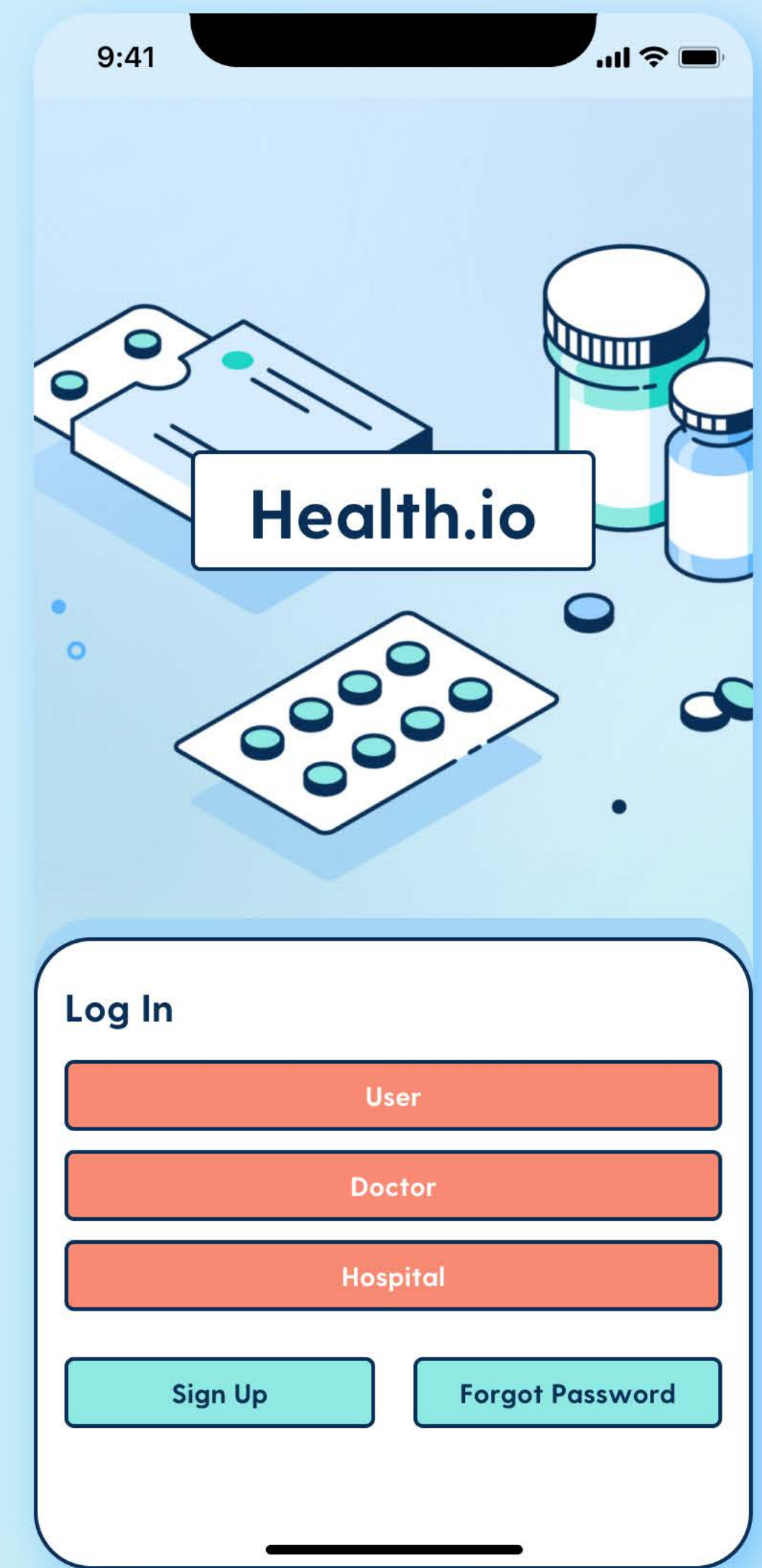# Health.io

The one-stop health solution.

