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APPLYING QR CODE AND MOBILE APPLICATION TO IMPROVE SERVICE PROCESS OF ACCIDENT HANDLING SYSTEM

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Abstract — *Long response time required for emergency responders to arrive may be a primary reason behind increased fatalities in serious accidents. One way to reduce this latency is to reduce the quantity of time it takes to report an accident. Smartphones are ubiquitous associate degreed with network property are perfect devices to immediately inform relevant authorities concerning the incidence of an accident. We tend to are coming up with an android application, which is able to be useful for peoples to assist different peoples who are suffering from incident like accident. It will facilitate us to save lots of the accidental person.*
Project is design for an accident detection system. The accident detection system informs the police room concerning the accident by clicking image of accident. The applying counsel nearby hospitals and police stations list in application. FIR is generating by police headquarters and sends copy to the respected hospital system. Respected hospital scan user QR Code and provide treatment in line with info. Additionally send emergency SMS to user's pre-register mobile number. There are tries to alleviate the problem through varied methods. During this paper, a low-cost system was developed and tested in a public hospital with restricted budget. The system utilized QR code and smartphone application to capture as-is hospital processes and therefore the time spent on individual activities. With the available activity, data.to improves hospital services and to reduce patients' waiting time, it is crucial to specialize in the development, which will produce the largest impact on the performance of the system. As increasing resources is difficult when budget is restricted, one will improve the performance by appropriately using info technology to hospital service processes

Keywords- *GPS, mobile interaction, QR-Codes.*

I. INTRODUCTION

A QR code is a type of barcode which will hold more info than the familiar kind scanned at checkouts around the country. The "QR" stands for "quick response," a relation to the speed at that the massive amounts of information they contain are often decoded by scanners. They were fictitious in 1994 in Japan and at the start used for tracking shipping. Because the code is often simply decoded by the camera of smartphone, this technology is more and more accessible to the average person. Rather than tracking car elements and packages, the codes are often used to store info of user. A QR code acts as a link embedded within the universe, group action it with the virtual pc world. The development of a transportation system has been the generative power for persons to possess the very best civilization on top of creatures in the earth. Automobile incorporates a great importance in our daily life. We have a tendency to utilize it to travel to our work place, keep in touch with our friends and family, and deliver our merchandise. However it will| bring disaster to us and even can kill us through accidents. An accident is a deviation from expected behavior of event that adversely affects the property, living body or persons and the environment. travelling is primary concern for everybody. Recent advances in android are one among the foremost widespread smartphone platforms at the instant, and also the quality is even rising. to boot, it's one of the foremost open and flexible platforms providing software system developers easy accessibility to phone hardware and rich software system API. Smartphone technologies ar creating it possible to minimize the death rate that are happening by vehicle accidents in a additional transportable and cost effective manner than conventional in-vehicle solutions.

II. LITERATURE SURVEY

1. TITLE: Recommendations of the dg eCall for the introduction of the pan-European eCall
Author: eCall Driving group
Description: With fatalities on the road across the EU of over 40.000 individuals each year, the ecu Commission acknowledges that the present measures towards reducing the fatality variety isn't enough. within the written report on European transport police from 2001, the ecu Commission projected that the ecu Union ought to set itself the target of halving the quantity of road fatalities by 2010.

One of the initiatives from the ecu Commission is that the institution of the E-safety Forum, that could be a joint industry/public initiative for rising road safety by exploitation new info and Communications Technologies. the general objective is to affix forces and to create up a ecu strategy to accelerate the analysis and development, readying 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
Description: Android is one among the foremost popular smartphone platforms at the instant, and also the quality is even rising. in addition, it's one among the foremost open and flexible platforms providing code developers easy accessibility to phone hardware and made code
API. we tend to envision Android-based smartphones as a strong and wide used participatory sensing platform in close to future. During this paper we tend to examine android smartphones within the context of road surface quality monitoring. They tend to evaluate a group of pothole detection algorithms on android phones with a sensing application whereas driving a car in urban surroundings. The results give first insight into hardware differences between numerous smartphone models and suggestions for additional investigation and improvement of the rule, sensor selections and signal process.

3. TITLE: Implementation of an android based teleportation application for controlling a KUKA-KR6 robot by using sensing element fusion.
Published by: Juan C. Yepes, Juan J. Yepes, Jos´e R. Mart´ınez, and Vera Z. P´erez
Description: Tele-operated systems have been used in numerous biomedical applications, from the rehabilitation of patients, the management of biological venturesome material and drugs storage, to minimally invasive surgery. This paper, introduces Associate in Nursing android OS (operating system) based mostly application that communicates with an industrial robot Kuka KR-6 through USB to Serial connection, to manage it with the on-board accelerometers, and gyroscopes of a pill or smartphone, supposed to be utilized in telemedicine procedures. Arduino Uno microcontroller board, RS232 Shifter SMD and mobile device were accustomed develop this work. to evaluate this system a survey was done with engineering related users.

