

# AMBULANCE SERVICE APP

Swapnil Ghule, Ganesh Shinde, Sourabh Chile, Somesh kamble, Rajnikanth Palwe

<sup>1</sup>Student, Computer, Marathwada Mitra Mandal's Polytechnic, Maharashtra, India

<sup>2</sup>Student, Computer, Marathwada Mitra Mandal's Polytechnic, Maharashtra, India

<sup>3</sup>Student, Computer, Marathwada Mitra Mandal's Polytechnic, Maharashtra, India

<sup>4</sup>Student, Computer, Marathwada Mitra Mandal's Polytechnic, Maharashtra, India

<sup>5</sup>Professor, Computer, Marathwada Mitra Mandal's Polytechnic, Maharashtra, India

## ABSTRACT

Operating Ambulance is much confronted as compared to carriage. Every fundamental demand spare facilities such as biomedical accessories, nurses, doctors and many more. So every fundamental need to be handled with human interaction, and its extremely difficult to brutalize it. As Ambulance utility per day is very less compared to carriage, one driver will be advance to maintain multiple vehicles based on the Accessories. So a driver app attached to a special vehicle will make no sense for operators.

In this project an android app namely Ambulance mainframe System has been defined. There is most common rescue service 1122 which is guided through phone calls but it's a separate idea in itself in which one can book an ambulance using an android smart phone.

The request for an Ambulance formed by the Boosted App is directly refresh on assemble mainframe office, where 24/7 server will automatically inquiry the request figure coordinates and response back to the user and it's several nearest station. That supplication is in progress and from which station ambulance will come. All this process and mainframe will handle practically. The whole antiquity will maintain on server side and also on user side. When task is done then situation on app and sever side will be update. It develops for plate humanity in the situation of emergency by using absolute and accurate results. As we monitor the word 'Ambulance' the first thing comes to mind is the salvage process. In the modern era where the population is increasing day by day, people feel cramped and frightened due to danger bearing of road accidents, some known and unknown endemic which required the quickly remedy but unfortunately due to couple of minute delay some important lives are lost.

**Keyword :** - Application, Google Maps, Andriod, Maintainability.

## 1. Introduction

As we monitor the word 'Ambulance' the first thing comes to mind is the salvage process. In the modern era where the population is increasing day by day, people feel cramped and frightened due to danger bearing of road accidents, some known and unknown endemic which required the quickly remedy but unfortunately due to couple of minute delay some important lives are lost. Therefore, to give the quick first-aid to the patient rescue system of every country should be maintained and trained well for the prosperity of human beings and to avoid the dying which occur due to delay in relief process. So our first goal is to guard the ambulance service system first by making android application for the relief process. It will provide all the rescue centers to stand on one staging through ambulance service application. In compact of any smash we call an ambulance for help via call. There are many alignment which provide ambulance services in Pakistan. But there is a problem with these alignment that they did

not work well-organized. So that, when there an accident shake people call for ambulance of explicit alignment like 'Eidhi', 'Cheepa', 'Rescue 1122', 'FIF' etc. There can be possibility that the ambulance of that alignment will not prepared near the place of accident. So this application will help people to find ambulance near them of any alignment. We have intended an android app namely Ambulance Mainframe System (AMS).

User will suitably sign up in the app with his mobile and CNIC number for evidence so that trivial person will not use this app without any reason. In case of emergency he will request for an ambulance made from his phone that will be directly updated on a compact main office where 24/7 server will naturally check his request, calculate coordinates and will check the occasion of ambulance in very nearby station, if there is no ambulance available in that station, then server will inquiry up next near station and response back to the user that request is in progress and how much time it takes to grasp, and from which station. All this process and mainframe will be handled morally using defined algorithm. The whole history will retain on server side. When task is done then stage and number of ambulance will be renew on sever.

## **2. REQUIREMENT GATHERING**

The Admin and developer will be responsible to control the system. The Admin can do the processes of Modification, Cancellation and some more other issues which can affect the system. The admin can also take the decision of altering the app design and can also trade from the developer to extent some more internal features of app which can be easy to used.

The developer will be executive of upgrade the app features as well as the requirements of user and the developer will also be executive for maintaining the app through finding the bugs.

