

Ambulance Car Service

Mr. Digvijay A. Patil¹, Bhushan S. Chopade², Shubham M. Kashid³, Aishwarya M. Kharche⁴, Shreya S. Narod⁵

¹*Project Guide, Information Technology, PESMCOE Shivajinagar, Pune.*
^{2,3,4,5}*Information Technology, SPPU*

Abstract: Each private and government service has its own contact number for ambulance services. Various NGOs provide ambulance services that people don't know about. It is very difficult for one person to call all these numbers and call an ambulance. So, we thought of developing a web app that allows ambulance to get to the patient.

The system can communicate via telemetry with ambulances to transport patients to hospitals in case of emergencies or life-threatening health conditions. However, the high utilization of the service by a very small number of patients is cause for concern. Ideas to make emergency services efficient and user-friendly. A Web application is developed that allows users to request an ambulance and select the hospital they want to take the patient to. The application also provides an location access that automatically assigns the nearest ambulance based on the patient's location in the event of an emergency. This web application project will totally change the native way of calling un ambulance and it will be more efficient and reliable.

This reacts with just one tab on the button and it will send the notification of user's details and location. via GPS to nearby ambulance control center. By the use of smartphone technologies, it will help every smartphone user. The application collects location information from Global Positioning System (GPS) and uses Google S2 Library to plot details of the ambulances on the Google Map.

1.INTRODUCTION

1.1 MOTIVATION

The best way to save lives is to have an ambulance system which is efficient, effective and can be easily reachable & useable for the user. For emergency calls, one minute might mean the difference between life and death. That means each minute is important between the time ambulance is called when the ambulance arrives on location the scene is critical. Today there are a hundred ambulance services running yet unknown to

people. Every hospital has its own contact number for the ambulance. Every private and government Service has its own contact number for an ambulance. Different NGOs are having their ambulance services which are unknown to people. It becomes really hectic for a person to call all these numbers and ask for an ambulance.

So, we thought of developing a Mobile app in which the patient will get the nearest ambulance. This project is aimed at developing a Mobile based application named Medilift for Ambulance of any organization to save life of people. The application will be a Mobile based application. Everyone now a days has a mobile phone so any person in emergency can call an ambulance by just enable his location.

1.2 PROBLEM DEFINITION

Ambulances play a very important role when there is an accident on the road network or when there is a medical emergency and lives need to be saved. Manually booking an ambulance in an emergency can take up valuable hours as it is a time-consuming process. Additionally, delays due to traffic jams between the pick-up location and the hospital facility may increase the risk of death for victims.

The system proposed here helps to find an ambulance easily. The user must select ambulance size, pickup point, and hospital. In an emergency, users simply select a pickup location and destination, and the system will automatically book the nearest ambulance and hospital. After booking, the ambulance operator will receive a notification confirming the booking on her Ambulance drivers can view the pick-up location in Goggle Maps. The user receives the driver's contact details. Hospitals can also view reservation history. So, this ambulance booking app acts as a life saver in medical emergencies.

1.3 OBJECTIVE

The main objective of the project “Ambulance Car Services” is to provide fast ambulance service in emergency services than available system and save their time, where time is most important in emergency condition like accident and natural disaster.

1.4 SCOPE

This project aims to develop an online ambulance service system that will improve access to emergency medical services. The system will enable users to request an ambulance without having to physically make a call or visit a hospital. The system will be designed to be user-friendly, reliable and secure.

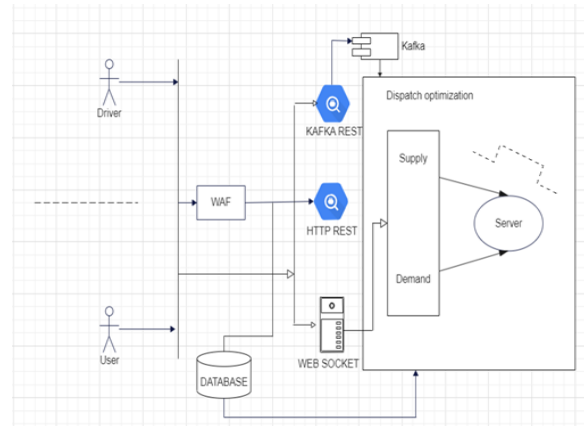
The scope of this project will include the following components:

1. Design and development of an online platform for requesting an ambulance. This will include the development of an interface for the user to input their details and location, as well as an algorithm for matching the user with the nearest available ambulance.
2. Integration of the system with existing emergency medical services. This includes establishing connections with the various ambulance service providers, so that the requested ambulance can be dispatched without delay.
3. Development of a payment system for the user to pay for the ambulance service.
4. Creation of a dashboard for ambulance driver to provide the service.
5. Creation of a secure system to store user information.
6. Testing and debugging of the system to ensure its performance and reliability.
7. Documentation of the system, including user manuals and technical guides.

2. SYSTEM DESIGNS

ARCHITECTURE DIAGRAM

2.1 Architecture Diagram



3. FUTURE WORK

In future to verify whether the ambulance is fully equipped with basic life support like oxygen cylinder, first aid etc. using object detection technology

Where Object detection is a computer technology related to computer vision and image processing that deals with detecting instances of semantic objects of a certain class (such as humans, buildings, or cars) in digital images and videos. Well-researched domains of object detection include face detection and pedestrian detection. Object detection has applications in many areas of computer vision, including image retrieval and video surveillance.

Android application for user side also to book ambulance form home for different emergency than accident.

If the system gets big the load is also get increased on the system to balance the load, we can use load balancer to balance load and smooth working of system.

4. CONCLUSION

After conducting a combined study of the papers and planning the project implementation, we are developing an easy and efficient system for fast ambulance. Currently, we are developing a web application for user which will take input from user and provide most accurate location with location access. In future, we would like to extend our scope of the project by making the model more efficient.

REFERENCE

- [1] ‘AmbuLens (Ambulance Service)’ by Poonam

Mishra 1, Nandita Pradhan², Neeraj Verma³, Nihal Sinha⁴ in Journal of Emerging Technologies and Innovative Research (JETIR)- June 2022, Volume 9, Issue 6 <https://www.jetir.org/view?paper=JETIR2206775>

- [2] 'Mobile-Based Medical Emergency Ambulance Scheduling System' by Bassey Isong, Nosipho Dladlu, Tsholofelo Magogodi in International Journal of Computer Network and Information Security https://www.researchgate.net/publication/309888533_Mobile-Based_Medical_Emergency_Ambulance_Scheduling_System
- [3] 'Ambulance Service' by Chavan Pragati, Thosar Mrunal, Panchal Sudha, Bandel Pooja in International Journal of Advance Research and Innovative Ideas in Education http://ijariie.com/AdminUploadPdf/Ambulance_Service_ijariie9757.pdf