




# H-Care

A Virtual Health  
Companion

Theme : Digital Transformation For Social Change

## **Team - Icons**

- **Emmanuel Shine Joseph**
  - **Bikku K Babu**
  - **Christina Antony**
  - **Angel Mary Alex**
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# INTRODUCTION

Technological advancements in the health sector have brought drastic changes in this field over the decade. Technology aims at making our lives far more easier and better and this health assistant application is a step towards it.

This application motivates and helps an individual to stay healthy and functions as an assistant between the patient and the hospital to make the processes more transparent and easier. People often come across instances in their life where they want to take an expert opinion from a more experienced doctor or to take a second opinion on medical decisions and this application establishes a social network where the users can communicate with doctors across different regions without any barriers.

# PROBLEM STATEMENT



- This main objective of this application is to help the user stay healthy and to aid them in their hospital services .
- The personal healthcare monitoring of each individual is important because of the rise in healthcare problem . We need healthcare system more innovative and inventive in the way they deliver services.

# MAPPING TO UNSDG

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GOOD HEALTH  
AND  
WELL-BEING



DECENT  
WORK AND  
ECONOMIC  
GROWTH



# FUNCTIONALITY

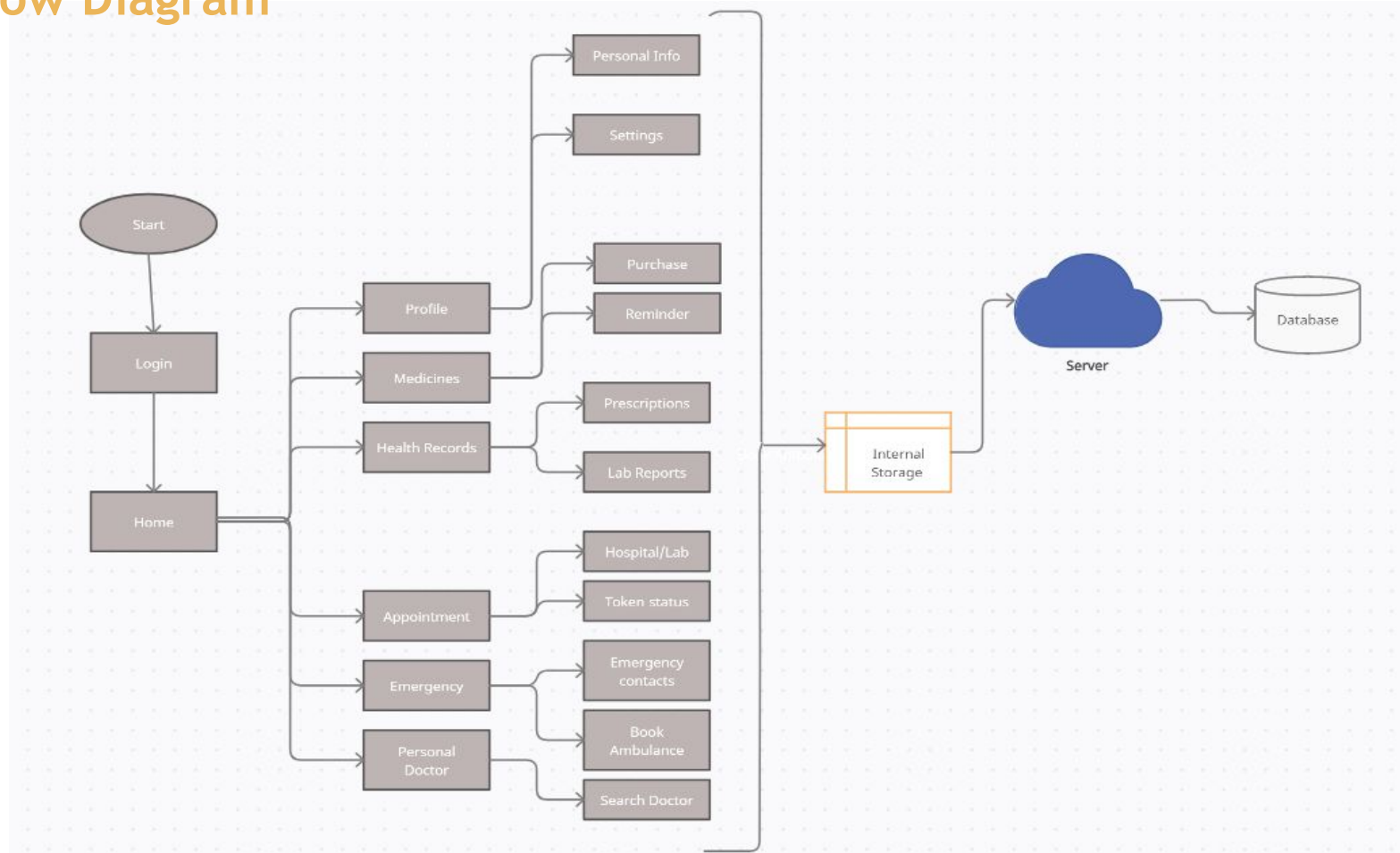
- Digital record keeping
- Books hospital appointments
- Token tracking
- Medicine booking and reminder
- Emergency button



