AUTOMATED SCHEDULING AND MANAGING APPOINTMENTS FOR HOSPITAL

A PROJECT REPORT

Submitted by

YASH KATHIRIYA
180210107024

In partial fulfillment of the award of the degree of

BACHELOR OF ENGINEERING
In
Computer Engineering Department
Government Engineering College, Bhavnagar

Gujarat Technological University, Ahmedabad

[April, 2022]

Government Engineering College, Bhavnagar
Nr. Sir BPTI Campus, Vidhyanagar,
Bhavnagar, Gujarat - 364002

CERTIFICATE

This is to certify that the project report submitted along with the project entitled **Internship** has been carried out by **Kathiriya Yash Kanubhai** under my guidance in partial fulfillment for the degree of Bachelor of Engineering in Computer Engineering, 8th Semester of Gujarat Technological University, Ahmedabad during the academic year 2021-22.

Internal Guide,
Prof. K.R. Makvana

Head of Department,
Prof. K.P. Kandoriya

Government Engineering College, Bhavnagar
NR. Sir BPTI Campus, Vidhyanagar,
Bhavnagar, Gujarat - 364002

DECLARATION

I hereby declare that the Internship report submitted along with the **Internship in Python developer** entitled submitted in partial fulfillment for the degree of Bachelor of Engineering in Computer Engineering to Gujarat Technological University, Ahmedabad, is a bonafide record of original project work carried out by me at Spider Technology under the supervision of Mr. Anurag Rabadiya and that no part of this report has been directly copied from any students' reports or taken from any other source, without providing due reference.

Name of the Student **Sign of Student**

Kathiriya Yash Kanubhai

SPIDER
TECHNOLOGY
Unbeatable Solutions & Ultimate Ideas..

Date : 29/04/2022

TO WHOM IT MAY CONCERN

This is to certify that, **Kathiriya Yash Kanubhai (180210107024)** the student of **Government Engineering College, Bhavnagar** has successfully completed his internship in the field of **Python Django** from **19/01/2022** to **29/04/2022 (Total Number of Weeks : 14)** under the guidance of **Anurag Rabadiya**.

His Internship Activities Include Work on the following Project:

Project Title: -

Automated Scheduling And Managing Appointments For Hospital

Platform:- **Python Django**

Back End:- **SQLITE Database**

During the period of his internship program with us, he had been exposed to different processes and found diligent, hardworking and inquisitive.

We wish him every success in his life and career.

Feel free to call us, if you have questions or concerns.

A.P. Rabadiya

SPIDER TECHNOLOGY SURAT

Thanking you
SPIDER TECHNOLOGY

98795 16668 99250 16668 info@spidertechsoft.com
www.spidertechsoft.com
202-A, 2nd Floor, Samarth Park Complex, Aai Mata Road, Varachha, Surat - 395010.

ACKNOWLEDGEMENT

The satisfaction that accompanies the successful completion of this project would be incomplete without mentioning the people who made it possible, without whose constant guidance and encouragement would have made efforts go in vain. I consider myself privileged to express gratitude and respect towards all those who has guided through the completion of projects.

I convey thanks to my project guide **Prof. K.R. Makvana**, Computer Engineering Department, Government Engineering College - Bhavnagar, for providing encouragement, constant support and guidance which was of a great help to complete this project work successfully.

I am grateful to my external guide **Mr. Anurag Rabadiya**, Technical Trainer in **Spider Technology**, for giving me the support and encouragement that was necessary for the completion of this project.

I am grateful to **Prof. G.P. Vadodariya,** Principal of GEC - Bhavnagar and **Prof. K.P. Kandoriya**, Head of the Department, Computer Engineering, Government Engineering College - Bhavnagar, for giving us the support and encouragement that was necessary for the completion of this project.

I would like to thank all the faculty members for their patience, understanding and guidance that gave me strength and will power to work through the long tedious hours for developing a project and preparing the report.

Last but not the least, I would also like to thank my colleagues, who have cooperated during the preparation of our report and without them this project has not been possible. Their ideas helped me a lot to improve my project report.

YASH KATHIRIYA

180210107024

ABSTRACT

According to this system, every person books their appointment at home and no need to visit the hospital for booking. Consequently, doctors and patients can save their time. Doctors can know how many patients book their appointment on the current day. They also set their time and date in the system when he/she is not or any emergency occurs. The system will give a slot to new patients when one will cancel their own appointment. Laboratory function is also available, so doctors directly book their appointment with all necessary data to the laboratory and patients don't have to go for that.

The aim of this project is to develop a system that provide amenities relevant to book doctor's appointment online, and system will maintain all the booked and canceled slots professionally.

Doctors can also see all slots and also manage their schedule, so system can give slots properly to patients.

List of Figures

LIST OF TABLES

Table of Contents

CHAPTER 1

COMPANY PROFILE

1.1 OVERVIEW OF THE COMPANY

Company Name : Spider Technology

Spider Technology is a provider of **IT consulting** and **software development services**. Having started as a small AI product company, we switched to IT services in 2009 and ever since we have helped non-IT organizations and software product companies improve business performance and quickly win new customers.

With over years in Information Technology, we have built up expertise in Software Development, Mobile Apps Development, Embedded Systems (IoT Development), Industrial Automation Solutions, Website Development, SEO, Cloud Business Solutions, Social Media Marketing and Project Training etc.

1.2 SERVICES

- IT Consultancy
- Tailor-made Software
- Digital Transformation
- Mobile App Development
- Digital Marketing
- Embedded Systems – IOT Development

1.3 BRANCHES

- Gujarat, India

  202-A, Second Floor, Samarth Park Complex, Aai Mata Road, Varachha, Surat - 395010, Gujarat, India

CHAPTER 2

PROJECT INTRODUCTION

2.1 OVERVIEW

Number of hospitals are passing from unmanageable work. According to that, sometimes a few patient's appointments are missed and patients have to face this difficulty. Moreover, patients have to go to the hospital even to book an appointment also and as a result they waste their valuable time. Also they are unfamiliar with the hospital's environment and doctors.

Also difficult situations will arise when patients are not coming at a given time or not canceling the appointment. Receptionist has to face the difficulties of searching the patient's appointment or details for confirming the booking slot. Patients have to spend more and more time due to separate appointments for hospital treatments and laboratory tests.

As a solution of all above described problems, Patients can book and change their slots by own-self. So, it's become easy to manage all appointments. And develop a system who can manage all appointments.According to this system, every person books their appointment at home and no need to visit the hospital for booking. Consequently, doctors and patients can save their time. Doctors can know how many patients book their appointment on the current day. They also set their time and date in the system when he/she is not or any emergency occurs.

The system will give a slot to new patients when one will cancel their own appointment. Laboratory function is also available, so doctors directly book their appointment with all necessary data to the laboratory and patients don't have to go for that.

2.2 PROBLEM OF CURRENT SYSTEM

Patients have to visit physically at the hospital. So, their time will be wasted. Sometimes patients are not in a waiting position and this will have a negative impact.

Receptionist can not find patients' details quickly who take appointments and also they are not able to save or store the data for a long time period. There is also an impact on management, when one will not cancel the slot or not inform the hospital about his absence. And sometimes some patients arrive late so there will be some traffic at the hospital.

Doctors don't know how many patients are available outside and he can not manage his time according to all appointments and Patients have to give their much time in the laboratory section to get appointments also, if there is requirement of reports.

2.3 SCOPE/APPLICATION

The Automated scheduling and managing appointment system is easy to use. Any person can use it freely.

All patients can book their appointment as per their own favorable time at home. There is no need to visit the hospital. As a result they can save their time. Also they don't need to go to the hospital. So, they can give rest to themselves. Also they can view their appointment reports. Doctors can know how many patients book their appointments and how many remain for consulting.

