

# Student Attendance Tracking with Real-Time Alerts for Improved Institutional Efficiency

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**Abstract:** *The Student Attendance Management System with Real-Time Alerts is designed to modernize attendance tracking in educational institutions by replacing traditional, error-prone manual processes with an automated solution. This system enhances accuracy, streamlines reporting, and provides immediate notifications to teachers and parents regarding student absences or tardiness via SMS or email. Key features include a user-friendly dashboard for monitoring attendance trends, comprehensive reporting capabilities, and seamless integration with existing ERP systems. The system is built using robust technologies such as Android Studio for development, MySQL for database management, Java for backend processing, and XML for frontend design. Hosting options include cloud-based or dedicated servers to ensure scalability and reliability. By leveraging these technologies, the system ensures robust performance and seamless data management. Ultimately, this innovative solution not only improves operational efficiency but also fosters greater accountability and engagement among students, contributing to enhanced academic performance*

**Keywords:** Real-Time Alerts, Student Attendance, Accountability, Automation, Educational Management