



Vitality vanguard

vitality Vanguard

Domain
Healthcare



TEAM --- ORION (28074)

SR. NO.	MEMBERS	NAME	ACADEMIC YEAR
1.	TEAM LEADER	SHASHANK PANDEY	2020
2.	MEMBER 1	ATUL PATEL	2020
3.	MEMBER 2	PRATYANSH SONI	2020
4.	MEMBER 3	AMAN KUMAR	2020

PROBLEM STATEMENT



Emergency medical situations require quick response and access to healthcare facilities. However, in many cases, patients and their families are unable to get an ambulance in a timely manner due to a lack of coordination between hospitals, ambulance services, and patients. This often leads to delays in receiving timely medical attention, which can result in further complications or even loss of life.

The goal of our app is to provide a faster and more efficient way for patients to receive medical attention in emergency situations. It aims to improve the coordination between hospitals, ambulance services, and patients, ultimately resulting in better health outcomes and saving lives.

The need for emergency medical services is increasing worldwide. We are currently living a sedentary lifestyle in a fast-paced, technologically advanced world. Technology has indeed transformed our lives as well as our physiques.

While the technology is in favour of patients who might need these emergency medical services at any point in time, unfortunately, the circumstances are not! The Emergency Ambulance is one of the vital modes of transport in the world. These days we see ambulances for long and short distance travels, which provides health care service to save lives. The management of the Emergency Ambulance database also has a vital role in the smooth running of this system.

Why this idea??



Everyone talks about AI/ML/Deep Learning implementation but no one focuses on small real life problems that we are facing in day to day life. This one single problem is costing us a lot of lives everyday. For instance, a 2 month old article says, emergency care delays causing up to 500 deaths a week.

So, here we came up with the idea of 'VITALITY VANGUARD' in which we will be developing a application which leverages the infrastructure of the ride-hailing platform to provide a reliable and efficient ambulance service to people in need, particularly during emergencies. The service aims to address the challenges of accessing emergency medical care in India by providing a transparent, reliable, and affordable service that adheres to strict safety protocols.

Real-time tracking of the ambulance, which allows users to monitor the progress of the ambulance and the estimated time of arrival.

Partnered with hospitals and other healthcare providers to provide a seamless experience for patients



Why Choose Us?



Our app addresses this problem by streamlining the process of requesting and receiving ambulance services. The application enables patients and their families to quickly and easily book an ambulance online, providing essential details such as location, medical condition, and contact information. The app matches and assigns the patient with the nearest available ambulance and dispatches them to either the nearest or selected hospital.

- The system alerts the nearest available ambulance on our network and makes it available and rolling towards the emergency scene. Simultaneously, it alerts the hospital about the type of casualty that has happened so that they could make all the necessary arrangements beforehand so as to start the treatment as soon as the patient arrives. All the saved time in the golden hour helps the medical personnel very much as every single minute is very crucial



Features of Our Application



Real-time tracking:



Advance Ambulance facility



Accessibility through the app:



Partnerships with healthcare providers:



ICU On Wheels Facility





Our Application would include the following features:



- **User-Friendly Interface:** The service should have a user-friendly interface that is easy to navigate and allows users to book an ambulance in a few simple steps.
- **Real-Time Tracking:** The service should provide real-time tracking of the ambulance to the users, allowing them to monitor the ambulance's location and estimated arrival time.
- **Automated Dispatch System:** The platform should have an automated dispatch system that matches the nearest available ambulance with the user's location and dispatches it immediately.
- **Integration with Emergency Services:** The service should be integrated with emergency services such as hospitals, fire stations, and police stations. This would allow for a more coordinated response in case of emergencies.
- **Payment and Feedback System:** The platform should have a secure payment system that allows users to pay for the ambulance service online. Additionally, users should be able to provide feedback on the service, which can help improve the service's quality.

