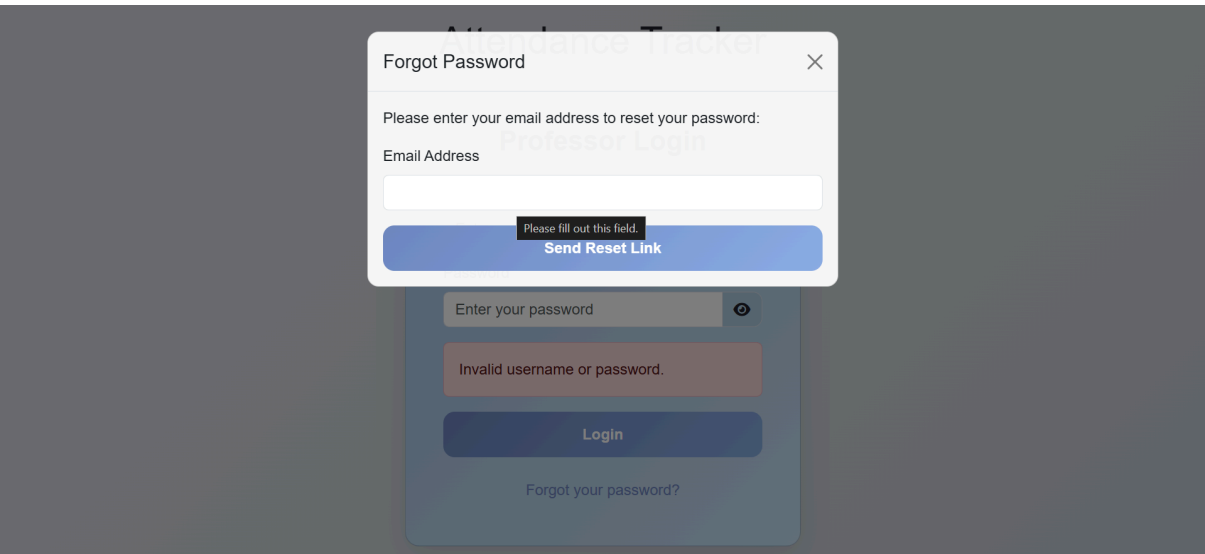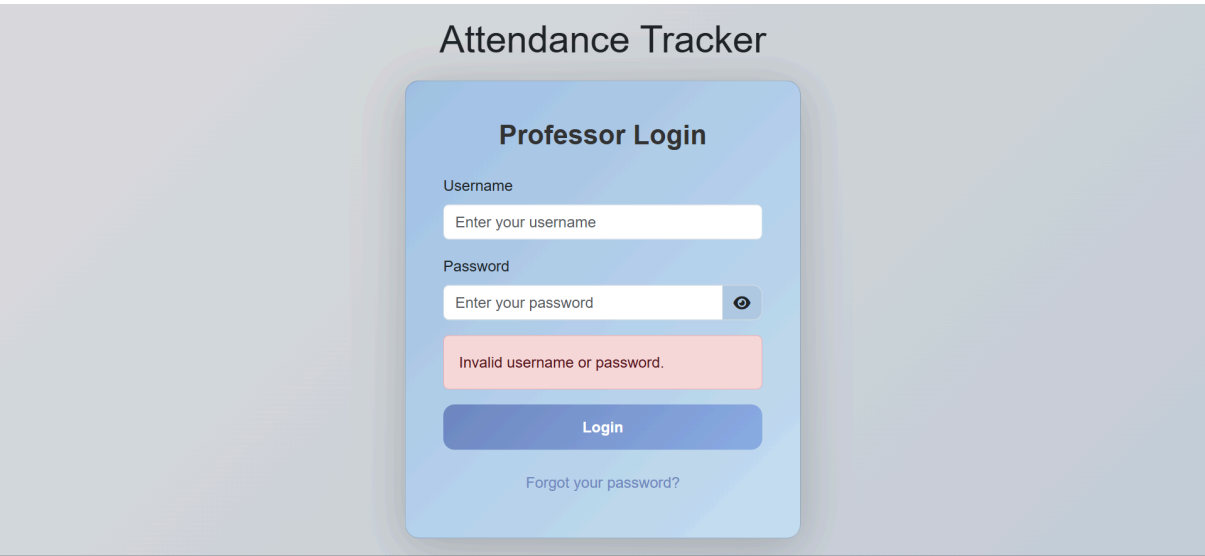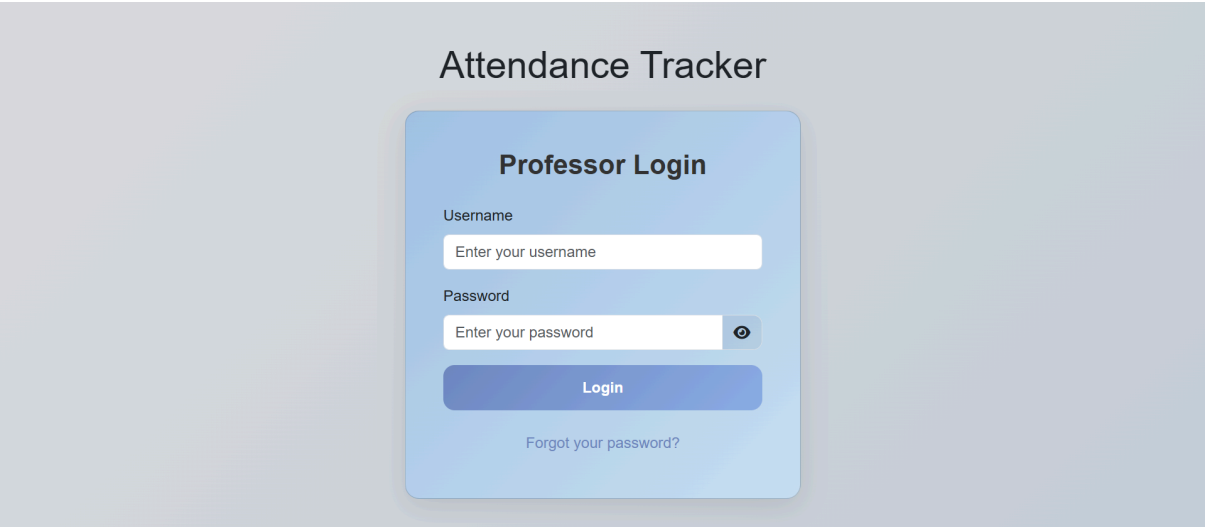
Contact

