

Abstract

Utilizing mobile devices for emergency management has gained much interest from governments in the past few years. This interest is mainly due to the high penetration rate of these devices among people and well-established, nation-wide coverage of mobile telecommunications networks in many countries around the world; making these devices a feasible means to send alerts or warnings message using short message services (SMS) or warnings for a specific geographic area (cell broadcast services (CBS)) in case of an emergency. As there are quite a number of barriers for investing in and establishing dedicated emergency management solutions in the developing countries, developing emergency solutions by the government of a developing country using its existing mobile telecommunications networks is argued to be feasible and viable. Nevertheless, a better understanding of the deployment of such mobile emergency solutions in context of developing countries is still in its genesis. In particular, the fit between the mobile phone platform and emergency management, delivery models of emergency alerts and warnings through mobile devices, the role of the private telecommunications providers and nongovernment organizations in such solutions, and the non-technical requirements of mobile government emergency solutions are all still not well articulated. A qualitative research approach was carried out to explore these matters of interest. Leximancer software tool and content analysis were used to extract themes of this study. The findings confirm mobile phones as a convenient approach for a developing country to develop its national emergency solution, but a set of requirements toward such development is still critically needed to be met.

The latest technology trends of today's era have transformed the world into a digital world. In recent years, the emergence of smart phones has changed the definition of mobile phones. Phone is no longer just a communication tool, but also an essential part of the people's life. These smart phones operate using a customized operating system. One of the commonly used among them is android. This system is highly efficient and contain a lot of open source applications. There applications attract millions of users towards smart phone. Various application added unlimited support in people's life. They perform a lot of their functions using mobile app.

The general adoption of mobile devices and its wide network coverage made it possible to make emergency calls virtually everywhere, even in the absence of a valid contact. This application is for deaf or dumb people who can take action when they are in emergency. It is *Icon-based mobile application, SMS message to the emergency center.*

1. Introduction:

Technology is constantly changing. Society as we know it depends on this fact. That which we take for granted today would have been the stuff of science fiction as little as fifty years ago. In fifty years time, we will doubtless be excited, perturbed and baffled by yet more new developments. In the early years of the twenty first century, it is computers and the Internet that

have captured the public imagination, and found their way into not just the working environments, but increasingly into the domestic spaces.

In this modern society, if we are not capable to cope up with these changes than we are not going to stand or survive anywhere in this technical world. Today there is no place for errors, so as to make a system more effective and efficient we need such technology where error prone chances must be least.

The internet's arrival and its subsequent popularity in world have made online trading possible in world. Which is about the online purchase and sales of shares, one of the extremely popular means of trading. Both beginner and experienced traders and investors in India are milking this opportunity by trading online in futures and options, stocks and currencies worldwide. Such opportunities are in the form of reduced brokerage and commissions, better broking services etc. This application is intended for the deaf peoples, make it easier for them to call the ambulance without having to ask for help from someone near them.

The application contains the site identification and contains the emergency situation that the patient is exposed to, whether it is a description of symptoms or disease name.

The person's information is already recorded in the application and the information of another person, like his family or friend, so the hospital can communicate with his family easily. Also where is his primary residence, and other information.

2. Why this app for Deaf People:

As we know, the deaf people cannot speak and hear but they can see, that's why I am designing this application for them. When any deaf person is in emergency and have any problem he can see the app icon related to their disease and can call emergency to ambulance by sending the message to emergency ambulance or to his family or friends. Their complete address is sent by this message also. This application has other two features of agent and assistance also.

3. Present System Analysis and Model Study

3.1 Definition:

System Analysis is the detailed study of the various operations performed by the system and their relationships within and outside the system. Analysis is the process of breaking something into its parts so that the whole may be understood. System analysis is concerned with becoming aware of the problem, identifying the relevant and most decisional variables, analyzing and synthesizing the various factors and determining an optimal or at least a satisfactory solution. During this a problem is identified, alternate system solutions are studied and recommendations are made about committing the resources used to design the system.

3.2 Proposed System

This application is aimed to help the deaf people who cannot speak and hear. They can use this app easily by touching icon and he can get rescue from other people or emergency hospital.

3.3 Advantage:

- This app help deaf people in emergency.
- They can send message by touching icons related to their problem.
- They also can send their location where they are present.
- It provide facility to deaf people to contact in case of emergency.
- It provide user friendly Ui.

3.4 Significance of Study:

The system provide help to deaf people to contact with emergency center in case of emergency. Deaf person can send message and their complete address through this app. This application has two other functionality : agent and assistance.

