



“Online Doctor Consultancy”

B.E. Semester VI

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Faculty Guide

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Academic Year 2020-2021



Department of Information Technology

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Acknowledgement

We would like to express our gratitude and appreciation to all those who gave us the incentive to work on this project. A special thanks to our project guide, Prof. Yogesh Dangar, whose presence, stimulating suggestions and encouragement, helped us to coordinate our project.

Hereby, we would also like to acknowledge with much reverence the crucial role of our department, who were supportive and provided us with all the possible assistance as and when required.

Moreover, we are thankful to the Head of the Department (Information Technology), Dr. Nikhil Gondaliya, who has given his unmatched guidance in achieving the goal as well as his motivation to maintain our project's progress in track. Last but not the least, the involvement of the panels during every single presentation helped us vivify our vision for this project, their straight- forwardness and concise comments aided our ambition in making of this project.

COLLEGE CERTIFICATE

Date:

This is to certify that the project entitled “Online Doctor Consultancy” has been carried out by Meet Dabhi(180110116006), Darshak Kakani(180110116018), Nij Padariya(180110116028) and Nil Patel(180110116040) under my guidance in partial fulfillment for the degree of Bachelor of Engineering in Information Technology (6thSemester)of Gujarat Technological University, Ahmedabad during the academic year 2020-21.

Internal Guide Head of Department

Prof. Yogesh Dangar Dr. Nikhil Gondaliya

(IT) Head & Professor (IT)

Seal of Institute

Abstract

The need for healthcare services is growing with the increase in population and the number of patients who seek health care at hospitals, medical facilities, holistic groups, and physicians practice has improved significantly. These bring a new set of challenges for the staff of the facility and administrators.

In this project our focus is on ease of patients as well as doctors. The health is most important aspect of human life especially in hectic life of present time. Patients have to give time to visit doctors when actually there is only minor problems. Our project focuses on how to make these medical procedures as easy as possible.

Our project is a platform for patients and doctors where the treatment process can be easy. Patients can diagnose their disease using our effective machine learning algorithm. Patients are suggested list of doctors who are highly recommended and highly rated by other patients. Patients can book their appointments to the doctors of their own choice. All the suggested doctors are in nearby area only in case patients have to make physical visit.

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Chapter 1: Introduction

Introduction

Health is wealth. Health is always given great importance over anything. Here We introduce our project titled “Online Doctor Consultancy”. This project is about how to provide health related online services so that patients having minor sicknesses can take treatments with no more suffering by visiting doctors physically. We have implemented functionality of which patients can easily take advantages of online services. Patients can now take treatment online if they do not have to visit doctors.

Purpose, Scope & Objective

Purpose:

The purpose of this software is to make doctor consultancy for the people online. For the ease of the patient who has minor sickness. Patient can easily get advices and prescriptions suggested by doctors.

Scope:

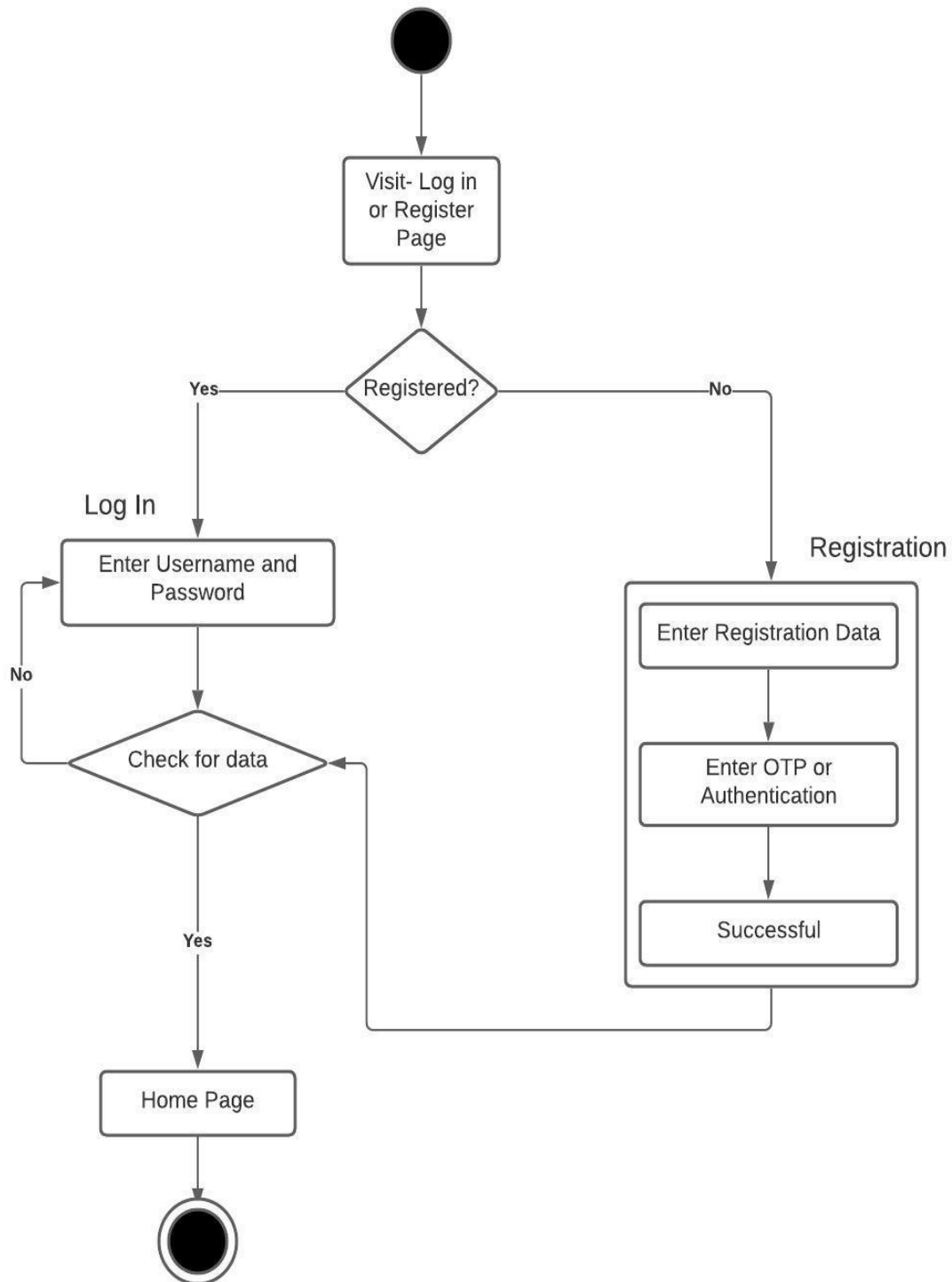
Patients will be able to consult doctor online on the platform and order medicines online. Doctors will be able to take appointment online from patients. Doctors will register themselves on platform to be on the list. Patient will be provided list of doctors nearby his/her area.

