InstaMed+: Medical Assistance System for Accidents

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Abstract - *Long latency is there in case of emergency and responders to arrive may be a primary reason behind magnified fatalities in serious accidents. A technique to scale back this latency is to scale back the number of your time it takes to report an accident. Smartphone's are present and with network property are excellent devices to right away inform relevant authorities regarding the prevalence of an accident. We have a tendency to be coming up with a mechanical man application which can be helpful for peoples to assist different peoples WHO are laid low with incident like accident. It'll facilitate U.S.A. to save lots of the accidental person. Project is style for an accident detection system. The accident detection systems inform the police room regarding the accident by clicking icon of accident. The appliance recommend close hospitals and police stations list in application. FIR is generating by police office and sends copy to the revered hospital system. Revered hospital scan user QR Code and supply treatment per info. Conjointly send emergency SMS to user's pre register mobile variety*

Key Words: **GPS, mobile interaction, QR-Codes.**

1. INTRODUCTION

A QR code may be a kind of barcode that may hold a lot of info than the acquainted kind scanned at checkouts round the country. The "QR" stands for "quick response," a relevance the speed at that the big amounts of knowledge they contain is decoded by scanners. They were unreal in 1994 in Japan and an initio used for chase shipping. Because the code is simply decoded by the camera of sensible phone, this technology is progressively accessible to the typical person. Rather than chase automotive elements and packages, the codes is accustomed store info of any user. A QR code acts as a link embedded within the globe, desegregation it with the virtual pc world. The event of transportation has been the generative power for people in general to possess the best civilization on top of creatures within the earth. Automobile features a nice importance in our existence. We have a tendency to utilize it to travel to our work place, detain bit with our friends and family, and deliver our product. However it also brings disaster to U.S.A. and even can kill U.S.A. through accidents. AN accident may be a deviation from expected behaviour of event that adversely affects the property, living body or persons and also the atmosphere. Move is primary concern for everybody. Recent advances in automaton square measures one amongst the foremost widespread sensible phone

platforms at the instant, and also the quality is even raising. In addition, it's one amongst the foremost open and versatile platforms providing software package developers quick access to phone hardware and wealthy software package API. Smartphone technologies square measure creating it potential to reduce the death rate that square measure happening by vehicle accidents in an exceedingly a lot of transportable and price effective manner than the standard in-vehicle solutions.

2. EXISITING SYSTEM

Existing system contain lots of defect. In existing system user need call police station and hospital individually. Then police station registers FIR. Unless and until police station finish its process hospital can't proceed further. After finishing FIR process, hospital admits the injured person. There isn't any automation system for accident.

3. DISADVANTAGES OF EXISITING SYSTEM

- Existing system is lengthy and time consuming.
- Lengthy paper work process.
- Need collaborative working of police station and hospital.
- Risk to life increases as in result to increase in death rate.

4. PROPOSED SYSTEM

Propose system collect user data at starting and generate QR code for on an individual basis. When accident, user take a photograph and send to nearest station house suggested by system along side location data additionally inform to the closest hospital. When station house permission, system mechanically generate FIR alongside accident image and send to the hospital. Hospital sends feedback to user and when planning to accident location nurse scans the user QR code to induce user data instantly. And supply treatment to the user.

5. ADVANTAGES

- Instant recommendation of nearest police station and hospital.

- Required time for documentation is reduced.

- It keeps the user's information confidential.

- It will send an alert message automatically to the emergency mobile no. of user relatives.

6. SYSTEM DESIGN

Fig -1 shows the system architecture of proposed system. The overview of our system is described below.

Process Flow:

- User will register into our application and a QR code will be generated at the time of registration. This QR code will contain user's personal and medical data.

- Whenever an accident will occur, any user who is registered in this app will click the picture of scenario and will upload it in our application.

- Using GPS, our application will take the exact location of user and will suggest the nearest Hospital and Police station.

- User will select the Hospital and Police station and send an alert message to the hospital and police station simultaneously.

- Once requesting nearest station house FIR is generated by station house. Station house sends one copy to hospital. At the same time Hospital will send medical help to user's exact location using GPS.

- Hospitals scan victim's QR code and supply treatment consistent with data.

