

# Location Based Panic Management System Using Information Technology

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## ABSTRACT

In the era of globalization, emergency can occur any where and at any time. In such situation, we look out for our mobiles for the support and help. The main objective in such situations is to find out the nearest places like hospital, medical store, police station, fire extinguisher station, and ATM machines. There are existing available systems such as location based search which can be used in the situations of emergency. The location based search usually supports only one subject during each search and is time consuming. The obtained search results may not be relevant. Hence the system is proposed to overcome the existing difficulties.

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## 1. Introduction

In the era of globalization and industrialization where sustained development is need of the hour[1], emergency can occur any where and at any time. In such situation, we look out for our mobiles for the support and help. The main objective in such situations is to find out the nearest places like hospital, medical store, police station, fire extinguisher station, and ATM machines. There are existing available systems such as location based search which can be used in the situations of emergency. The location based search usually supports only one subject during each search and is time consuming. The obtained search results may not be relevant. Hence the system is proposed to overcome the existing difficulties.

## 2. Objectives

The main objective is to develop an application that will help the users in case of emergency. The applications like Google Maps, Zomato, and Nirbhaya etc were studied in depth where the users search for nearest places and send automated messages to the people who care about them. This Application will allow user to find the nearest hospitals, medical shops, police station and fire extinguisher station during emergency.

## 3. Literature Survey

The existing systems are required to query the places in the google maps which are time consuming. The major problem is to notify our friends about the distress due to emergency. In such cases one is expected to type query which may not be possible during the panic. Hence there is need for

the automation of the process with more innovative and intuitive manner. Following are the problems in existing system for a person in new locality:

To locate the nearest places like hospital, medical store, police station, fire extinguisher station, and ATM machines in a totally new place.

- 1) To find one's location during panic.
- 2) To get first aid health tips.
- 3) Delay in catering the query where time plays very crucial role which may case deaths.

## 4. Proposed System

To overcome the above mentioned problems of existing systems, a new system is proposed using automation and artificial intelligence. With the help of this idea, we will eliminate the task and time for information collection during emergency. It helps to find the exact location and required data within a short period of time. It also include emergency features which will come handy to send one's live location to their trusted one With the help of this tool, the user must register in the application and then he/she has to add their trusted contact in trusted person list. It allows them to send instant notification or message to every trusted person by clicking on the emergency panic button, so that their trusted gets notified about the person's panic and in turn it also navigates the helpers to the exact location of the person who is in the need of help. The zero level data flow diagram for the proposed system is as below.

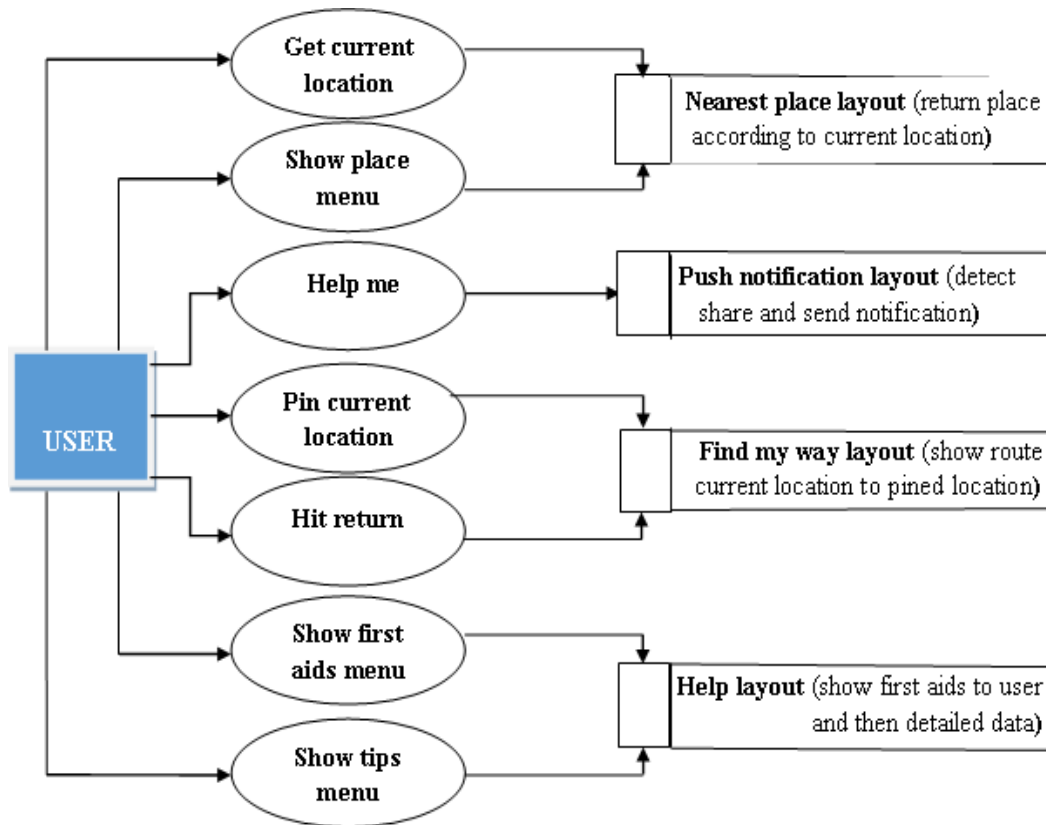


Fig 1. First level data flow diagram

This application allows the user to access nearest locations like hospital, pharmacies, police station and fire station in the Show place menu by using Nearest place layout. It will fetch places according to the current location. It also allows users to send a predefined message to predefined contacts by sending push notification by using Push notification

