

InstaMed+: Medical Assistance System for Accidents

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Abstract—Long latency needed for emergency responders to arrive may be a primary reason behind magnified fatalities in serious accidents. A technique to scale back this latency is to scale back the number of time it takes to report an accident. Smartphone's are present and with network property are excellent devices to right away inform relevant authorities regarding the prevalence of an accident. We have a tendency to be coming up with a mechanical man application which can be helpful for peoples to assist different peoples who are laid low with incident like accident. It'll facilitate U.S.A. to save lots of the accidental person. Project is style for an accident detection system. The accident detection systems inform the police room regarding the accident by clicking icon of accident. The appliance recommends close hospitals and police stations list in application. FIR is generating by police office and sends copy to the revered hospital system. Revered hospital scan user QR Code and supply treatment per info. Conjointly send emergency SMS to user's pre-register mobile variety.

Keywords— GPS, mobile interaction, QR-Codes.

I. INTRODUCTION

A QR code may be a kind of barcode that may hold a lot of info than the acquainted kind scanned at checkouts round the country. The “QR” stands for “quick response,” a relevance the speed at that the big amounts of knowledge they contain is decoded by scanners. They were unreal in 1994 in Japan and an initio used for chase shipping. Because the code is simply decoded by the camera of sensible phone, this technology is progressively accessible to the typical person. Rather than chase automotive elements and packages, the codes are accustomed store info of user. A QR code acts as a link embedded within the globe, desegregation it with the virtual pc world. The event of a transportation has been the generative power for people in general to possess the best civilization on top of creatures within the earth. Automobile features a nice importance in our existence. We have a tendency to utilize it to travel to our work place, detain bit with our friends and family, and deliver our product.

However, it will also bring disaster to U.S.A. and even can kill U.S.A. through accidents. AN accident may be a deviation from expected behavior of event that adversely affects the property, living body or persons and also the

atmosphere. Move is primary concern for everybody. Recent advances in automaton square measure one amongst the foremost widespread sensible phone platforms at the instant, and also the quality is even raising. In addition, it's one amongst the foremost open and versatile platforms providing software package developers quick access to phone hardware and wealthy software package API. Smartphone technologies square measure creating it potential to reduce the death rate that square measure happening by vehicle accidents in an exceedingly a lot of transportable and price effective manner than standard in-vehicle solutions.

II. LITERATURE SURVEY

1. TITLE: Recommendations of the DG e-Call for the introduction of the Pan-European e-Call

Published by: e-Call Driving Group

With fatalities on the road across the EU of quite forty.000 folks once a year, the European Commission acknowledges that this measures towards reducing the fatality range isn't enough. within the report on European transport police from 2001, the European Commission projected that the European Union ought to set itself the target of halving the quantity of road fatalities by 2010. One of the initiatives from the European Commission is that the institution of the e-Safety Forum, that could be a joint industry/public initiative for rising road safety by victimization new data and Communications Technologies. The objective is to affix forces and to make up a strategy to accelerate the analysis and development, preparation and use of Intelligent Integrated Safety Systems together with Advanced Driver help Systems (ADAS) for increasing road safety in Europe.

2. TITLE: Towards Vehicular Sensor Networks with Android Smartphones for Road Surface Monitoring.

Published by: Girts Strazdins, Artis Mednis, Georgijs Kanonirs, Reinholds Zviedris and Leo Selavo

Android is one in every of the foremost common Smartphone platforms at the instant, and also the quality is even rising. to boot, it's one in every of the foremost open and flexible platforms providing software system developers easy accessibility to phone hardware and wealthy software system API. We tend to envision Android-based smart

phones as a robust and wide used democratic sensing platform in close to future. During this paper we tend to examine automaton smart phones within the context of paved surface quality observation. We tend to evaluated a group of hole detection algorithms on automaton phones with a sensing application whereas driving a automotive in urban surroundings. The results offer first insight into hardware difference between numerous Smartphone models and suggestions for any investigation and improvement of the algorithmic rule, sensing element selections and signal process.

3. TITLE: Providing Accident Detection in Vehicular Networks Through OBD-II Devices and Android-based Smartphones.

Published by: Jorge Zaldivar, Carlos T. Calafate, Juan Carlos Cano, Pietro Manzoni

By combining sensible phones with existing vehicles through Associate in Nursing applicable interface we have a tendency to area unit able to move nearer to the smart vehicle paradigm, providing the user new functionalities and services once driving. During this paper we have a tendency to propose Associate in Nursing automaton based mostly application that monitors the vehicle through Associate in Nursing On Board medicine (OBD-II) interface, having the ability to observe accidents. Our projected application estimates the G force intimate with by the passengers just in case of a frontal collision, that is employed in conjunction with airbag triggers to observe accidents. The applying reacts to positive detection by causation details regarding the accident through either e-mail or SMS to pre-defined destinations, right away followed by Associate in Nursing automatic call to the emergency services. Experimental results employing a real vehicle show that the applying is in a position to react to accident events in but three seconds, a really low time, confirmative the practicability of Smartphone based mostly solutions for rising safety on the road.