### **2.1 Business Problem:**

The objective of this app is to provide a user friendly places. In the modern technology, there is no app available for phone users in Pakistan, which helps them to apply for an ambulance

### **2.2 Solution Approach:**

There should be an android based ambulance system through which we could improve ambulance system. So we have tries to enhance the capability of a team system by linking an android app with based on web platform in which user can check its request's status and admin maintains thing and view user's work. It will be a free of cost app.

### **2.3 Project Description:**

There should be an android based ambulance system through which we can improve ambulance system. So we have tried to enhance the capability of a team system by linking an android app with web based platform in which user can check its request's status and admin maintain things and view user's history. It will be a cost free App.

The admin or developer will participate in the design and testing of the new Ambulance Team System. There will be participants in the integration testing and system testing as well as end-users testing for the following modules: Authentication, Authorization, and some more other services. There participants will also supporting to end user training classes.

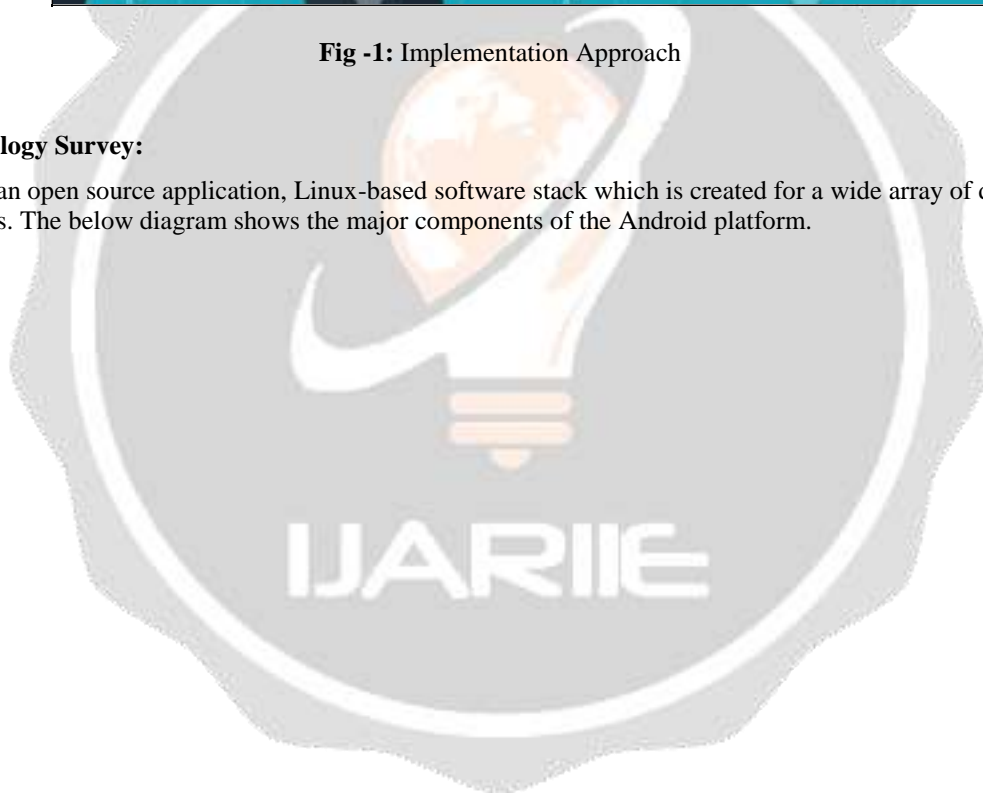
The technical team will be responsible for the app development and testing as well as they will also be capable of finding the errors and unnecessary things to terminate them.

