

STUDYSYNC – An Student Tracking Website that Tracks the Location of Student in Campus

¹Tushar Gaikwad, ²Atharva Kakade, ³Shreya Taktode, ⁴Aastha Madgunaki, ⁵Prof. Rupali Padhar

^{1,2,3,4}Student, Artificial intelligence and Machine Learning Diploma, Ajeenkya D. Y. Patil School of Engineering, Charholi, Pune, India

⁵Professor, Artificial intelligence and Machine Learning Diploma, Ajeenkya D. Y. Patil School of Engineering, Charholi, Pune, India

Abstract - StudySync is a smart campus monitoring system designed to track student presence and class attendance using real-time location tracking. Many institutions struggle to verify whether students are attending classes after entering campus. StudySync solves this problem using GPS, Wi Fi triangulation, and secure mobile authentication. The system checks student location against campus boundaries and class timetables to mark attendance automatically. Teachers and administrators can monitor attendance reports through an admin dashboard, while students can view their academic records. The system protects student privacy through encryption and role based access control. StudySync reduces manual errors, improves discipline, enhances student safety, and provides accurate attendance analytics. The proposed system is scalable, cost effective, and suitable for smart campus environments.

Keywords: Student Tracking, Smart Campus, Attendance Monitoring, GPS Tracking, Mobile Application, Education Technology.

I. INTRODUCTION

Colleges face major challenges in monitoring student attendance and ensuring safety inside campus. Manual attendance methods are time consuming and inaccurate. Students may enter campus but skip lectures. StudySync provides an automated solution that tracks student presence in campus and verifies whether they attend scheduled classes using real time location tracking and smart scheduling.

1.1 Problem Statement

There is no reliable system to confirm whether students are attending classes after entering campus. Manual attendance systems are inefficient and prone to manipulation, causing academic discipline issues.

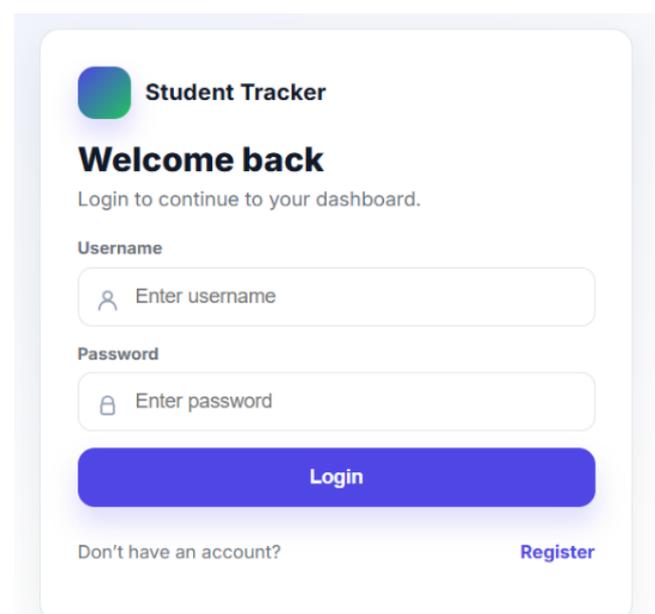
1.2 Objectives

The objectives of StudySync are to track student location within campus, automatically detect class attendance, provide real time monitoring through an admin dashboard, improve discipline, enhance safety, and ensure data privacy.

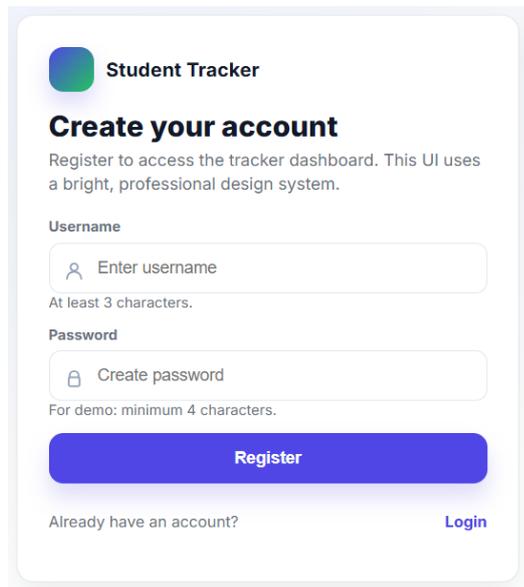
II. SYSTEM DESIGN

StudySync consists of three major modules: a Website, backend server, and admin dashboard. The website collects student location using GPS and Wi Fi signals. The backend compares location data with class schedules to determine attendance. The admin dashboard displays analytics and reports. Technologies used include, HTML5, CSS, JavaScript (Vanilla JS), Leaflet.js, OpenStreetMap tiles, Browser local Storage.

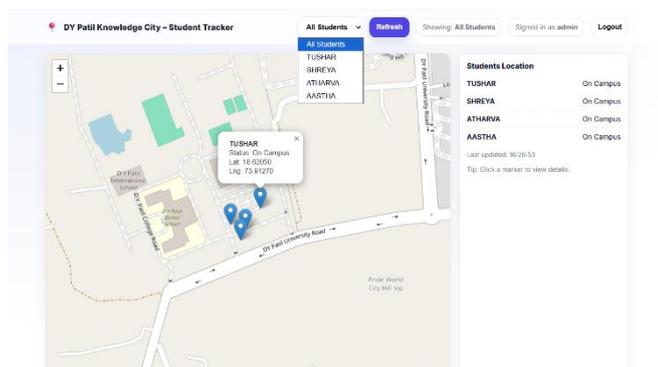
1. Login Page:



2. Registration Page:



3. Home Page:



III. RESULTS AND DISCUSSION

Testing in a simulated campus environment showed high accuracy in detecting student presence. StudySync reduced manual attendance effort and improved transparency. Students received notifications about attendance status, and administrators obtained accurate reports for decision making.

IV. CONCLUSION

StudySync provides an automated and accurate student tracking system that improves attendance management, enhances campus safety, and reduces manual work. The system can be expanded with indoor tracking, AI based analytics, and parent notification features in future versions.

ACKNOWLEDGEMENT

We thank our project guide, faculty members, and institution for their support in completing this project.

REFERENCES

- [1] Research papers on smart campus systems.
- [2] Studies on GPS based attendance tracking.
- [3] OpenStreetMap.
- [4] IoT based student monitoring research articles.

AUTHORS BIOGRAPHY



Tushar Gaikwad – AIML Diploma 3rd Year student who worked as the Backend Developer for the StudySync project.



Atharva Kakade – AIML Diploma 3rd Year student who served as the Project Leader overseeing overall development and coordination.



Shreya Taktode – AIML Diploma 3rd Year student who designed the UI and CSS for the StudySync application.



Aastha Madgunaki – AIML Diploma 3rd Year student who managed the database and handled debugging for the project.

Citation of this Article:

Tushar Gaikwad, Atharva Kakade, Shreya Taktode, Aastha Madgunaki, & Prof. Rupali Padhar. (2026). STUDYSYNC – An Student Tracking Website that Tracks the Location of Student in Campus. *International Research Journal of Innovations in Engineering and Technology - IRJIET*, 10(2), 84-86. Article DOI <https://doi.org/10.47001/IRJIET/2026.102013>