System will set or manage the all appointments according to doctor's leave or any emergency occurs. Patients can change or cancel their appointment and that remaining slot will be provided to new registered patients. Also doctors can book laboratory appointments for those patients who need it. Consequently, patients have not to go for that and they can save their time.

CHAPTER 3

TRAINING ACTIVITIES

TECHNOLOGIES

- **Front-end:** HTML5, CSS3, JS
- **Back-end:** Python, Django MVT
- **Database:** SQLite
- Django is a Python framework that makes it easier to create web sites using Python.Django takes care of the difficult stuff so that you can concentrate on building your web applications.

3.1 HTML5

HTML stands for Hyper Text Markup Language. It is used to design web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. Markup language is used to define the text document within tag which defines the structure of web pages. HTML 5 is the fifth and current version of HTML. It has improved the markup available for documents and has introduced application programming interfaces(API) and Document Object Model(DOM).

3.2 CSS3

CSS stands for Cascading Style Sheets. It is the language for describing the presentation of Web pages, including colors, layout, and fonts, thus making our web pages presentable to the users.

CSS is designed to make style sheets for the web. It is independent of HTML and can be used with any XML-based markup language. Now let's try to break the acronym:

- **Cascading:** Falling of Styles
- **Style:** Adding designs/Styling our HTML tags
- **Sheets:** Writing our style in different documents

3.3 Java Script

JavaScript is a lightweight, cross-platform, and interpreted scripting language. It is well-known for the development of web pages, many non-browser environments also use it. JavaScript can be used for Client-side developments as well as Server-side developments. JavaScript contains a standard library of objects, like Array, Date, and Math, and a core set of language elements like operators, control structures, and statements.

- **Client-side:** It supplies objects to control a browser and its Document Object Model (DOM). Like if client-side extensions allow an application to place elements on an HTML form and respond to user events such as mouse clicks, form input, and page navigation. Useful libraries for the client-side are AngularJS, ReactJS, VueJS and so many others.

- **Server-side:** It supplies objects relevant to running JavaScript on a server. Like if the server-side extensions allow an application to communicate with a database, and provide continuity of information from one invocation to another of the application, or perform file manipulations on a server. The useful framework which is the most famous these days is node.js.

3.4 Django MVT

The MVT (Model View Template) is a software design pattern. It is a collection of three important components Model View and Template. The Model helps to handle database. It is a data access layer which handles the data.

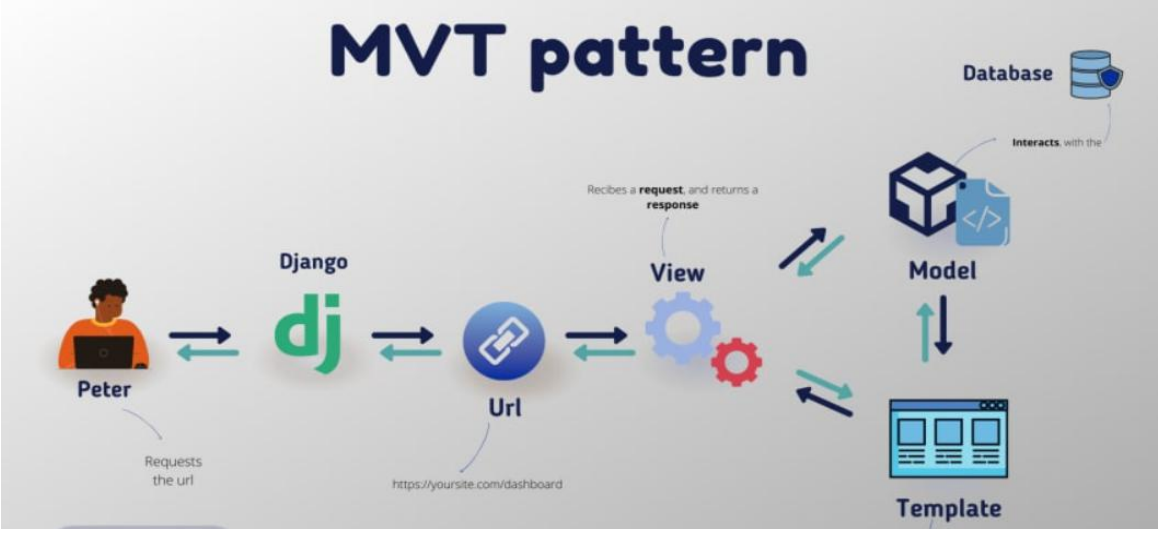

Fig 3.1 DJANGO MVT

The Template is a presentation layer which handles User Interface part completely. The View is used to execute the business logic and interact with a model to carry data and renders a template.

Although Django follows MVC pattern but maintains it's own conventions. So, control is handled by the framework itself.

There is no separate controller and complete application is based on Model View and Template. That's why it is called MVT application.

3.5 PYTHON

Python is a widely used general-purpose, high level programming language. It was created by Guido van Rossum in 1991 and further developed by the Python Software Foundation. It was designed with an emphasis on code readability, and its syntax allows programmers to express their concepts in fewer lines of code.

3.6 SQLite

SQLite is a self-contained, high-reliability, embedded, full-featured, public-domain, SQL database engine. It is the most used database engine in the world. It is an in-process library and its code is publicly available. It is free for use for any purpose, commercial or private. It is basically an embedded SQL database engine. Ordinary disk files can be easily read and write by SQLite because it does not have any separate server like SQL. The SQLite database file format is cross-platform so that anyone can easily copy a database between 32-bit and 64-bit systems. Due to all these features, it is a popular choice as an Application File Format.

CHAPTER 4

SYSTEM PLANNING

4.1 PROJECT DEVELOPMENT APPROACH

- DevOps model
- DevOps is about removing the barriers between traditionally siloed teams, development and operations. Under a DevOps model, development and operations teams work together across the entire software application life cycle, from development and test through deployment to operations.
- The primary goal of DevOps is to strongly integrate automation and monitoring at all steps of the software development life cycle (SDLC), from integration, testing, releasing, to deployment and infrastructure management.
- Advantages of DevOps model

•Speed

➢ DevOps moves at a higher velocity. Thus, organizations can innovate for customers faster, they can adapt to the changing market requirements, they can grow efficiently

•Rapid Delivery

➢ It helps in increasing the frequency and pace of your organization's releases. This allows you to innovate and improve your product at a much faster rate.

•Reliability

➢ DevOps is more reliable. It ensures the quality of application updates, thus enabling delivery at a rapid pace while still maintaining a positive experience for the customers/end-users.

•Scale

➢ It helps you to manage the infrastructure processes on a large scale. Automation can consistently help in managing complex or changing systems efficiently and also with reduced risk.

- **Security**
  - There is a greater amount of security. Your team can adopt a DevOps model with no sacrifices made towards security. Automated compliance policies, fine-grained controls, and configuration management techniques are utilized.

- **Cost Efficiency**
  - The software development process is made easier due to its cost-efficiency. It is more stable, secure, and changes are auditable. This is a huge plus point for any IT management team or organization.