Arpita Mohapatra
IIT Guwahati

About Health.io

This setup (app + band) will completely revolutionize the healthcare industry once put to use largely. It'll take care of all the daily fitness tracking activities of the user, maintain all the health records of the patient, puts reminders, facilitates digital prescription and a lot more.

The band is completely different from those present in market, much more cost efficient , discrete and smaller. Novel method for blood pressure measurement gives the band a huge advantage over similar products ,the technique possibly revolutionizing the way blood pressure is measured all over.

User Side : (Features)

1. Prescription Section - there will be digital prescription in use. They're modern, computerized versions of old-fashioned paper prescriptions. Completely typed in online by the doctor signed electronically and protected with some security techniques. The prescription will be directly saved to the app for the user to view late. The prescription will be saved by the patient for future use. Only his doctors can edit the details.

The e-prescription is a total time saver enabling in app ordering via a single command.The doctor or nurse practitioner finishes an examination with the patient and types in the medication into the application. You can see in an instant the history of the patient's medications, including facts such as if the patient has an allergy to a particular drug.
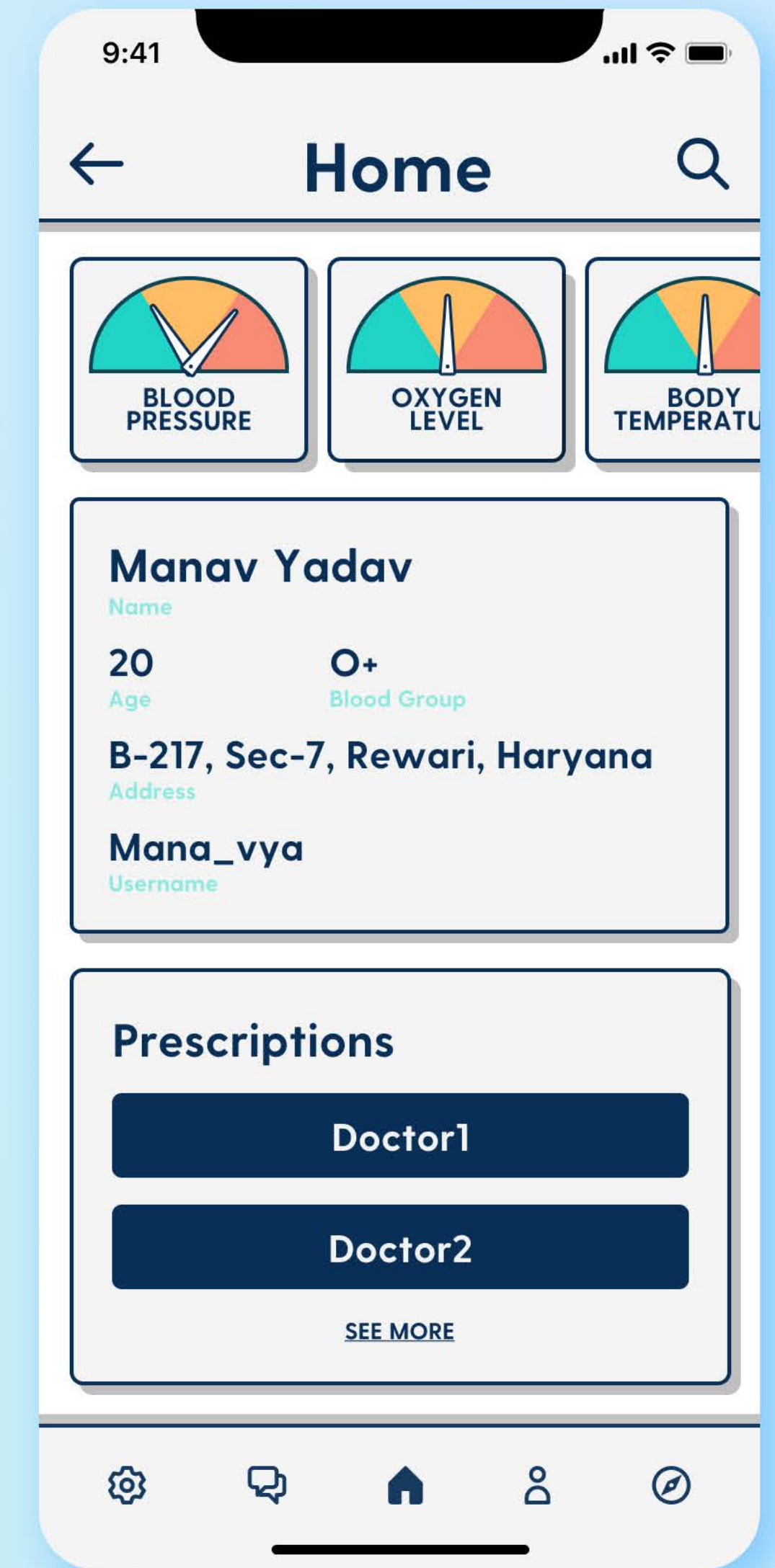
2. Patient History stored well -