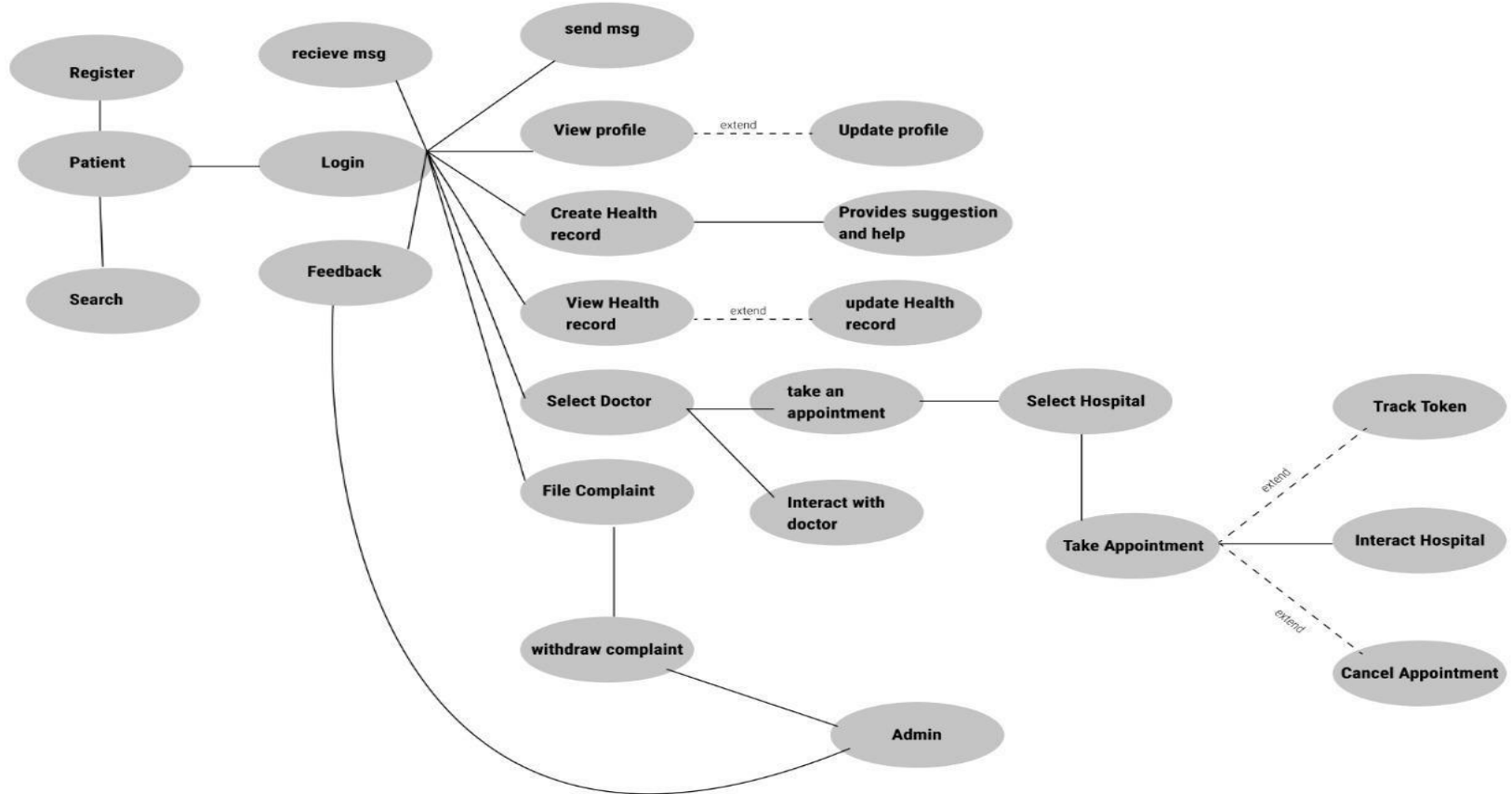
# DIAGRAMS



# Flow Diagram



# Patient Use Case Report



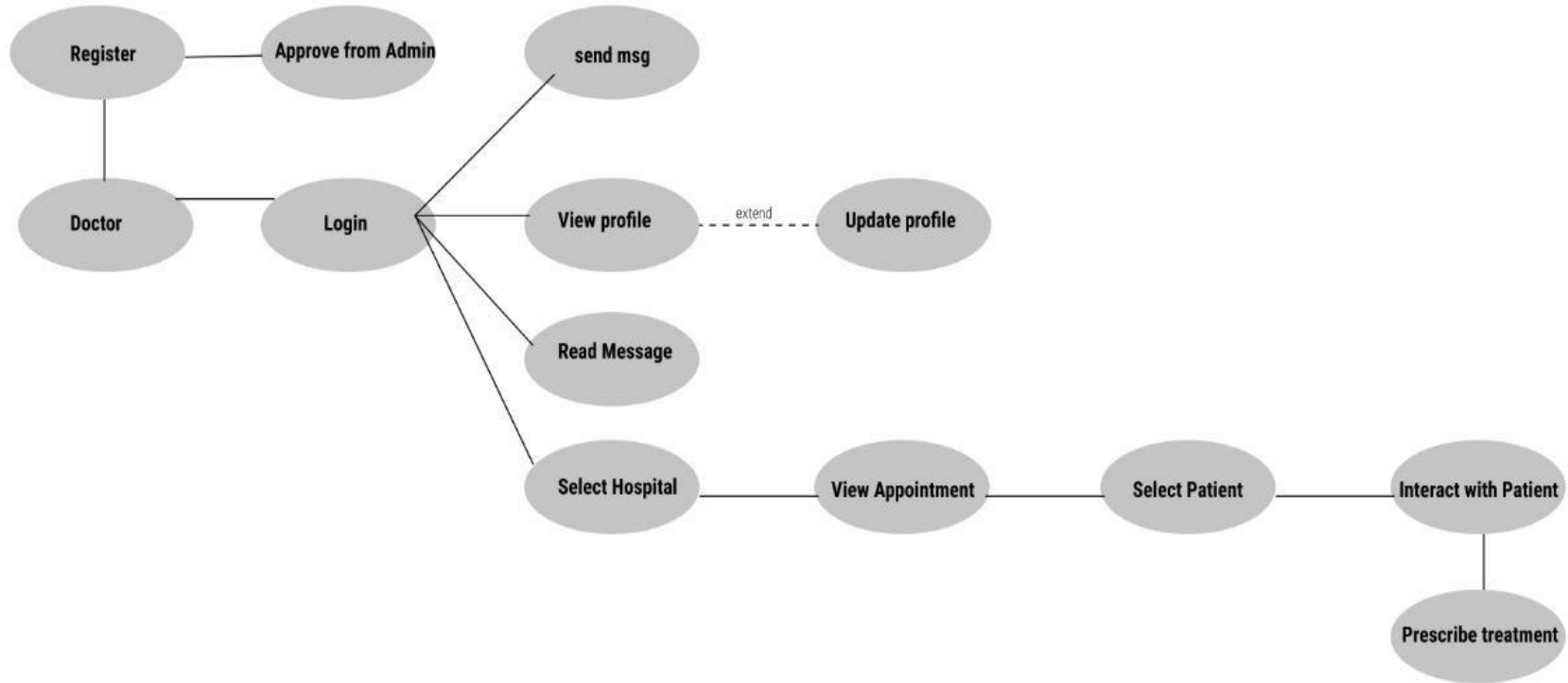


# Use Case Description

- The patient has to sign-in .
- Every registered patient has his/her own profile containing personal details.
- The patient has the option to update his/her own profile containing personal details.
- The patient can create a health profile by providing the following information.
  - Height
  - Weight
  - Waist size
  - Average blood pressure
  - Sugar level
  - Cholestrol

- The health record is updated each time the patient takes a health checkup and previous history will be available.
- The patient can request for a appointment in a hospital/clinic with a particular doctor.
- The patient can interact with doctor.
- The patient can file complaint to hospital/clinic.
- The patient has option to withdraw their complaint.
- The patient can send private messages to both doctors and hospitals/clinics.
- The patient can receive messages privately from doctors and hospitals/clinics.
- The patient can search for a particular hospital or doctor.

