

Attendance Management System

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Abstract: *Efficient attendance management is a crucial aspect of organizational and educational institutions. "Attendance Management System: A Web-Based Smart Attendance Monitoring Solution" is an innovative approach that automates attendance marking through real-time data processing and centralized record management. The system utilizes a web application built with PHP and MySQL database to maintain and manage attendance records. The user-friendly web interface allows teachers, administrators, and employees to mark, view, and generate attendance reports. This solution minimizes manual effort, reduces errors, prevents proxy attendance, and enhances data accuracy. Future enhancements may include AI-based analytics, cloud integration, and mobile app support for seamless accessibility..*

Keywords: Attendance Management, Web Application, PHP, MySQL, Online Attendance, Dashboard, Real-Time Monitoring, Software Solution, Attendance Reports

I. INTRODUCTION

Attendance management methods involve manual attendance registers or Excel sheets, leading to inefficiencies, human errors, and data loss. To address these issues, the Attendance Management System integrates web-based technology to monitor and manage attendance records in real-time. The system employs PHP for backend development, a MySQL database for data storage, and a web interface for interaction. The web application allows users to log in, mark attendance, generate reports, and analyze data efficiently. The implementation of this system enhances accuracy, reduces manual workload, and enables smart digital attendance management for institutions.

II. PROBLEM STATEMENT

- Manual Attendance Handling: Traditional methods are time-consuming and prone to human errors.
- Data Inaccuracy: Paper-based records are susceptible to manipulation and loss.
- Proxy Attendance: Manual systems make it difficult to prevent fraudulent attendance.
- Lack of Centralized Data: Institutions lack a centralized system for easy record access and reporting

III. LITERATURE SURVEY

Research in web-based attendance systems has explored various solutions for effective attendance tracking. Previous studies have implemented mobile apps and biometric systems for attendance marking. Some systems focus on integrating IoT and RFID, while others rely on manual entries. Our approach eliminates the need for hardware or biometric devices by developing a fully web-based platform, reducing operational costs while ensuring real-time monitoring, secured login, and data analytics through a responsive web interface and a robust backend system.

IV. METHODOLOGY

Web Components

- Frontend (HTML, CSS, JavaScript): User-friendly interface for interaction.
- Backend (PHP): Processes requests, handles authentication, and communicates with the database.
- MySQL Database: Stores attendance records, user data, and reports.
- Admin Dashboard: For administrators to manage users, attendance, and reports.

Software Development

- User Login System: Role-based access for admin, teachers, and employees.
- Attendance Module: Interface to mark and manage attendance records.
- Report Generation: Generates daily, monthly, and custom reports.