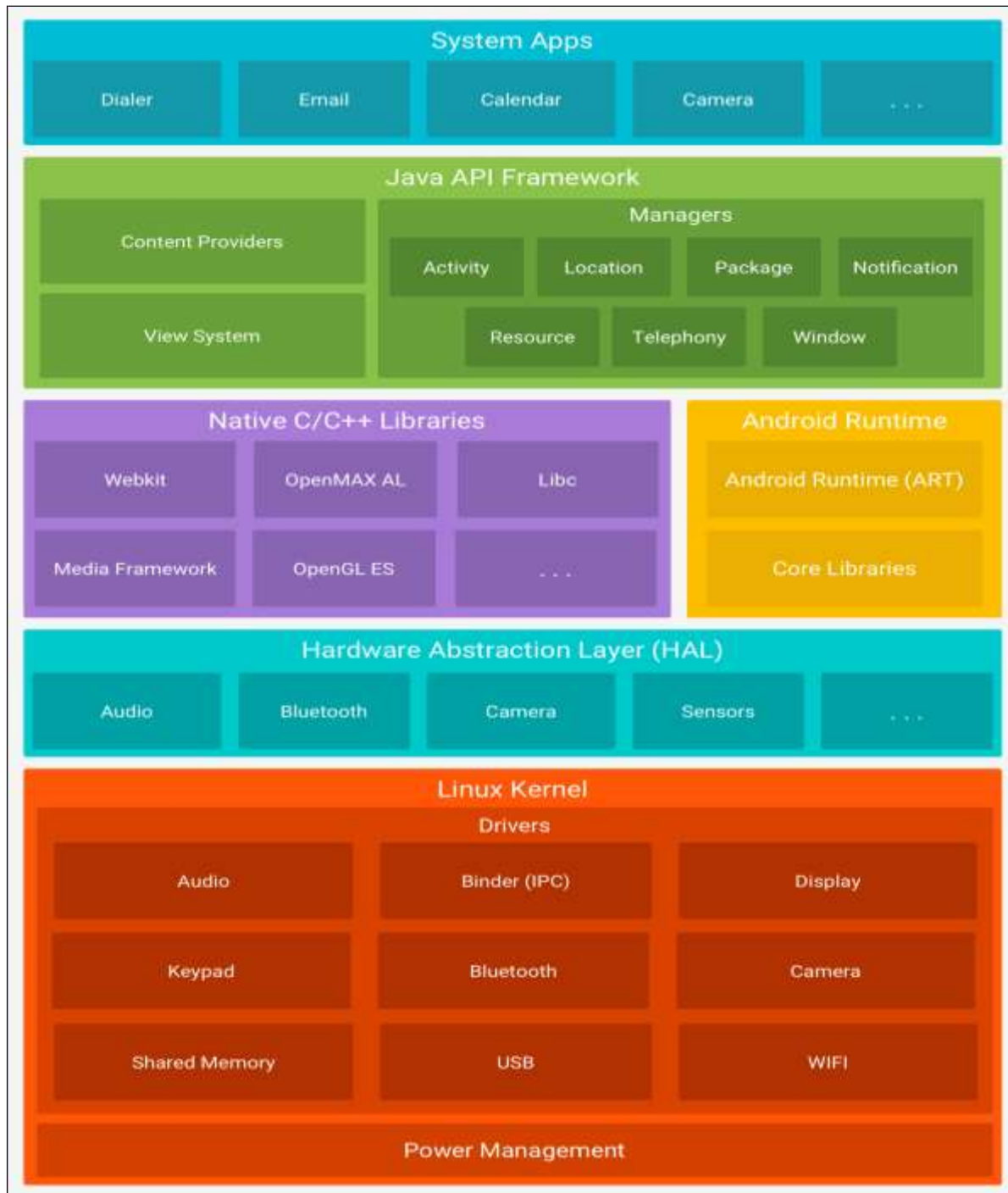


**Fig -1:** Implementation Approach

**2.4 Technology Survey:**

Android is an open source application, Linux-based software stack which is created for a wide array of devices and form factors. The below diagram shows the major components of the Android platform.





**Fig -2:** Android Platform

**2.5 Android studio:**

Android Studio is the official IDE for Android development, and includes everything you need to build any type of Android apps.

The new app publishing format, the Android Studio, is a more efficient way to build and release your app. The Android App Bundle lets you to more easily deliver a great experience in a very small app size, allowing for the huge variety of Android devices which are available today in the market. It is very easy to switch. You do not need to refactor the code to start benefiting from a small app.



