

DOCALL

Neha Patil¹, Sadiya Sanadi², Apeksha Kamble³, Radhika Pachherwal⁴, Mr. Suraj.S.Jamadar⁵

^{1,2,3,4}Student, computer science and engg., Sanjay Ghodawat Institute

⁵Guide, Lecturer, computer science and engg., Sanjay Ghodawat Institute

Abstract: The growing demand for real-time healthcare solutions necessitates the development of innovative platforms that can offer timely and accessible medical assistance. DOCALL is a mobile application designed to facilitate emergency medical support by connecting patients with nearby doctors, offering functionalities for medicine ordering, ambulance booking, and nursing care services. This paper details the conceptual framework of DOCALL, presenting its problem statement, objectives, modules, requirements, and applications. It further discusses the advantages, disadvantages, and future scope of the system, making a significant contribution to the healthcare sector by leveraging technology for urgent care delivery.

INTRODUCTION

The healthcare industry faces increasing challenges in providing immediate medical assistance, especially during emergencies. DOCALL seeks to address these challenges by offering a mobile application that connects users with nearby medical professionals, streamlines access to medicines, books ambulances, and provides home care nursing services. The proposed system utilizes real-time location tracking and a user-friendly interface to make healthcare more accessible and efficient.

PROBLEM STATEMENT

Access to timely medical assistance during emergencies is a critical issue, particularly in areas where healthcare infrastructure is limited or overburdened. The existing methods of contacting doctors, booking ambulances, and ordering medicines are often slow, fragmented, and inefficient. There is a need for a streamlined platform that can quickly connect patients with healthcare providers and emergency services.

OBJECTIVES OF THE PROPOSED SYSTEM

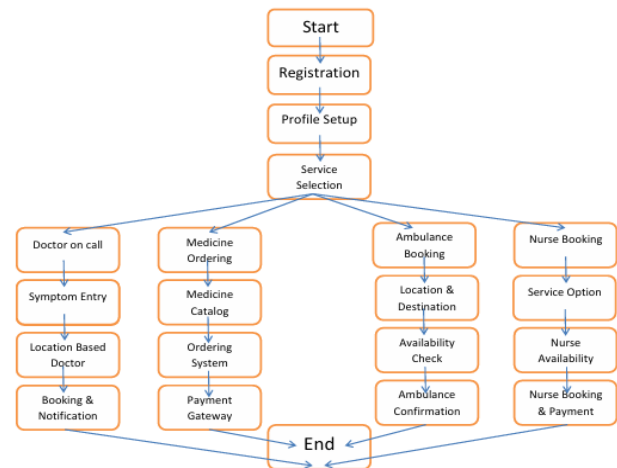
The primary objectives of DOCALL are:

- To provide a fast and reliable means for users to get medical help during emergencies.

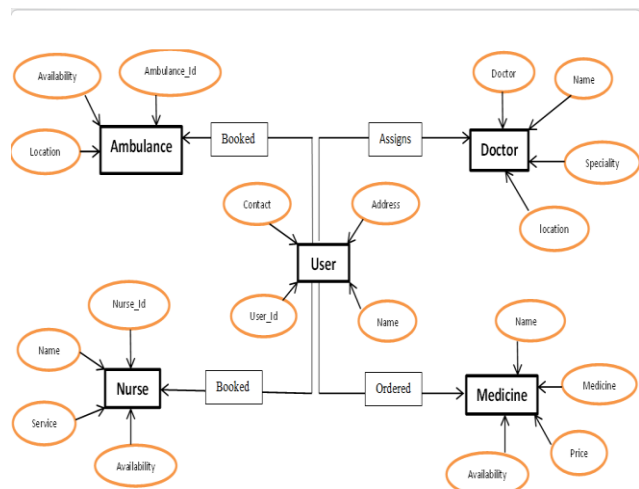
- To streamline the process of ordering medicines and medical supplies.
- To facilitate easy ambulance bookings.
- To offer home nursing services for patients requiring care at home.