Medical history : Includes all diseases and illnesses currently being treated, and those which have had any residual effects on the patient's health.

Vaccination history : There can be a list of the vaccines that've been administered to them already!

Surgical history : to include all invasive procedures the patient has undergone.

X-rays, medical reports, blood samples results and such, will be stored digitally with the hospital and doctors, in the app.

3. Nearby location doctors present : will be based on the hospitals associated with us.
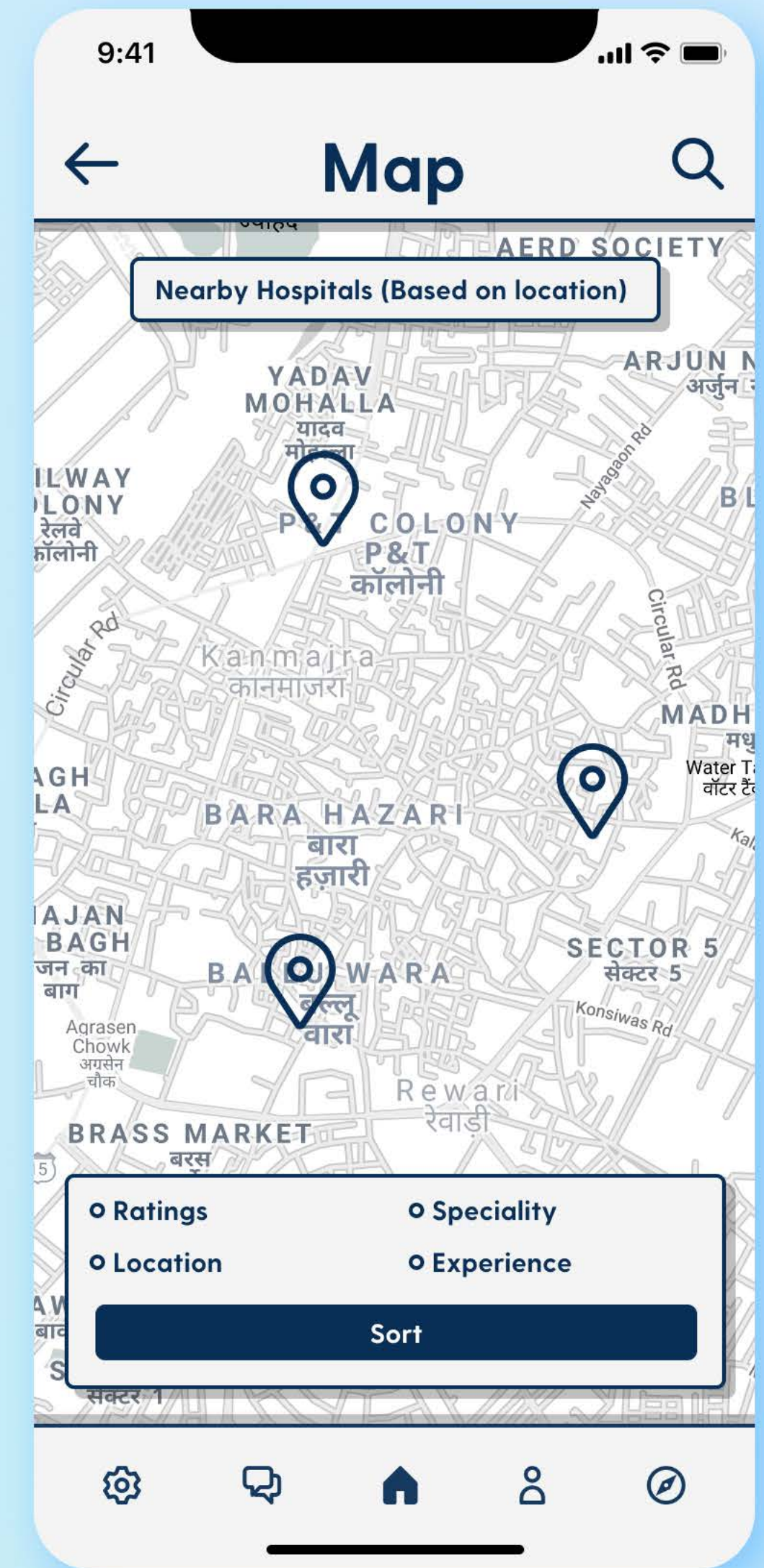
And also the departments will be mentioned for convenience sorting in the app with various filters based on timings available, location etc.