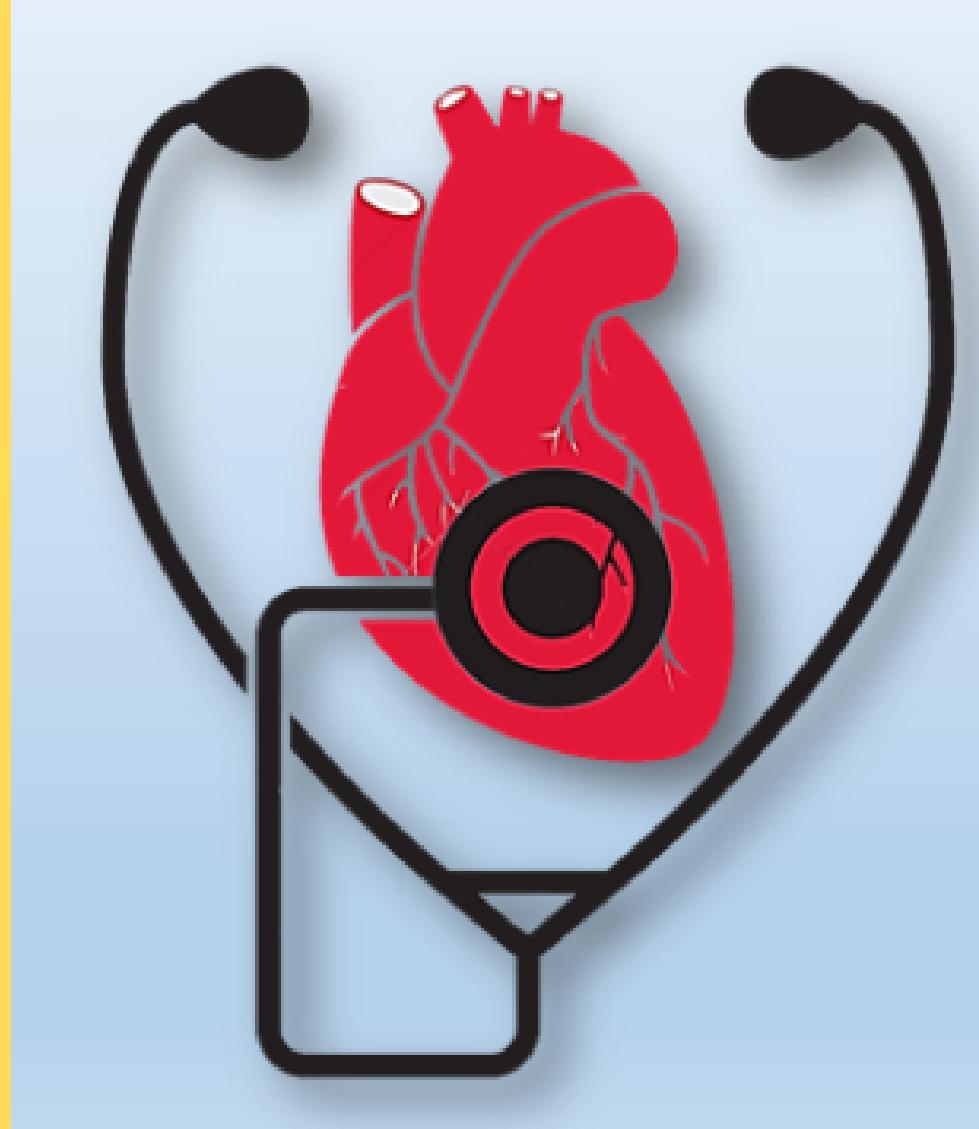
By implementing these features, the online ambulance booking service can provide a faster and more efficient way for patients to access ambulance services during emergencies, potentially saving lives



Advance life support



Ambulance



We will going to introduce Advance Ambulance facility for Patients who suffer from acute life-threatening injuries or conditions need ALS ambulance through our product. The growing number of emergency medical hospitalization cases is due to our changing lifestyles, increasing prevalence of chronic diseases, a rise in nuclear families, aging populations and increasing the number of incidents of road accidents.

In certain critical cases, we require more than Basic Life Support ambulance and Advanced Life Support ambulance is called in such critical cases.

When to call Advanced Life Support Ambulances?