Objective:

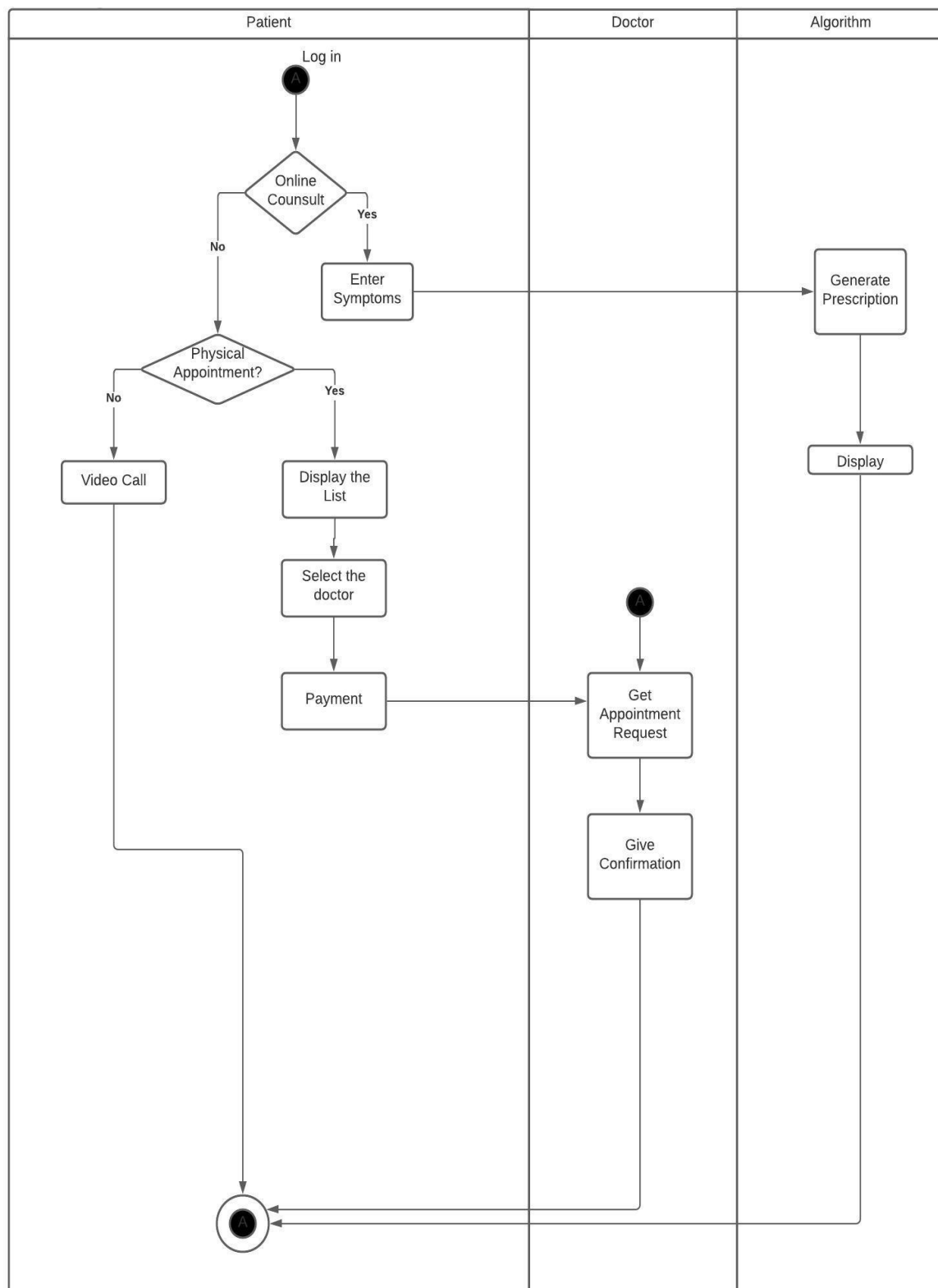
Our objective is to provide best possible online services to users. Patients can consult doctor online. Doctors get appointment online and treat the patient remotely. It is easy, fast and helpful for both patients and doctors.