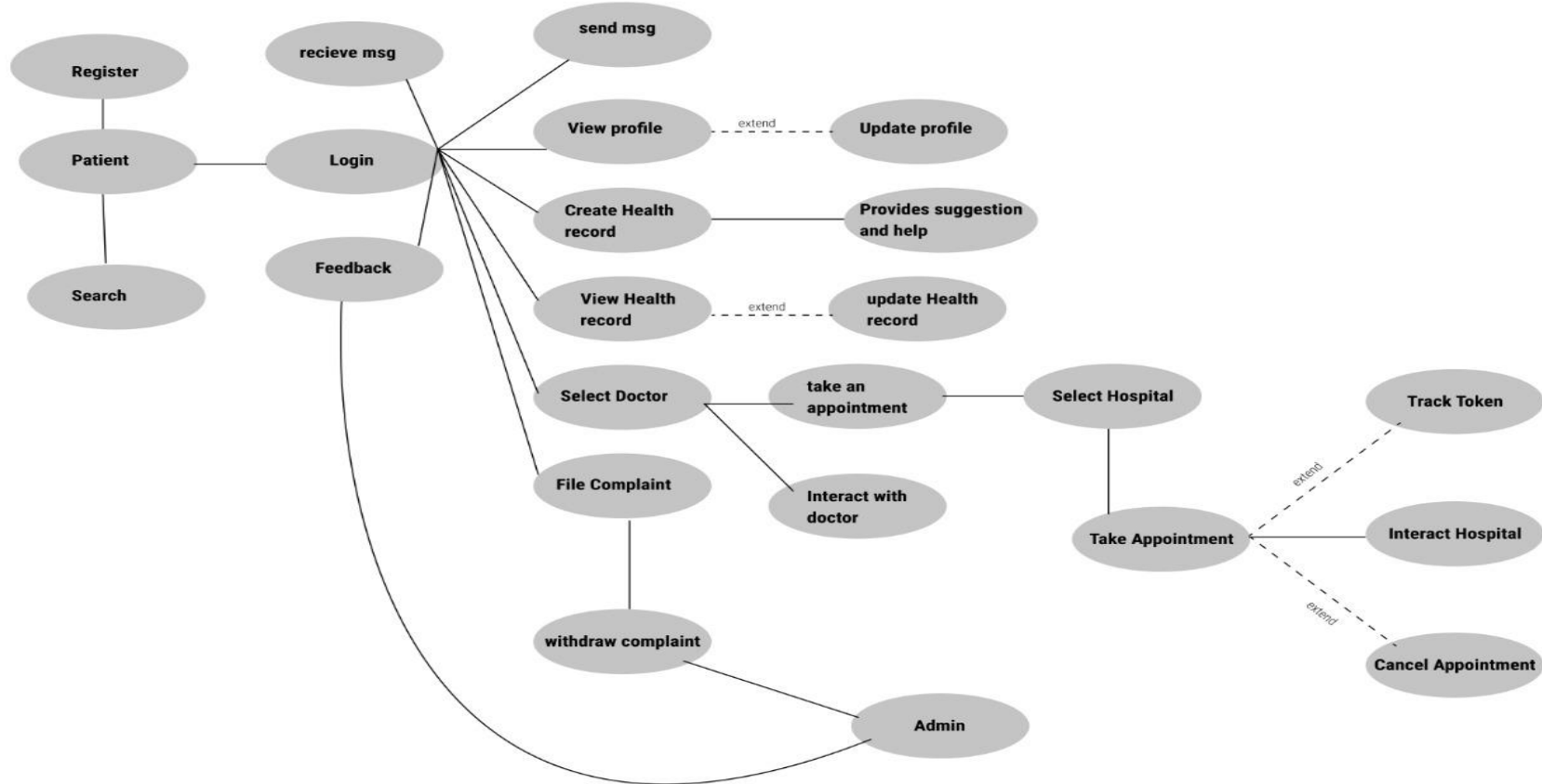
# Doctor Use Case Report



# Use Case Description

- The doctor has to sign in in order to start their work.
- Every registered doctor has his/her own profile containing personal and professional details.
- The doctor has the option to update their profile. The doctor can select from the various hospitals they are working in to view details.
- The doctor can view their appointment schedule for the day in the selected hospital.
- As the doctor selects a patient, all other patients will get live updates of which token number is being currently consulted and thus provides a live status check.
- The doctor can send private messages to the patients and hospitals.