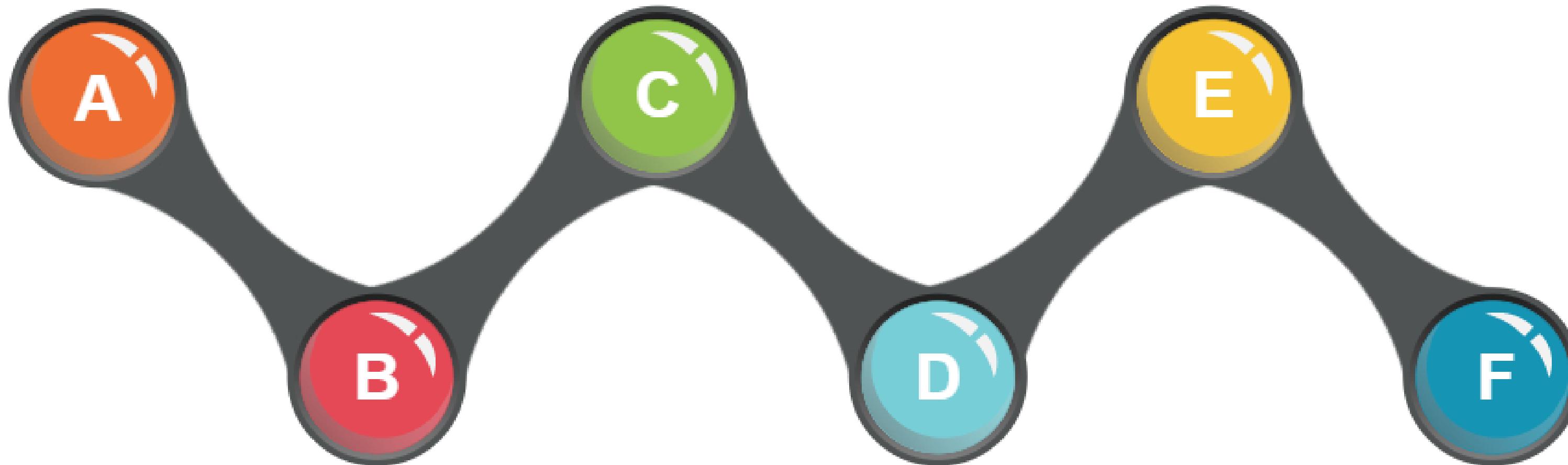
- Patients suffering from pregnancy-related (Obstetrical) complications.
- Patients who have respiratory challenges and airway compression
- Life battling critical illnesses which require immediate medical attention.
- Patients who are suffering from certain heart conditions and require cardiac monitoring
- Any emergency condition who require consistent medical and cardiac monitoring



TIME-LINE

Ideation and Planning

We have identify the real life problem and come up with solution.



**UI/UX
Designing
Prototype**

Developing

Developing the different feature

Testing

Testing our Application on different platform

Integration

We will integrate different feature and database

Deployment

We will deploy and provide it for society use.

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Implementation

Till Now:-

UI/UX PROTOTYPE

FIGMA LINK:-

<https://www.figma.com/proto/r5dhwCY3b7CXSVDbgajP/ambu?node-id=1-16&scaling=scale-down&page-id=0%3A1&starting-point-node-id=1%3A16>