3.5 Feasibility Study

A feasibility analysis usually involves a thorough assessment of the operational (need), financial and technical aspects of a proposal. Feasibility study is the test of the system proposal made to identify whether the user needs may be satisfied using the current software and hardware technologies, whether the system will be cost effective from a business point of view and whether it can be developed with the given budgetary constraints. A feasibility study should be relatively cheap and done at the earliest possible time. Depending on the study, the decision is made whether to go ahead with a more detailed analysis.

When a new project is proposed, it normally goes through feasibility assessment. Feasibility study is carried out to determine whether the proposed system is possible to develop with available resources and what should be the cost consideration. Facts considered in the feasibility analysis were.

- Technical Feasibility
- Economic Feasibility
- Behavioral Feasibility

3.5.1 Technical Feasibility

Technical Feasibility deals with the hardware as well as software requirements. Technology is not a constraint to type system development. We have to find out whether the necessary

technology, the proposed equipment have the capacity to hold the data, which is used in the project, should be checked to carry out this technical feasibility.

3.5.2 Economical Feasibility

This feasibility study present tangible and intangible benefits from the prefect by comparing the development and operational cost. The technique of cost benefit analysis is often used as a basis for assessing economic feasibility. This system needs some more initial investment than the existing system, but it can be justifiable that it will improve quality of service.

Thus feasibility study should center along the following points:

- Improvement resulting over the existing method in terms of accuracy, timeliness.
- Cost comparison..
- Estimate on the life expectancy of the hardware
- Overall objective

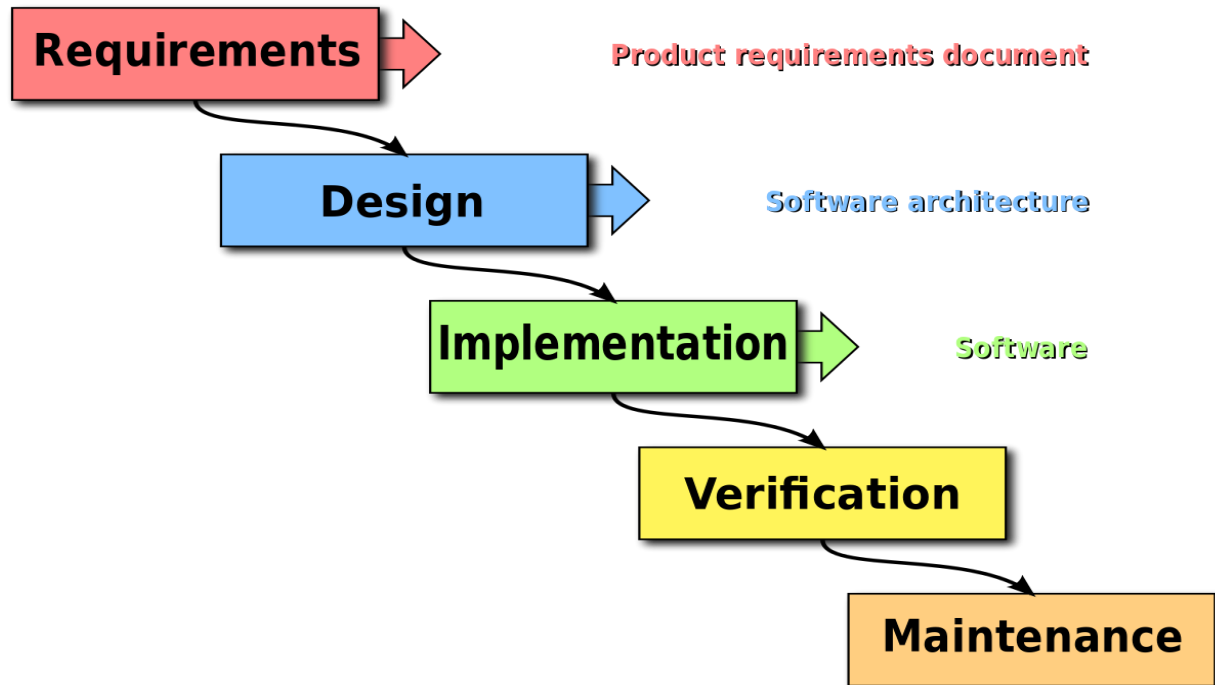
Our project is economically feasible. It does not require much cost to be involved in the overall process. The overall objectives are in easing out the requirement processes.

3.5.3 Behavioral/ Operational Feasibility

This analysis involves how it will work when it is installed and the assessment of political and managerial environment in which it is implemented. People are inherently resistant to change and computers have been known to facilitate change. The new proposed system is very much useful to the useful to the users and there for it will accept broad audience from around the world.

