

Emergency Accident Reporting Using Smartphone

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Abstract: Now a days many accident occur in our world. We can't do anything but we can only do one thing and that is providing safety through the technology if accident occurs because emergency never comes with prior clue. In our real world detecting such these emergencies and reporting them is a very real challenge. So This project contains the detail of existing systems and proposed system to overcome such common trouble of having manual meddling while reporting emergency. We are proposing a new idea to automate this process of emergency detection and reporting them in the various help locations, this app will record and report emergency in real time. This app works in many stages like registration of the user and information about the user and panic button , health emergency.

This system is very much helpful and it will work fast and recognize accident happen and fast and response very fast. This system contains software which a useful app in the mobile while driving and driving safety purpose. This is done by using OOPs concept , Java for Android Application and Google Uirebase for database and mysql is for the database.

Keyword: Android, Mysql, Java, OOPs, GSM.

1. Introduction

In spite of learning the success that automotive industry achieved in producing safer and more efficient vehicles over the past years, but road accidents are still the problem for thousands of casualties happened each year. To solve these problem an app that can be useful for the driver in the daily basis life. An android app that is design to understand the situation and work fast for providing help to the driver but that app also show the traffic due to accident occur in the road. To provide Flexibility to the users, the interfaces have been developed that are accessible through a browser.

When the emergency button presses then saved emergency contact will get an alert message of that location and message to the nearby help centers. The app send request to the server and server get the location of that particular place approx. radius (5km).

and send that information to user current nearby location and relatives.

2. SYSTEM ARCHITECTURE

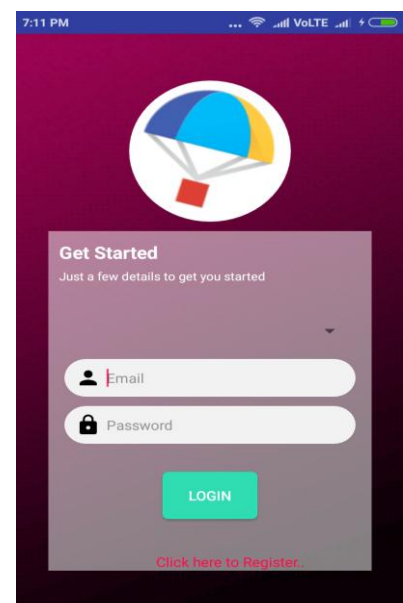
2.1 User Management

- A. Login.
- B. User profile.
- C. Update information.
- D. Role based rights.

2.2 Admin Module

- A. Manage user information.
- B. Update information.
- C. Manage documents

3. Requirements



3.1 Functional Requirement

- A. Modules for admin to handle the administration task.
- B. Module for user to manage user information.
- E. Module to make Online Payment (Database Based).
- F. Modules for customer to search place of their choices.

3.2 Non-Functional Requirements:

Secure system protected with Login ID and Password.

parking the car & It is recommended for the commercial purpose. In future, some changes can be done as per the requirement system can be extended to multilevel and by making potential charges in the software setup it can be more effective and most helpful safety app.

4. CONCLUSION

In this paper, the implementation of accident detection successfully discussed, we proposed a robust system to report the emergency. System implementation with one emergency type and their respective experiments shows the positive feedback on systems working model. Including the partial success scenarios as well as fully succeeded scenarios listed in experiments section proves that - Implemented system is real time system which reports emergency automatically and also records the sufficient data like person in emergency, location, time and type of emergency and communicate this message to outside world with help of wireless channels. The component used for implementing the system provide an efficient output at various stages of implementation this interface established between various components and it provide easiest way to the user.

REFERENCES

1. World Health Organisation, "Road Traffic Accidents," Last Accessed On 01 May 2017. [Online]. Available: [Http://Apps.Who.Int/Iris/Bitstream/10665/39723/1/Who Php 12.Pdf](Http://Apps.Who.Int/Iris/Bitstream/10665/39723/1/Who%20Php%2012.Pdf)
2. Deotale V.V ,R.V.Babar.(2012) "Accident Avoidance And Detection On Highways", International Journal Of Engineering Trends And Technology, Vol.3, Issue 2, Pp. 247-252.
3. Google Developers. (N.D.).Overview | Places Sdk For Android | Google Developers. [Online] Available At: [Https://Developers.Google.Com/. Places/Intro](Https://Developers.Google.Com/.Places/Intro) [Accessed 15 Jan. 2018].
4. Jennifer William, Kaustubh Paudwal, Nixon Samuel, Akshay Bawler And Smita Jain.(2016). Intelligent Helmet. International Journal Of Scientific And Engineering Research, 591-594
5. Android Developers. (n.d.). Location and context overview | Android Developers. [online] Available at: <https://developer.android.com/training/location/> [Accessed 4 Jan. 2018].
6. Android Developers. (n.d.). Volley overview | Android Developers. [online] Available at: <https://developer.android.com/training/volley/> [Accessed 4 Jan. 2018].
7. GitHub. (n.d.). Uirebase [online] Available at: <https://github.com/Uirebase/geoUire-java> [Accessed 26 Jan. 2018]
8. P .Kalbadevi , T.Kokila, S .Namratha, V.Janani "Accident Detection Using Android Smart Phone" March 2014
9. Rashida Nazir, Ayesha Tariq, Sajjad Rabbani "Accident Prevention and Reporting System Using GSM (SIM 900D) and GPS " 2014
10. Square.github.io. (n.d.).RetroUit. [online] Available at: <http://square.github.io/retroUit/> [Accessed 4 Jan. 2018].