Proposed MODULE:-



Welcome page

Login

Payment

Pickup Request

Feedback

Review

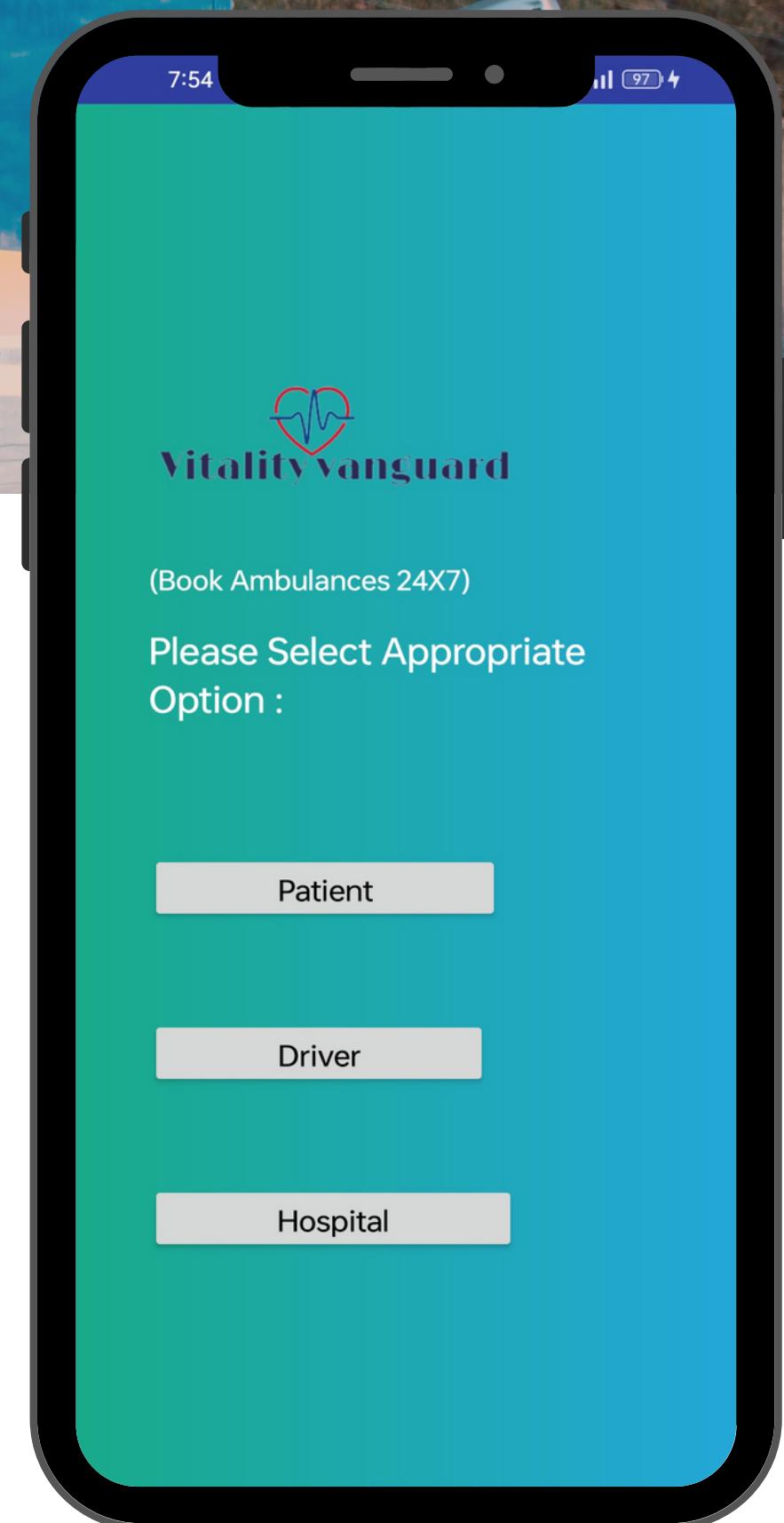
Request An Ambulance

Medical Service



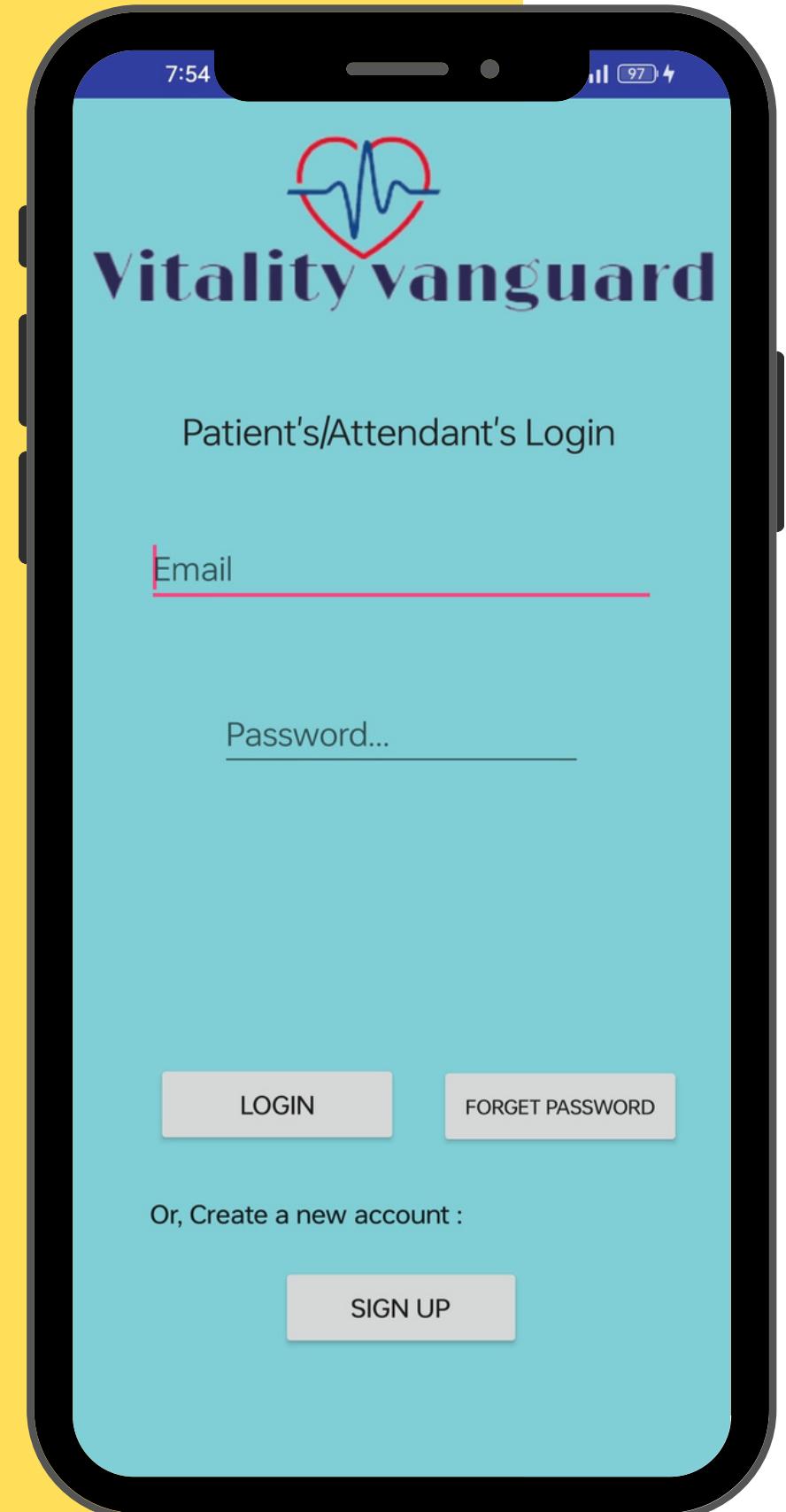
Welcome Page

- This page will allow users to choose whether he/she is a Patient (or their attendant) or a Ambulance Driver.
- After this the users will redirected to there respective Login pages.

