

# E-Care

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**Abstract**— Now-a-days an application that fulfills only a single purpose is not much helpful to the community as compared to those with multiple functionalities. In a world with a great population and an advanced technological era, there will always be the occurrences of crimes, damage to public properties, a patient in urgent need of blood, and other such issues that require a quick way of communicating them to those who can solve it. Although there are many systems developed previously to deal one of these issues at a time, no efficient system has yet been invented that could deal with not just one, but many such difficulties in a single place. Thus in an attempt to achieve something similar an android application is developed by the team that deals with blood requirement, complaints, and a few other issues.

**Key words:** Android Application, Blood Donor, Complaint, Municipal Corporation, Tracking, GPS, Crime Report

## I. INTRODUCTION

To fulfil the purpose of providing solutions to issues related to human sufferings, leads to the development of an innovative android application that provides multiple services which can assist in an emergency situation with a way to communicate the current situation to those who can help.

One such issue is the requirement of blood for a patient. To deal this situation the application provides the facility to find an appropriate donor among all the registered users on this application with a simple and efficient user interface and user experience. Imagine old people going out of the house and getting lost. A method to track them wherever they go is a good idea when necessary.

Another issue that this application addresses is the problem with the process of communicating a problem related to the municipal corporation. A simple way is introduced to inform the authorities on any unusual act related to their department, in which the citizens are the conveyers and the authorities might act based on this, much quicker than the other modes of communication. A few other services include: Providing evidence and reporting a crime scene to police, a list of emergency numbers of selected countries, and a simple function that sends an emergency message to user-defined numbers.

## II. EXISTING SYSTEM

All the available systems are either applications that solve a single categorical issue, or it still works on the old paper-work methods due to inefficiency of new proposed systems over traditional methods. Thus, this proposed system provides a solution to the problem by combining solutions to some issues that has a tendency for improvements based on user experiences.

## III. PROPOSED SYSTEM

The purpose is to provide multiple services which can assist in an emergency situation in a single application. Some points are listed below.

- 1) Friendly login and authentication environment.
- 2) Availability of blood donor in critical conditions might get easy.
- 3) Register complain with image or video evidence.
- 4) Send current location to the family or dear ones with single touch.
- 5) Get the emergency numbers based on Country.

## IV. SYSTEM REQUIREMENTS

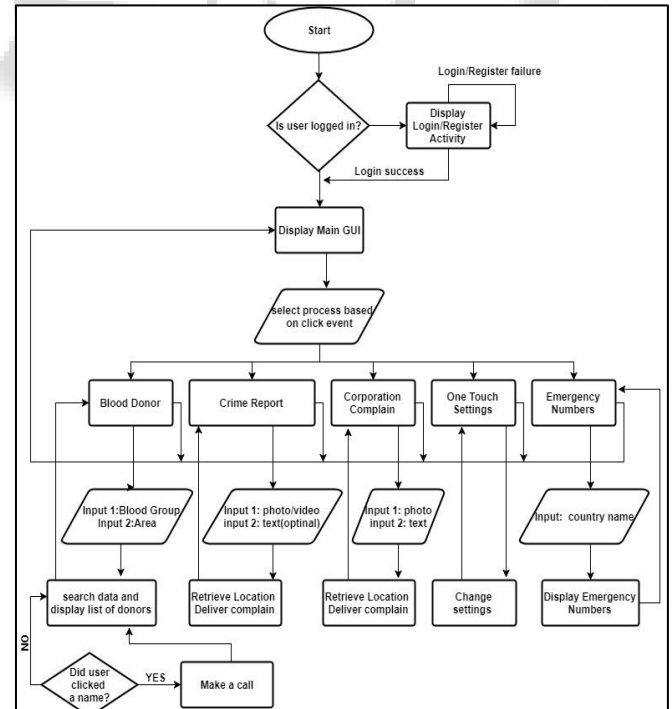
### A. Software Requirements:

- Software: Android Studio, Genymotion.
- Operating System: windows/Linux.