- If Hospital or Police station will not respond within a given threshold time then that request will automatically forward to next nearest hospital and police station.
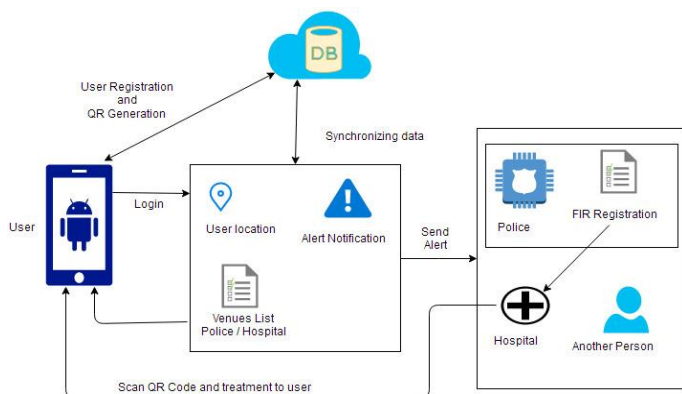

Fig -1: System Architecture

7. ALGORITHM

Step by Step:

- Determine parameter K = number of nearest neighbors

- Calculate the distance between the query-instance and all the training samples

- Sort the distance and determine nearest neighbors based on the K-th minimum distance

- Gather the category y of the nearest neighbors

- Use simple majority of the category of nearest neighbors as the prediction value of the query instance.

Pseudo Code:

Classify (X, Y, x) // X: training data, Y: class labels of X, x: unknown sample

For i=1 to m do

Compute distance d(Xi, x)

end for

Compute set I containing indices for the k smallest distances d(Xi, x).

return majority label for {Yi where i E I}

8. RESULT ANALYSIS

Fig -2(a) shows the Home page of our android application. Here a new user can register or registered user can login.
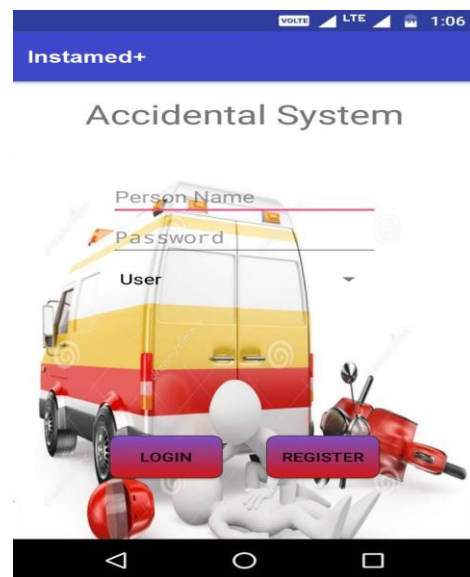

Fig -2(a): User Home page

Fig -2(b) shows the Registration page. Here our application will ask whether the user is normal user, Hospital or Police. Here we are showing the normal user registration page. Whenever a new user will register, our application will take required information including user's personal data and medical data.
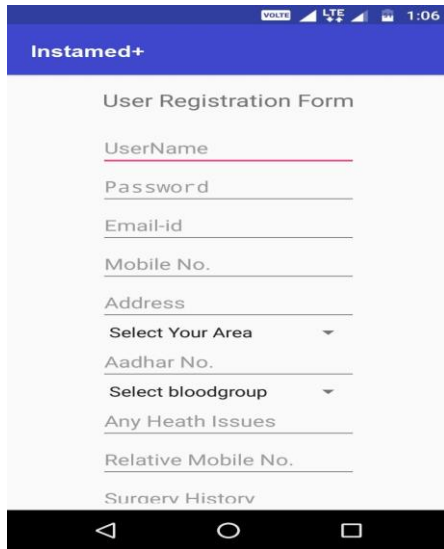

Fig -2(b): User Registration page

Fig -2(c) shows the QR code generated after registration of user which will be helpful to access user's data at hospital or police side. This QR code stores the data provided by user during registration process. This QR code is highly encrypted. Whenever user will update their data respectively a new QR code will be generated.

Fig -2(c): QR Code generated after Registration

Fig -2(d) shows the QR code which is generated after registration. This will be scanned only by hospital or police to access the information related to user.
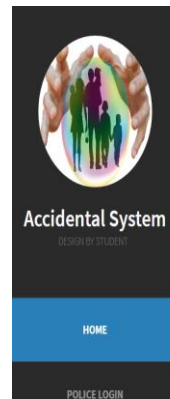

Fig -2(d): During QR Code scanning

Fig -2(e) shows the Police registration page. Whenever a new police station will register in our application, our application will take all its required information and will provide a unique username and password to each police station.
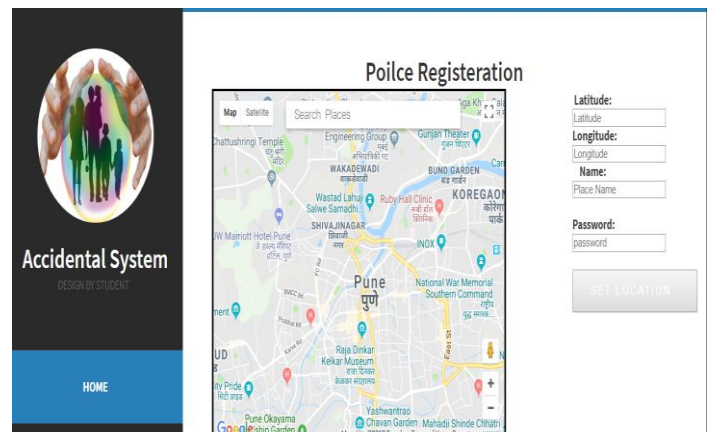

