Title:
Real-Time College Bus Tracking System Using MERN Stack

Domain:
Web Application Development

Team Members:
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Objective:
To develop a real-time College Bus Tracking System using the MERN stack and Google Maps API that allows students and staff to track live bus locations, reducing waiting time and improving safety.

Abstract:
This project aims to develop a College Bus Tracking System using the MERN stack (MongoDB, Express.js, React.js, Node.js) with Google Maps API to improve transportation for students and staff. The system will allow users to track the live location of college buses on their phones or computers, helping them plan their travel, reduce waiting time, and improve safety.

Each bus will send its live GPS location to the server, and users can see the bus moving on Google Maps in real-time. The backend will handle location data and API requests using Node.js and Express.js, while React.js will provide a clean and user-friendly interface. MongoDB will store bus, route, and user data securely.

The system will also include features like estimated arrival time. This will help the college manage bus operations efficiently and provide transparency for students and parents. The project aligns with smart campus goals by bringing a practical and modern solution for college transportation using web technologies.