4. Regular health readings:

Inside the app, there will be tracking of a person's regular pulse count, blood pressure, etc.

These things will be possible with the help of a band, which will be described below.

5. There will also be an in-app option for automatic prescriptions,verified and ordered from the **pharmacy** of your choice.
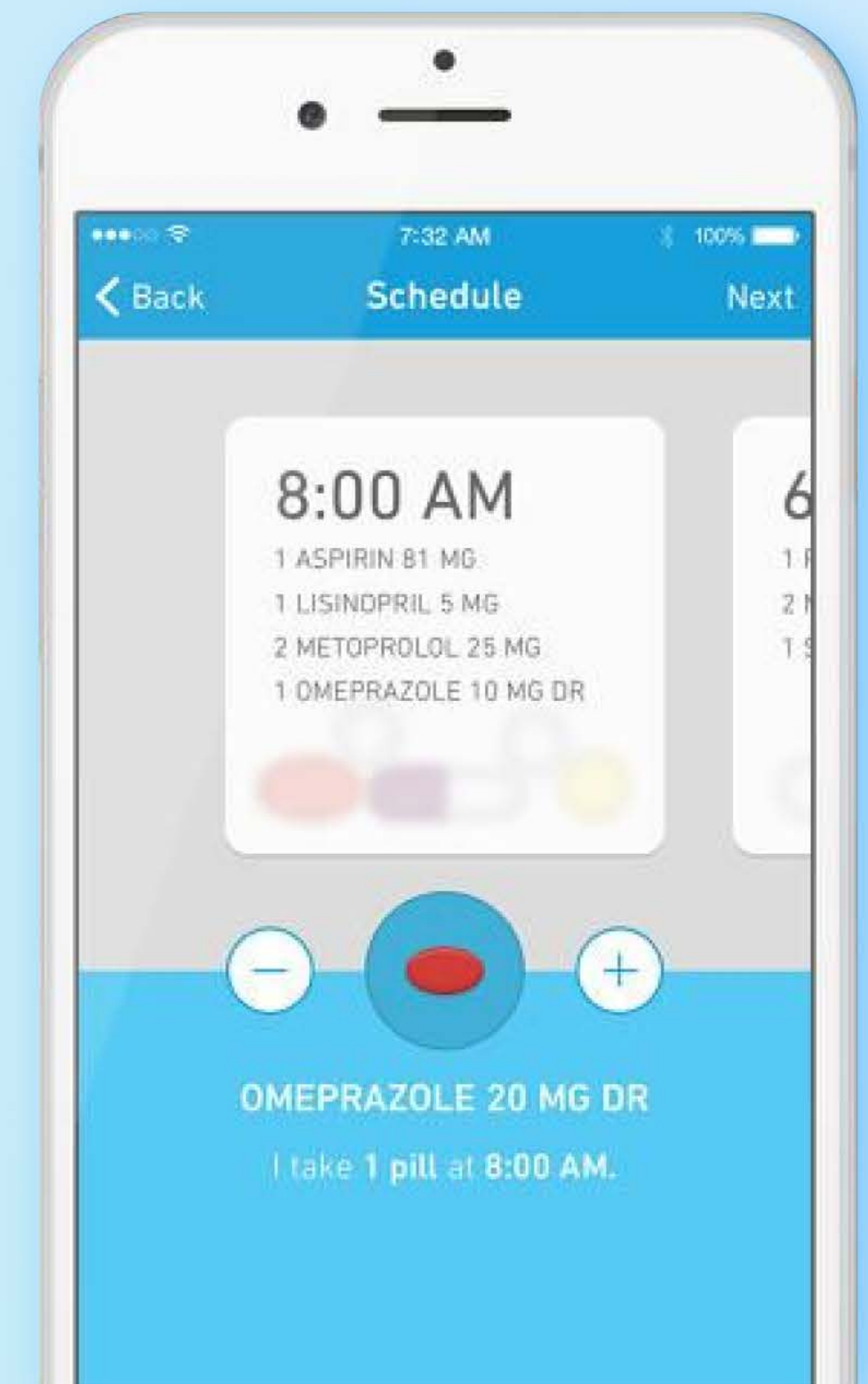
6. Medicine Reminders option available based on doctor's e-prescription. Can be set according to the doctor's medicine dosages. Also there will be an option to unsubscribe from it (timely reminders)

