

Geofencing Based Attendance Tracking and Monitoring System

Prof. Sagar Mane¹, Mr. Nikhil Gandhi², Mr. Atharva Bharambe³, Mr. Mihir Gawade⁴,
Mr. Suyash Bhanwase⁵

Professor, Department of Computer Engineering¹

Students, Department of Computer Engineering²⁻⁵

NBN Sinhgad Technical Institute Campus, Pune, India

Abstract: *The Geofencing-Based Employee Attendance and Tracking System is an innovative solution designed to enhance workforce management through the integration of geofencing technology. This system allows organizations to automatically monitor employee attendance and track their movements within predefined geographical boundaries. By utilizing GPS and mobile applications, the system provides real-time data on employee check-ins and checkouts, ensuring accurate attendance records without manual intervention. The system addresses common challenges associated with traditional attendance methods, such as buddy punching and inaccurate time tracking, by enforcing location-based restrictions. Furthermore, it enables managers to gain insights into employee behavior, productivity, and compliance with attendance policies. In addition to attendance monitoring, the system features action tracking to assess employee engagement by distinguishing between active working and nonworking statuses through camera integration. This dual approach addresses common challenges associated with traditional attendance methods, such as buddy punching and inaccurate time tracking, by enforcing location-based restrictions and providing visual verification of work activity.*

Keywords: Geofencing, Employee Attendance, Tracking System, Action Tracking, working Status, Camera Integration, Workforce Management, GPS Technology, Real-Time monitoring, Attendance Automation, Attendance Reports

