

Student Manual Attendance with Geofencing

Introduction

The Student Manual Attendance with Geofencing system is designed to streamline the attendance process for students while ensuring that attendance records are accurate and reliable. This documentation provides a comprehensive guide on how to use the system effectively.

Features

1. **Subject-specific Attendance Logging:** Students can log their attendance only for the subjects they are enrolled in.
2. **Geofencing Restrictions:** Students can only log their attendance when they are within the designated school campus area.
3. **Attendance Logs Viewing:** Students can view their attendance logs, regardless of any remarks.
4. **Comprehensive Attendance Data Collection:** Attendance data includes Date, Time, Subject, and Remarks.

System Components

The system is built using the following technologies:

- PHP: Server-side scripting language for backend functionality.
- MySQL: Database management system for storing attendance data.
- CSS: Styling language for user interface design.
- JavaScript: Client-side scripting language for interactive features.
- HTML5: Markup language for structuring web pages.

Usage

1. Login

Students need to log in to the system using their credentials.

2. Subject Selection

Upon successful login, students are presented with a list of subjects they are enrolled in. They can select the subject for which they want to log their attendance.

3. Geofencing Check

Before allowing attendance logging, the system checks whether the student's current location is within the school campus area using geofencing technology.

4. Attendance Logging

Once the geofencing check is passed, students can log their attendance by confirming their presence.

5. Viewing Attendance Logs

Students can view their attendance logs, which include the date, time, subject, and any remarks associated with each attendance entry.

Implementation Details

The system is implemented using the following steps:

1. **Database Design:** Designing the MySQL database schema to store student information, subjects, attendance logs, etc.
2. **Backend Development:** Implementing server-side functionalities using PHP to handle user authentication, attendance logging, data retrieval, etc.
3. **Frontend Development:** Creating user interfaces using HTML5, CSS, and JavaScript for seamless interaction with the system.
4. **Geofencing Integration:** Implementing geofencing functionality using relevant libraries or APIs to restrict attendance logging based on location.
5. **Testing and Deployment:** Thoroughly testing the system for functionality, security, and usability before deploying it for use.

Conclusion

The Student Manual Attendance with Geofencing system offers a convenient and secure way for students to log their attendance within the school premises. By following the guidelines provided in this documentation, students can effectively utilize the system to maintain accurate attendance records.

Appendices

1. Attendance History

Today Attendance History			
Date	Time	Subject	Remarks
2024-02-12	12:54:23	IT Project Management	Failed: You're not enrolled in the selected subject!
2024-02-12	12:54:13	Software Development	Failed: You're not within the school campus!
2024-01-17	19:58:36	Data Structures	Failed: You're not within the school campus!
2023-12-15	08:25:43	Data Structures	Success: Attendance signed successfully!
2023-12-15	08:29:30	Software Development	Failed: You're not within the school campus!
2023-12-15	08:26:45	Cybersecurity	Failed: You're not enrolled in the selected subject!

2. Log Attendance

Select Subject

Software Development

Sign Attendance

3. Selecting Subject (Not enrolled)

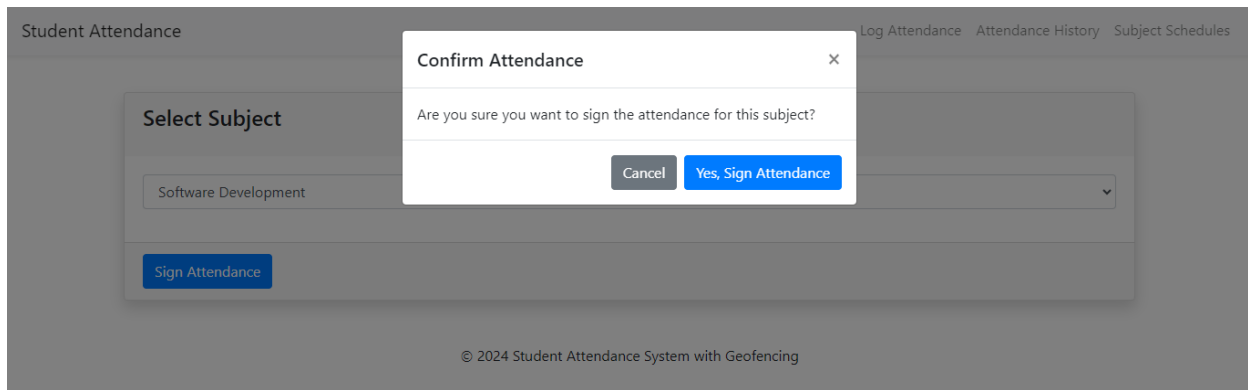
Failed: You're not enrolled in the selected subject!

Select Subject

IT Project Management

Sign Attendance

4. Confirming Attendance



5. Source Code (Screenshot)