Fig -2: Andriod Studio

2.6 Design Approach:

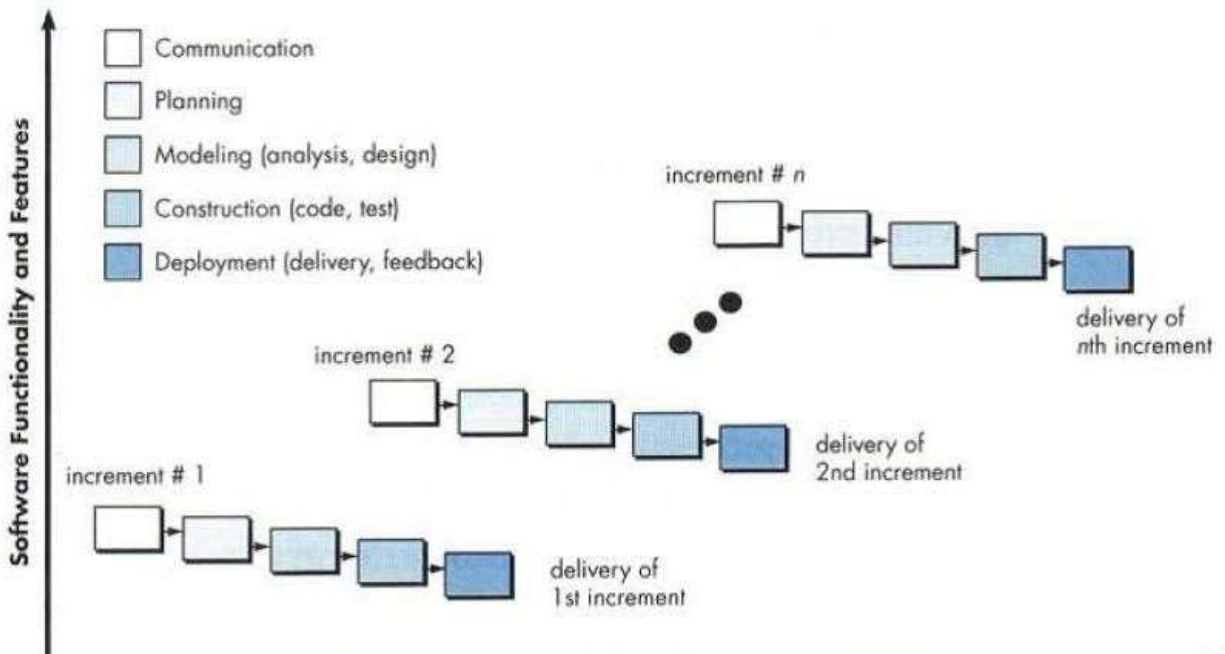
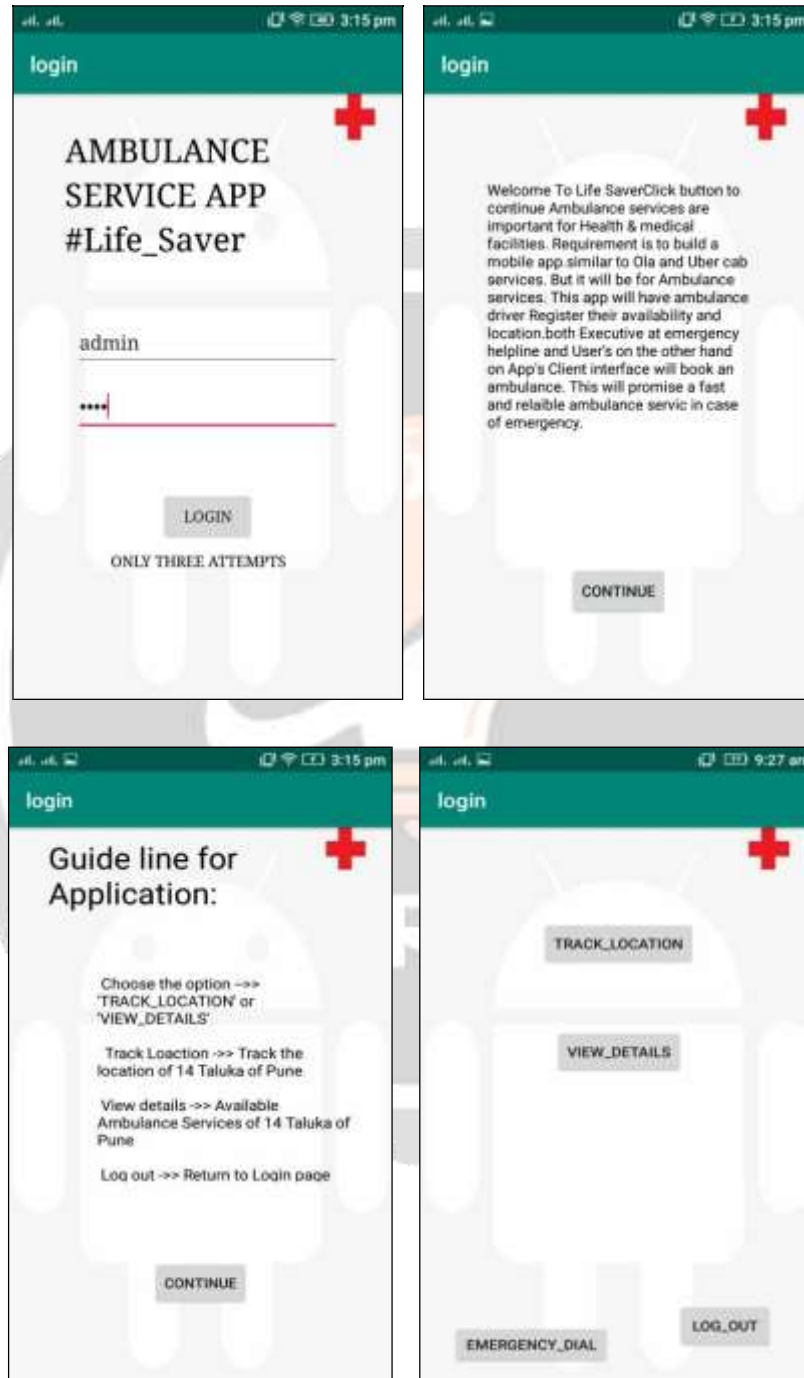