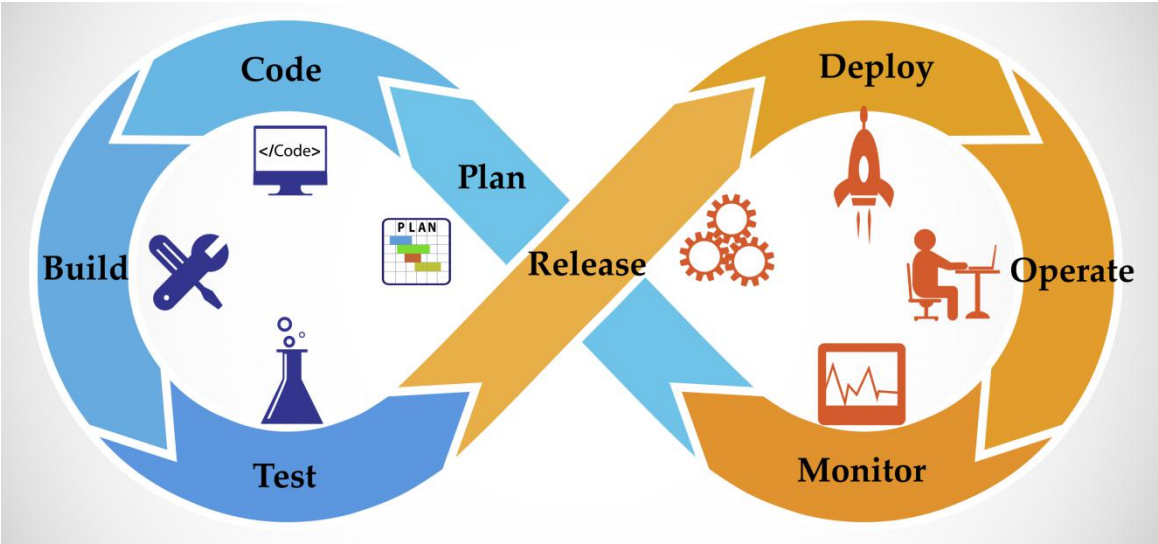

Fig 4.1 DEVOPS Model

4.2 SYSTEM MODULES

- Login And Registration
- Patient Module
- Doctor Module
- Profile Management
- Book Appointment
- Doctor Leave Management

4.2.1 Login And Registration

To perform any task in the system, patients and doctors both first need to register themselves into the system. Registered candidates can login to the system using registered credentials and book their appointments.

4.2.2 Patient Module

In this module patients can search for the doctor related to their concern. List of all the available doctors with their details like name, specialization, degree, consult time etc will be displayed to the patient. Patients can then book an appointment with the doctor. Patients can see all their booked appointment history in the dashboard.

4.2.3 Doctor Module

In this module doctors can check past and upcoming appointments and can approve the upcoming appointments. Doctor also add the leave so patient can not book an appointment at that time when doctor is not available. Doctor can change their consult time as per their schedule.

4.2.4 Profile Management

Registered candidates manage their profile, edit details and can change their password if required.

4.2.5 Book Appointment

This module can book appointment automatically. This is depend on doctor consult time and schedule time. There is no need to select specific time in web for book appointment.

4.2.6 Doctor Leave Management

Doctor can add their leave in website so patient can't book appointment at that time and system will gave available time.

4.3 FUNCTIONAL REQUIREMENTS

- Patients can see the booking list of other patients.
- Patients can delete leave before turns.
- In website patients can search doctors as per disease.
- Doctor can able to delete patients appointment.
- Doctor and patient can book laboratory appointment also
- Patients able to check their booking status from their account.

4.4 NON FUNCTIONAL REQUIREMENTS

➢ Security

- **Patient Identification :** The system leads the system recognize own self using the password
- **Login ID :** Any users who make use of the system need to hold a login id and password
- **Modification :** Any modification like insert, delete, update

➢ Reliability

- **Availability :** The system is available all the time

➢ Performance

- **Response Time :** The system provides acknowledgement in just one second once the patients information is checked
- **User Interface :** The user interface acknowledges within five seconds

4.5 TIMELINE CHART

Fig 4.2 TIMELINE CHART

CHAPTER 5

SYSTEM DESIGN

5.1 DATABASE

- **Doctor Table**

Table 5.1.1 Doctor Table

Column Name	Type	Constraint	Extra
Doctor_id	Int	PK	Auto Increment
name	CharField		max_length=200
mobile	IntegerField		
email	EmailField		max_length=256
password	CharField		max_length=80
doc_type	CharField		
degree	CharField		
speciality	CharField		
consult_time	IntegerField		max_length=2
slot1_strttime	TimeField		
slot1_endtime	TimeField		
Slot2_strttime	TimeField		
Slot2_endtime	TimeField		

- **Patient Table**

Table 5.1.2 Patient Table

Column Name	Type	Constraint	Extra
Patient_id	Int	PK	Auto Increment
name	CharField		max_length=200
mobile	IntegerField		max_length=256
email	EmailField		
password	CharField		max_length=80
age	IntegerField		
city	CharField		
address	CharField		

- **Hospital Appointment Table**

Table 5.1.3 Hospital Appointment Table

Column Name	Type	Constraint	Extra
hos_id	Int	PK	Auto Increment
hos_doctor_id	Int	FK	
patient_id	Int	FK	
date	DateField		
appointment_time	TimeField		
satus	CharField		

- **Laboratory Appointment Table**

Table 5.1.4 Laboratory Appointment Table

Column Name	Type	Constraint	Extra
lab_id	Int	PK	Auto Increment
lab_doc_id	Int	FK	max_length=256
patient_id	Int	FK	
date	DateField		max_length=80
appointment_time	TimeField		
status	CharField		

- **Doctor Leave Table**

Table 5.1.5 Doctor Leave Table

Column Name	Type	Constraint	Extra
leave_id	Int	PK	Auto Increment
doctor_id	Int	FK	
date	DateField		
slot1_strttime	TimeField		NULL
slot1_endtime	TimeField		NULL
slot2_strttime	TimeField		NULL
slot2_endtime	TimeField		NULL

5.2 DATA FLOW DIAGRAM

A data-flow diagram is a way of representing a flow of data through a process or a system.

