

Helping: Homeless Refugee and Protection of Women Through Mobile Application

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Abstract

This paper discusses about which will help the refugees and homeless people to get their needs (foods, shelter, and clothes) at the time of disaster. This shows the sources available in their current location. This also helps the women protection in refugee camps and other areas. And refugee health is diagnosed. The users can first aid and they can prevent the health problems. And the women and other peoples can stay away from getting infected by the disease. They are diagnosed through online in which the health provider provides the information and prescription for the disease and the victim can be taken to the nearest health care centers. When contacting the health provider this contacts the nearer health care center.

Keywords: Humanitarian, Women Protection, Medical, Food, Clothing.

I. INTRODUCTION

In this paper, the social apps which are user friendly and the user can communicate their needs through the mobile application or through the helpline systems and SMS. This project creates a lifeline system for the registered user. The application navigates the user to meet their needs in their area through the application with the help of Google maps. In this generation everyone has Smartphone. The person who can't afford a smartphone has an ordinary phone through which they can communicate the helpline by calling the number. Then the women protection is done using through the monitoring of blood pressure and then if the blood pressure goes high then the phone starts recording video if not then the mic of the phone acts as the sensor and calculates the frequency of the screaming voice. If the women scream the sound is calculated in hertz if it reaches the certain limit then the particular area cops are alerted with the exact location and then the nearby citizens and the victim's friend or parents are alerted through the SMS which shows the exact location of the victim.

The homeless people do not fulfill their needs and their health conditions are not in good condition. This can be overcome using this application the user must be registered and then

He/she can directly communicate with the health provider this will help in first aid and the homeless people can avoid such diseases.

This paper describes how to improve social resiliency to disasters by bridging the gap through the app. In this paper, we discuss hackathon technology for the development of the homeless people. Two projects are been developed.

II. BACKGROUND

The goal of the tool is to provide service for the homeless refugees, people, and women protection. Mostly the homeless people have cellular phones. If they can't afford a smartphone they have a basic model phone. At the time of disaster, most of the people loss their properties such as housing, clothing, food and medical support [1]. In this situation, this application could help them to get their basic needs such as food, clothes, housing and medical.

If the people are registered their mobile number to the service they can be informed about their subscribed pack. If the person is subscribed for food information then the user gets the notification about the service.

Then the subscriber is informed about the service before an hour so that the subscriber can reach the destination at the time. The location of the food providing place is sent through SMS or else the subscriber can make a call to the emergency number and they will provide the service [1]. First, the automated system gives the details if it's not clear then the user can go for a human to speak.

In the same way, all other services work. If the user has a smartphone then he is guided to the location with the help of Google Maps API. The location of the provider is shown with the symbol and the user is directed to that specific location.

The subscriber needs to enter the details at the time of registration to this service. The user should provide name, phone number and the location (pin code). A website is also created for the users they can log in with their login id and password. The user can freely register for this service.

In medical, there are two portals such as user and the provider portal [2]. The user details are stored in the database. It can store more user details. The database has the user name, phone number, location details and their subscribed service.

Then the women protection is done using the same application. If the women are subscribed to this service the danger zones are shown in colored regions in Google Maps. The user is notified when she enters the danger zone. The alternate safe route is also shown. If she is under attack then the phone notifies the cops and nearby citizens and the victim's family is informed of the victim's exact location.

III.SYSTEM DESIGN

The architecture of the system is shown below. And the reason for this architecture is that there are different operating systems such as android, mac, blackberry. To cover all of the operating system different software's are used in designing this software.

