24X7 Online Ambulance service OAS

(A Team you can Trust Anytime, Anywhere!)

Introduction

The condition of the Indian healthcare system can be gauged from the fact that there are only 25,851 ambulances for about 130 crore people across the country.
A large number of people die due to unavailability of ambulance services during an emergency, especially in rural areas. In 2016, about 30% of total deaths in road accidents occurred due to inaccessibility of ambulances Out of 25,951, a total of 9,305 ambulances are under Dial 108, 10,589 ambulances under Dial 102/104, besides 5,957 other patient transport vehicles.

The state-wise data indicates that Dial 108 services are not available in about 10 states and Union Territories which includes West Bengal, Bihar, Jammu and Kashmir, Arunachal Pradesh, Manipur, Mizoram, Nagaland, Tripura, Andaman & Nicobar Islands, Dadra & Nagar Haveli, Lakshadweep and Delhi.

India is experiencing a dire shortage of emergency medical services in urban and rural areas. The ratio of ambulances per person in the country is currently 3:1000. With a population of over 1.3 billion and the current rate of supply, the demand can never be catered to. A majority of the critical patients in an emergency lose their life due to lack of an ambulance to reach the hospital on time.

This begs the question as to what can be done to improve the patient transport system in India so that casualties are minimised. OAS is here to change the ingrained perception of non-reliability on ambulances.

Why OAS?

have you ever needed assistance but not known how and where to look for ambulances? Have you had to go through the pain and loss of family and friends due to this unknown? . In India getting an pizza in 20 minutes is possible but getting an ambulance is not . As In India there is lots of traffic due to which some time some casualties lost their life on the spot only .

Hiring an ambulance has always been stressful, not sure whether the hired ambulance will come and what time, can it locate the address swiftly, is it equipped to handle the patient etc., all these can compound the trauma, especially in a moment of crisis. OAS is designed with several unique features to provide respite in life and death exigencies

We at OAS, refused to let this problem be treated as an act of god anymore and decided to make finding an ambulance as easy as finding food or taxis these days.
Hence, OAS was developed, to assist lives. Using simple location based mapping, we seek to provide india with quality ambulances, easier and faster than before.

Objective of OAS?

- To develop cost effective ambulance services for transporting accident, emergency and other patients to appropriate referral medical

- To provide Reliable and professionally managed ambulance services available to people at a reasonable costs and on 24-hour basis.

- Considerable saving of time and effort of patients and their relatives to locate and get transportation services.

- Reduced expenditure on transportation

- Increased confidence of people in public healthcare services.

- Enhanced utilization of public health infrastructure..

- To save lives, reduce suffering and enhance quality of life, through the provision of accessible and responsive quality patient care.

- Reduction in response time to deliver health services to patients and to enhance the quality of patient care during transportation.

- To reach to those in need of urgent medical care in order to satisfactorily treat the presenting conditions, from the scene of the incidents to the point of definitive care

- The objective of OAS Initiative is to strengthen local capacity among ambulance providers and first responders to provide effective care during medical emergencies and mass-casualty disasters.

- To ensure all OAS activity remain patient focused and promotes the best patient outcomes.

- To main the nationally interperoable capabilities to ensure they remain safe and operational effective

- To provide a well governed, patient focused service that value for money and is delievered through a motivated workforce.
- To increase ambulance service preparedness for dealing with major and complex emergencies.
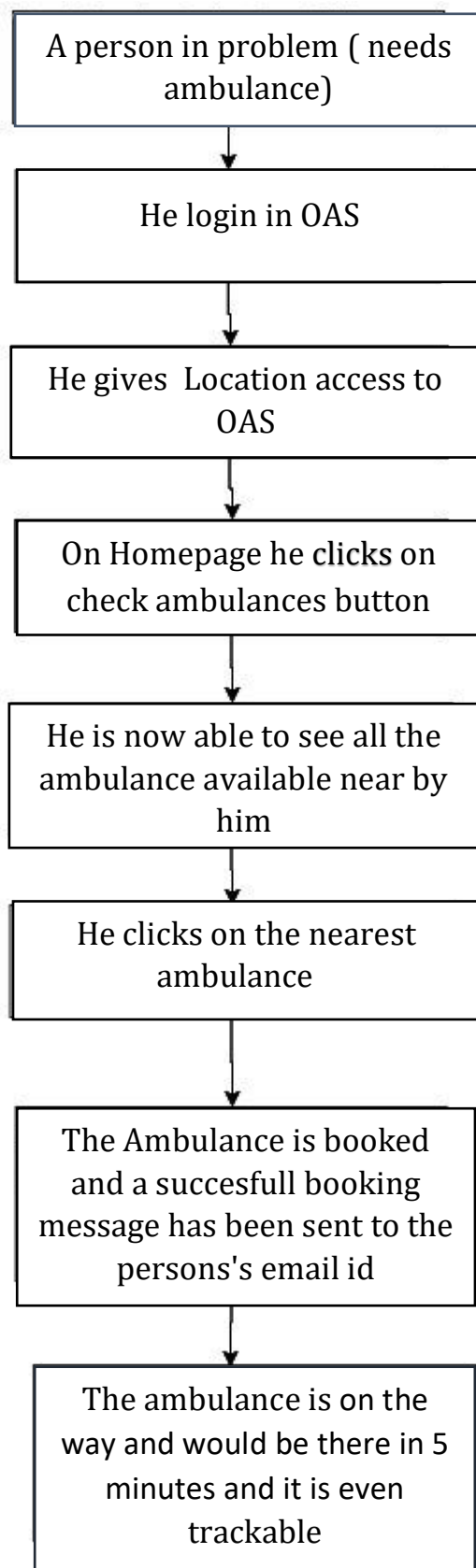
Scope of Project