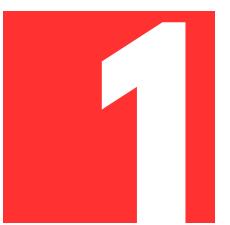




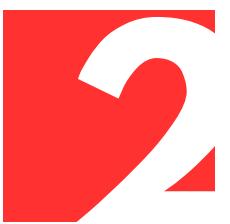
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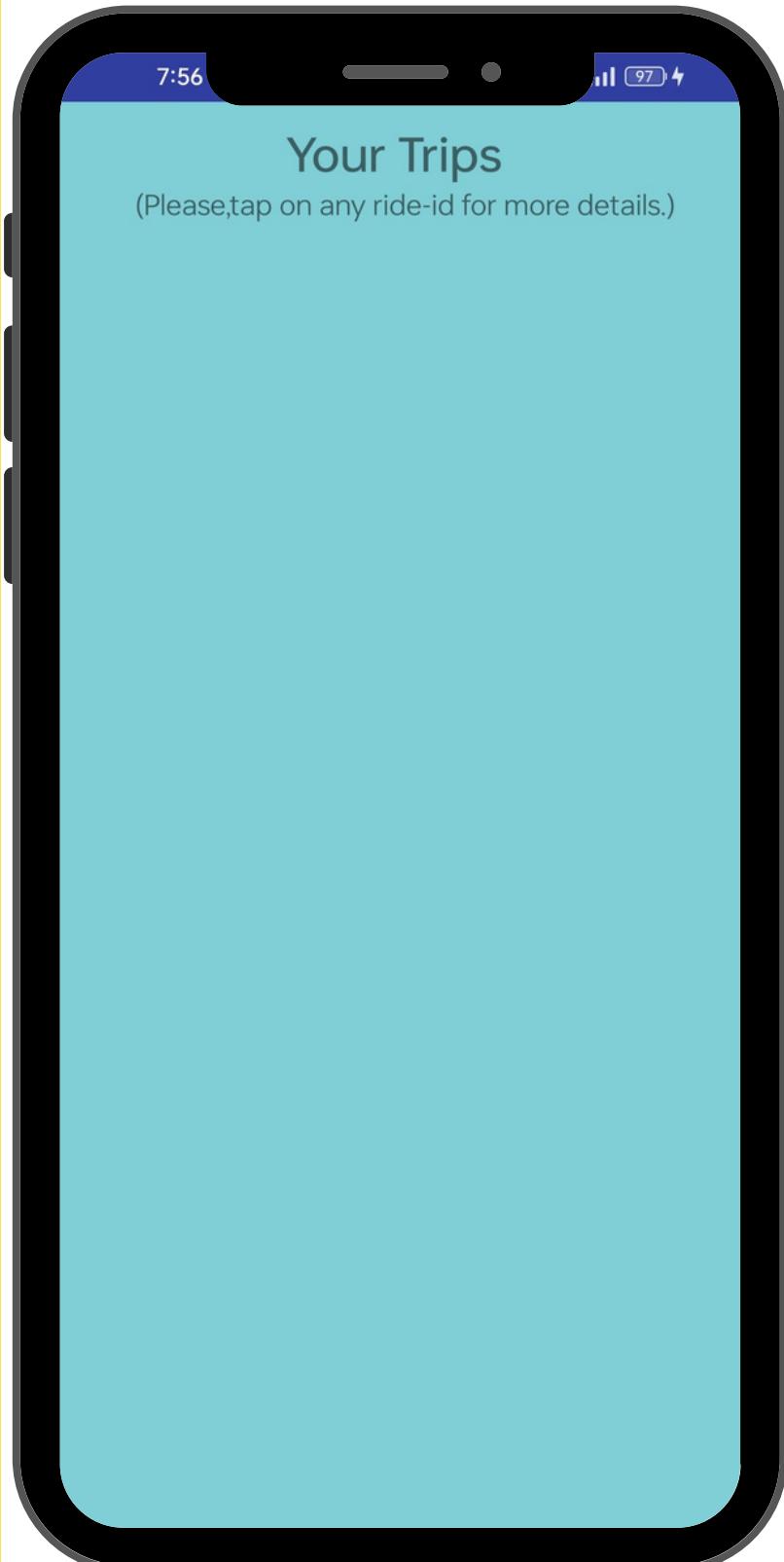