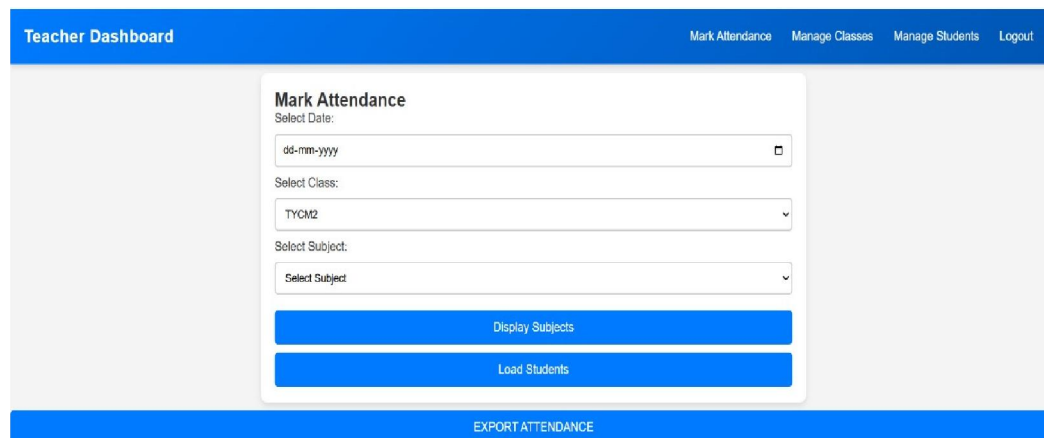
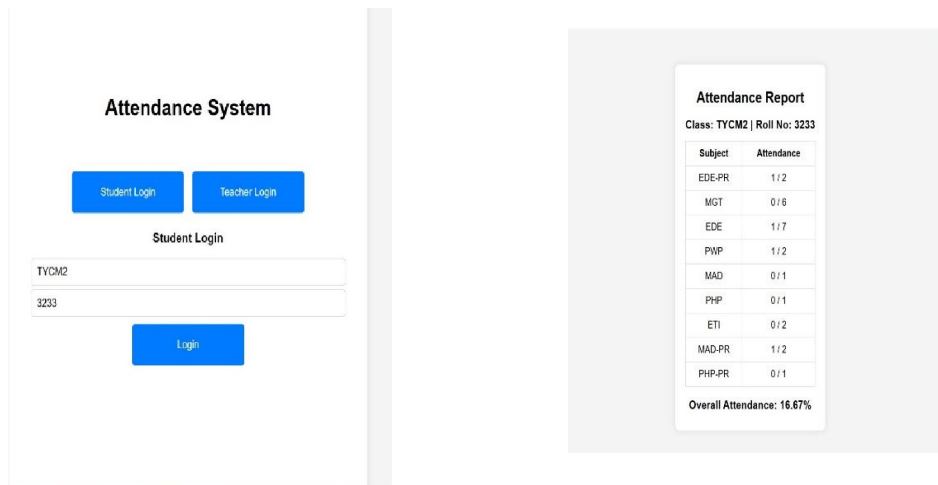
V. SYSTEM FLOW

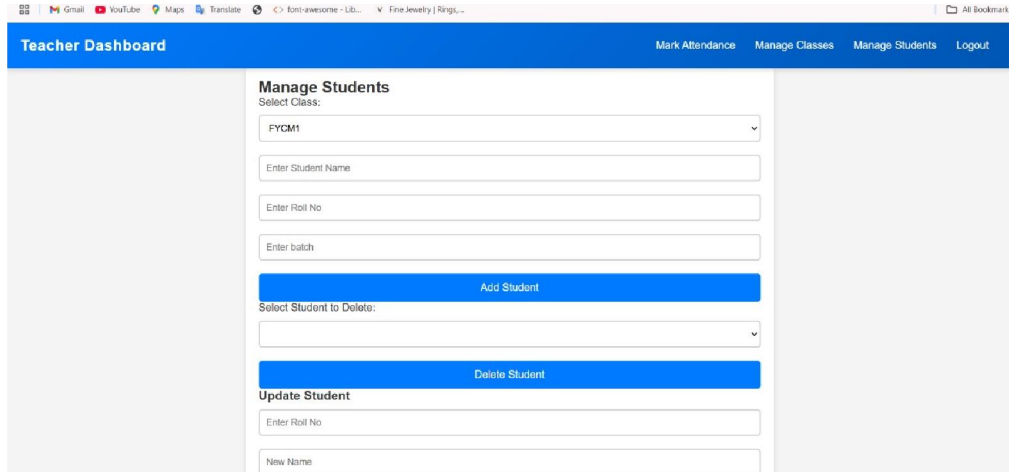
1. User Login: Teachers and employees log in using credentials.
2. Attendance Marking: Teachers mark attendance through the web interface.
3. Data Storage: Attendance data is stored securely in the MySQL database.
4. Real-Time Monitoring: Admin can view real-time attendance status via the dashboard.
5. Report Generation: System generates automated reports based on stored data.
6. Decision Making: Management can take decisions based on analyzed attendance data.

VI. RESULTS AND DISCUSSION

- The system successfully enables teachers and administrators to mark attendance online.
- Attendance records are stored and retrieved efficiently through the MySQL database.
- The PHP backend ensures secure and smooth data processing.
- The web dashboard allows real-time monitoring and effective decision-making.

