



Sahayak

Sahayak - Online Booking Prototype

A Smart Solution for Faster Ambulance Passage. Streamlining emergency response with real-time tracking and traffic light control.

Introducing Sahayak

What is Sahayak?

A prototype ambulance service, akin to Uber/Ola, designed for emergency response.

Online Booking

Connects users to available ambulances via a mobile app or web interface.

Traffic Light Control

Detects ambulances and dynamically adjusts traffic signals, clearing their path.



The Critical Need for Sahayak

1

Delayed Response Times

Traffic significantly increases ambulance response times, impacting survival.

2

Inefficient Dispatch Systems

Manual coordination leads to delays and miscommunication in emergencies.

3

Lack of Real-Time Tracking

The absence of real-time tracking hinders route optimization and ETA accuracy.

Sahayak's Comprehensive Solution

Smart Traffic Control

Uses GPS and real-time data to turn traffic lights green in the ambulance's path.

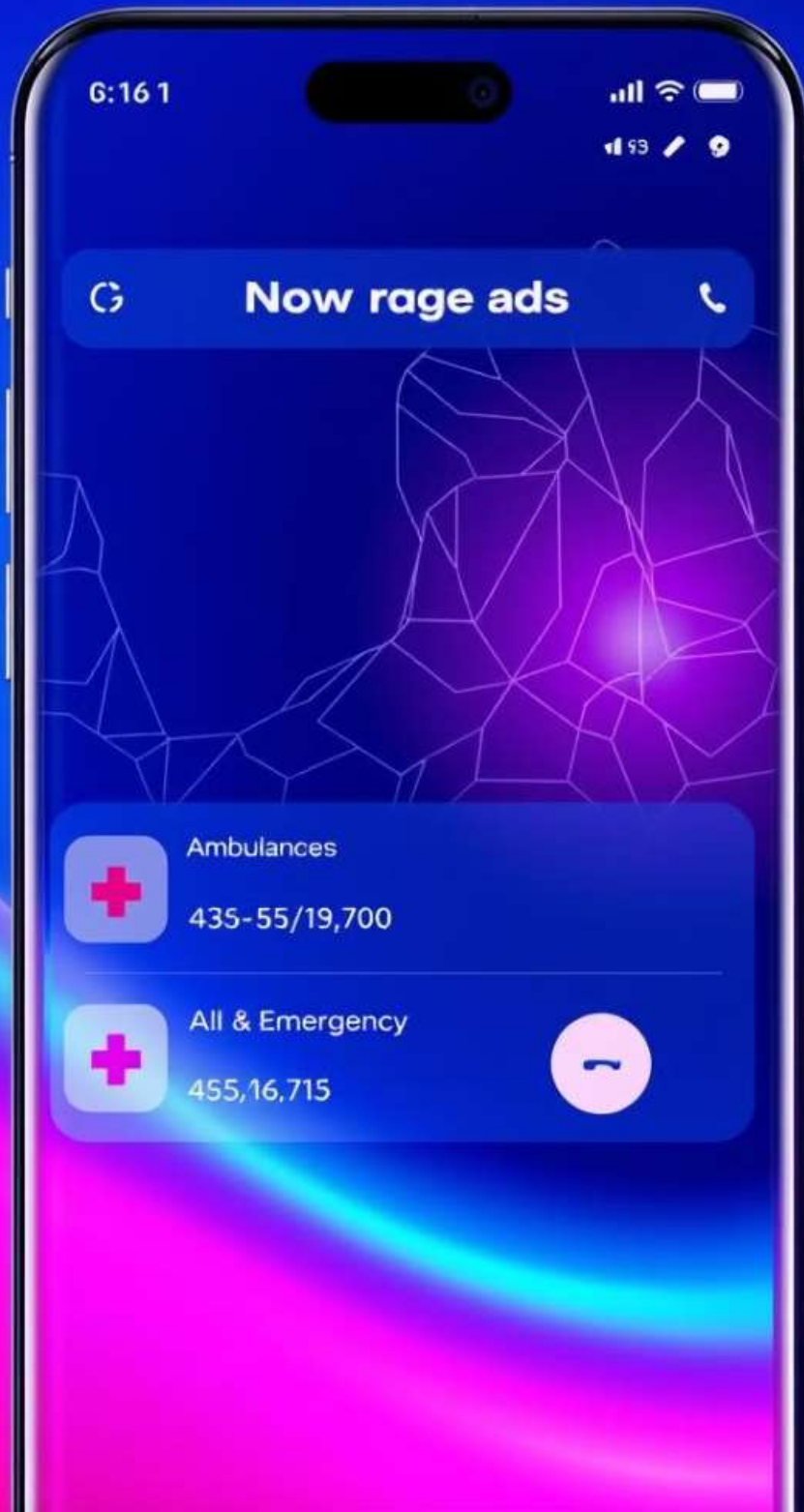
Optimized Ambulance Dispatch

Algorithm-based system selects the nearest available ambulance, reducing dispatch time.

Real-Time Tracking

Provides real-time location tracking for dispatchers, hospitals, and family.





Core Features and Functionality



User-Friendly Interface

Easy booking and tracking via mobile app and web portal.



Traffic Light Override

Automatically triggers traffic signal changes based on ambulance proximity.



Real-Time Monitoring

Centralized dashboard for monitoring ambulance locations and traffic conditions.



Prototype Architecture and Technology

1

Mobile App

React Native ensures cross-platform compatibility for users.

2

Backend Server

Node.js manages requests and data efficiently.

3

Database

MongoDB stores critical ambulance, user, and traffic data.



Projected Impact and Benefits

25%

Response Time Reduction

Saving precious moments during emergencies.

1-2%

Increased Survival

For cardiac arrest, per minute saved.

3

Enhanced Coordination

Streamlined dispatch processes improve efficiency.

Conclusion: A Smarter Emergency Response

Address Challenges

Sahayak tackles ambulance response challenges effectively.

Improve Services

Online booking and tracking enhance emergency services.