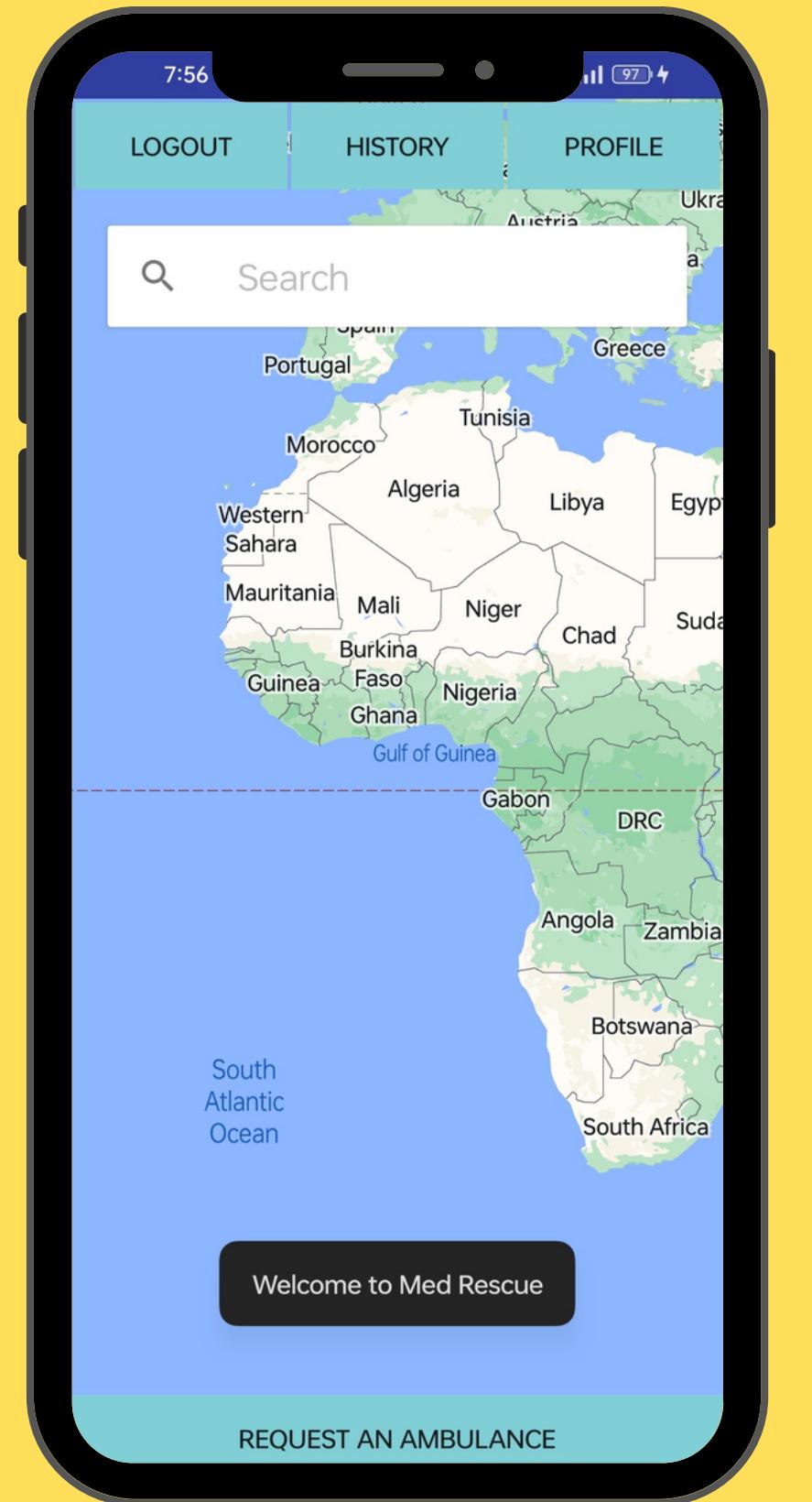
Login



Users have to provide email id and password for registration. After that only, all the features can be accessible by the users.



