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# **QR Scan Based Intelligence System for School Bus Tracking**

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Abstract: The use of private vehicles intensifies the existing unbearable traffic jam and majority of the parents consider school buses to be largely unsafe for their kids. However, safe and user-friendly school buses can reduce the use of private vehicles and will eventually cut back the traffic jam in cities especially in school hours. All buses can be tracked by the guardians using the proposed intelligent and secured tracking system for school buses. This proposed system includes an Android application that can be employed to send notifications during entry and exit of the students using Barcode scanner, ensuring arrival confirmation of the student by dual authentication. The focus of the research is to display the feasibility of a safe and intelligent school bus using secured tracking system based on authentication procedures. It is expected that the offshoot of this research initiative will regain the confidence and reliability of parents in school bus and reduce the use of individual transport. A smart school bus will keep the student safe, easing the tension for parents and the city will have a smooth traffic system.

Keywords: School Bus, GPS, QR Scan, Smartphone Application, Android Google Maps API.

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