5.2.1 DFD LEVEL 0

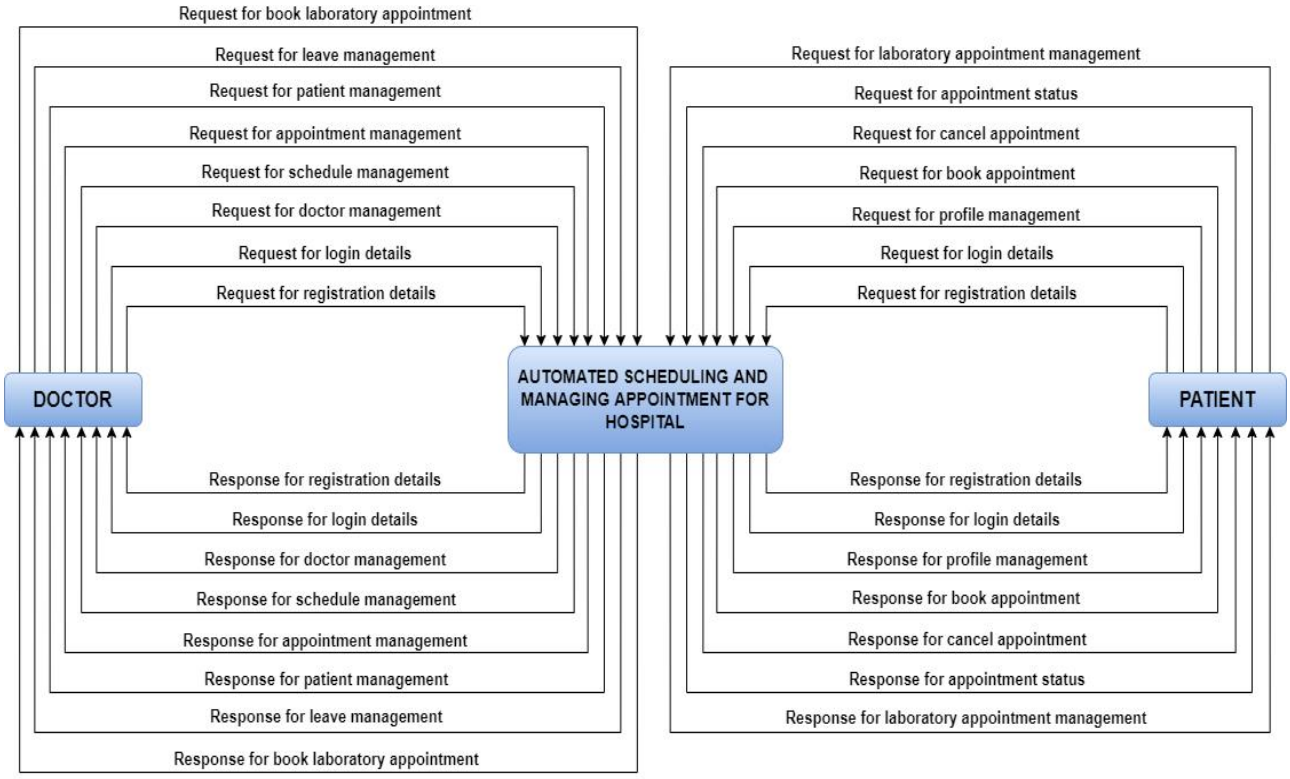

Fig 5.2.1 DFD Level-0

5.2.2 DFD LEVEL 1

- **For Patient**

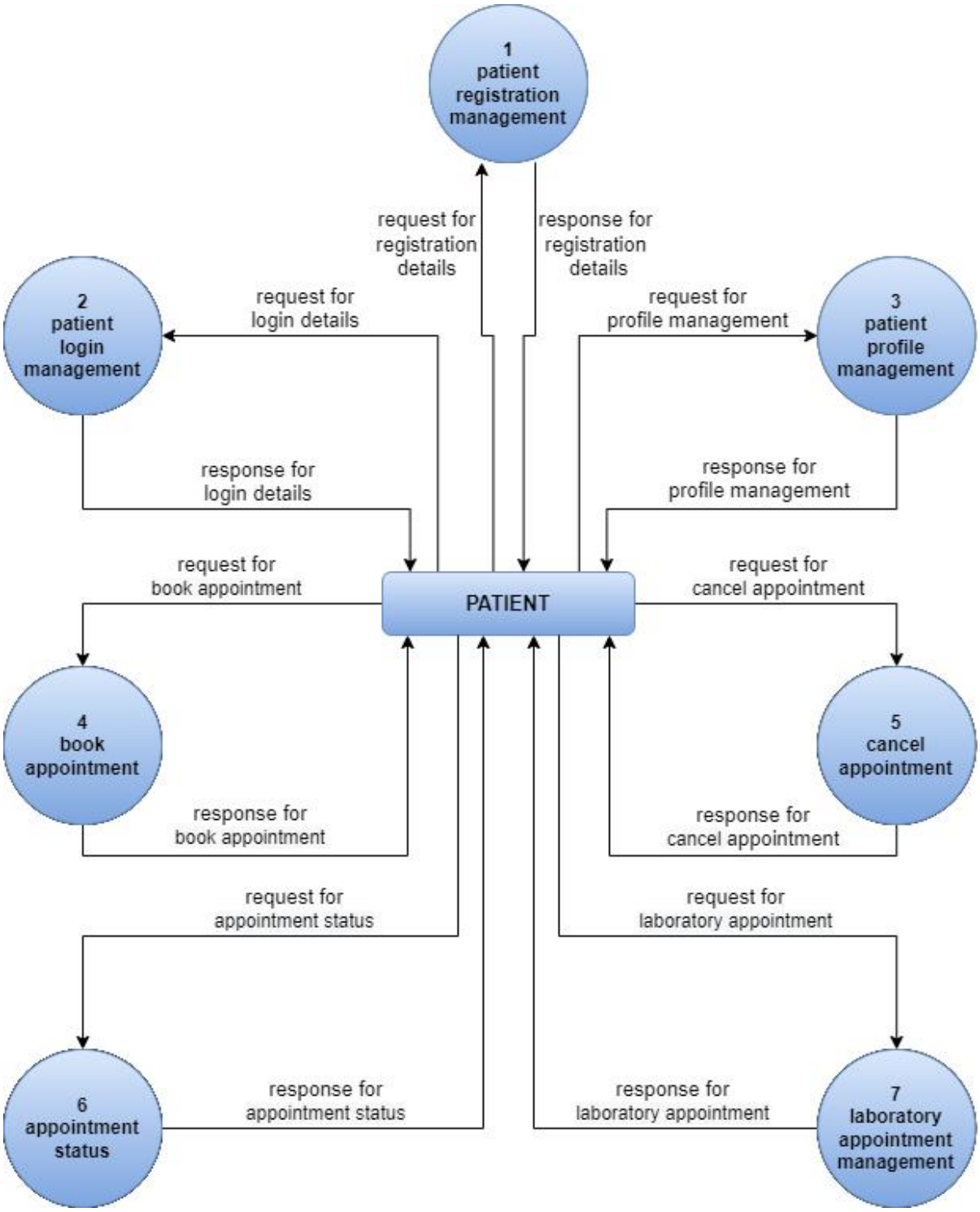

Fig 5.2.2.1 DFD Level-1 For Patient

- **For Doctor**

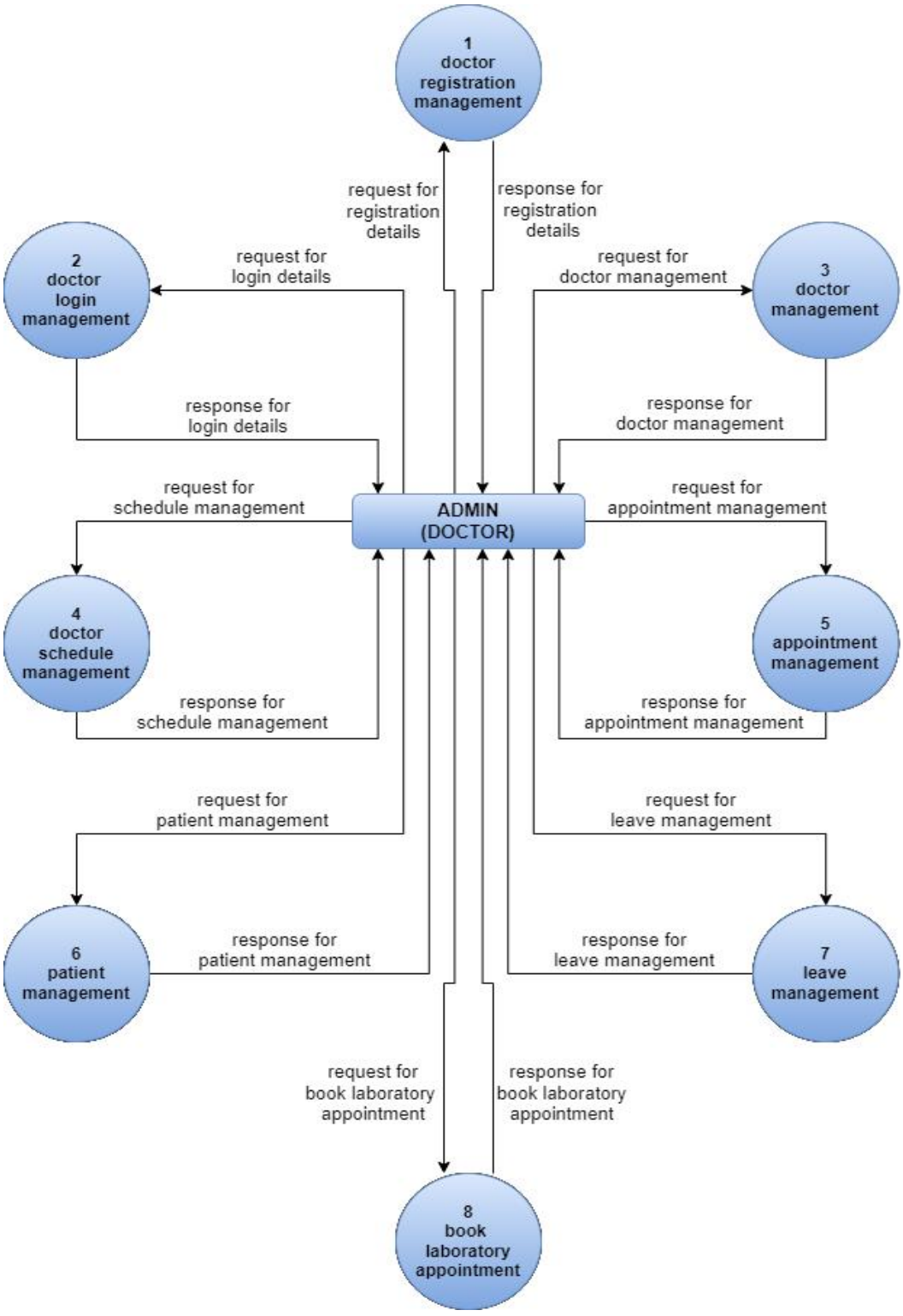