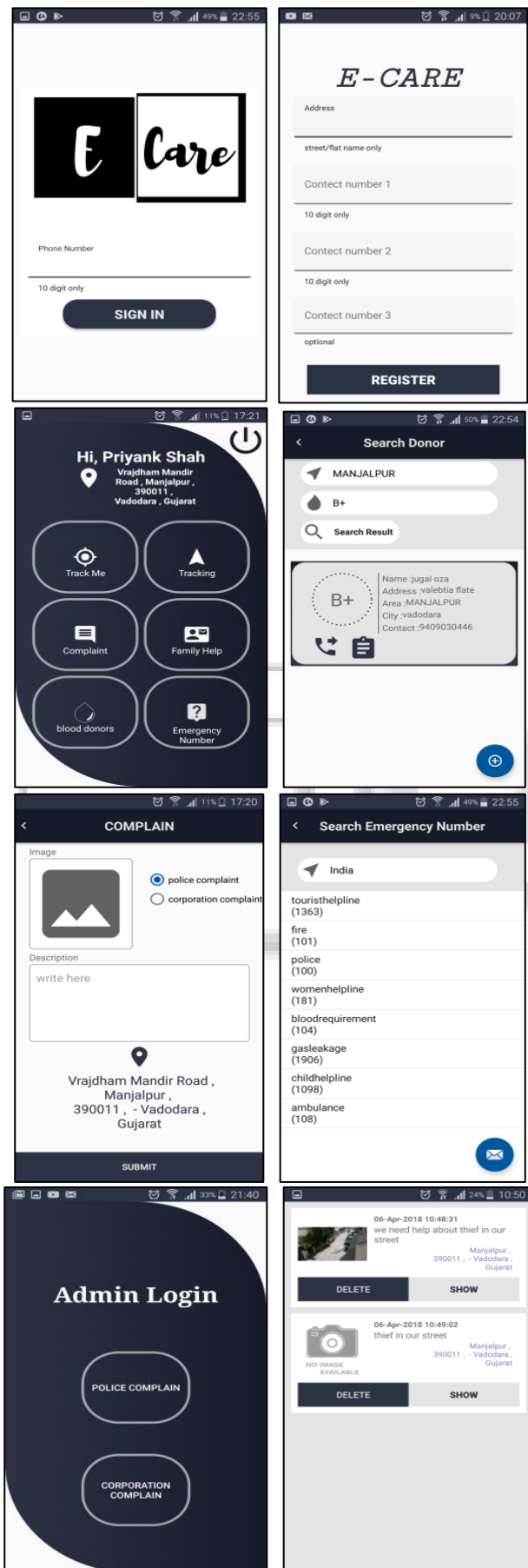
### B. Hardware Requirements:

- Processor: Intel core-i3 or higher
- Minimum memory: 1 GB
- Memory required: 8 GB

## V. SYSTEM FLOW DIAGRAM



## VI. SCREENSHOTS



## VII. FEASIBILITY STUDY

### A. Technical feasibility

This project is developed for android device users which requires basic understanding of the system and can be understood quickly by them.

Nowadays everyone is using android and the user interface is very simple and user friendly thus, this is technically feasible project.

### B. Economic feasibility

Android studio being a freeware is a big advantage to the economic feasibility of the project. The application is developed without any software cost. The only economic factor to this will be for future development and maintenance.

### C. Implementation Feasibility

The implementation of the project is feasible as it only requires understanding of android studio that uses java as for back-end and xml for front-end.

### D. Proposed system usage:

The first usage is for all the users who need the available facilities mentioned before by registering to this application.

Second usage is for the police department and the municipal corporation departments to monitor the complaints and respond to the same appropriately.

Finally, the last usage is for the developers to use the collected data for analysis and thus, improving the system according to user responses and data analytics.

## VIII. FUTURE ENHANCEMENTS

More features can be provided to the *Complain* module such as, *Online FIR* (if feasible), notification updates. Data duplication (i.e., redundant complaints) can be resolved for the *Complain* module. Data analytics can be provided to determine the popularity of different services, how many people actually helped in blood donation, which areas require how many blood donors, and many more. Current modules can be enhanced to provide better *UI* and *UX*. Additional services such as women safety can be added. Data encryption algorithm can be used to secure all the data on the *Firebase*.

## IX. CONCLUSION

The proposed system is an Android application that provides a medium for finding blood donors, reporting crime, improving the city, getting emergency numbers, and inform about any emergency in a snap of a moment. Hence, this system might ease life of people by helping them in difficult times. It provides some relief in a crucial time of emergency and all of this at one place. There are many other services that can be added to improve this application in many ways that can further provide better and new functionalities. Also as mentioned in limitations and future enhancements, a lot of work needs to be done to make this application more attractive and user-friendly.

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