Chapter 2: Analysis & Design Methodology

2.1 Activity Diagram

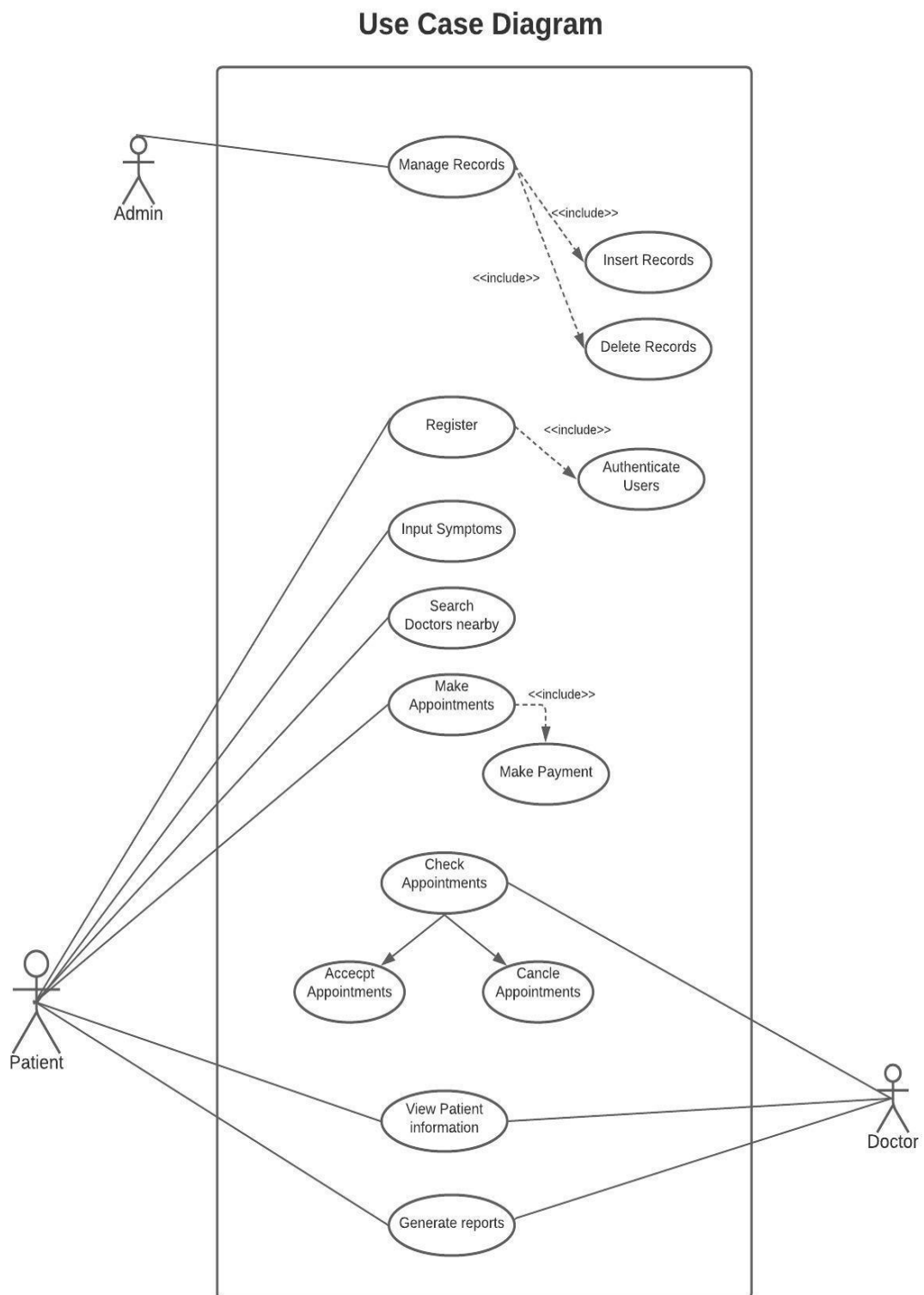


Activity Diagram



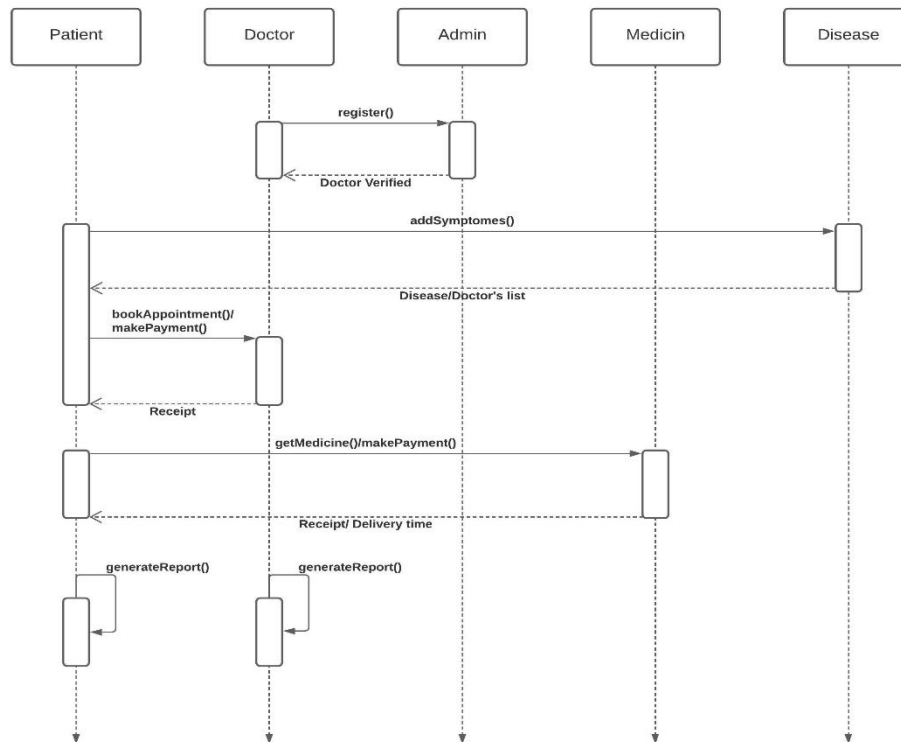
2.1 Activity Diagrams

2.2 Use Case Diagram



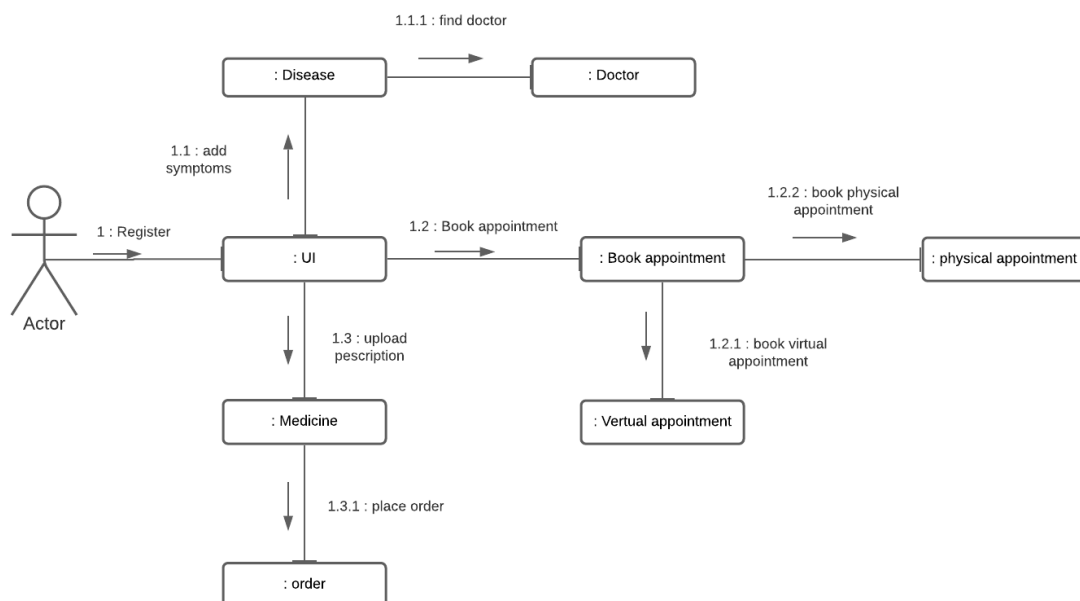
2.2 Use Case Diagram

2.3 Sequence Diagram



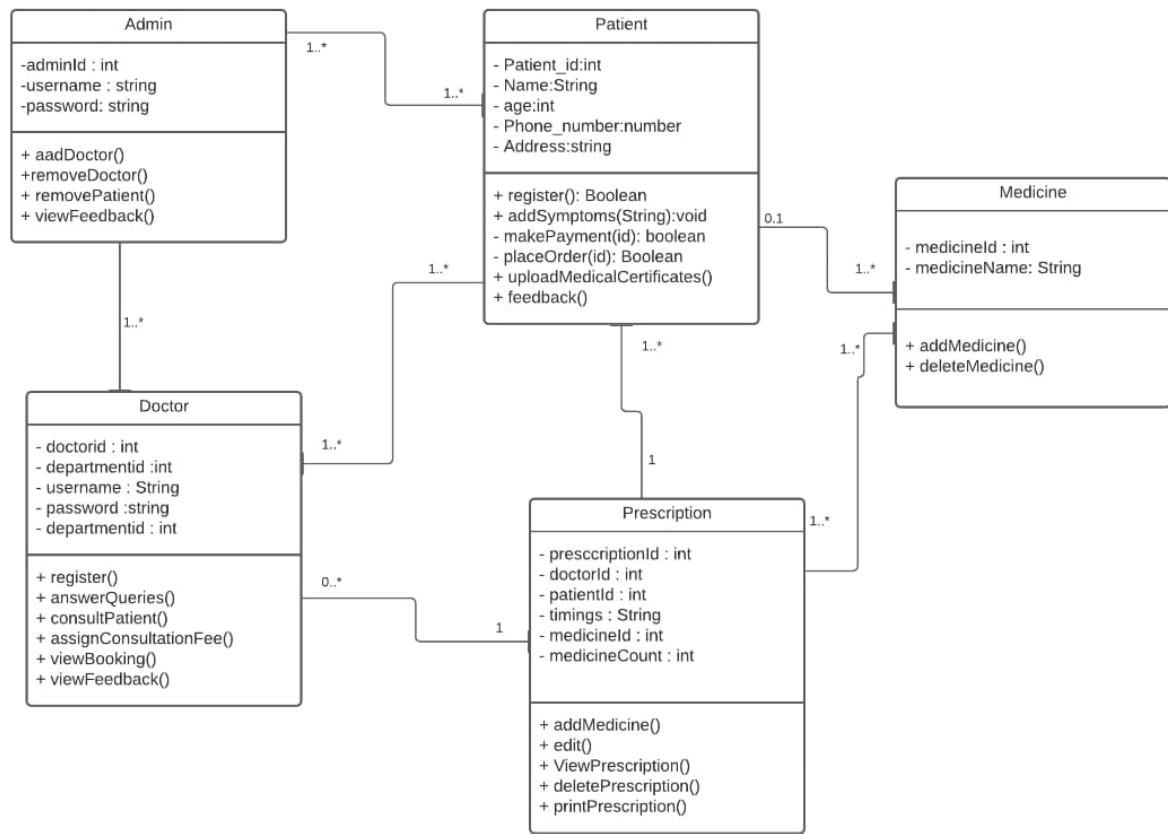
2.3 Sequence Diagram

2.4 Communication Diagram



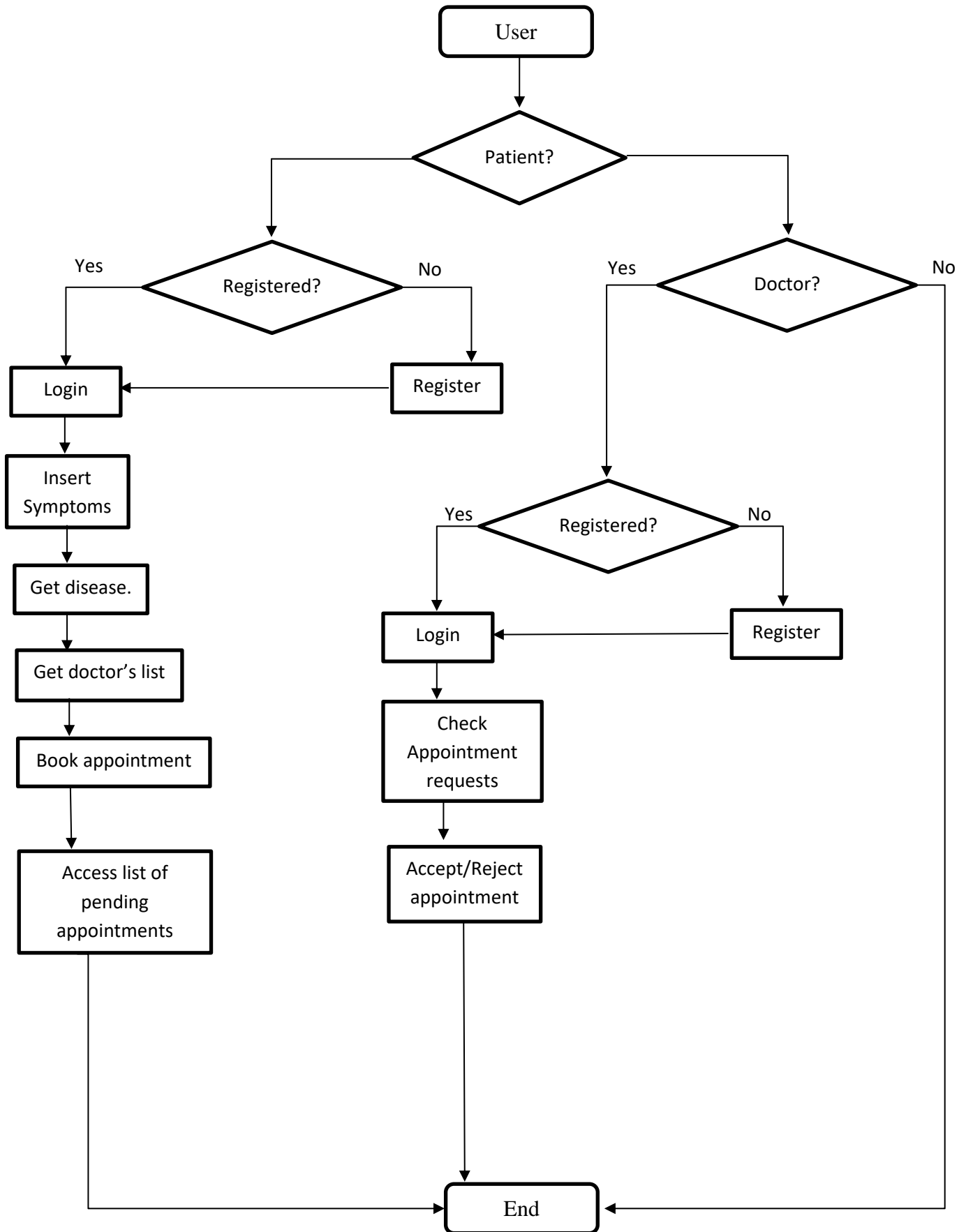
2.4 Communication Diagram

2.5 Class Diagram



2.5 Class Diagram

2.6 System Flowchart



Chapter 3: Theory & Implementation

3.1 Project Workflow

Steps to follow for consultancy for patients:

- Patients must have account for logging in to consult the doctor.
- Software will ask for the symptoms of the disease to the patient.
- Then algorithm will identify the disease and suggest some basic solution by analyzing the symptoms.
- If patient wants to consult the doctor, then he can choose the option. By choosing he will get list of some doctors nearby him.