Fig 5.2.2.2 DFD Level-1 For Doctor

5.2.3 DFD LEVEL 2

- **For Patient**

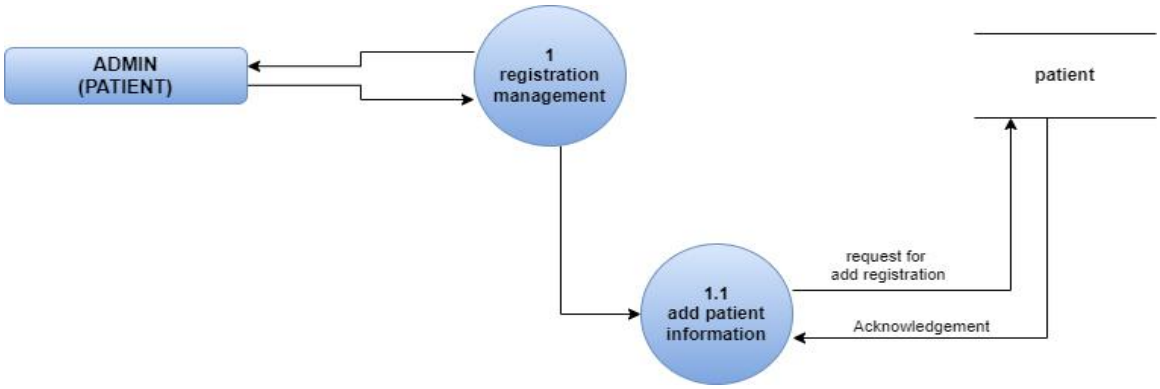

Fig 5.2.3.1 DFD Level-2 For Patient Registration

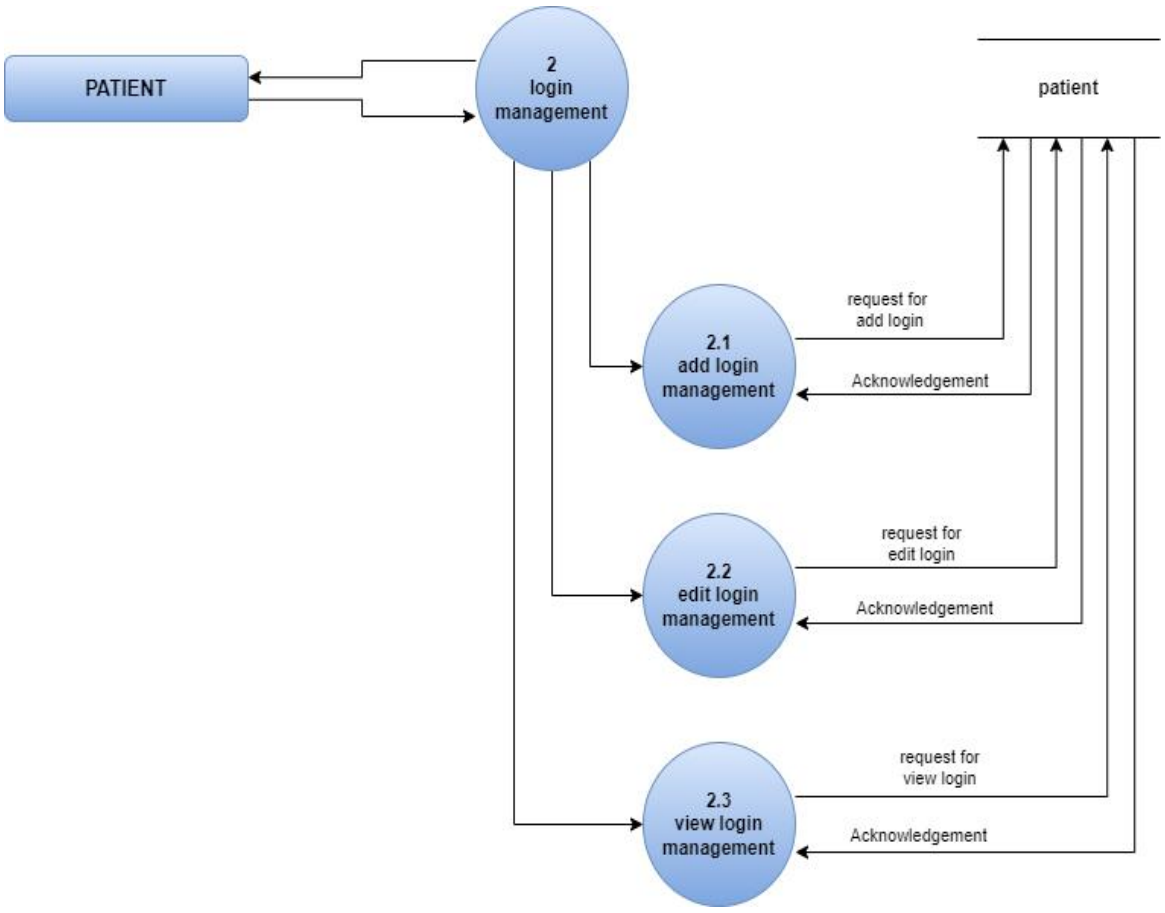

Fig 5.2.3.2 DFD Level-2 For Patient Login