For any inquiries or issues, please contact:

Email: bhumikamittall0306@gmail.com

Screenshot

Login page:

Attendance Tracker

Professor Login

Username

Enter your username

Password

Enter your password

Login

Forgot your password?

Attendance Tracker

Professor Login

Username

Enter your username

Password

Enter your password

Invalid username or password.

Login

Forgot your password?

Forgot Password ✕

Please enter your email address to reset your password:

Email Address

Please fill out this field.

Send Reset Link

Enter your password

Invalid username or password.

Login

Forgot your password?

Key Features:

- **Username & Password Authentication**: Professors can enter their credentials to access the system.

- **Forgot Password Option**: If a professor forgets their password, they can request a reset link via email.
- **User-Friendly Design**: The interface features a clean, professional, and modern aesthetic with a soft gradient background and an easy-to-use login card.

Dashboard:
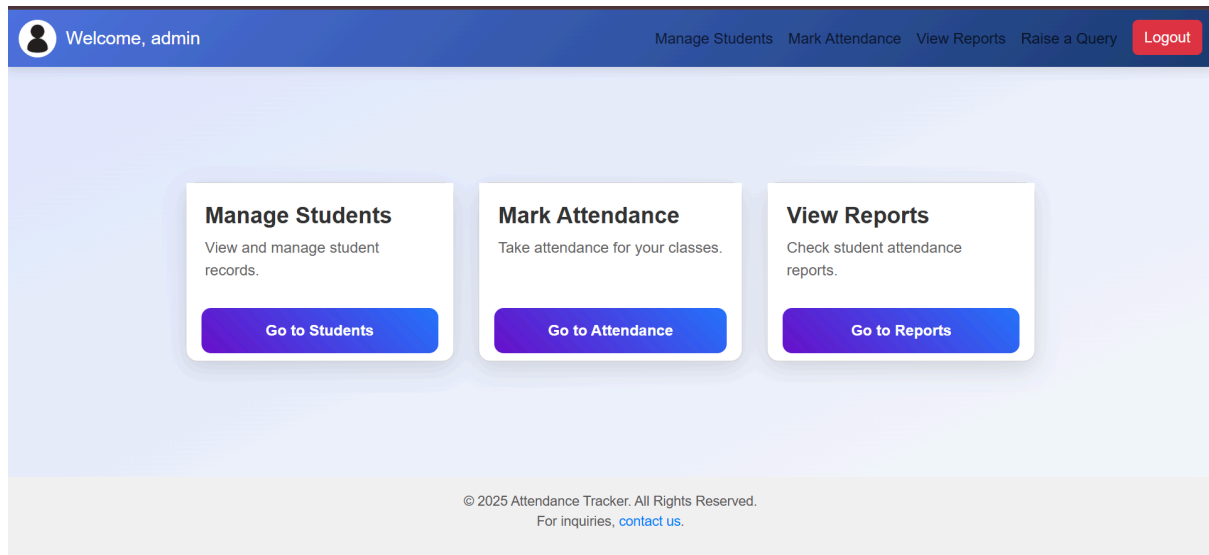
Key Features:

