

Convenient Address Book Management

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Abstract: E contacts project makes your contact list available all time and can be accessed from anywhere. project can be helpful to save your precious memory. It's just not only providing you to save contacts information, but more than that. This e contact will also act as optimizer, who will responsible to perform other functions to make your information updated and accurate. Using this e contact project, you can save unlimited contacts and make necessary processing based on your requirements. Its smart filter system will also allow you to import contacts from networking sites and saves their information's to the respective fields automatically. This E Contact project also provides you the facility to make backups of your contact lists and not only that, it will also able to create a text file of all your contacts, so that you can keep separately for your convenience. Apart from these, e contact project will also able to find duplicate contacts and take necessary operations based on your requirements.

KeyWords: e-contact; assessment; multiple; effective

1. INTRODUCTION

Being in a situation where a person is in trouble or if he sees someone in his vicinity in a trouble like an accident – fire, vehicle etc. and he is looking to contact the nearest rescue service to request help to get out of this tough situation without any hassle? Any normal human would try to contact the required rescue service for help or he would like to let his contact know about his situation so that they might be of help. In this case, it is quite possible that the person is very tensed and is in a shock and he cannot communicate effectively to explain his position. To avoid such a situation, this application is the best solution.

The main idea behind this paper was to create an application that could be of great use in times of emergency. The goal is to help set an official guideline to assist Emergency Response Teams in their efforts to save time and lives in the event of an emergency and help people in times of emergency. There would also be functionalities that would allow quick access to all relevant information that would be required at the times of an emergency. Thus, with only one click on your screen, we can send SMS alerts to all your saved contacts, call rescue workers. Thus, this application could be a LIFE SAVER in times of a calamity.

2. RELATED WORK

In current emergency dialer, user can only dial emergency numbers such as 100, 101, 102, etc. It's not so that the user

can use it to call his/her family members or relatives in case of an emergency. Existing system does not allow us to save our contact information online and also to make files of contact data which is saved to our mobile phone and save to external memory for future reference. Using the current app, we cannot able to create backup of our contacts and even cannot make further advanced filtration like duplicate contact list and their missing fields information which is required to be filled. There was no facility to make multiple operations at a time by just one click. Contact list cannot be categorized based on user defined rules or using system defined rules. Using this e contact project, you can import contact from various social networking sites and even from your email contact lists. This system will automatically enter the necessary data, by which you can easily save to the server or to your mobile phone in offline mode.

3. PROPOSED SYSTEM

In this paper an application is proposed that could be of great use in times of emergency. The goal is to help set an official guideline to assist Emergency Response Teams in their efforts to save time and lives in the event of an emergency and help people in times of emergency. The application has functionalities that would allow quick access to all relevant information that would be required at the times of an emergency. Thus, with only one click on the screen, user can send SMS alerts to all your saved contacts, call rescue workers. Thus, this application could be a LIFE SAVER in times of a calamity. Even people with speech disorders can use this application since they are just few taps away to communicate the problem.

Functional requirements define the fundamental actions that system must perform. Functional requirements of the application are text messaging to 911, Blood bank feature, Hospital Services, Fire Stations, Police Stations, Emergency Contact, SOS.

- Text Messaging

With only one click on Phone screen, SMS is sent to alerts to all the person's saved contacts, call rescue workers. SMS will contain the address of the location the person is in and brief detail about the incident the person is affected with.

- Blood Bank Feature

This Feature will enable a user to send a message to all his contacts regarding the place where he is located and the type

of blood that is required. This also sends out nearby Blood Bank locations to the emergency contacts.

- Hospital Services, Fire Stations, Police Stations, Emergency Contact, SOS

There are other features like the broadcast blood donation request that broadcast bulk SMSs to all the emergency contacts in the user's database.

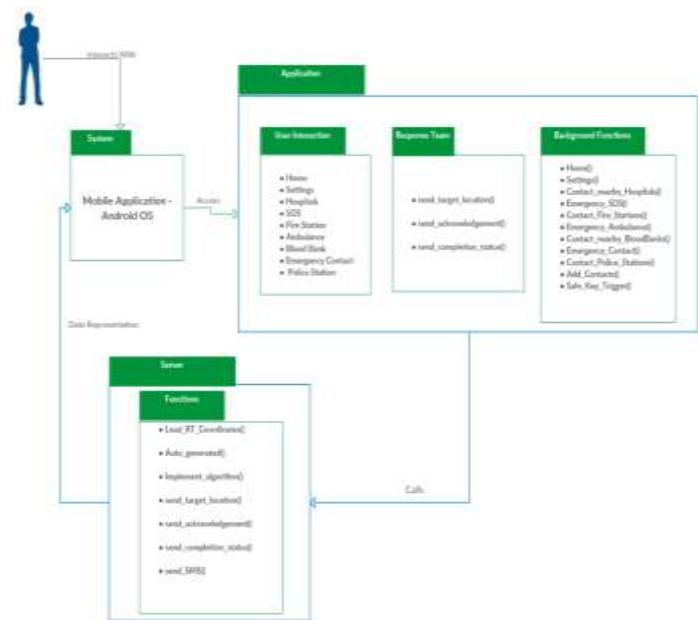
There would also be functionalities that would allow quick access to all relevant information that would be required at the times of an emergency.

