LOW COST VEHICLE TRACKING SYSTEM FOR NATIONAL PUBLIC TRANSPORT

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ABSTRACT

Vehicle tracking systems available in developed countries, mainly focus on public transport. However, public transport in Sri Lanka is generally characterized by a lot of chaos; these range from poor management of the vehicles, traffic congestion, reckless driving and unreliable service provision. The main objective of this research project is to develop a customized location-based service for caters the needs of the public transport in Sri Lanka. This project demonstrates the development of a free prototype solution for management of public transport in Sri Lanka. It will provide GPS and GPRS technologies for real-time transmission of coordinates from the tracking devices (Ticketing machine or Android phone) to the central database server and finally rendering to the Android application. The development process of the system entailed the analysis of existing systems used in Sri Lanka, system design and development, evaluation and implementation. The research provides a cheaper solution for saving thousands of human our waiting for buses and effective management of public buses by preventing vehicle misuse. The final solution comprises an Android application. It provides real-time graphical visualization on the "Google map" and it can predict the arrival time of the vehicle.

Keywords: Low-cost vehicle tracking, GPS, GPRS, Android, Public Transport