4. Waterfall Model

The waterfall model derives its name due to the cascading effect from one phase to the other as is illustrated in below figure. In this model each phase well define starting and ending point, with identifiable deliveries to the next phase. Note that this model is sometime referred to as the linear sequential model or the software life cycle model. The water fall diagram is basically divided into following 5 models.



- Requirement
- Design
- Implementation
- Verification
- Maintenance

- **Requirement:-**

In the requirement phase their is need to create the application is specified. What is the need of the system is defined. What information to be feeder to create the application will come under the requirement phase?

- **Design:**

After the requirement phase the next phase is the Design phase where the application is designed according to the forms and other modules created. This phase is much important phase because it will structure the layout of your application.

- **Implementation:**

Implementation is the process of having a system personnel phase check out and put new equipment into use, train users, install new application and construct any file of data need to use it.

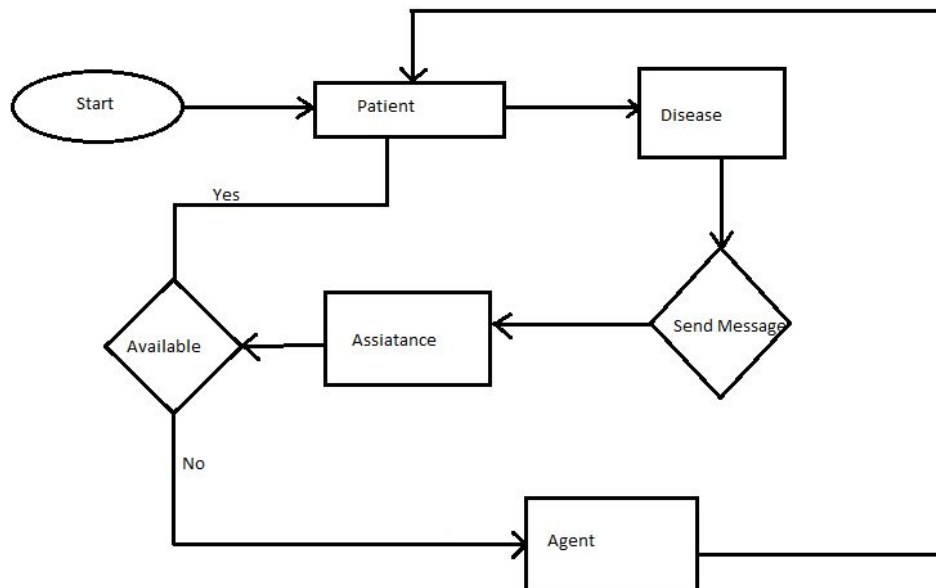
- **Verification:**

After the whole application is being the developed the main phase is the verification phase where the whole application tested and verified to check the whole application.

- **Maintenance:**

After the successful verification of the application the main phase is the maintenance phase where the application needs to be maintained for its successful operation in future.

5. Architecture:



This application is for deaf and dumb people who can not speak and hear. The patient can send message and its location when they are sick and have any disease. The patient will send message to any person or emergency center to assistance. If any assistance near the patient is available the it will rescue the patient, if not available then the agent rescue the patient. All the information of patient will be stored in database

5.1 Tool:

Android Studio

Xamp server

5.2 Language:

Java (for functionality)

Xml (for layout designing)

5.3 Framework

Step 1. In an emergency, the user runs the application and touches the icon most similar to the symptom.

Step 2. The application receives the user's location information from the mobile phone.

Step 3. SMS messages containing your location and symptom information are sent to the emergency center.

5.4 GPS

Embedded GPS in mobile phone.

6. Conclusion:

In this study, a discussion was made about the idea of using mobile phone services for emergency management in developing countries, taking into account the economic barriers for investing in dedicated emergency management solutions in such countries. Related definitions were first presented in regard to the concepts of emergency and emergency management, and an overview was provided about the main mobile phone technologies that exist today which theoretically can be utilized in the domain of emergency management.

43% 8:17 pm




Register the Patient Code

Patient Code

PW

REGISTER

43% 8:17 pm



Register the Patient Code

Patient Code

Ok I hello

1 2 3 4 5 6 7 8 9 0

q w e r t y u i o p

a s d f g h j k l

↑ z x c v b n m

!#☺ ☺ English (UK) . ↵

43% 8:17 pm

← Send Message

Enter Message


Type Number

SEND

LOCATION

43% 8:17 pm

← Symptoms



What is Your Symptoms?

Dizzy


Fever

Heart Problem

Injury

44% 8:16 pm

Emergency Call Application




What is Your Position?

Patient

Assistent

Agent

43% 8:17 pm



You Are an Agent