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A Car Breakdown Service Station Locator System

Neelima Sutar ¹, Pooja Dorge², Monika Kadam³, Prof. Rashmi Tundalwar⁴ P.G. Student, Department of Computer Engineering, DPCOE, Pune, Maharashtra, India ^{1,2,3} Professor, Department of Computer Engineering, DPCOE, Pune, Maharashtra, India ⁴

ABSTRACT: While travelling sometimes vehicle is breakdown, and searching garage it is waste of time. Driver searches garage near to his location. In virtual garage system provides accurate information about nearest garage and also provides facilities around any location, allowing drivers to reduce the time spent searching for garage at the time of incident occur. This virtual garage system informs drivers about nearby garage with facilities and have available and at what price.

KEYWORDS: Garage, GPS, Virtual Wallet.

I. Introduction

Virtual garage provides detailed and accurate information about nearest garage facilities around any location or destination, allowing drivers to reduce the time spent searching for garage once the incident happens. This innovative service informs drivers of nearby garage facilities that have available and at what price. A lot of people are facing difficulties getting help when their car breaks down on the road. Many of them do not have any Car Repair Service Providers' contact number and could not get help as the Car Repair Service Providers might be far away from their locations. These problems are the motivations for the development of this project to help those who are in need when their car breaks down along the roads.

II. RELATED WORK

N. Jagan Mohan Reddy et al, "Wireless electronic display board using GSM technology", International Journal of Electrical, Electronics and Data Communication, vol. 1, no. 10, pp. 50-54, 2013. This paper carries out a detailed review of the various techniques employed in the recent years in GSM technology. It discusses the current innovations in technology, and within this context, the operation of wireless electronic display boards using GSM technology has been reviewed. The important techniques used in past are also tabulated. Various technical papers and articles on wireless technology have been analysed. The paper takes an inquisitive approach to the proposals and prototypes of an electronic display board obtained using GSM, which can be used in public areas for information dissemination. Although this review paper cannot be all-inclusive, it may serve as a reference for further analysis in the domain of GSM and its application in wireless notice boards. [1]

Gamini Jayasinghe et.al. "A GSM alarm device for disaster early warning," in IEEE conference on Industrial and Information Systems, pp. 383-387, 2006. The paper describes the design and development of an alarm device that can disseminate disaster early warnings to threatened communities over the GSM network. The device is capable of generating audible, high-volume alarms, flashlights and turning on an in-built radio in response to a warning message from an authorized entity via GSM s short message service (SMS) or cell broadcast (CB). The design of the device follows international guidelines on emergency communications, such as the ability to reach a large number of people very fast, awaken sleeping communities, and be able to acknowledge warning messages. The alarm has been designed as a last-mile technology in a larger Disaster Early Warning network (DEWN). It is intended to be place in selected locations such as police stations, places of religious places and community centres. Thus the DEWN System and thus the Alarm Device presents a unique opportunity to test the concept of GSM for Warning".[2]

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N. Khera, A. Verma, "Development of an intelligent system for bank security", IEEE conference on Confluence: The Next Generation Information Technology Summit, pp. 319-322, 2014.

The limitations of each security technology combined with the growth of cyber attacks impact the efficiency of information security management and increase the activities to be performed by network administrators and security staff. Intelligence improves an individual's ability to make better decisions. This paper presents a proposed architecture of an Intelligent System for Information Security Management (ISISM). The objective of this system is to improve security management processes such as monitoring, controlling, and decision making with an effect size that is higher than an expert in security by providing mechanisms to enhance the active construction of knowledge about threats, policies, procedures, and risks. We focus on requirements and design issues for the basic components of the intelligent system.[4]

Z.Wanli, "The design of communications dispatch module based on GSM", in IEEE conference on Computer Technology and Development, pp. 583-585, Nov. 2010.

This paper introduces a kind of intelligent communications dispatch terminal equipment. The equipment is applied to taxi. Its core technology is GSM short message module. The paper describes the overall design of this application in detail. And it studies the power system in terminal blocks, the overall circuit design, short message sending and receiving control. The module of taxi communications scheduling provides an economical and practical technical project for vehicles tracking, call and management.[5]

III. SYSTEM ARCHITECTURE

In that system will register garages with the provided facility and contact details. The system will fetch the Person's current location to searching the nearest garage. In order to perform the search of nearest garage, Google Places API for mobile will be used to connect people to places of interest with the power of location awareness on Android.

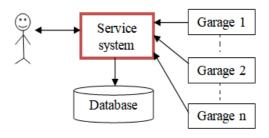


Fig 1. System Architecture

The proposed system uses either Bluetooth or Wi-Fi based wireless serial data communication in displaying messages on a remote digital notice board. Android based Application programs available for Bluetooth and Wi-Fi communication for personal digital assistant (PDA) devices are used for transmitting the alpha-numeric text messages. Using the Bluetooth or Wi-Fi based serial data communication technique, the corresponding transceiver module has been interfaced with server at the receiver end. The proposed system will help in reducing the human effort, paper, printer ink and cost for manual changing of the notices.

A. Methodology Steps

Correspondence Utilizing the Bluetooth interface a Personal Area Networks (Container) has been made in the range between 10-15 meters. Bluetooth utilizes the 2.45 GHz recurrence band for association. A Bluetooth module has been interfaced with the server utilizing serial correspondence. The module's Media Access Control address is utilized by Android application program (Bluetooth Terminal) which enables just this gadget to speak with the cell phone for controlling the outer gadgets. The interconnection of Android PDA with the outer Bluetooth gadgets like HC-05

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Bluetooth module, utilizing Bluetooth terminal for transmitting or getting the information in type of hex or, on the other hand string. Utilizing the android based remote notice board in Bluetooth correspondence mode the client can send the alphanumeric content message immediately once the association is built up between Android based PDA and Bluetooth gadget. The notice on the LCD show can be changed whenever by resending the new message from PDA utilizing android application program that is Bluetooth innovation. The new message will scheduled for what time it will going to show on display to what time it will stop displaying making the framework extremely basic and simple to utilize. The execution of Android based remote notice board utilizing Bluetooth correspondence.

IV. ADVANTAGES

- 1. Provide services to user nearest garage with detail information around any location.
- 2. Thus saves wastage of time and energy.
- 3. Also inform facilities and contact details.
- 4. Prevents unauthorized access.

V. CONCLUSION

In this paper we have proposed a system which will helps people to find nearest garage on road when their car has breakdown. This will provide accurate information about nearest garage and all the contact details of nearest garage. Virtual garage system will saves time and energy.

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