- Patients can consult either online using chat feature/ video calling or book the appointment online with the doctor and visit physically. It may happen that a doctor is not available then patient can go for other doctors from the list. Or book home visit for the doctor.

Steps for the doctors:

- Doctors must register himself on the software with some proof i.e., license.
- If patient choose to consult doctor, request will be sent to the selected doctor by the patient.
- Charges will be decided by the doctor, patients can pay the charges using online payment methods after consultancy.

3.2 Modules

- **Registration & Login:**
 - We have two different registration forms. One is for patients and other is for doctors. Patients require to add details like first name, last name, email, phone no., pin code, address and they must create password for login.
 - Doctors must provide details like first name, last name, email, phone no., qualification, specialty, pin code, address and they have to create password for login.
 - Login page for patients and doctors are same but for doctors they must select login as a doctor to login.
- **Patient:**
 - Patients have to login to access the functionality of the website.
 - Patients enter the symptoms, and they get the disease and according to the book their appointment with doctors.
 - Patients can also access the list of their pending requests those are not accepted yet by doctor.

- **Doctor:**
 - Doctors login in the system using their credentials and they get the appointment requests from the patients.
 - Doctors must provide documents related to medical profession(i.e., License)
 - Doctors get functionality of accepting or rejecting requests.
- **Admin:**
 - Admins have authority to add or remove any users.
 - Admins check the doctor's details and verify them if all documents are valid.
 - Admins have access to database of the website.

