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Android Application for Vehicle Emergency Alert System-Ve Help

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ABSTRACT: Management of road accidents has been a challenging task in the country like India, whose vision is more focused on smart cities development. The reporting of vehicle accident incidents immediately in case of emergency is being delayed and the accident rate is increasing in such cases, due to less concentration on usage of technology in the management of road accidents in smart cities.

The recent available technology used in the management of accidents through vehicles are challenging, as they are not smart enough, unreliable, ease of application is unrealistic, not so economic friendly, and they are not meant for all vehicles too, as the detection of accidents and the immediate response or plan of action for it is unrealistic.

The main contribution from our research is to detect accidents and respond to the notification which would be sent through our android application system generating short message service to the concern person, family and to all the respondents immediately.

In this we have proposed our idea on alert management of emergency of vehicle accidents through android technology which would assist the concerned one.

I. INTRODUCTION

In the twenty first-century, the number of vehicles exponentially increased due to growth in the automobile industry. As the number of vehicle increases, the accident also increases. With the growing population the use of vehicles has become superfluous and this has led to the accidents increasing at an alarming rate resulting in a large loss of property and human life. The reasons for most of the accidents are due to lack of timely information.

Due to more road accident taking place in various cities. Nowadays the cause of death increasing more by accident. If an accident met on a national highway road no one is there to rescue the person to meet with accident this is due to a lack of emergency facilities and rescue teams to overcome these drawbacks our paper proposed this method can automatically indicate a device for a vehicle accident is used in this paper it is used protect the people from the risk as soon as possible after the occurrence the accident wasting a time may lead to death?

The Android application in the mobile phone will send text messages to the nearest medical center and friends. The application also shares the exact location of the accident and it can save time.

The main objective of this project is to prevent casualties which happen due to lack of medical assistance in time. Certainly, if the accident happens due to other cases, the used electronic devices will be able to provide the spontaneous message and exact location to police and ambulance in order to recover victims.

1.3 Purpose

Helps millions of vehicle users to get updated about vehicle safety information and more.

Proposed application deals with real time emergency alerts.

Android based application that helps in informing about vehicle in emergency situation.

In the Proposed System, we have introduced an Android-based application which can work of almost 98% of the mobile-phones present in the market with ease and minimum data on the device. There is no such mobile application or web application which helps out the vehicle owner or the close ones related to the vehicle owner.

II. RELATED WORK

Car Accident Detection and Reporting System

Authors: Mandeep Kaur Angrula, Mrs. Narinder Kaur in IRJET on Dec 2019

This system implemented aims at reducing the road accidents in the near future due to drunken driving. The system detects the presence of Alcohol in the vehicle and immediately locks the engine of the vehicle. Accident detection and messaging system can be fitted in vehicle (Ambulance & Police) and they are informed about any such untoward incident at the go. Accident detection and messaging system is execution simple as the system makes use of GSM & GPS technologies. GPS is used for taking the coordinate of the site of the accident while GSM is used for sending the message to phone. To make this process all the control is made using Arduino whereas LCD is used to display the accident.

IOT Based Automatic Vehicle Accident Alert System

Authors: Nazia Parveen, Ashif Ali, Aleem Ali in IEEE on Oct 30-31, 2020

In this proposed method accident location can be detected easily and the information of the accident location can be sent via the GPS to the emergency offerings for assistance. [3] proposes an automated detection and alerting system for automobile accidents. This system helps in detecting the accidents in very less period of time, basically within a few seconds, send the basic information to the first aid center in a message including the time and location of the accident. This application provides in the most feasible way the optimal solution to the poor emergency facilities provided for road accidents.

Smart Automatic Vehicle Accident Detection, Tracking and Messaging System using GPS and GSM

Authors: Keshwaryakunjekar, Prashant Karad, Prof. V.S. Gawali in IRJET on Feb 2019

Accident is detected by the system with the help of vibration sensor and at that time GPS trace the location and gives the details to the near hospital to provide emergency ambulance and medical facility as fast as possible using GSM. A sensor will sense the mismatch any occurrence of the accident will found then it gives the output to the ARM processor. Buzzer is start beeping that indicate the system is activated. GPS detect the latitude and longitude value of the vehicle to provide essential treatment to near hospital, police station and its regarding home number

These related works collectively demonstrate the active research efforts in the field of vehicle emergency application using technologies.