7. Automatic curated content for the user based on medical history using AI methodologies-
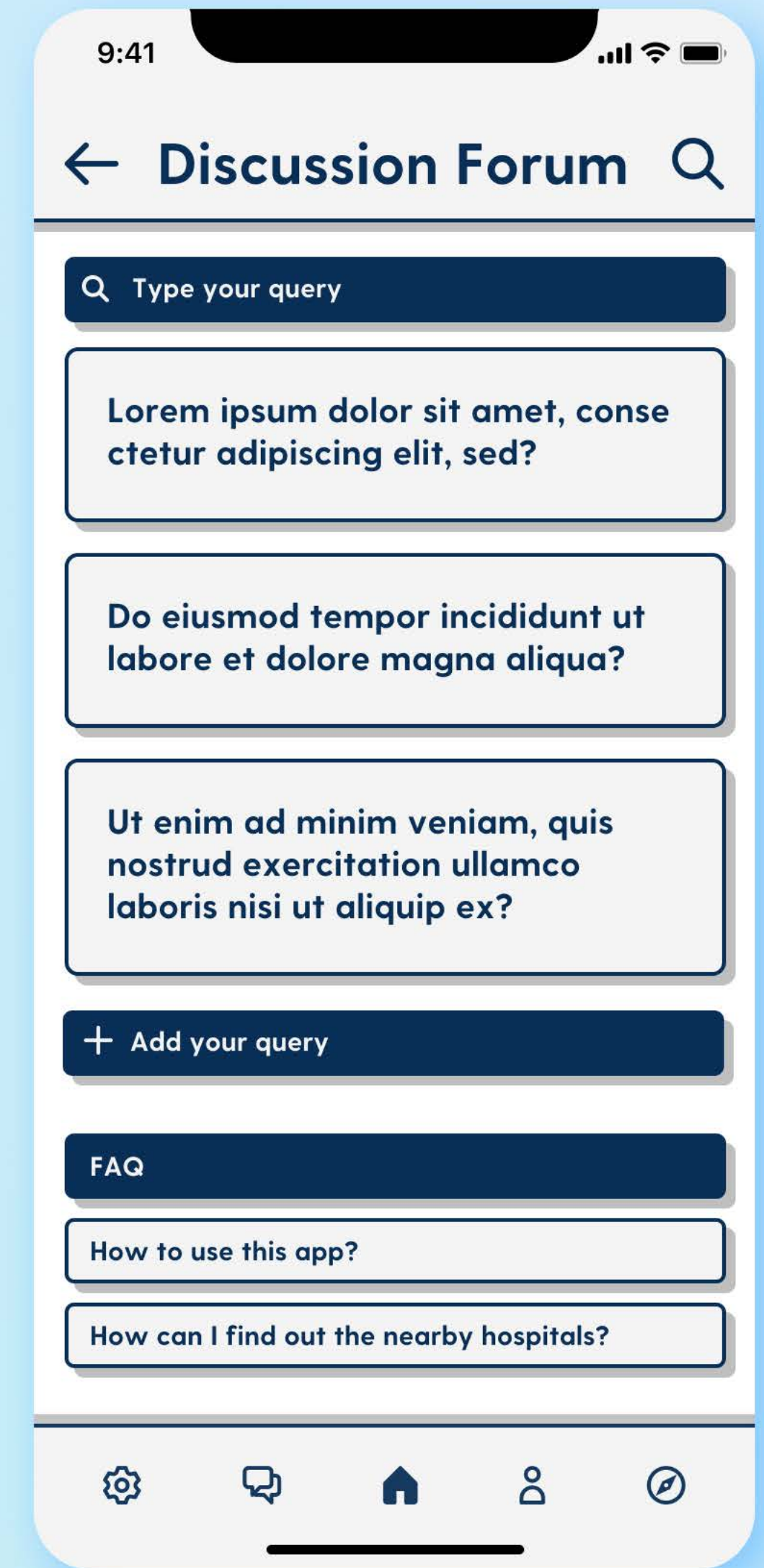It will include sections like:
A. Dos donts for the patient according to the ailments detected,
B. General info about the medications prescribed and also based on the remarks given by their last visited doctor,
C. Lifestyle change suggestions which can be adopted for better,
D. Product catalogue(recommended) - This will show the products which may be of their use according to the user's