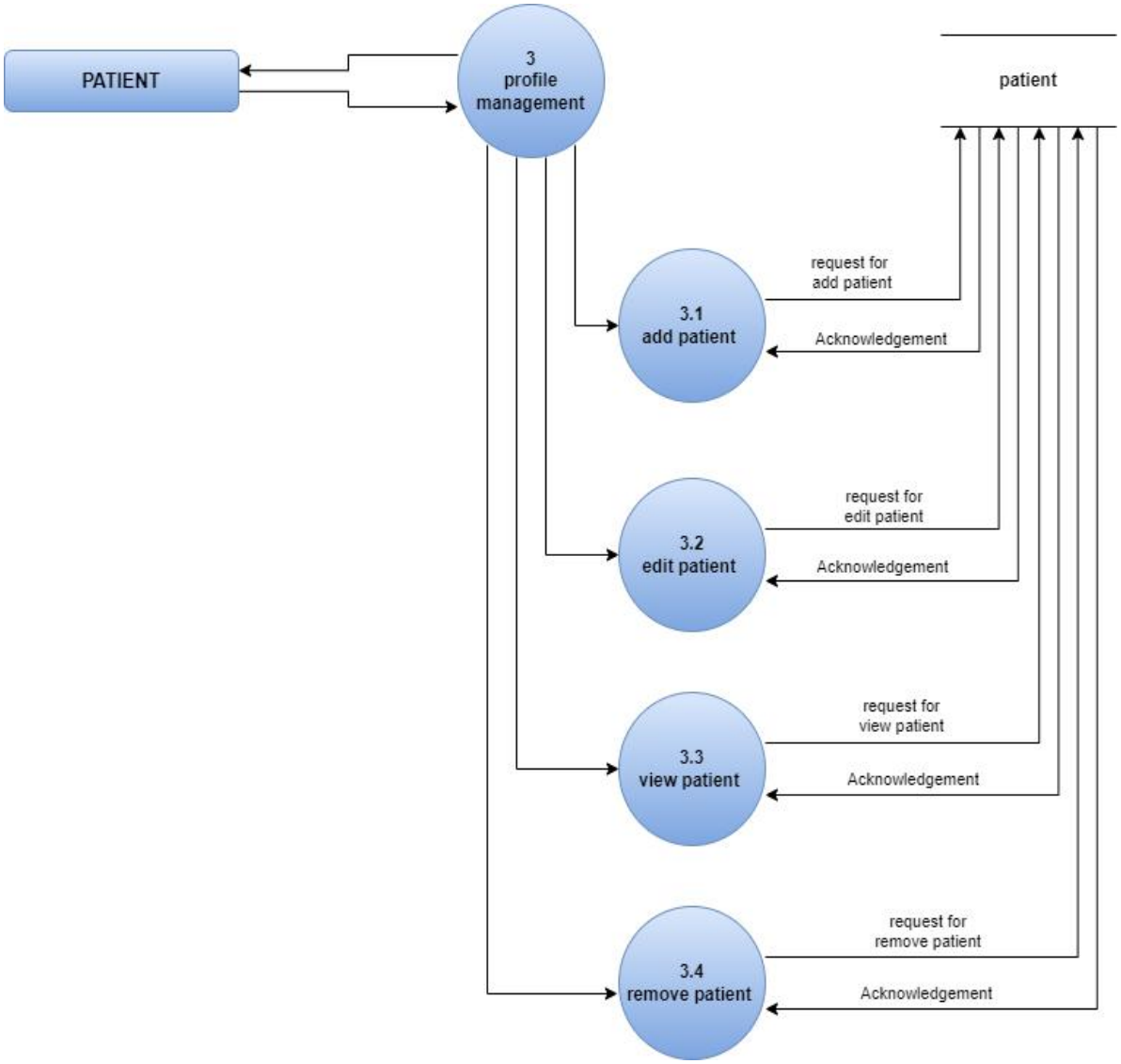

Fig 5.2.3.3 DFD Level-2 For Patient Profile

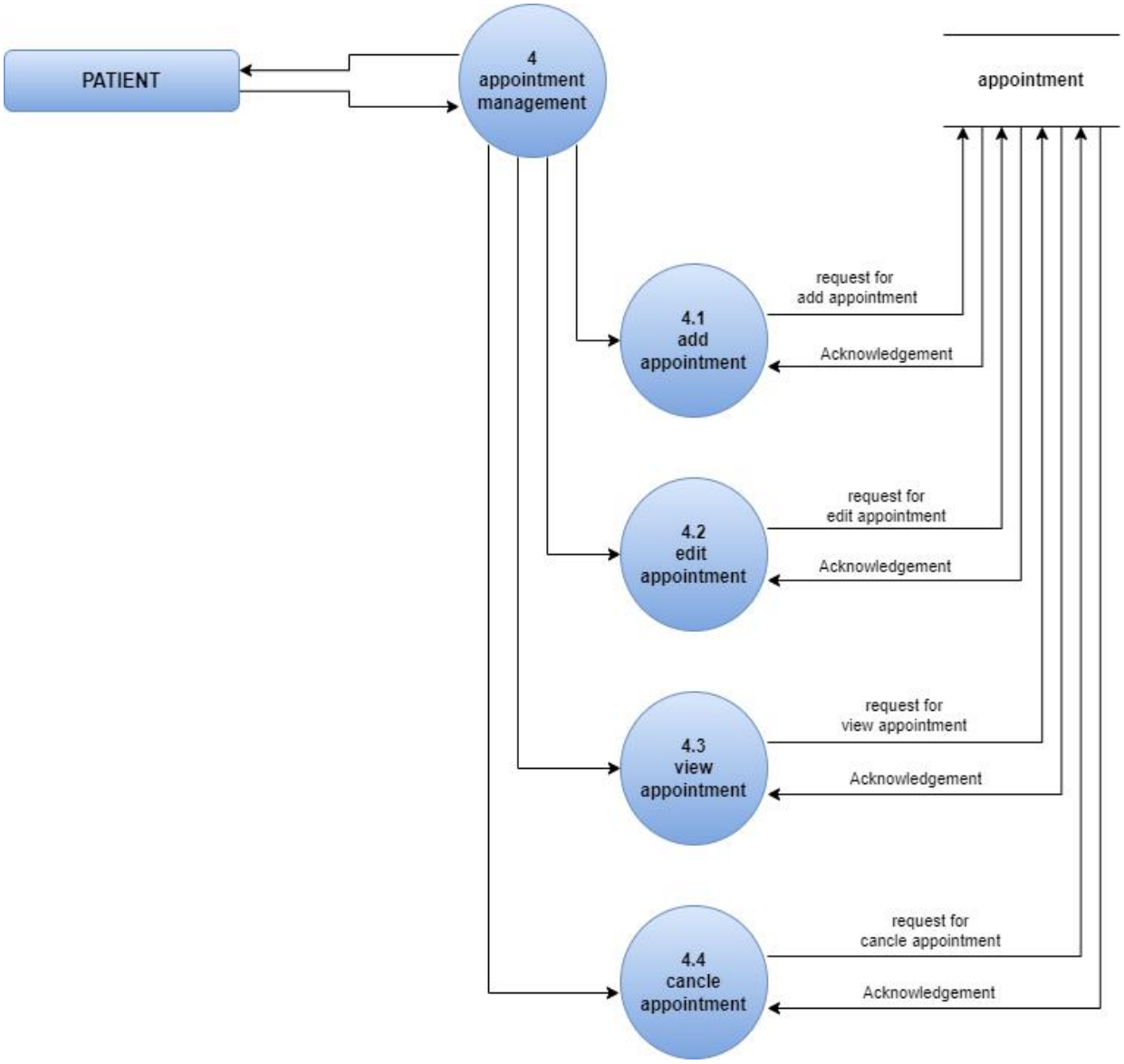

Fig 5.2.3.4 DFD Level-2 For Patient Appointment

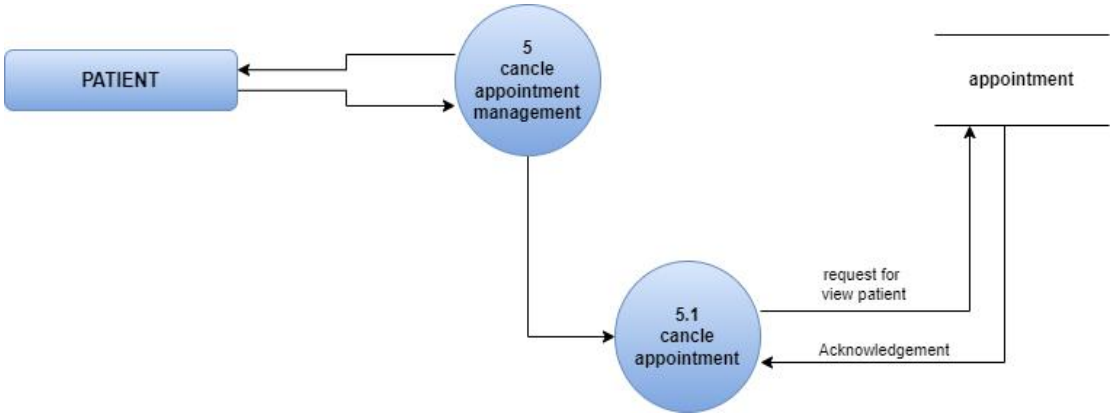