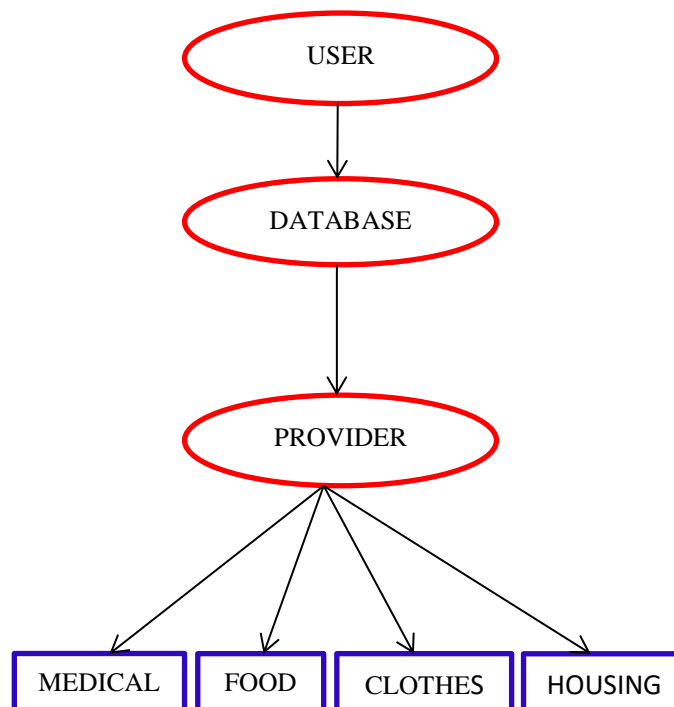


Fig.No1: System architecture

First, the user details are verified through the database and if he is a subscribed person then he is taken to the service provider. Or else the user is taken for the registration procedure.

The technologies used in design and implementation of this software are SQL Server, HTML/CSS, PHP, Phone Gap, JQuery mobile. This application is used to gather the requirements and the implementation.

A. Medical

In the medical, there are two portals (i.e.) one end is the user and the other end is the health provider portal [2].

- User portal
- Provider portal

As to measure the ECG of a person which is to be known then it can be done using the system known as CUEDATA [5]. This is the mobile cardiac monitoring incorporates a design of an integrated electrocardiogram (ECG) beat detector, supported by the PDA version of the personal health of information management system.

i.User portal

In this, the registered user can log in to their id and they can contact the health provider for the first aid. Instead of taking the user directly to the health provider first the user is seen with text and they can select the appropriate symptoms about the patient or they can view a video on how to first aid the patient through the which are collected from the other sources.

If they couldn't understand they can directly contact the health provider directly. The application has 3 options in it as shown below. The figure 2 shows the outline of the application which will be the user end.

IV.Provider Portal

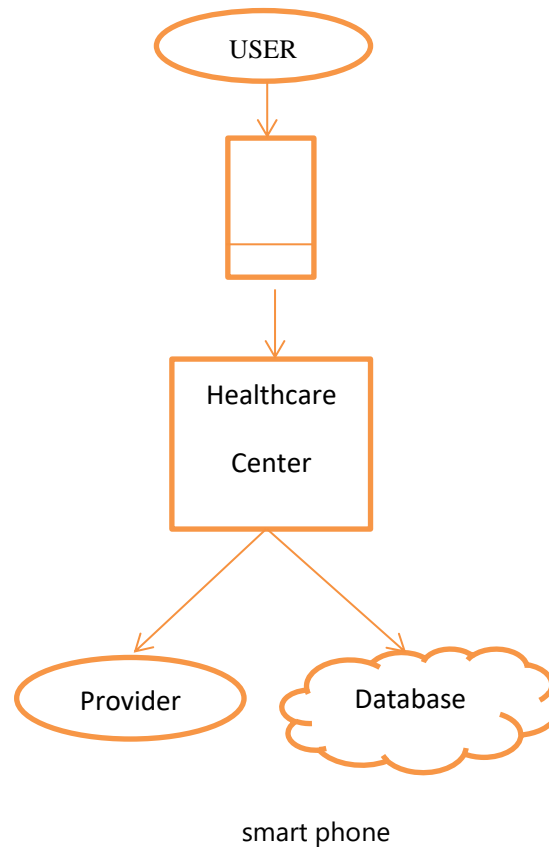
The provider has tablet or smartphone. The health provider says what should be done to the patient for the first aid. The health provider has a database that the registered user can only contact.

The user requests for the location of the health care center that is near and then the user is directed to the nearest healthcare center and the user is connected to the nearest healthcare only.



Fig.No:2 USER END

The provider portal works as shown in the below figure.



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Fig.no:3 PROVIDER END.