health records, be it some fitness band, immunity boosters, yoga classes subscription, some belts etc etc. We can also associate with the desired brand companies and manage to derive some cool discounts and offers for our dedicated users.

6. In- app patient counselling **(Discussion Forum):**
This feature can act as a boon, when the patient is going through some rare disorder or is about to undergo some kind of tests or surger. There'll be a forum on the app, where they can go and raise doubts on the kind of procedures involved and so. The fellow users or some dedicated doctors can give their inputs. At times, patients are in a mental dilemma before some new tests or operations, in app counselling will in a way, allow them to calm down. Other patients share their experience, and in a way counsel the ones in need.

9:41

Discussion Forum

Type your query

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed?

Do eiusmod tempor incididunt ut labore et dolore magna aliqua?

Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex?

+ Add your query

FAQ

How to use this app?

How can I find out the nearby hospitals?

How will this app be used in general appointments?

The patient goes to the doctor for a visit. The doctor enters credentials, an unique username (that of the patient) and logs in. He will be able to view all the previous hospital records of the patient, from medicines, to tests to the health tracker stats of the patient. After that, he can add a prescription, edit it and add remarks for the patient.All of these will be done digitally and without any hassle.
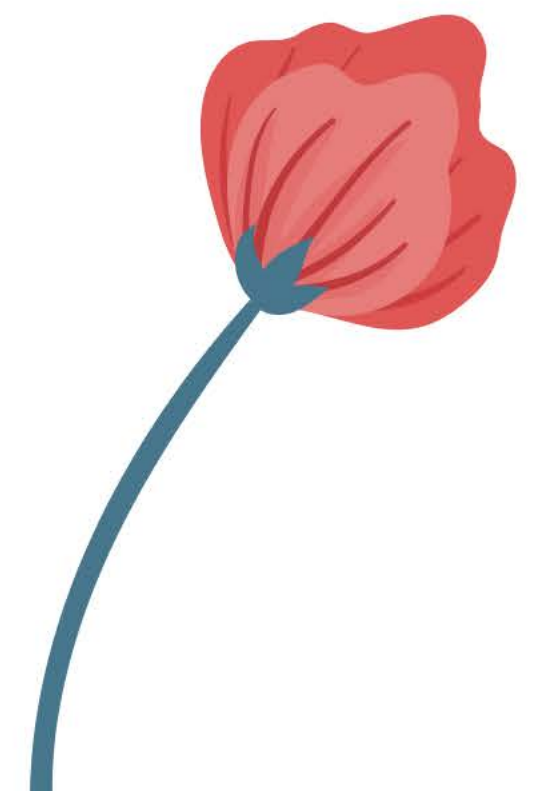
Doctor's side:

For the app, we'll be having tie-ups with various renowned hospitals in a particular city. We'll be approaching all possible hospitals with eminent doctors in all domains. These doctors will also be shown on the app. Databases that'll be maintained properly, those doctors will be directly signed up.

But for individual doctors, the verification procedure for signup to doctors will be a little different. They'll have to login to the app, then there'll be verification. First they'll be asked for the medical registration number, aadhar details and few other general information about their speciality. There'll be credentials generation after verification. After that, he enters the app and can see a complete list of all the patients he has already treated (if any).

Then, for consultation, the doctor will enter the patient's unique username and can access (only if the user has granted access to that specific doctor) the whole medical history of the patient to analyze his current and past condition , after the analysis the doctor can upload his prescription along with remarks . Additionally the band statistics will get attached with the remark and prescription and will get uploaded in the patient's medical profile .

All the data will be uploaded under the doctor's profile/signature to prove the credibility of the prescription.
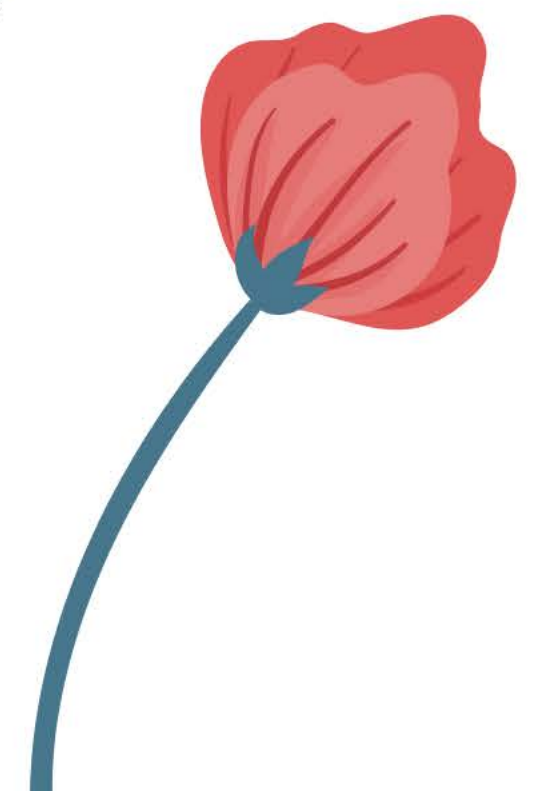
Emergency feature for all users

Emergency feature for all users

An emergency can be triggered by-

1. Feedback from health tracker.
2. Emergency button in Phone.

Emergency button is present on the Home Screen of the phone enabling easy access for the user or any passerby

As soon as there is an emergency indication based on the tracker, the patient's phone and band starts ringing and vibrating. If the patient doesn't respond within 30 seconds, chosen emergency contacts are notified with basic parameters , current location and chosen hospital for admittance
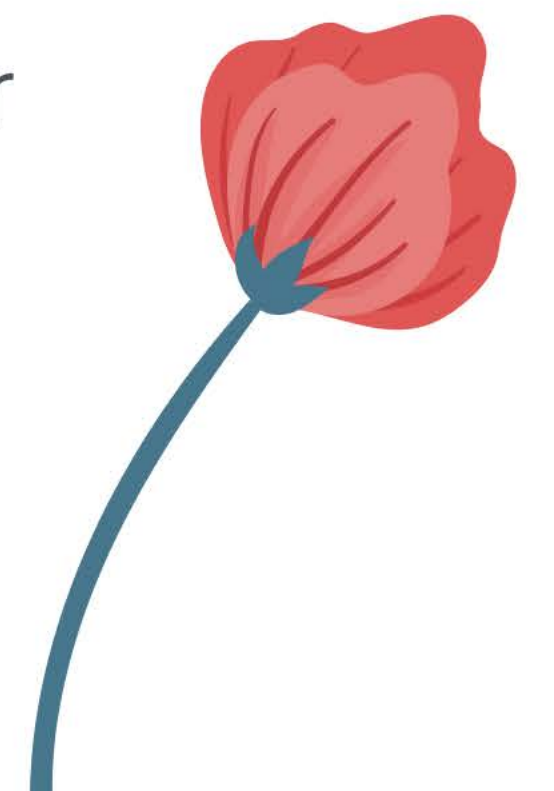
The hospital will be chosen with this selection process.