Overview :





Teacher Dashboard | Mark Attendance | Manage Classes | Manage Students | Logout

Manage Students

Select Class:
FYCM1

Enter Student Name:

Enter Roll No:

Enter batch:

Add Student

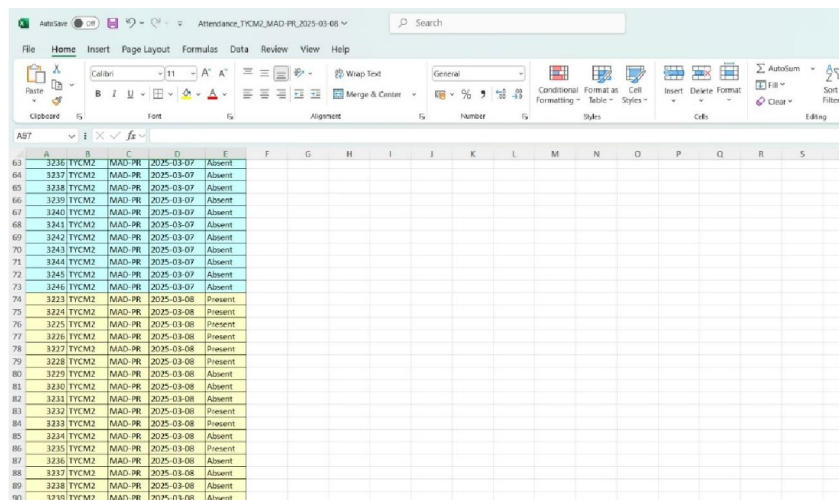
Select Student to Delete:

Delete Student

Update Student

Enter Roll No:

New Name:



Sl. No	Roll No	Class	Section	Date	Attendance
63	3236	FYCM2	MAAD-PR	2025-03-07	Absent
64	3237	FYCM2	MAAD-PR	2025-03-07	Absent
65	3238	FYCM2	MAAD-PR	2025-03-07	Absent
66	3239	FYCM2	MAAD-PR	2025-03-07	Absent
67	3240	FYCM2	MAAD-PR	2025-03-07	Absent
68	3241	FYCM2	MAAD-PR	2025-03-07	Absent
69	3242	FYCM2	MAAD-PR	2025-03-07	Absent
70	3243	FYCM2	MAAD-PR	2025-03-07	Absent
71	3244	FYCM2	MAAD-PR	2025-03-07	Absent
72	3245	FYCM2	MAAD-PR	2025-03-07	Absent
73	3246	FYCM2	MAAD-PR	2025-03-07	Absent
74	3223	FYCM2	MAAD-PR	2025-03-08	Present
75	3224	FYCM2	MAAD-PR	2025-03-08	Present
76	3225	FYCM2	MAAD-PR	2025-03-08	Present
77	3226	FYCM2	MAAD-PR	2025-03-08	Present
78	3227	FYCM3	MAAD-PR	2025-03-08	Present
79	3228	FYCM2	MAAD-PR	2025-03-08	Present
80	3229	FYCM2	MAAD-PR	2025-03-08	Absent
81	3230	FYCM2	MAAD-PR	2025-03-08	Absent
82	3231	FYCM2	MAAD-PR	2025-03-08	Absent
83	3232	FYCM2	MAAD-PR	2025-03-08	Present
84	3233	FYCM2	MAAD-PR	2025-03-08	Present
85	3234	FYCM2	MAAD-PR	2025-03-08	Absent
86	3235	FYCM2	MAAD-PR	2025-03-08	Present
87	3236	FYCM2	MAAD-PR	2025-03-08	Absent
88	3237	FYCM2	MAAD-PR	2025-03-08	Absent
89	3238	FYCM2	MAAD-PR	2025-03-08	Absent
90	3239	FYCM3	MAAD-PR	2025-03-08	Absent

VII. FUTURE SCOPE

- Mobile App Integration: For marking and viewing attendance on the go.
- AI-Based Attendance Analytics: Predictive analytics for absenteeism patterns.
- Cloud Deployment: For scalability and remote access.
- Integration with LMS: Linking attendance with learning management systems for holistic monitoring.

VIII. CONCLUSION

Attendance Management System offers an efficient and scalable solution for web-based smart attendance management. By integrating real-time data processing, secure authentication, and automated report generation, the system enhances attendance tracking efficiency, reduces manual workload, and promotes accurate record keeping. The use of PHP and MySQL improves reliability and flexibility, making attendance management smarter and optimized.

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