AN ENHANCING PUBLIC TRANSPORTATION IN SRI LANKA THROUGH REAL-TIME TRACKING AND BOOKING SYSTEM

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Abstract: This research is about creating a Bus Tracking and Booking System designed specifically for the transportation system in Sri Lanka. The goal is to make public transportation better by using technology. The system will help users track buses in real-time and easily book their rides. The aim is to improve the way buses operate and make public transportation more modern and user-friendly in Sri Lanka. It uses advanced technologies like GPS and mobile apps to give users accurate and current info about bus locations, schedules, and available seats. It also has an easy-to-use booking system, allowing passengers to reserve and buy bus tickets without any hassle. The studies worked together with stakeholders like transit authorities to create a system that meets the specific needs of Sri Lanka. A database has been built into the system, and user-friendly interfaces, and tested everything thoroughly to make sure the system works reliably. Results from the implementation demonstrate a significant improvement in the accessibility and efficiency of bus services. Passengers can now plan their journeys more effectively, reducing waiting times and enhancing overall satisfaction. Transit authorities benefit from enhanced operational insights, enabling better resource allocation and schedule optimization. In conclusion, the Bus Tracking and Booking System presented in this research represents a technological advancement in the Sri Lankan public transportation landscape. The successful implementation of this system not only addresses current challenges but also lays the foundation for future innovations in the realm of smart and sustainable urban mobility.

Keywords: Bus Tracking, Online Booking, Public Transportation, Real-Time, User-friendly Service.