4. TITLE: Fail Silent Road Side Unit for Vehicular Communications.

Published by: Joaquim Ferreira, Arnaldo Oliveira, João Almeida, and Cristóvão Cruz

Wireless vehicular networks for cooperative Intelligent Transport Systems (ITS) have raised widespread interest in the last few years, due to their potential applications and services. Cooperative applications with data sensing, acquisition, processing and communication provide an unprecedented potential to improve vehicle and road safety, passenger's comfort and efficiency of traffic management and road monitoring. Safety, efficiency and comfort ITS applications exhibit tight latency and throughput requirements, for example safety critical services require guaranteed maximum latencies lower than 100ms while most infotainment applications require QoS support and data rates higher than 1 Mbit/s. The mobile units of a

vehicular network are the equivalent to nodes in a traditional wireless network, and can act as the source, destination or router of information. Communication between mobile nodes can be point-to-point, point-to-multipoint or broadcast, depending on the requirements of each application. Besides the adhoc implementation of a network consisting of neighboring vehicles joining up and establishing Vehicle-to-Vehicle (V2V) communication, there is also the possibility of a more traditional wireless network setup, with base stations along the roads in Vehicle-to-Infrastructure (V2I) communication that work as access points and manage the flow of information, as well as portals to external WANs.

5.TITLE: Performance Analysis of Maximum Length LFSR and BBS Method for Cryptographic Application.

Published by: N. S. Abinaya, P. Prakasam

In this paper, 8, sixteen and thirty 2 bit most length LFSR which can supply the foremost states of PN sequence has been enforced. to boot given the comparison of performance analysis of 4 bit LFSR and sixteen bit BBS supported synthesis and simulation result on FPGA victimization hardware descriptive language(HDL) with most length feedback polynomial to know the planet, speed and power demand. The target device we have got used is Xilinx Virtex6 XA9572XL FPGA and performed simulation and synthesis victimization Xilinx ISE twelve. FPGA might be a predesigned reconfigurable. it is the power to reconfigure its equipment for a desired application or operate at any time once manufacturing. it's associate adaptive hardware that endlessly changes in response to the pc file or method atmosphere. The FPGA configuration is generally defamed using a hardware description language (HDL), virtually like circuit (ASIC). FPGAs are accustomed implement associate logical operate that associate degree ASIC can perform. owing to varied blessings and quick model development can potential, therefore FPGA is chosen.

III. PROPOSED SYSTEM

Propose system collect user data at starting and generate QR code for on an individual basis. When accident, user take a photograph and send to nearest station house suggested by system alongside location data additionally inform to the closest hospital. When station house permission, system mechanically generate FIR alongside accident image and send to the hospital. Hospital sends feedback to user and when planning to accident location nurse scans the user QR code to induce user data instantly. And supply treatment to the user.

IV. SYSTEM DESIGN

QR Code generated at the time of registration. All data hold on at information. Users capture exposure and search nearest station house and hospital. Once requesting nearest station house FIR is generated by station house. Station house sends one copy to hospital. Hospitals scan battle-scarred person QR Code and supply treatment consistent with data. Fig. 1 shows the whole system architecture of proposed system.

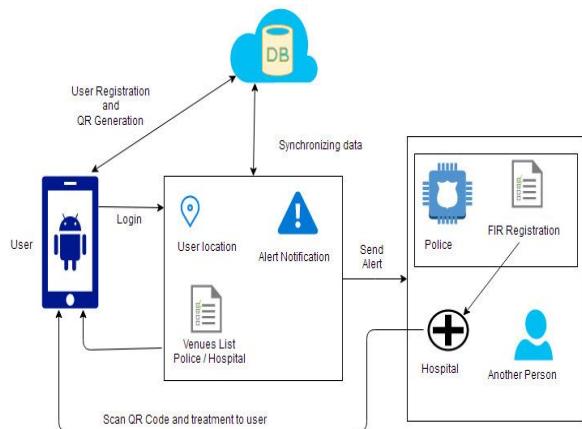


Fig. 1. System Architecture

V. ADVANTAGES

- Instant recommendation of nearest police station and hospital.
- Required time is reduced.
- Reduction of paper work.
- It keeps the user's information confidential.
- It will send an alert message automatically to the emergency mobile number of user's relatives.

VI. GOALS AND OBJECTIVE

1. To Reduce the Human Death Ratio due to Road Accident.
2. To provide details about nearby hospitals and police station to the user.
3. Store information of user in QR Code to quickly access user information after accident.
4. To reduce the complication of FIR.
5. The goal of this is to minimize the deaths of the people who are met with accidents by providing the useful information of nearby hospital and nearby police station at the required time and also sending the user location and automatically send alert message

about accident to the registered mobile number after admitting user in hospital.

VII. CONCLUSION

Results have shown that the applying developed is ready to properly fulfill its purpose inside a brief fundamental measure. Our results show that the entire time needed to perform all the tasks, as well as the delivery of AN SMS with the accident details, followed by providing the close police headquarters and hospital details and causing them an alert message of the user accident with actual location of user, is taking short fundamental measure.

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