Detailed information on hospital availability is accessed from the hospital management section.

List of hospitals is arranged by preference based on a two parameter algorithm considering distance and ratings

Chosen hospitals are again notified for confirmation and post a 30 second window, the hospital with highest preference is selected.

Patient history and current vitals are transferred to the hospital and subsequently to the concerned ward/doctor. This proves time saving as the doctor now can prepare for any necessary procedures and avoid any dangerous actions by filtering allowed procedures with reference to the patient's past.
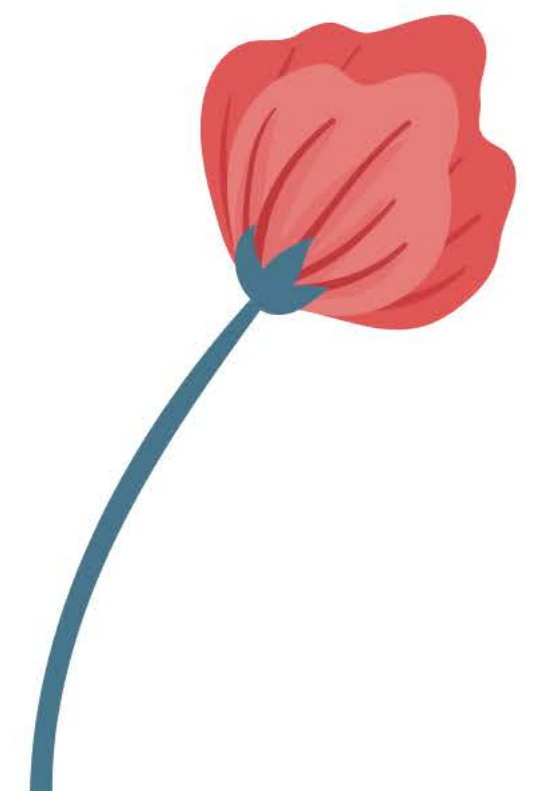
Once an emergency is triggered the user's lock screen displays stats or generated guidelines taking into account patient history which is most useful to ambulance staff (in case the staff doesn't possess patient history). Guidelines can also be useful for immediate first aid by any person in the vicinity.

Additional option of guidance via video call with a registered set of doctors is also possible. Ambulance staff that possess the app will have an option to send more information about the patient's condition to the receiving doctor.

This feature gives the patient a much better chance of survival because of-
1. Significantly reduced time between accident and treatment because of the hospital preference algorithm
2. Preparation time and patient information given to the doctor will lead to much better decision making about the most suitable procedure/action.
3. Ambulance staff can take immediate steps for stabilisation based on patient vitals(eg oxygen supply)
4. Common mistakes committed by people trying to assist the user can be avoided

Hospital Management System

A single platform to manage and keep track of activities in the hospital

Features included -

1. Doctor in and out time (availability of doctor)

2. Availability of beds in various divisions(logged by concerned personnel)

3. Available ambulances

4. Entry of patient data uploaded by doctor directly added to hospital database

5. Shift assignment directly to the doctor part of the app.

6. Any patient data transferred to concerned doctor or ambulance staff in case of emergency from the digital storage, useful for referrals where patient is shifted from one section to another.

Usage of the app by a hospital immediately ensures detailed information about availability of doctors in various divisions as well as the hospital's ability to admit emergency cases as well as scheduling instant appointments without the taxing wait in the hospital.