1. **Navigation Bar**:
   - The top navigation bar features the professor's profile picture and name, offering a personalized welcome.
   - It includes links to manage students, mark attendance, view reports, and raise queries.
   - The professor can log out at any time using the logout button.
2. **Dashboard Cards**:
   - **Manage Students**: This card leads to the section where professors can view and manage student information.
   - **Mark Attendance**: Professors can easily mark attendance for their classes through this card.
   - **View Reports**: This card grants access to detailed reports on student attendance for performance tracking.
   - Each card is equipped with a prominent button that directs professors to the respective section for seamless navigation.
3. **Raise Query Modal**:
   - The "Raise a Query" feature allows professors to submit questions or concerns, with a simple form to input the query.
4. **Footer**:
   - At the bottom, a footer with copyright details and contact information enhances professionalism and offers a way for users to reach out for support.

Students:

Key features:

Search and Filter Students: Professors can search for students by name or ID and filter them by division (Div A, Div B) to quickly locate specific students.

Add New Students: Professors can add new students by entering their name and division through a simple form.

View and Edit Student Information: Each student's information, including their name and division, is displayed in a clean and modern card layout. Professors can view the details and make edits, such as updating the student's name or division, directly within a modal.

Remove Students: If necessary, professors can remove students from the system through a simple "Remove" button.

Pagination: The page supports pagination to manage large student databases efficiently, allowing professors to navigate through the records in manageable chunks.

Modern, Responsive Design: The page is built with Bootstrap, ensuring it is fully responsive and looks good on both desktop and mobile devices. Cards are used for each student, creating a visually appealing and organized layout.

Interactive Elements: Hover effects on cards and modals provide a modern and interactive user experience.

Consistent Branding: The design incorporates modern colors and styles for buttons, headers, and cards, ensuring consistency across the application and maintaining a professional and clean look.

Mark attendance:

Mark Attendance

ID	Name	Division	Status
1	Bhumika mittal	Div A	Present ⌄
5	Saad	Div A	Present ⌄
6	saad	Div A	Present ⌄
7	shreyaa	Div A	Present ⌄
3	vinayak	Div A	Present ⌄

6	saad	Div A	Present ⌄
7	shreyaa	Div A	Absent ⌄
3	vinayak	Div A	Present ⌄
4	Saad	Div B	Present ⌄

Submit Attendance

Today's Attendance Summary

Present: 5 / 6	**Absent:** 1 / 6	**Total Students:** 6

Key features:

Session Management: Ensures only logged-in professors can access the page.

Database Integration: Fetches student data and stores attendance records in the database.

Attendance Marking: Allows professors to mark each student's attendance as "Present" or "Absent."

Dynamic Student List: Displays students' details (ID, Name, Division) in a table for easy attendance marking.

Success Message: Shows a confirmation message after submitting attendance.

Attendance Summary: Displays a summary of the day's attendance (Present, Absent, Total students).

Responsive Design: UI adapts to different screen sizes, using Bootstrap for a modern look.

Navbar Navigation: Provides links to Dashboard, Reports, and Logout, with a profile picture.

Form Submission: Attendance data is submitted via POST, updating the database accordingly.

Footer: Contains copyright information and contact details.

Attendance report:

Key features:

User Authentication: Professors are required to log in to access attendance reports.

Attendance Reports: Displays overall attendance for each student, showing present and absent days.

Monthly Attendance Data: Tracks student attendance month-by-month.

Defaulter Detection: Identifies students with more than 2 absences and marks them as defaulters.

Raise Red Flag: Professors can flag students for attendance issues by entering their name and ID.

Dynamic Table: Presents student attendance data in a table, with dynamic rows populated by database results.

Chart Visualization: Uses Chart.js to display a bar chart for visualizing attendance trends over multiple months.

Responsive Design: Adapts the UI for various screen sizes, ensuring a mobile-friendly layout.

Interactive Modal: Allows professors to raise a red flag for students via a modal popup.

Footer with Contact Info: Provides a simple footer with copyright and contact details.

Raise a query:

Raise a Query ✕

Your Query

Bhumika

Submit Query