# Admin/Hospital Use Case Report



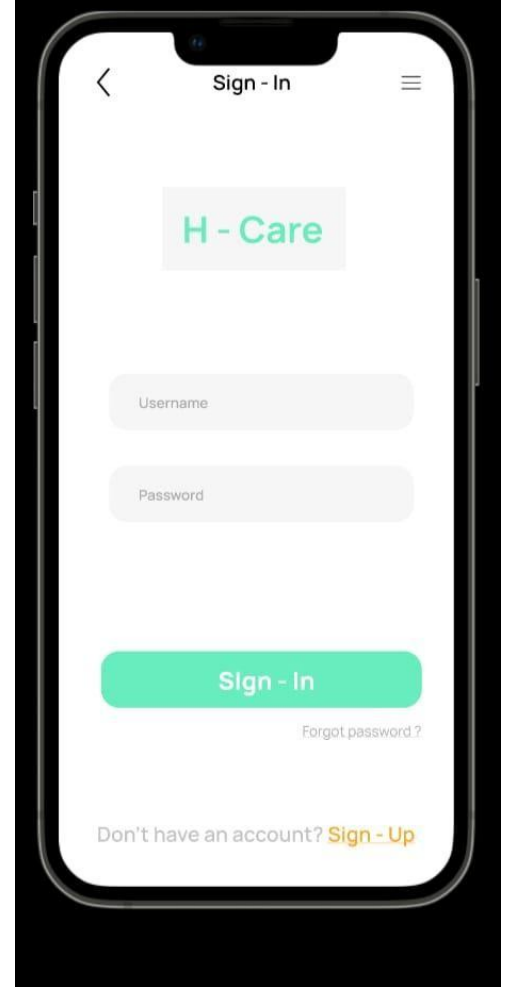
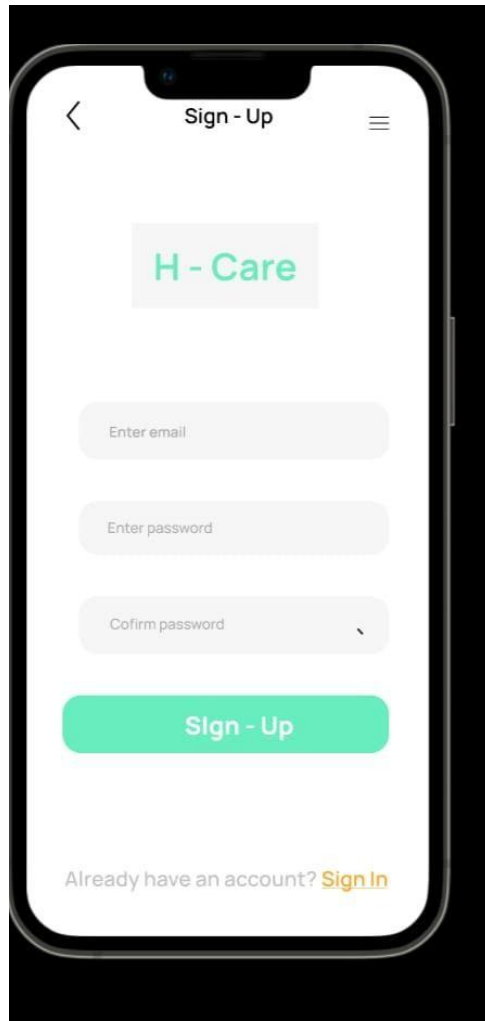
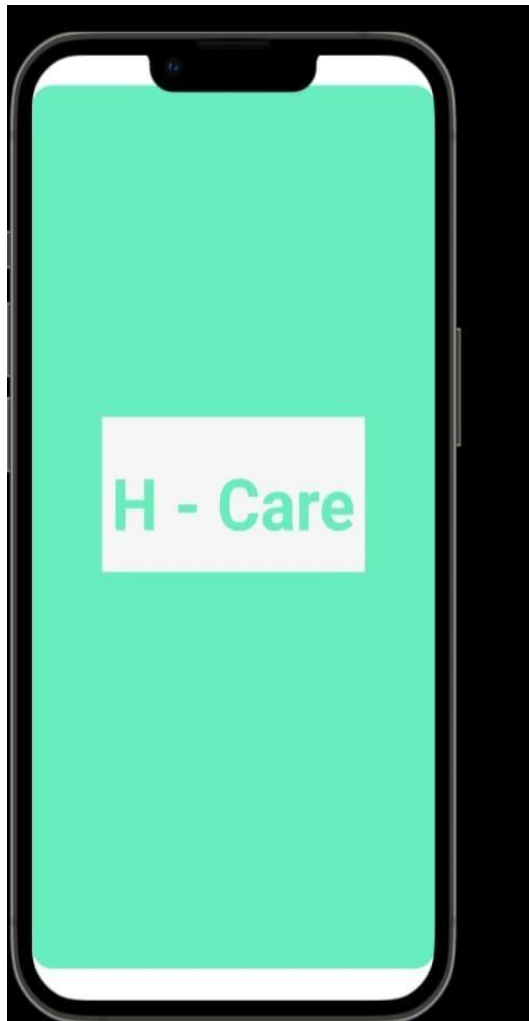
# Use Case Description

- The hospital has to sign-in in order to start begin their work. Hospital has their own profile containing the personal and professional details.
- The hospital can generate reports on the various medical tests undergone by the patients.
- The hospital can authenticate the doctors.
- The hospital can view the complaints sent by other users and can take necessary actions.
- The hospital can take backup of the system and can delete doctors that are no longer working with them. The hospital can send private messages to both doctors and patients.