Already registered users authenticate themselves by providing their email id and password.



Request an ambulance:

This module works just like a modern cab booking facility. User's current location will be fetched by device's GPS. User have to provide drop location (medical facility). Drivers access this data to reach that location.



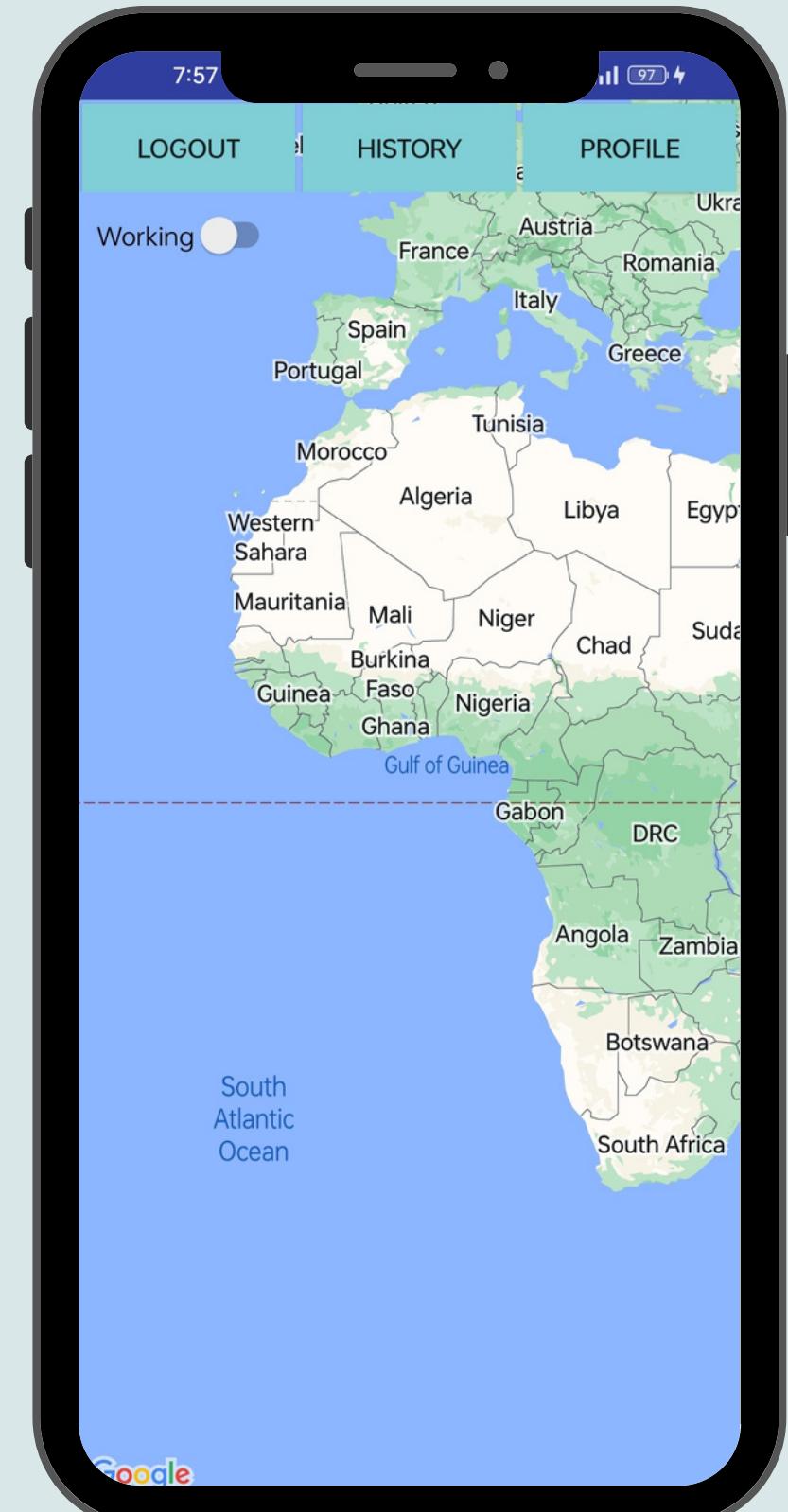
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Pickup Request (For Drivers)

Drivers can specify, whether they are working or not by tapping on toggle switch.

Ambulance Drivers will receive pickup request from patient/ attendant.

