



Advanced Bus Ticketing System

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ABSTRACT:

The use of bus traveling is a large growing business in all countries; the manual use of bus reservation is presently very strenuous and also consumes a lot of time by having to stay on a long queue. For

this reason, an efficient system is to be proposed in this paper to ease the issue of bus reservation amongst

indigenes within the country. The system is a web – based application that allows visitors to check bus

availability, buy and pay bus ticket online, checking our route where we travel, Accident detection and emergency service. Bus ticket booking during the offline era posed various difficulties to the customers as well as the bus operators.

Offline ticket booking reduced the scope of customers to choose different options based on their travel criterion . Online ticketing could be extended to major entertainment and touristic sites and thus facilitate access to major points

of interest within cities, making online ticketing also interesting for travelers .In this paper, the proposed Advanced bus ticket system was developed using Hyper Text Markup Language (HTML),Cascading Style Sheet (CSS), JavaScript, Embedded C By using keil, Proteus for designing PCB.

Keywords: Bus Reservation, Queue, Efficient.

INTRODUCTION

A proper and systematic public transport plays a major role in economic development and well being of the people in any country. But public transport in most of the developing countries is not running properly because of the lack of systematic planning and monitoring. In this project, we are planning to monitor operations of bus transportation systems. We propose use of minimal information i.e. record of arrival time of the buses at the bus-stops, for improvement of bus transportation system. Public Transport is one of the important infrastructures of any country. In developing countries like India bus transport consists of 90% of public transport.

However, lack of systematic mechanism to monitor and manage the bus-network is leading to lack of predictability of the bus network. It gets difficult to identify causes behind delays, or predict the arrival times. Bus transport system faces the ever increasing problem of traffic and congestion. The operations of bus-transport systems can be significantly improved by monitoring the bus operations and analyzing them to providing useful information both to the travelers and bus operating authorities. We propose the use of advanced wireless technologies for automated monitoring of bus operations. The monitoring data thus collected provides information about arrival time of buses at bus-stops all over the deployment area.

LITERATURE SURVEY:

1] Empowering Bus Transportation System Using Wireless Sensor Networks

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Public Transport is one of the important infrastructures of any country. In developing countries like India bus transport consists of 90% of public transport. However, lack of systematic mechanism to monitor and manage the bus-network is leading to lack of predictability of the bus network. It gets difficult to identify causes behind delays, or predict the arrival times. Bus transport system faces the ever increasing problem of traffic and congestion. Without a well-deployed monitoring system, it becomes very difficult to plan for optimization and growth. In this paper, we propose the use of advanced wireless technologies for automated monitoring of bus operations. We argue that powerful analysis can be performed with simple and low cost infrastructure. For doing above analysis and for generating essential information, we need to track the bus on the route. There are multiple choices of wireless technologies that could be used for the purpose of tracking movement of buses such as GPS (Global Positioning System) with GSM, RFID (Radio Frequency Identifier) and WSN (Wireless Sensor Network). Table I presents a qualitative comparison of the above three technologies. GPS+GSM, requires deploying GPS

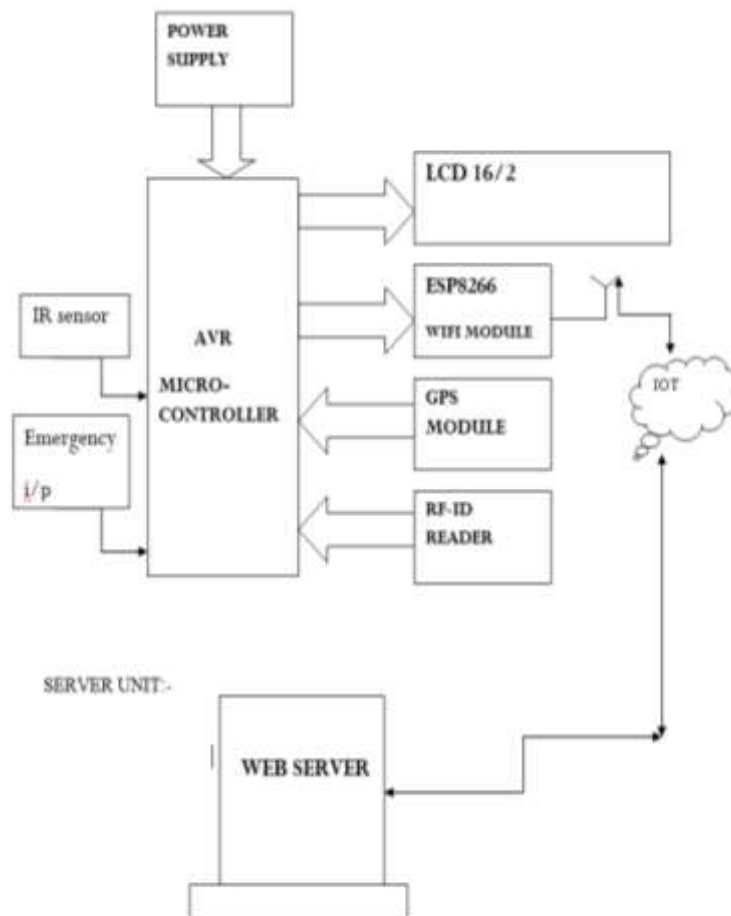
and GSM infrastructure on each bus. This is costly in comparison with the RFID and WSN infrastructure. RFID technology works best in short range communication scenarios and is very sensitive to interference resulting into an infeasible solution for road conditions. In authors have enhanced reading range of RFID by incorporating WSN and propose use of WSN with traffic signaling system to get maximum clear way for buses. We propose to use wireless sensor network as a feasible technology option for its low cost and adequate location estimation.

2] Vehicle Data Acquisition And Telemetry

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Data Acquisition (DAQ) and Telemetry are part of the winning formula of any race team or vehicle manufacturer. It is vital to the development phase of a vehicle, so that designs can be validated and tunable parameters adjusted to increase performance and efficiency. Existing DAQ systems fail as they are of universal application type and turn out to be extremely costly and power hungry. Also, the lack of filtering stages is an issue for sensor data coming from a moving vehicle. The system discussed in this paper was designed specifically for automotive application, taking into account the size, cost and performance, while also taking care of the noise factor by including digital filters. The system was found to be 2.2 times more cost effective than current modules, with a data rate of 9600Hz and 10 bit resolution for DAQ and the telemetry system working at a serial data baud rate of 9600 transmitted wirelessly through a ZigBee network.

BLOCK DIAGRAM:



(1)

RESULT AND CONCLUSION:

Online ticket booking system is an application where the customer can book a ticket online and 24*7 hours a day from anyplace in the world. Customers can also interact with the ticket booking website to know any other details they want. Online ticket booking system has been developed successfully.

System performance is also found to be satisfactory. This is a user-friendly application. Through this application, the cost can be reduced and efficiency is increased. There are several procedures that can be selected by customers.

FUTURE SCOPE:

- Display system at every bus stop.
- Making information available on mobiles.

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