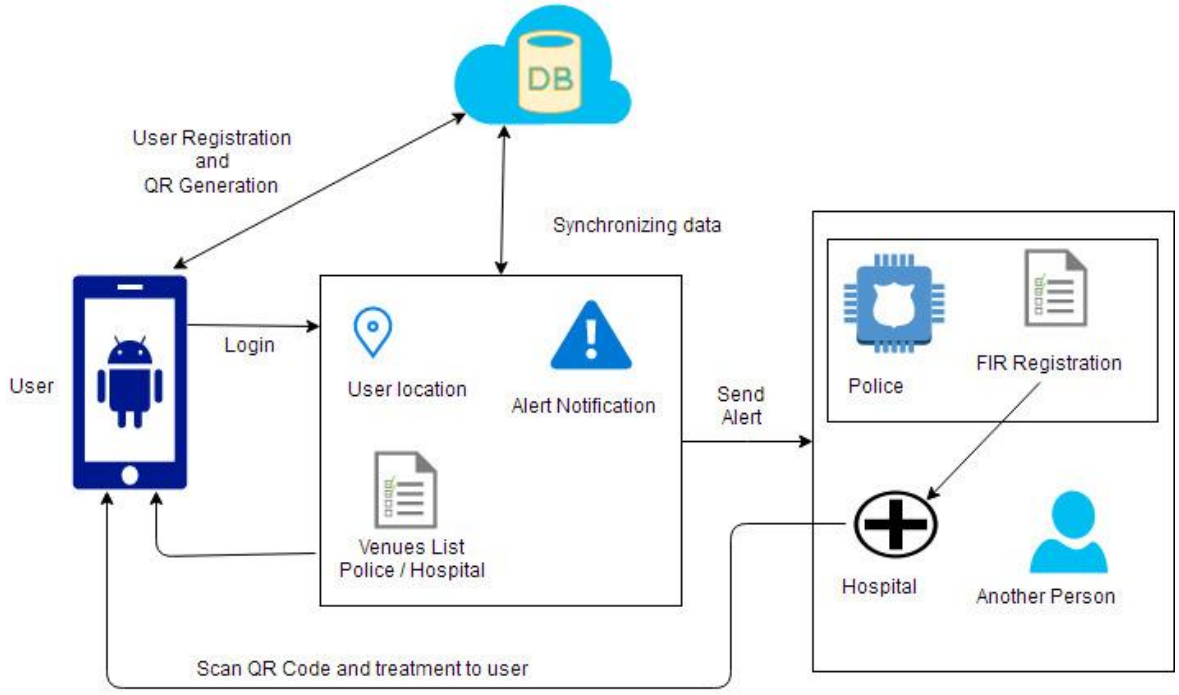
4. TITLE: using Smartphones to detect car Accidents and provide Situational Awareness to Emergency Responders.
Published by: Chris Thompson, Jules White, Brian Dougherty, Adam Albright, and douglas C. Schmidt
Description: This paper shows however smartphones in an exceedingly wireless mobile sensor network will capture the streams of information provided by their accelerometers, compasses, and GPS sensors to supply a portable “black box” that detects traffic accidents and records data associated with accident events, like the G-forces (accelerations) experienced by the driver. They tend to additionally gift an design for detecting car accidents based on WreckWatch, that may be a mobile client/server application they tend to developed to automatically detect car accidents. Figure a pair of shows however sensors engineered into a smartphone sight a serious acceleration event indicative of an accident and utilize the intrinsic 3G data association to transmit that data to a central server. That server then processes the knowledge and notifies the authorities similarly as any emergency contacts.

5. TITLE: Providing Accident Detection in vehicular Networks Through OBD-II Devices and Android-based Smartphones.
Published by: Jorge Zaldivar, Carlos T. Calafate, king Cano, Pietro manzoni
Description: By combining smartphones with existing vehicles through an acceptable interface we tend to are able to move nearer to the smart vehicle paradigm, giving the user new functionalities and services once driving. during this paper we tend to propose an robot based mostly application that monitors the vehicle through an On Board diagnostics (OBD-II) interface, having the ability to detect accidents. their application estimates the G force intimate with by the passengers just in case of a frontal collision, that is employed along side airbag triggers to detect accidents. the applying reacts to positive detection by causation details concerning the accident through either e-mail or SMS to pre-defined destinations, forthwith followed by an automatic call to the emergency services. Experimental results employing a real vehicle show that the applying is ready to react to accident events in but three seconds, a really low time, confirmatory the feasibleness of smartphone based mostly solutions for up safety on the road.

III PROPOSED SYSTEM

Propose system collect user data at beginning and generate QR code for on an individual basis. once accident, user take a photograph and send to nearest station house counseled by system along side location data additionally inform to the nearest hospital. once police station permission, system automatically generate FIR along with accident image and send to the hospital. Hospital send feedback to user and once reaching to accident location nurse scan the user QR code to get user data instantly. and provide treatment to the user.

IV. SYSTEM DESIGN



V. ADVANTAGES

- Instant recommendation of nearest police station and hospital.
- Required time is reduced
- Reduction of paper work.

VI. CONCLUSION

Results have shown that the application developed is able to properly fulfill its purpose among a short time period. Our results show that the overall time needed to perform all the tasks, as well as the delivery of an SMS with the accident details, followed by providing the nearby station and hospital details and causation them an alert message of the user accident with precise location of user, is taking short time period.

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