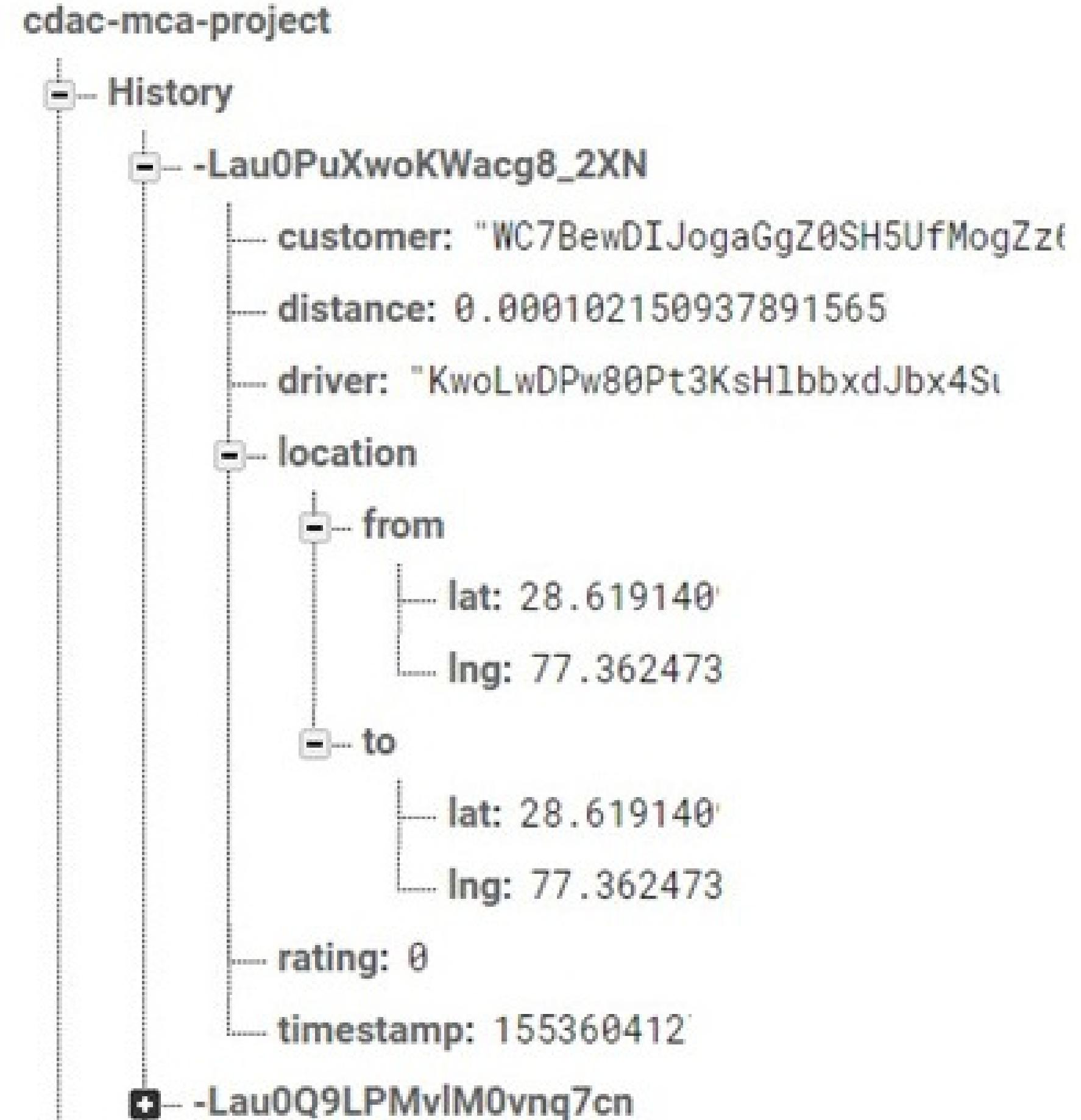
Drivers can accept the pickup request and then route Will be shown from driver's location to patient's location.





Database mapping of parent and child nodes using Firebase





Database mapping of parent and child nodes using Firebase

Services on which we are going to work further



- IN APP MESSAGING
- HOSPITAL ALERT SYSTEM
- DATABASE MAPPING AND MODULES



FUTURE WORKS



- INTEGRATION OF ELECTRONIC HEALTH RECORDS
LINKED WITH AADHAR CARD
- USE OF ML AND DL MODELS TO INCREASE THE
NUMBER OF AMBULANCES IN AN AREA PRONE TO
FREQUENT NEED OF EMERGENCY MEDICAL
ASSISTANCE