Fig 5.2.3.5 DFD Level-2 For Patient Cancel

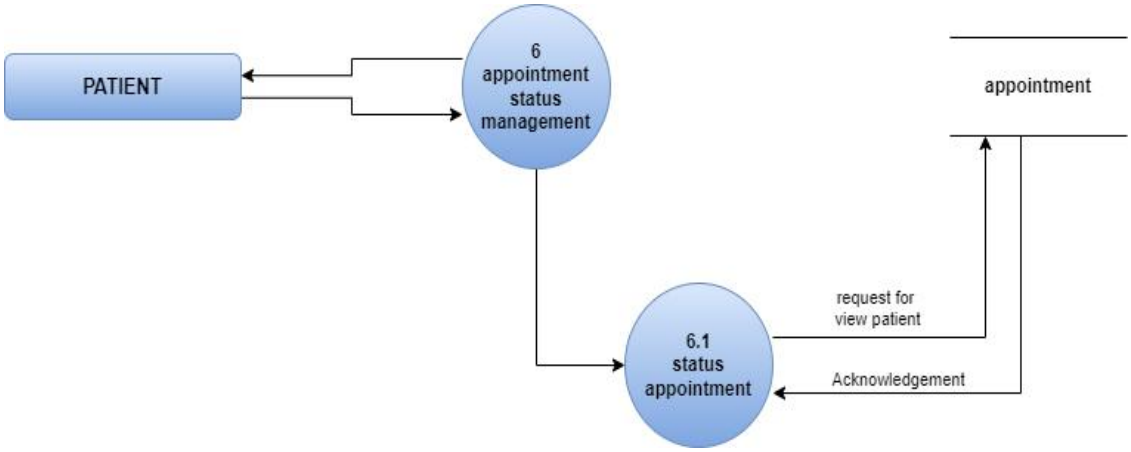

Fig 5.2.3.6 DFD Level-2 For Patient Status

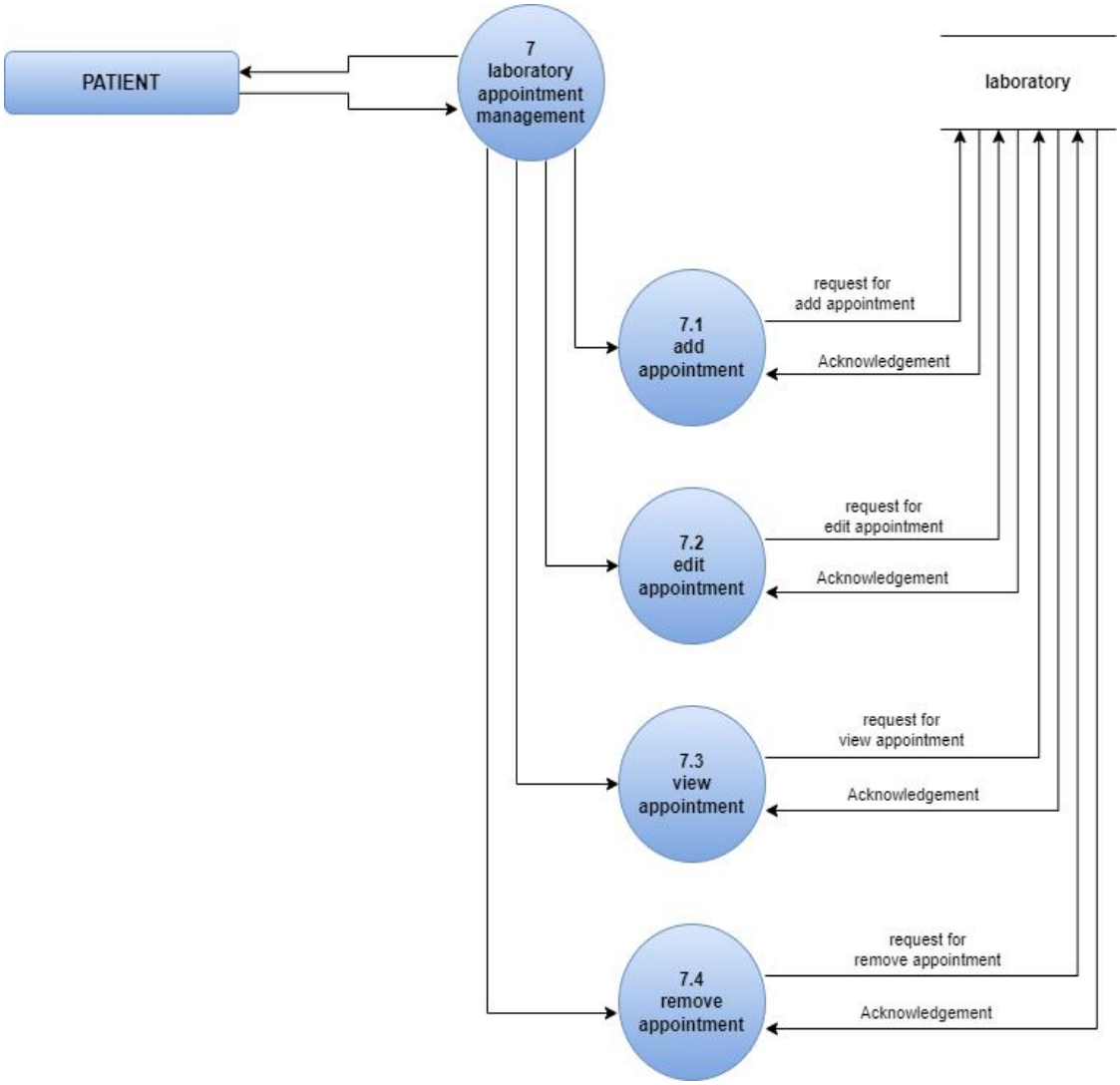

Fig 5.2.3.7 DFD Level-2 For Patient lab appointment

➢ **For Doctor**