METHODOLOGY

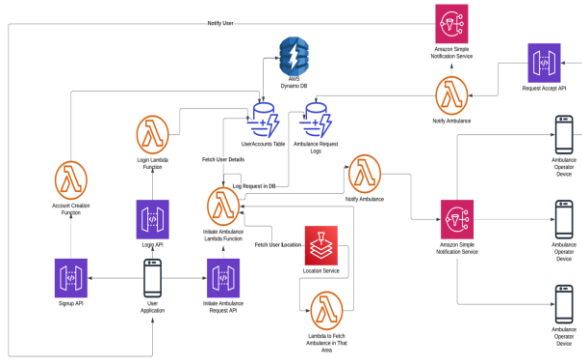
FLOW DIAGRAM:



ER DIAGRAM



SYSTEM ARCHITECTURE



MODULES OF THE SOFTWARE SYSTEM

- **Doctor On Call:** This module enables users to locate and request nearby doctors based on live location. Users can input symptoms, and doctors receive notifications to accept or decline the request.
- **Medicine Ordering:** This module lets users search for and order medicines or medical supplies from nearby pharmacies, with real-time delivery tracking.
- **Ambulance Booking:** Users can book ambulances by entering their location and destination, tracking the ambulance's route in real-time.
- **Nurse Booking:** Users can book home nursing services for specific durations (hourly or daily) and view the profiles of available nurses.

REQUIREMENTS

- **HARDWARE REQUIREMENTS:**

Android Smartphones with GPS and internet connectivity.

- **SOFTWARE REQUIREMENTS:**
- Mobile operating systems: Android 7.0+
- Real-time database for user data and location services
- Secure payment gateways for service payments

APPLICATION OF THE PROPOSED SYSTEM

- **Emergency Medical Assistance:** Connecting users with nearby doctors during medical emergencies.
- **Medicine Delivery:** Providing a platform for users to order essential medicines and supplies.
- **Ambulance Services:** Enabling quick and efficient ambulance booking.

- **Nursing Care:** Offering users the ability to hire professional nursing staff for home care.

ADVANTAGES

- **Real-Time Assistance:** Instant connection with doctors and emergency services through live location tracking.
- **User Convenience:** The app streamlines the process of finding healthcare professionals and ordering medicines, enhancing user experience.
- **Comprehensive Care:** From doctor consultations to medicine delivery and nursing services, DOCALL provides an all-in-one solution for healthcare needs.

DISADVANTAGES

- **Dependency on Internet Connectivity:** The system requires stable internet access, which may be a challenge in rural or remote areas.
- **Limited Coverage:** Initially, DOCALL may only cover specific geographical areas, limiting its accessibility for users in non-covered regions.
- **User Training:** Some users, particularly the elderly, may require assistance in navigating the app's features.

CONCLUSION AND FUTURE WORK

DOCALL represents a significant step toward revolutionizing healthcare accessibility by providing real-time medical assistance via a mobile application. With features like doctor-on-call, medicine ordering, and ambulance and nursing services, DOCALL bridges the gap between patients and healthcare providers in emergencies. The future scope of DOCALL includes telemedicine integration, AI-driven health insights, expanded service areas, partnerships with healthcare providers, and the implementation of an emergency alert system. By enhancing these features, DOCALL can play an even larger role in delivering healthcare solutions worldwide.

REFERENCE

[1] Neha Santosh Patil, Sanadi Sadiya Imran, Apeksha Pandurang Kamble, Radhika Dheeraj Pacherwal. *DOCALL Software Requirements Specification* (2024).

- [2] Mobile Health Solutions. *Overview of Mobile Health Applications and Their Role in Healthcare*. (2023).
- [3] World Health Organization. *Mobile Health for Emergency Medical Services*. (2022). "Apple Vision Pro": Information on Apple's upcoming VR headset and its potential applications in healthcare.