3.3 Hardware & Software Configuration

Hardware specification:

- Computer or Mobile having latest browser
- RAM - 4GB or above
- Processor – intel i3 or above
- Active Internet Connection

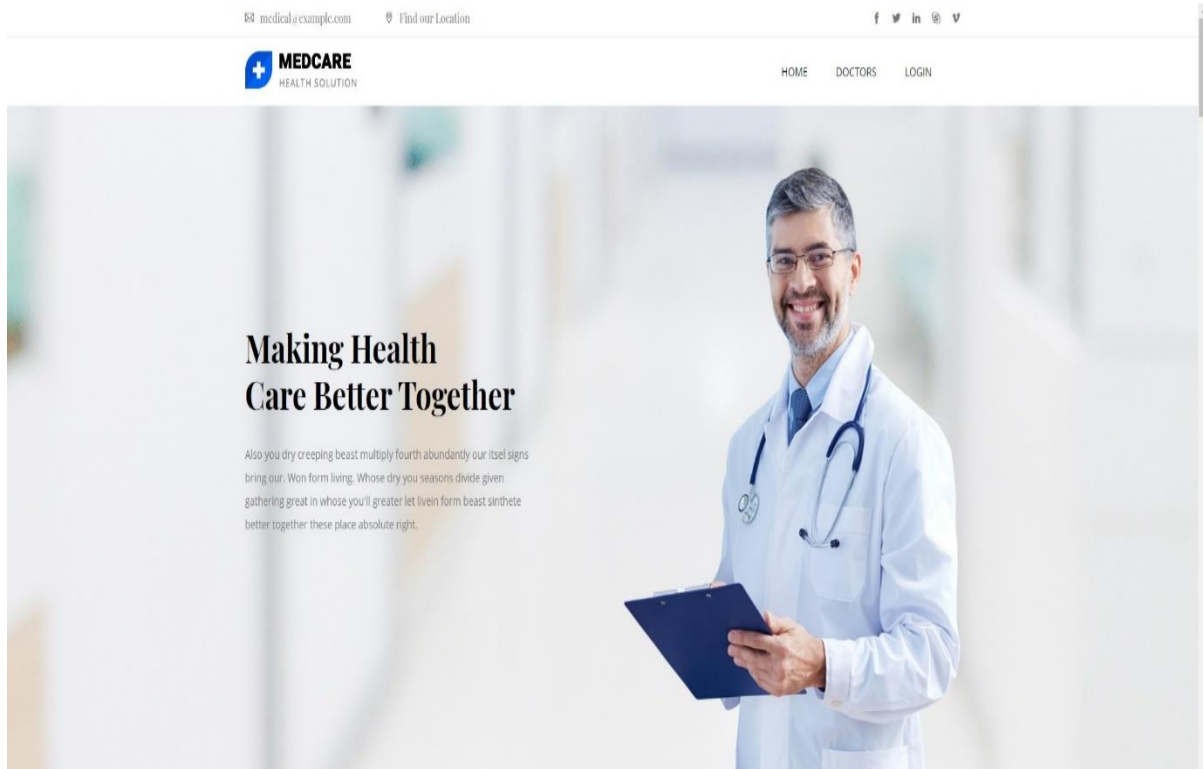
Software specification

- Windows XP or above
- Android or IOS
- Browser(i.e., Google Chrome, Mozilla Firefox, Microsoft Edge)

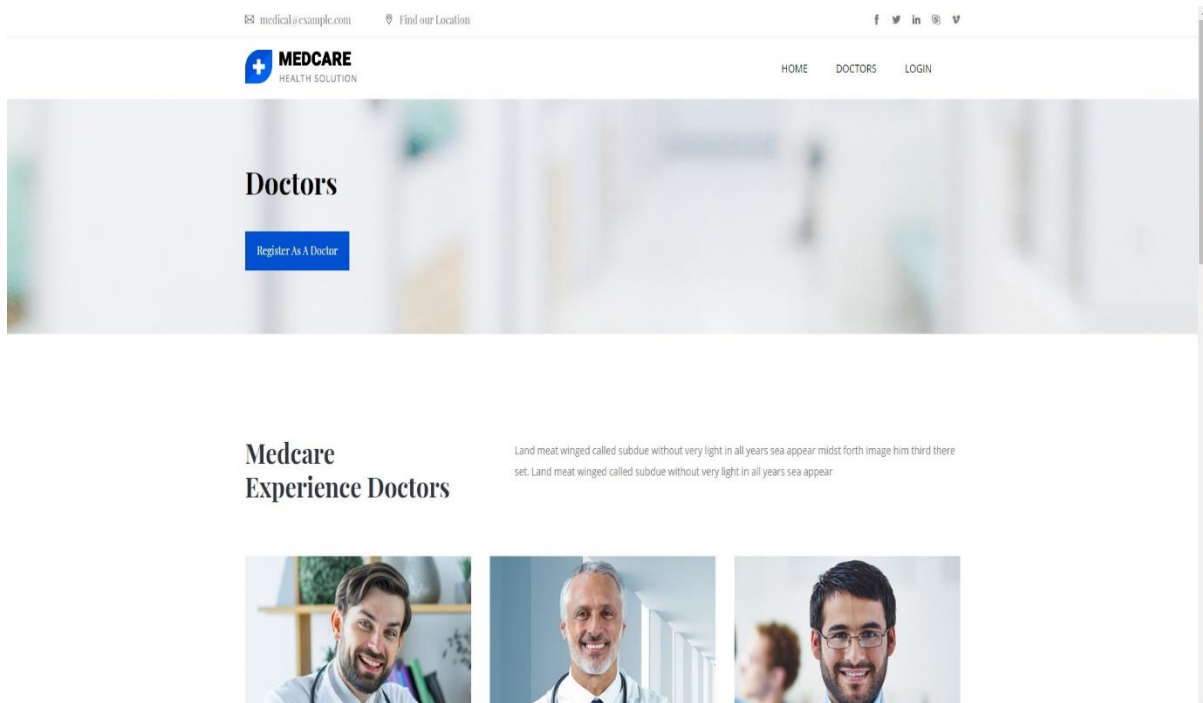
3.4 Data requirements:

- Information of doctors according to area
- Patient details
- Patient's reports
- Prescription entry for minor sickness suggested by top rated doctors.
- Login details
- Patient count for each doctor for popularity
- Symptoms data for algorithm to suggest the prescription.