III. METHODOLOGY

- We will be using Java & XML in the Android Studio software which help us to build the user-interface and its functionalities. Further to store and retrieve the data of the vehicle owners and user's information we use MySQL
- The benefits of adopting the proposed methodology over existing system are as follows-
- Easy to use mobile application which can easily serve the purpose.
- Alarm system to alert the owner and emergency contacts if not responded to the notification.

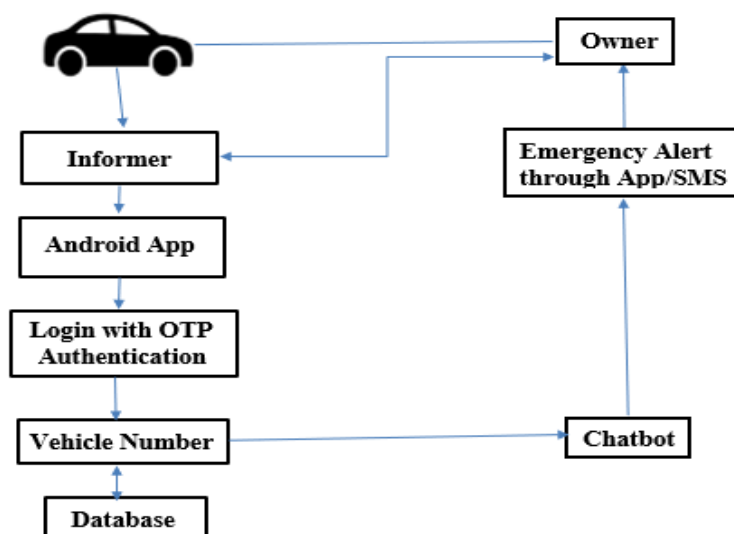


Fig.1.Flow chart

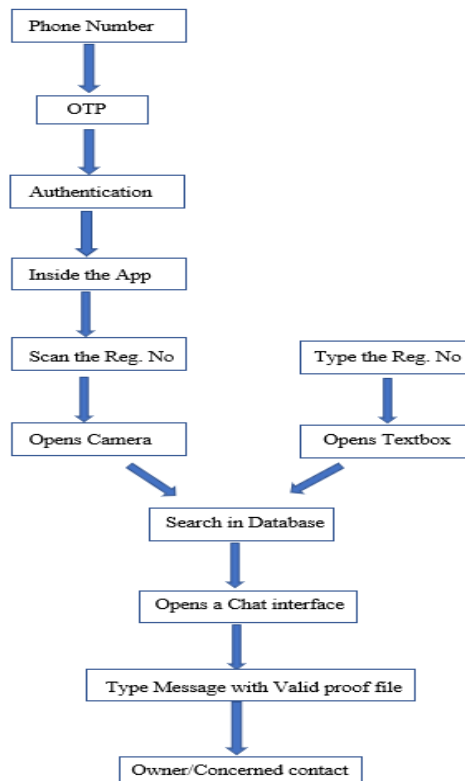
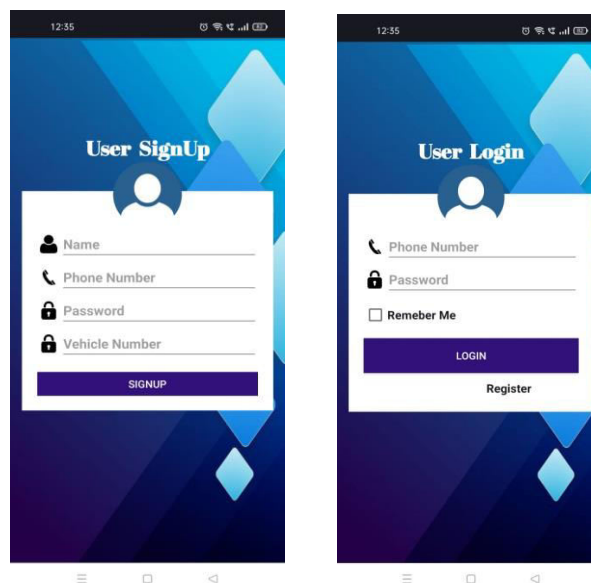
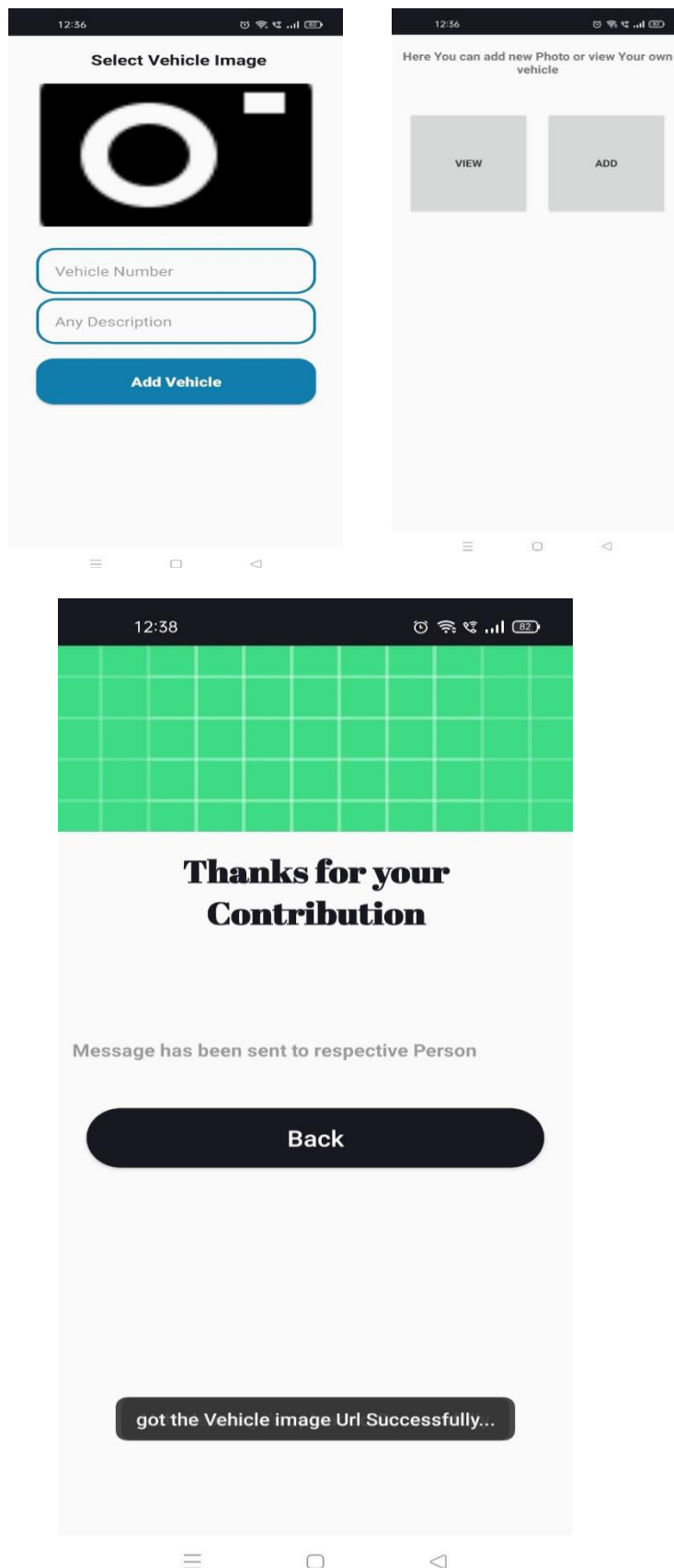


Figure 2: Architectural diagram of VeHelp app

IV. EXPERIMENTAL RESULTS

Figures shows the results of the vehelp android application







V. CONCLUSION

- Over the period of last 12 months 1.5 lakh vehicles have been hit anonymously and no relevant information passed on. As technology gets on improving day-by-day there are few inventions in the current scenario to prevent the ongoing problem, yet we fail in addressing the issue sometimes.
- To improvise this sector of emergency we have come up with an android-based application that helps in informing about vehicle status in emergency situations.
- This app is called VeHelp which abbreviates as Vehicle Help

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