Fig -2(e): Police registration page

Fig -2(f) shows the FIR generation report which will be generate whenever a user will send an alert message to police station. A copy of this FIR report will be sent to hospital.

Fig -2(f): FIR generation report

Fig -2(g) shows the Hospital Registration page. Whenever a new Hospital will register into our system, our application will provide a username and password to that Hospital.
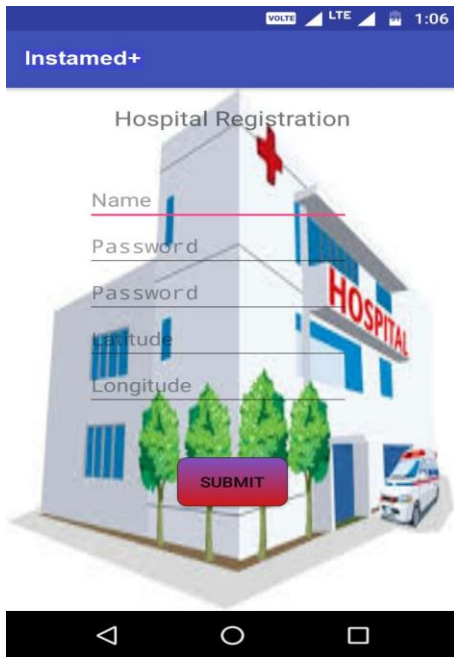

Fig -2(g): Hospital Registration Page

Fig -2(h) shows the exact location of the victim to the police and hospital by using GPS. It will help the hospital to send medical help to victim's location very fast.
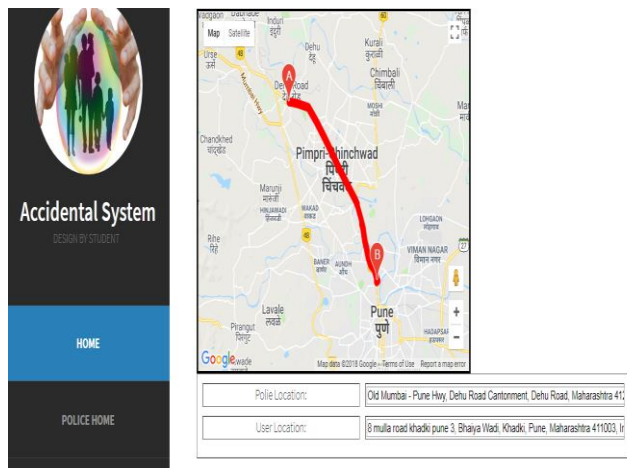

Fig -2(h): Victim Navigation

Fig -2(i) shows the send alert request page. After selecting the nearest hospital and police station, user can send an alert message to respective hospital and police station.
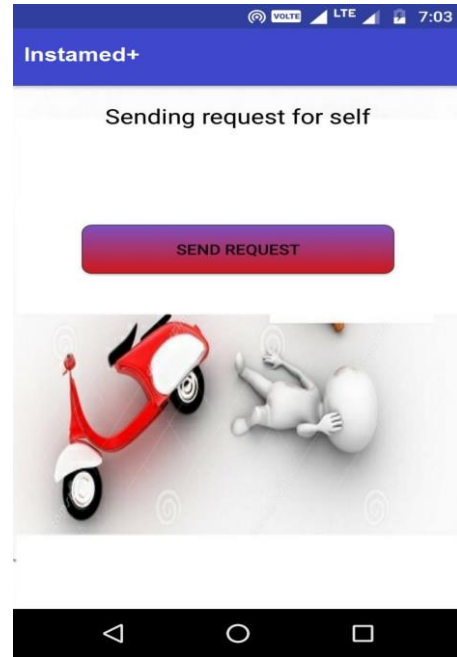

Fig -2(i): Alert request page

9. CONCLUSION

Results have shown that the application developed is ready to properly fulfill its purpose inside a brief fundamental measure. Our result shows that the entire time needed to perform all the tasks, as well as the delivery of AN SMS with the accident details, followed by providing the close police headquarters and hospital details and causing them an alert message of the user accident with accurate location of user, is taking much of short fundamental measure.

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