A painful accident, severe brain stroke, or massive cardiac arrest, all reaches close to fatality if the ambulance arrival is delayed. The intervention of digital tools for real-time activation of ambulance services is very necessary now. Owing to the major difficulties based on communication, location tracking, and interaction, OAS can be the most worthy solution. If patients or their attendants get to know about the status and location of the ambulance, it releases them from a great deal of mental stress. This is possible with OAS

How OAS help people?

OAS has several customer friendly features like, easily accessible wide network of ambulances; option of booking from anywhere; customise and schedule an ambulance arrival; choice of ambulances to suit the need; real time tracking; lowest possible price; 24/7 Call Support;

OAS offers three types of ambulances – Advanced Life Support, Basic Life Support and Patient Transport Service, to suit the varied needs of the customers. Advanced Life Support Ambulance meant for critical patients are big vehicles like Tempo Traveller or Winger and are equipped with an array of life support equipment like ICU equipment, in-built ventilator with oxygen cylinder, BP monitor and specialized medication. Basic Life Support ambulances meant for semi-critical and non-critical cases are small vans like Omni and Eco and have minimal features like an oxygen cylinder with mask and an option for customization. While Patient Transport Service ambulances mostly Omni or Eco are meant for non-serious patient's transfer and are equipped with a stretcher as well. It helps you to find near by ambulance that are available during an emergency and you would be able to connect to the nearest ambulance to you. OAS also provide Air Ambulance Services to transport patients by air from faraway places to major hospitals in the quickest way possible with medical care. You could book a ambulance and go to your choice hospital. It also provide mortuary van for the deceased people and as well as chambers to preserve the body after death. You would be able to get to know   information about all the blood banks near you.

Flow chart of OAS facilities

A person in problem (needs ambulance)

↓

He login in OAS

↓

He gives Location access to OAS

↓

On Homepage he clicks on check ambulances button

↓

He is now able to see all the ambulance available near by him

↓

He clicks on the nearest ambulance

↓

The Ambulance is booked and a succesfull booking message has been sent to the persons's email id

↓

The ambulance is on the way and would be there in 5 minutes and it is even trackable

Services

- ## BLS (Basic Life Support)

BLS Ambulance provides service to patients who are non ambulatory, bed confined, and non-life threatening condition. Ambulances provide transport to patients who do not require extra support or cardiac monitoring. A typical BLS ambulance staffed by caregivers transport can serve:

- Lower extremity fractures
- Discharges to home and sub-acute care facilities (nursing homes)
- Medical and Surgical patients who do not require cardiac monitoring
  Psychiatric Patients

- ## ALS (Advanced Life Support)

Advanced Life Support (ALS) ambulances transport patients who need a higher level of care during transport, above those services provided by a BLS ambulance. The unit is staffed by two paramedics who are qualified to render advanced life support to patients. Patients who typically require ALS transport include:

- Medical/surgical patients with a continuous Intra-veinous
- Patients on a cardiac monitor
- Patients with potential airway compromise
- Any patient deemed to have a potential complication during transport when reported by the sending facility Life threatening

- medical emergencies (For example: respiratory distress, stroke, seizure, or chest pains)

- ## Air Ambulance

A way to transport patients by air from faraway places to major hospitals in the quickest way possible while providing inflight medical care. An air ambulance typically includes emergency medicines, ventilators, ECG and other monitoring equipment along with CPR kits and stretchers.

- ## Mortuary Van

A mortuary van is a funeral vehicle used to carry a deceased patient from hospital to home or to cremation grounds.

- ## Mortuary Chamber

Also known as a Mortuary Refrigerator or Body freezer box. It is designed to preserve the body after death. The Mortuary chamber maintains a low temperature to prevent decomposition. These chambers are portable and can be hired at home as well.

Advantages of OAS

Indicates Ambulance Availability

By this feature of an Ambulance Booking App, you can real time updated information on the availability of ambulances. Patients can easily spot the ambulance near them and decide which one to book for their purpose.

Establishes Proper Communication Channel

An online ambulance booking service always ensures that all the operation points are well connected for smooth coordination. Be it the patients' end, the ambulance team and driver, or the hospital or clinic, the app binds all with seamless communication features.

Real-Time GPS Tracking Features

The major reason for restlessness in patients or their attendants is the long wait for the ambulance till its arrival. Be it patients or ambulance service providers, it is very important to know its accurate location for booking and operations respectively.