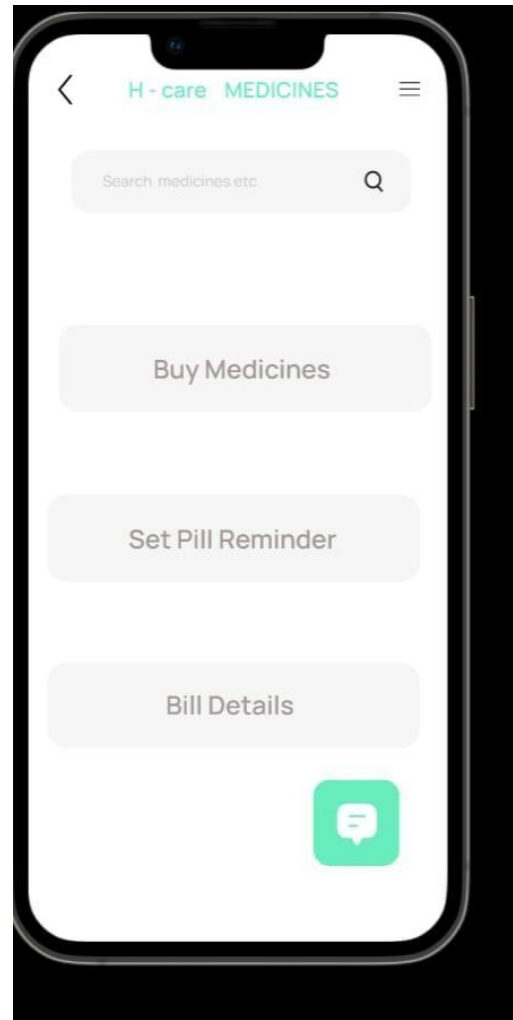
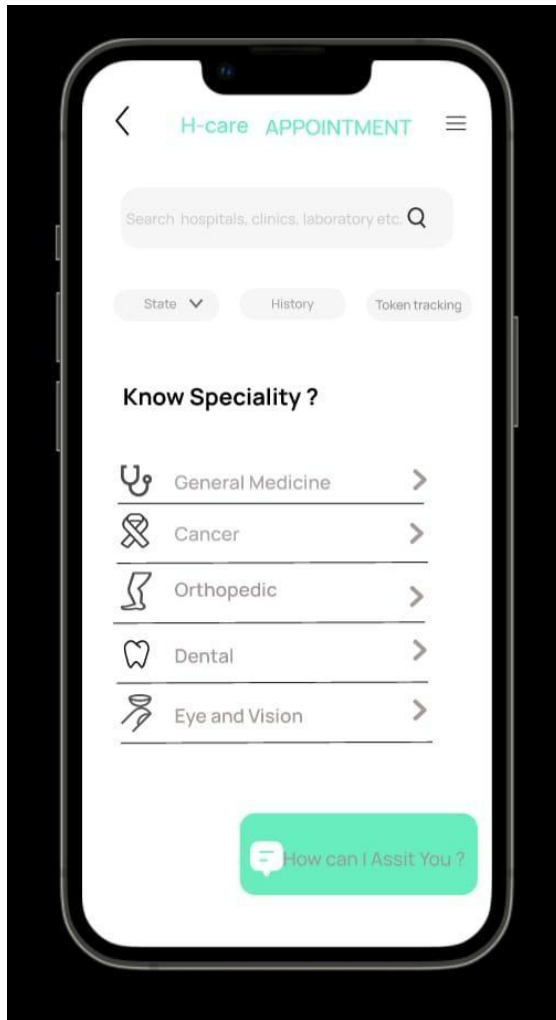
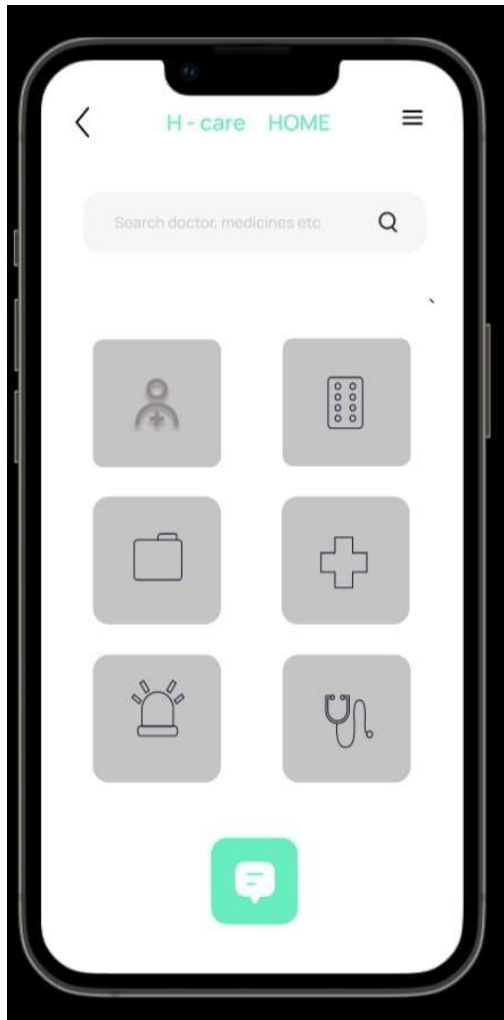