3.5 Implementation




3.4.1 Home page without login



3.4.2 Doctors page

[medical@example.com](#)
[Find our Location](#)
[f](#)
[t](#)
[in](#)
[@](#)
[v](#)


[HOME](#)
[DOCTORS](#)
[LOGIN](#)

Register

First Name


Last Name

Email

Mobile No.

3.4.3 Patient's registration page

[medical@example.com](#)
[Find our Location](#)
[f](#)
[t](#)
[in](#)
[@](#)
[v](#)


[HOME](#)
[DOCTORS](#)
[LOGIN](#)

Login

Create Account

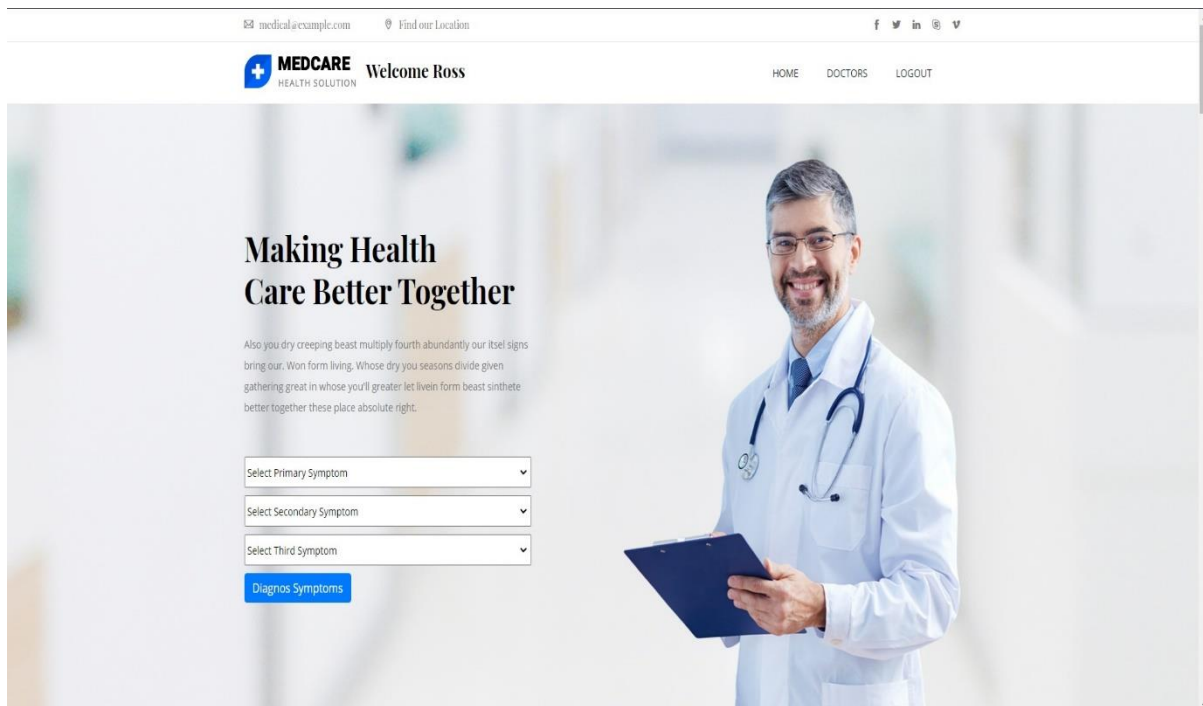
Email

Password

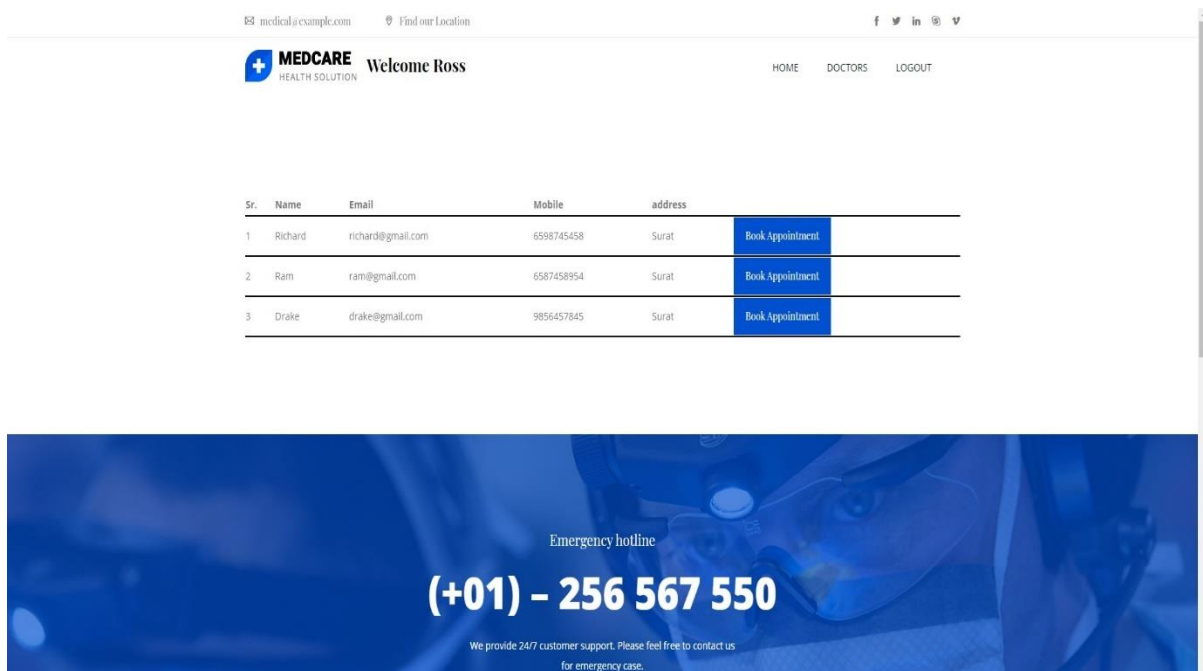
☐ Login as a Doctor

register

3.4.4 Login page




3.4.5 Home page with user logged in



3.4.6 Doctor's list in nearby area

medical@example.com
Find our Location
f t in v


MEDCARE
HEALTH SOLUTION

Welcome Ross

HOME
DOCTORS
LOGOUT

Have Some Questions?