B. Food and Clothing:

In this, the user is shown with the SMS which contains food providing location and time. The user is notified before an hour as it makes the person to travel in the public transit. The clothing is also provided to them. The services are only available in their registered pin code. On smartphones according to their desired location detected by Google play services they are directed to the specified location in which they can get their needs.

In the food and clothing the present location of the user is detected and then the user is directed to get their needs. The present location is detected using the Google maps API

C. Housing

The housing for the refugees is done after the time of disaster. In this, the tents long for only 12 weeks that is not sufficient for the refugees to live [3]. As it would take for the people more time to recover from the disaster impact.

At this situation, the housing is done with some additional features. The housing must be stable and durable. The HHI House design it includes the PVC pipes which is used to build the house as the victims can live inside it.

D. Women Protection

When a woman is under surprise attack she can be protected. The woman has a wristband known as neo reflective pulse flux [6]. This is used to measure the blood pressure of the women. It is connected to the cellphone through wireless such as Wi-Fi or Bluetooth. When the user is in danger then the cops, nearby citizens and victim's parents are notified of the exact location. What will happen if the wristband is removed from her hand? At this situation, the mic in the phone acts as the sensor which acts as the scream detector. Then the phone starts recording video.

To avoid these attacks the user location is updated repeatedly [4]. The Google Maps are used when the user enters danger zone she gets notified. These locations are in white, yellow and red.

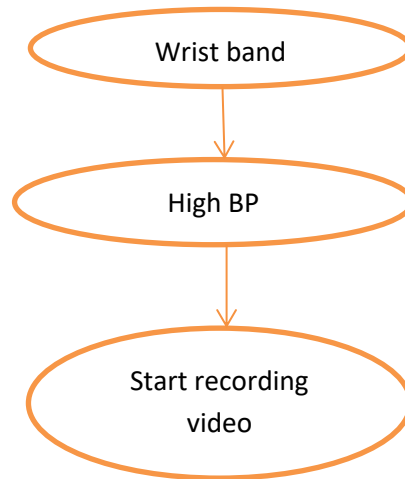


Fig.no:4 video recording

WHITE – Safe.

YELLOW - Medium threat.

RED – High threat.

These locations are collected from cops case files as this would help in measuring the safety and marking the threat type in Google Maps. When the user enters danger zone then the mobile notifies and also shows alternative safe route.

The location is identified by the cellular tower range. And the users can also mark the zone by pinning it. If the user marks a fake zone then the user is blocked from this service.

CONCLUSION

Women protection and helping homeless refugees are helped and they can fulfill their needs. Our project specifically focuses on women protection and helping homeless people. This project is a step in the direction of providing food, healthcare, food, housing, clothes, and women protection.

FUTURE ENHANCEMENTS

The future enhancement of this project involves the implementation of services at the time of disaster there might be a signal loss in the mobile services which makes it difficult for the users to fulfill their needs.

REFERENCES

1. Natalie Linnell, Silvia Figueira, Neil Chintala, Lauren Falzarano, Vincente Ciancio. "Hack for the homeless: A Humanitarian Technology Hackathon". IEEE Global Humanitarian Technology Conference 2014.
2. Silvia Figueira, Kelsey Dedoshka, Katie Le, Kaitlin Kirasich. "Youth Street Connect- Helping Homeless Young Women". IEEE Global Humanitarian Technology Conference 2014.
3. Stuart Ohlson, Robert Melich "Designing and Developing Sustainable Housing for Refugee and Disaster Communities". IEEE Global Humanitarian Technology Conference 2014.
4. A. Figueira*, D. Nunes*, R. Barbosa*, A. Reis*, H. Aguiar*, S. Sinche*, A. Rodrigues*, V. Pereira*, H. Dias*, C. Herrera*, D. Raposo*, J. Sa Silva* and F. Boavida* "WeDoCare: A Humanitarian People-centric Cyber Physical System for the Benefit of Refugees". IEEE Global Humanitarian Technology Conference 2016.
5. Roshan Issac, Sreevas Sahasranamam, "Tele-Consulting Through Rural Health Centres for Tribal Community- A Case Study from Wayanad". IEEE Global Humanitarian Technology Conference 2014.
6. Grantham Pang, (Senior Member, IEEE), and Chao Ma "A Neo-Reflective Wrist Pulse Oximeter". IEEE 2015