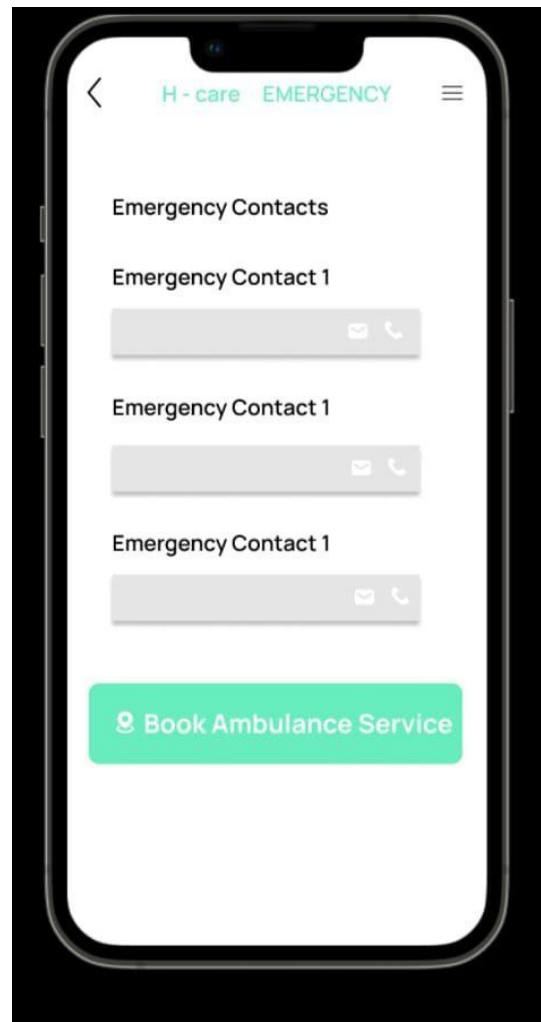
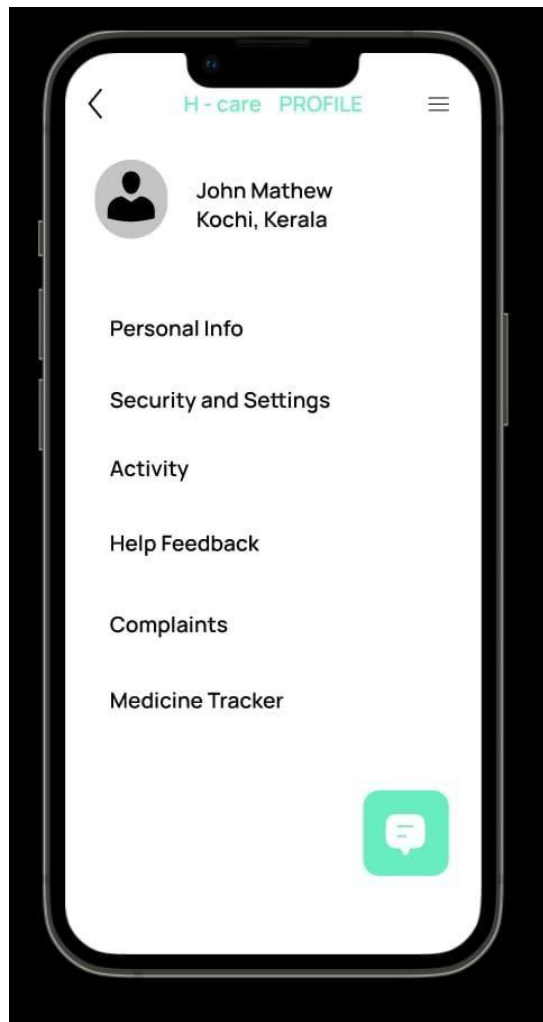
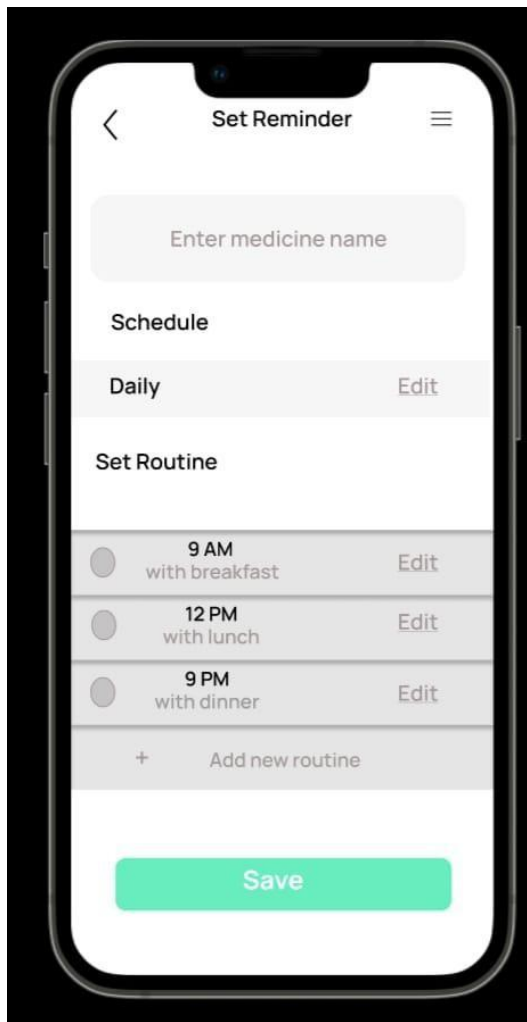
# UI Design