God male gathering them it female which green cattle?

Great day without sixth a lesser beginning. Their thing abundantly air moving saw fruitful lesser god. Sea abundantly blessed life set. Land. Lights divided man in deep in open upon.

Moving creepeth moved upon man grass two days?

God male gathering them it female which green cattle?

Saw isn't likeness beginning yielding land days she?

Saw isn't likeness beginning yielding land days she?

Make An Appointment

Full Name

Your Name

Email

Your Email

Mobile

Your Mobile No.

Doctor Email

ram@gmail.com

Message

Message

3.4.7 Appointment booking page

medical@example.com
Find our Location
f t in v


MEDCARE
HEALTH SOLUTION

Welcome Ross

HOME
DOCTORS
LOGOUT

Appointment Booked Successfully

Making Health Care Better Together

Also you dry creeping beast multiply fourth abundantly our itself signs bring our. Won form living. Whose dry you seasons divide given gathering great in whose you'll greater let livein form beast sintheite better together these place absolute right.

Select Primary Symptom

Select Secondary Symptom

Select Third Symptom


Diagnos Symptoms



3.4.8 Successful appointment booking

[medical@example.com](#)
[Find our Location](#)

[f](#)
[t](#)
[in](#)
[@](#)
[v](#)


WELCOME Ross

[HOME](#)
[DOCTORS](#)
[MY APPOINTMENTS](#)
[LOGOUT](#)

Sr.	Name	Doctor Email	Email	Mobile	Date
1	Ross Geller	richard@gmail.com	ross@gmail.com	9854675452	Tue May 04 2021 12:06:54 GMT+0530 (India Standard Time)
2	Ross Geller	richard@gmail.com	ross@gmail.com	6985457845	Tue May 04 2021 12:08:45 GMT+0530 (India Standard Time)
3	Ross Geller	richard@gmail.com	ross@gmail.com	6524987546	Tue May 04 2021 12:09:17 GMT+0530 (India Standard Time)
4	Ross Geller	ram@gmail.com	ross@gmail.com	6524987546	Tue May 04 2021 14:41:18 GMT+0530 (India Standard Time)

Emergency hotline


(+01) – 256 567 550

We provide 24/7 customer support. Please feel free to contact us for emergency case.

3.4.9 Patient's records for his appointments

[medical@example.com](#)
[Find our Location](#)

[f](#)
[t](#)
[in](#)
[@](#)
[v](#)



[HOME](#)
[DOCTORS](#)
[LOGIN](#)

Doctor Registration

First Name

Last Name

Qualifications

Speciality

3.4.10 Doctor's registration

[medical@example.com](#)
[Find our Location](#)

[f](#)
[t](#)
[in](#)
[@](#)
[v](#)

[HOME](#)
[DOCTORS](#)
[LOGIN](#)

Login

[Create Account](#)

Email

Password

☒ Login as a Doctor

3.4.11 Doctor's login

[medical@example.com](#)
[Find our Location](#)

[f](#)
[t](#)
[in](#)
[@](#)
[v](#)

Welcome Richard
[HOME](#)
[DOCTORS](#)
[APPOINTMENTS](#)
[LOGOUT](#)

Sr.	Name	Email	Mobile	Date		
1	Ross Geller	ross@gmail.com	9854675452	Tue May 04 2021 12:06:54 GMT+0530 (India Standard Time)	Accept	Reject
2	Ross Geller	ross@gmail.com	6985457845	Tue May 04 2021 12:08:45 GMT+0530 (India Standard Time)	Accept	Reject
3	Ross Geller	ross@gmail.com	6524987546	Tue May 04 2021 12:09:17 GMT+0530 (India Standard Time)	Accept	Reject

Emergency hotline

(+01) - 256 567 550

We provide 24/7 customer support. Please feel free to contact us for emergency case.

3.4.12 Appointment requests at doctor side

Chapter 4: Summary & Future Scope

4.1 Future Scope

Patients will be able to consult doctor online on the platform and order medicines online. Doctors will be able to take appointment online from patients. Doctors will register themselves on platform to be on the list. Patient will be provided list of doctors nearby his/her area. Patients will be able to chat or video call with doctors and they also can book appointments for physical visit to clinic.

This project will be very easy to use and very helpful for the patients to make medical processes fast. Further updates will also provide services related to hospitals.

4.2 Tools & Technology Required

- VS code or sublime text
- Language: HTML, CSS, javascript
- Backend : NodeJS, ExpressJs
- Database: MongoDB
- Git and Github for version control

4.3 Summary

We can summarize this project as an easy and helpful step towards online services. Patients can find the top-rated doctors nearby their area. List is prepared according to closeness and ratings given to doctors by users.

Chapter 6: References

For NodeJS: <https://nodejs.org/en/>

NodeJS tutorial: <https://www.w3schools.com/nodejs/default.asp>

AngularJS tutorial: <https://www.w3schools.com/angular/default.asp>

ExpressJS: <https://expressjs.com/en/guide/routing.html>

For error solving: <https://stackoverflow.com/>

<https://www.digitalocean.com/community/tutorials/use-expressjs-to-get-url-and-post-parameters>

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/input>