Fig -4: Incremental Model

In incremental development the system is partitioned into subsystems or increments. The releases are defined in the beginning with initial function and then adding functionalities with subsequent releases. Incremented development slowly builds up to full functionality with subsequent releases. This model combines the elements of waterfall model in an iterative fashion. The model applies linear sequences in a staggered manner as the calendar time progresses. In

this model first increment is the core product or primary function. The core product implemented undergoes detailed evaluation by the user which becomes advantages for future increments. The feedback also addresses future modifications which are included in the next increments for additional features and functionality. He process is repeated till delivery of each increment till the final product is delivered





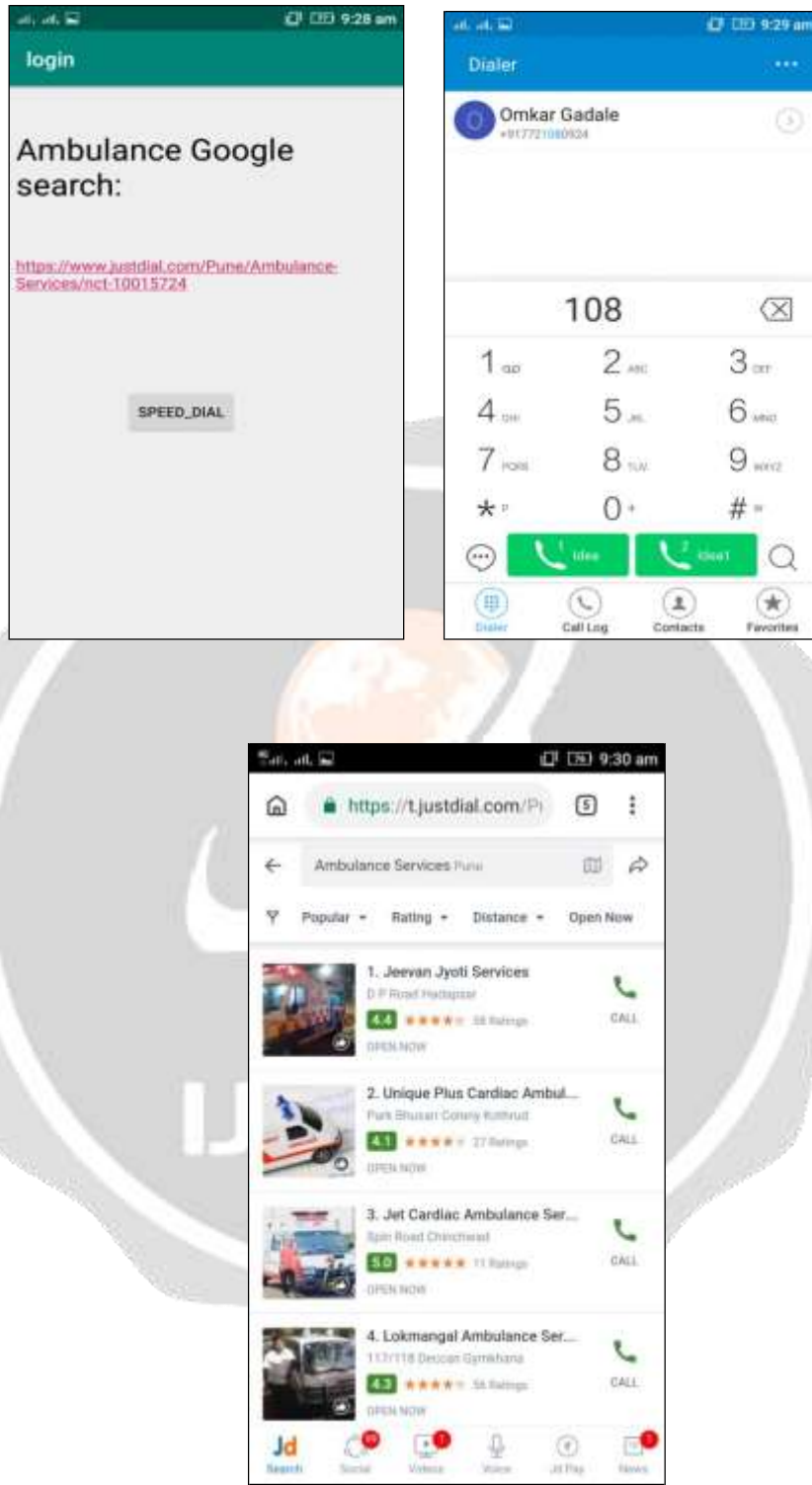


Fig -4: Application Design



#### 4. CONCLUSIONS

It is beneficial for the users in case of any type of emergencies as it saves time which gets consumed in searching for the ambulance by other means. All information about the hospitals provided helps in getting the proper hospital which is suitable for the patient's treatment. Sending health information about patient to the hospitals helps the hospital staff to get all the things ready required for the treatment. Here the patient does not have to wait in any case. All hospital's information is directly provided with the help of maps and hence there is no need to visit the particular hospital's website for any information. Live information will help for better medical procedures which helps in saving patient's life in an very effective way. Future scope for this Ambulance Service's app project can be planned by using