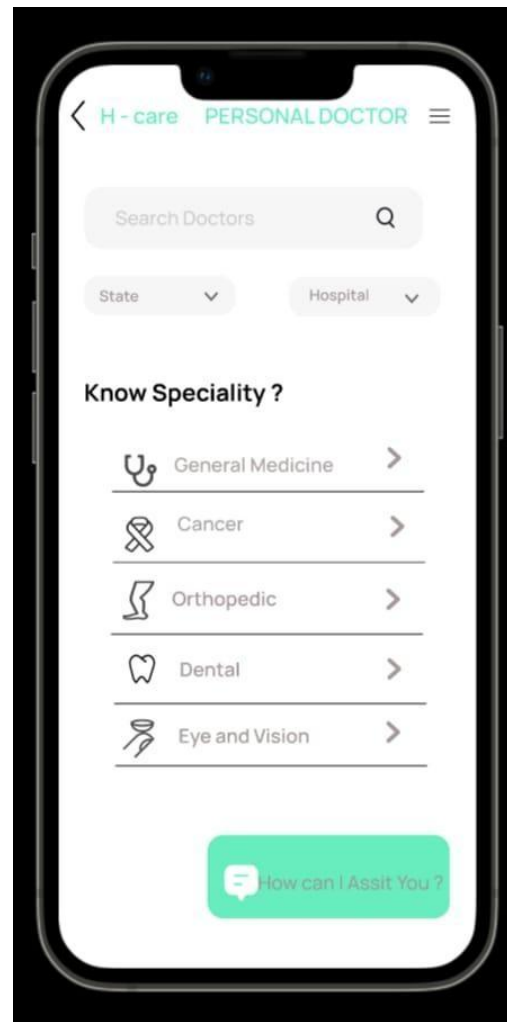
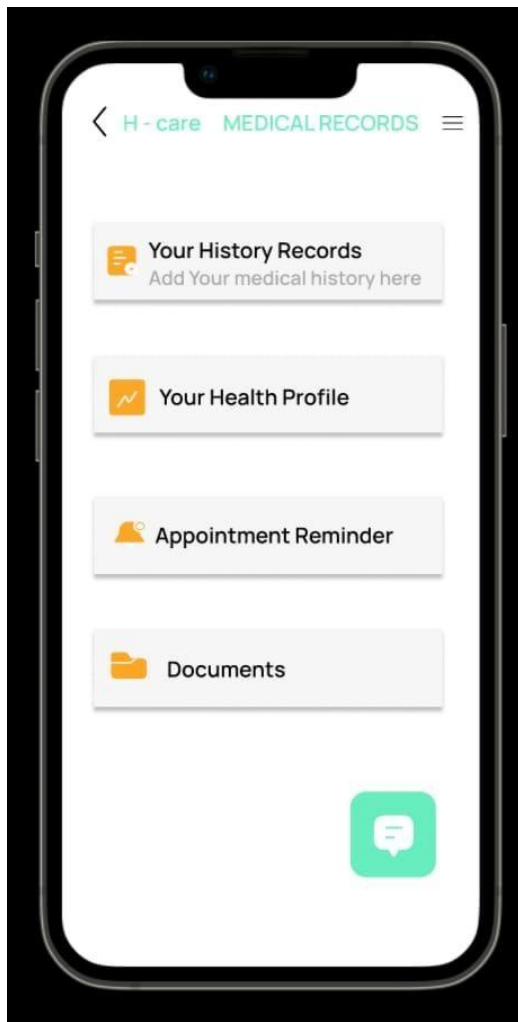












# STACK



## Flutter

Flutter is an open source framework by Google for building beautiful, natively compiled, multi-platform applications from a single codebase.

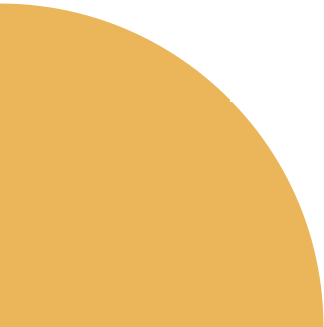
## Firestore

Firestore is a Google-backed application development software that enables developers to develop iOS, Android and Web apps. Firestore provides tools for tracking analytics, reporting and fixing app crashes, creating marketing and product experiment.



# Python RASA

Rasa is a tool to build custom AI chatbots using Python and natural language understanding (NLU). Rasa provides a framework for developing AI chatbots that uses natural language understanding (NLU). It also allows the user to train the model and add custom actions.




# Additional Packages



## 1. Nexmo SMS API


- ❏ Nexmo SMS API allows you to send and receive text messages to users around the globe through simple RESTful APIs.

## 2. Geolocation API

- ❏ The Geolocation API returns a location and accuracy radius based on information about cell towers and WiFi nodes that the mobile client can detect.
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# IBM Watson



- A chatbot is a support system for your customer service. using artificial intelligence and natural language processing, your chatbot can simulate conversation with a user through messaging applications, websites, mobile apps and more, giving them accurate and relevant information.
  - IBM Watson Chatbot is a conversational AI platform that helps you answer customer's queries with fast and accurate answers. It is built over the powerful AI engine of IBM Watson.
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## Scope

The scope of this application is enormous in the health care sector. Mobile technologies have made significant improvements in health care. This application helps patients to monitor their health, reduce their medical bills, connect with various doctors and be assured and confident in their treatment. It makes health care services accessible to all.



# Ethics

- The system is supposed to abide according to all rules and regulations
- Should ensure data safety and privacy
- Using the system shouldn't lead to addiction or any mental issues
- Data storage and collection should be transparent




## Expected Outcome

- Replacing the conventional prescriptions and reports
- Decline of documentation filling
- Improves rapport between user and healthcare providers
- Saves unnecessary consultations
- Provides health records and data to analyse the potential health



# Limitations

- Non - OTC medicines cannot be purchased
- Time delay may occur for medicine arrival
- Data privacy and Scalability



*Health is not valued till sickness comes*

*-Thomas Fuller*

Thankyou