layout. Further it allows the user to pin a location and find the way back. Show route current location to pinned location using navigation by using Find my way layout. Finally, it allows the user to get basic health tips and first aids information by using Help layout.

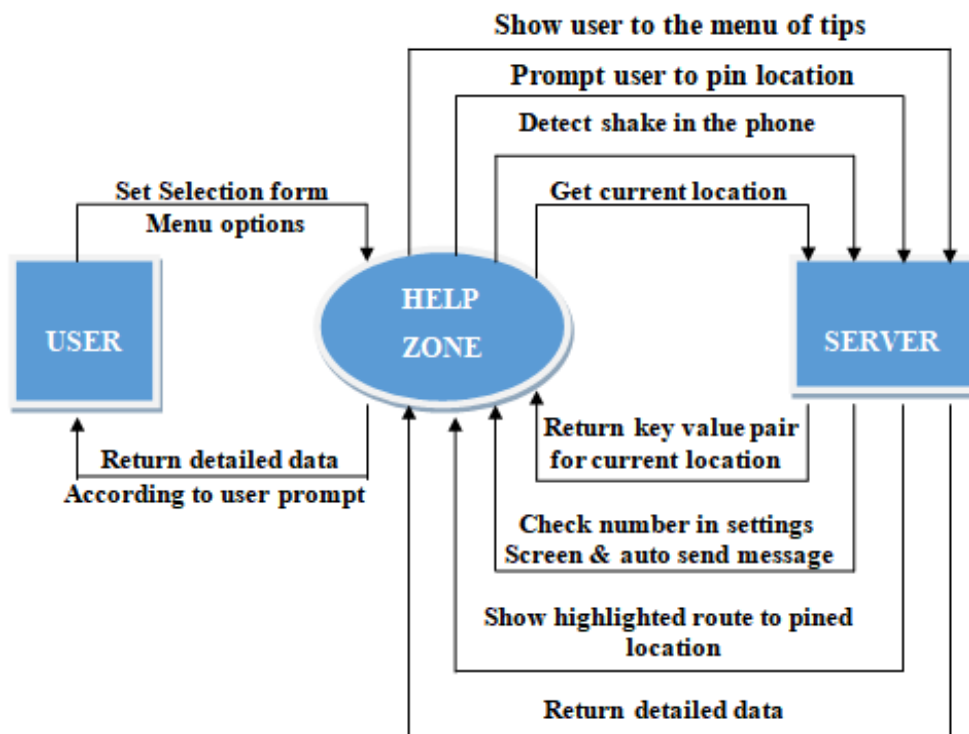


Fig 2. Second level data flow diagram

Here user can set selection from menu options and server will find and get the location from particular selection and return places according to the current location. It also allows users to click on Help Me button to send a predefined notification to predefined contacts and server will check friends in Friends Screen and auto send notification to trusted friends. Further it allows the user to pin a location server will show highlighted route to pinned location using Navigation. finally, it allows the user to get basic health information tips and server will return data to the user.

## 5. Feasibility Study

An analysis and evaluation of a proposed system to determined in this section. The key consideration in feasibility study is

- Operational feasibility
- Technical feasibility
- Economical feasibility

Operational feasibility - The proposed Application will provide the faster accessing the information in Help Application. The user interface is very friendly and hence can easily be understood. It does not require any training.

The user will find the application easier to operate. All the details can be updated by providing the necessary conditions that should be satisfied for the same.

Technical feasibility - The technology needed for the implementation of the proposed application is easily available.

## References

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Economical feasibility - The hardware and software are easily available and we propose to use OSS for the implementation. The only cost is, the cost incurred in the development of the Application which is not more as compared as the benefits provided.

## 6. Advantages of proposed system

Following is the list of advantages of the proposed system.

1. The user is able to find the nearest Hospitals and its details.
2. The user is able to find the nearest Pharmacy and its details.
3. The user is able to find the nearest Police Station and its details.
4. The user is able to find the nearest Fire Station and its details.
5. The user is able to send automated message with current location in case of distress to three present phone numbers by just shaking the android handheld device.
6. The user is able to navigate to the person who is in need of help.

## 7. Conclusion

Our application will help the smart phone users in during panic by providing the basic functionality to handle the situation. This app allows the user to access nearest locations like hospitals, pharmacies, police stations and fire stations is also allows users to send a predefined message to predefined contacts by push notification The user interface is intuitive and self-descriptive.