GPS tracker sync with location feature of the drivers' devices transmit accurate location details to all in the app network. An Ambulance Booking App always tracks the accurate location of the incoming ambulance and shares the exact estimated time of arrival on user dashboards.

Ensures Authenticity

Every person registering on the ambulance booking app is required to go through a brief registration process. In this process, they have to provide all their details related to their identity and communication ready for verification. So it ensures the authenticity of users as well to avoid any operational deficiency in your business.

Data Management

The app stores all data of every user, be it the patient, driver, service provider, or ambulance service team. This can help you as an admin to monitor all data straight from your dashboard to monitor and improve the operational efficiencies of your business. Reports related to ambulance duty travel, driver performance, and revenues can be easily accessed from the dashboard of the app on a single tap.

Core Features of OAS

Customer App Feature List

- Profile creation*:*

  Upon successful installation of the app, customers must be able to signup using their email IDs Once logged in, they should be asked to fill up personal details like Name, Address, Age, Contact Details, Chronic Diseases(if any) for record.

- Emergency Contact Details

  Ask users for alternate contact details like name & contact number as a backup, especially for emergency cases.

- Emergency Bookings

  In emergency situations, users should be able to book an ambulance without having to spend a lot of time on the app.

- Schedule an ambulance

  Users must be able to to schedule an ambulance for pick-up at a later date or time for non emergency cases.

- Select Ambulance Type

  Enable users to select from the list of the kind of vehicle as per their requirement.

- Real-Time Ambulance Tracking

  Helps users to track the movement and estimated time of arrival of the ambulance.

- Share location

  Users should also be able to share their live location with the driver to enable ambulances to reach the right spot at the right time.

- Contact Driver or Ambulance Assistance Team

  The app must allow users to contact the assigned driver or doctor or paramedic with just a click.

- Book for Others

  A lot of times, users may be booking an ambulance for people they don't know, say, in case of an accident. Such a feature will help him add contact details of somebody associated with the victim rather than having to escort the victim to the hospital himself.

- Cancel Booking

  Enable users to cancel a booking, if required.

- Booking History

  Such a feature is required for record and for future reference. It may also help users to repeat a service request, say, for chronic illness patients.

- Alerts and Notifications

  notifications like booking accepted, ambulance arrived, reminder for scheduled booking adds to the comfort of users.

Hospital Web Panel Feature List

- Notifications

  Notifies hospitals/doctors about any incoming patient so that they are well prepared in advance.

- Track Ambulance

  It is of utmost importance to know the estimated time of arrival of the patient to make arrangements and avoid any delay in treatment.

Driver App Feature List

- Login & Registration

  The driver's app must have all the necessary personal details of drivers like name, address, contact number, driving license number, etc for record.

- Accept/Cancel Bookings

  Once the driver receives a notification for service request, he must have the option to accept or reject the request. All rejections should be supported by proper evidence.

- Patient details

  Upon acceptance of a booking, the driver must receive all necessary information like patient details, pick up spot, contact number, alternate contact number as well as an intimation for critical cases.

- Start & End Trip

  The app must allow the drivers to start and end the trip which will automatically update the availability status of the ambulance.

- Alerts and Notifications

  In-app notifications can be used for new service requests, any update about assigned patients, any change in suggested route, etc.

- Booking History

  Keeps a log of all accepted and rejected requests for reference.

- Ratings and Feedback

  Motivates an individual to fill the gaps in his medical emergency service and perform better. Higher customer rating might also lead to higher incentives.

Software Requirements

For OAS Website

- HTML, CSS, JavaScript
- Python
- Php
- SQL

Hardware Requirements

For OAS Website

- Processor: Preferably 1.0 GHz or Greater
- RAM: 512MB or Greater

Conclusion

As the number of ambulance ratio is unequal to the number of citizen count in India. This create a hapless situation due to in-adequacy of services for the people. There nothing to blame about the ambulance or population growth,. The one to criticise of scoff is the lack of knowledge about ambulances services of people in india which need to be helped with easy and smart efforts.

OAS(Online Ambulance Services) can help in educating the unknown minds of people and can solve their queries regarding →

1. How to summon a Ambulance?
2. Which Ambulance to summon?
3. Help in finding nearest ambulance.
4. Educate them how to book ambulance online through OAS.

Therefore the concluding statement of this would be…

"**Educating people to help themselves, which help to fill the gap between bridges of lack of knowledge**"

Bibliography

Websites

Following websites are referring to create this project reports.

- https://www.google.com/
- https://www.youtube.com/watch?v=qK0QNA0sMGc
- https://developer.android.com/docs
- https://github.com/
- https://stackoverflow.com/
- https://www.w3schools.com/xml/
- https://www.sololearn.com/
- https://www.youtube.com/channel/UCNFVIu9YEb1fGPnPz-pTl0g
- https://www.django-rest-framework.org/community/tutorials-and-resources/
- https://realpython.com/django-setup/
- https://medulance.com/