some of the similar concepts used in this project. In order to save lives of people there are many other factors which can be taken into consideration. Traffic is one of the most serious issue faced in day to day life which can create delay for the ambulance to reach the hospital on time. Traffic police can help in this situation if they will be able to know the ambulance's current location in advance. For the same, traffic police will be also provided with the application which will show the current location of ambulance through GPS. Hence, traffic police will be able to clear the traffic prior in order to make way for the ambulance.

#### 5. REFERENCES

- [1] Barbeau, S.J., Labrador, M.A., Winters, P.L., Pérez, R., and Georggi, N.L.: '\_Location API 2.0 for J2ME-A new standard in location for Java-enabled mobile phones\_', Computer Communications, 31, (6), pp. 1091-1103, 2008.
- [2] Cooke, R.: '\_The role and impact of transport on rural communities accessing the state health care system in south africa\_', rural health advocacy project, 2013
- [3] Phillips, A., Schroth, F., Palmer, G.M., Zielinski, S.G., Smith, A.P., and Cunningham. '\_Location-based services\_', Google Patents, 2010.
- [4] Siruma, A., Hornby, D., Srinivas, S. An Assessment of Maternal Health Issues in Two Villages in the Eastern Cape Province of South Africa. *Int. J. Environ. Res. Public Health* 2014, 11, 9871-9884
- [5] Junglas, I.A., and Watson, R.T.: '\_Location-based services\_', Communications of the ACM, 2008, 51, (3), pp. 65-69
- [6] Malusi, Y., and Kogeda, O.: '\_A mobile transport scheduling and coordination system for marginalized rural areas\_' pp. 10-13, 2013
- [7] DeLone, W.H., and McLean, E.R.: '\_Information systems success: The quest for the dependent variable\_', Information systems research, 1992, 3, (1), pp. 60-95