Performance requirements define acceptable response times for system functionality.

- The load time for user interface screens shall take no longer than two seconds.
- The log in information shall be verified within five seconds.
- The application should never be unresponsive as it's affiliated to rescue network.
- All the features should yield proper results.
- Synchronization of contact list with your phone in one click.
- Easy process of automatic fill up while importing from networking sites.
- System can easily find duplicate contact details and take necessary actions.
- E-Contact project allows you to make multiple operations at a time.
- Easy user interface to take advantage of e contact project.

4. LOGICAL DATABASE REQUIREMENTS

The logical database requirements include the retention of the following data elements. This list is not a complete list and is designed as a starting point for development: User's Name, User's Address, User's Contact number, User's relatives, User's emergency contacts, Location of the probable Incident, Details of nearby Rescue centers, hospitals, fire stations, police stations, etc. Default Emergency short messages.



V. DESIGN

Whenever you install the application for the first time, it is mandatory to enter your details and register yourself by providing your name, contact number, blood group, emergency contact name and emergency contact number.

An option to update your and your emergency contact details is provided in the application under the "Settings" option. In case you want to give your phone to someone; they can update their corresponding details instead of uninstalling and installing the app again.

Feature to contact the emergency contact number is provided under "Help" option.

Feature to contact rescue hotlines is provided under "SOS" session.

Option to send a request for blood group by sending an SMS to all the contacts, which includes the current location of the user, blood group required is possible with the "Blood Bank" feature.

Nearest hospitals, Ambulance Service, Fire Station, Police Stations available can be searched using the corresponding options provided in our application.

6. TESTING PROCESS

- Unit testing:

After writing of code, all the modules like Hospital, SOS, Fire Station, Police, Blood bank and emergency contacts were separately checked whether the result generated is correct or not.

- Integration testing:

Integration testing focuses on unit tested modules and build the program structure that is dictated by the design phase.

- System testing:

System testing tests the integration of each module in the system. It also tests to find discrepancies between the system and its original objective, current specification and system documentation. The primary concern is the compatibility of individual modules. In various devices like mobiles, tablets and various PCs entire system was tested to check working properly or not.

- Acceptance Testing:

This testing is done to verify the readiness of the system for the implementation by execution of functional tests, performance tests and stress tests in order to demonstrate that the implemented system satisfies its requirements.

7. RESULTS AND OUTPUT

Though there were glitches to make the maps run on a mobile, we tried our best to make the software efficient and useful to the people. We are able to show the maps, map the location of emergency services in the google maps. We managed to complete the project within the deadline and mostly importantly – the working version. As far as we tested, we did not encounter any issues and the app runs absolutely fine on any smart device with API Version ≥ 23 .

8. CONCLUSION

The future improvements in project based E Contact app include getting the hotline numbers dynamically based on the location in which the user is present. With this feature incorporated in the app, people outside India can easily use this app. Further, a feature to send a text message to emergency services can also be introduced into the E Contact app.

REFERENCES

[1] Shrabanee Swagatika, Amiya Kumar Rath, Prasant Kumar Patnaik , "Markov Chain Model And PSO Technique for Dynamic Heuristic Resource Scheduling for System Level Optimization of Cloud Resources", ARPN Journal of Engineering and Applied Sciences. 13(7):375-393,2018.

[2] Shrabanee Swagatika, Amiya Kumar Rath, "SLA-aware task allocation with resource optimisation on cloud environment" International Journal of Communication Networks and Distributed Systems, InderScience Publisher. (In Press)

[3] Shrabanee Swagatika, Amiya Kumar Rath, SDN-Cloud: A Power Aware Resource Management System for Efficient

Energy Optimization. International Journal of Information and Computer Security, InderScience Publisher. (In Press)

[4] A Aparajita, Shrabanee Swagatika, Debabrata Singh "Comparative analysis of clustering techniques in cloud for effective load balancing", International Journal of Engineering and Technology(UAE) 7 (3.4) 47-51(2018).

[5] Debabrata Singh, Shrabanee Swagatika, "Analytical Study of SEP & M-SEP in Wireless Sensor Network with Heterogeneous Platform", International Conference on Recent Innovations in Electrical, Electronics & communication Engineering - (ICRIECE-2018).

[6] A Aparajita, Shrabanee Swagatika, Debabrata Singh, "Hierarchical and Partition Based Clustering Techniques Comparison in Cloud Computing", International Conference on Recent Innovations in Electrical, Electronics & Communication Engineering - (ICRIECE-2018).