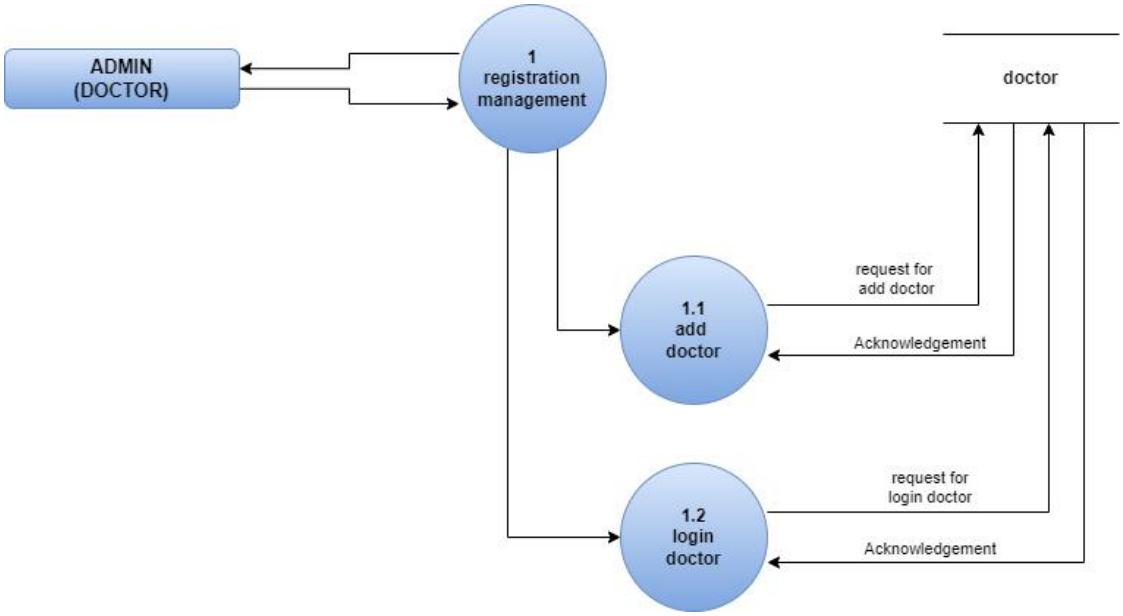

Fig 5.2.3.8 DFD Level-2 For Doctor Registration

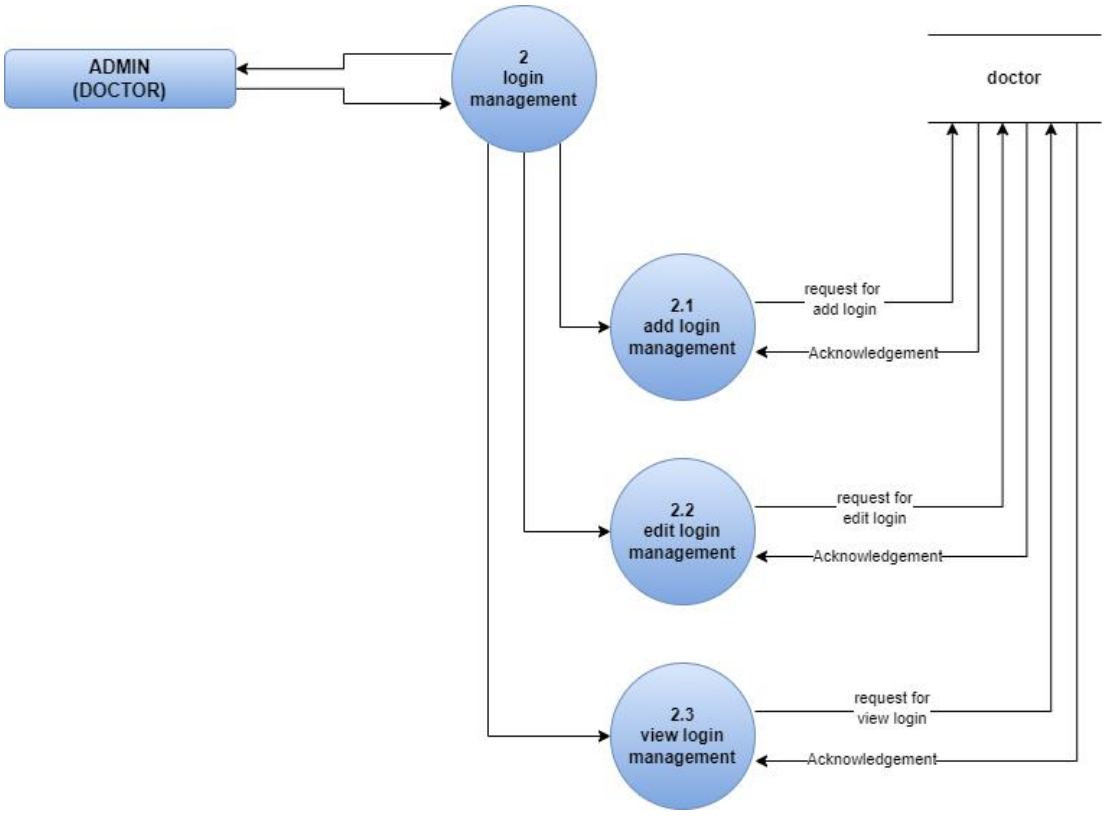

Fig 5.2.3.9 DFD Level-2 For Doctor login

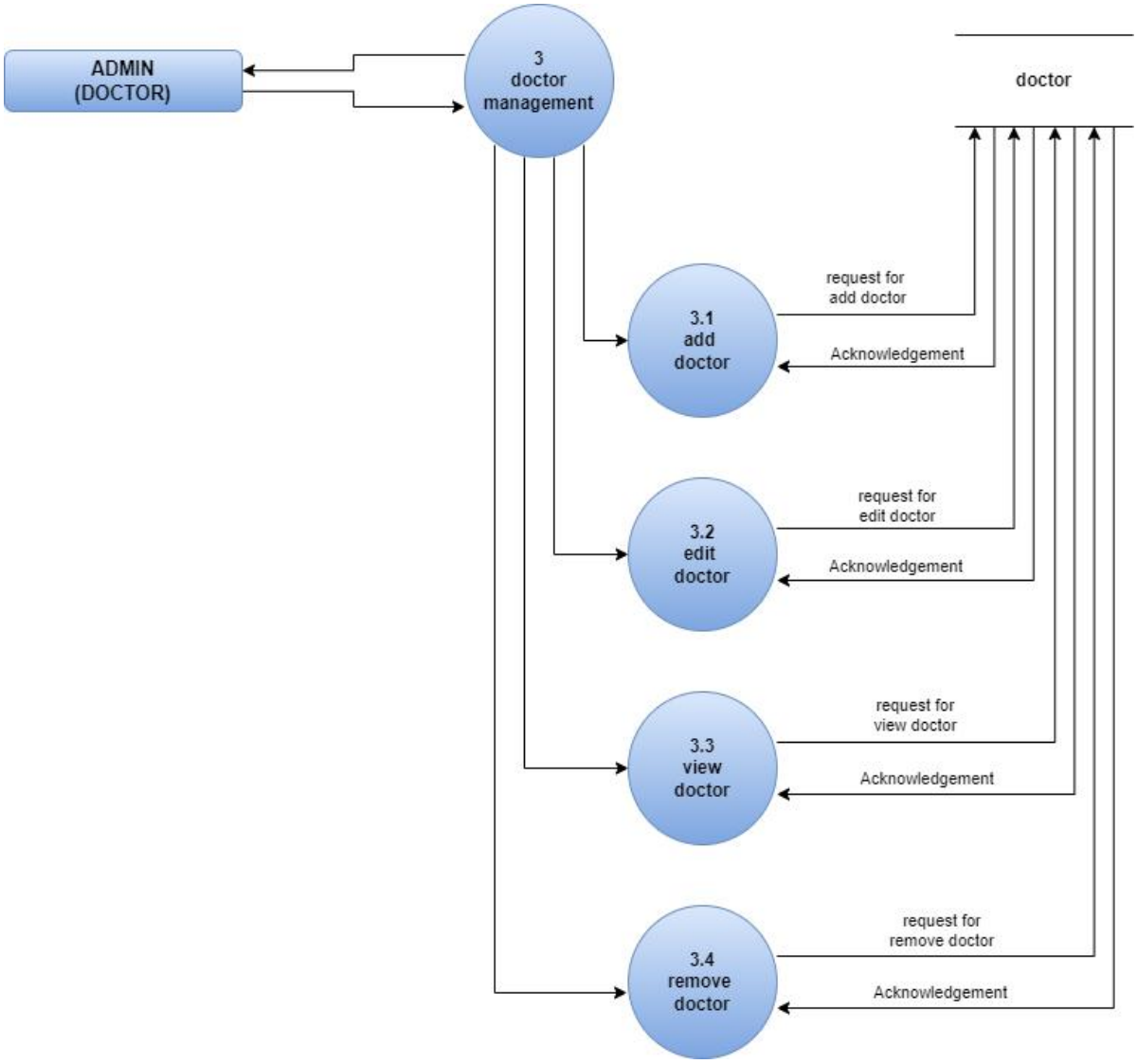

Fig 5.2.3.10 DFD Level-2 For Doctor Management

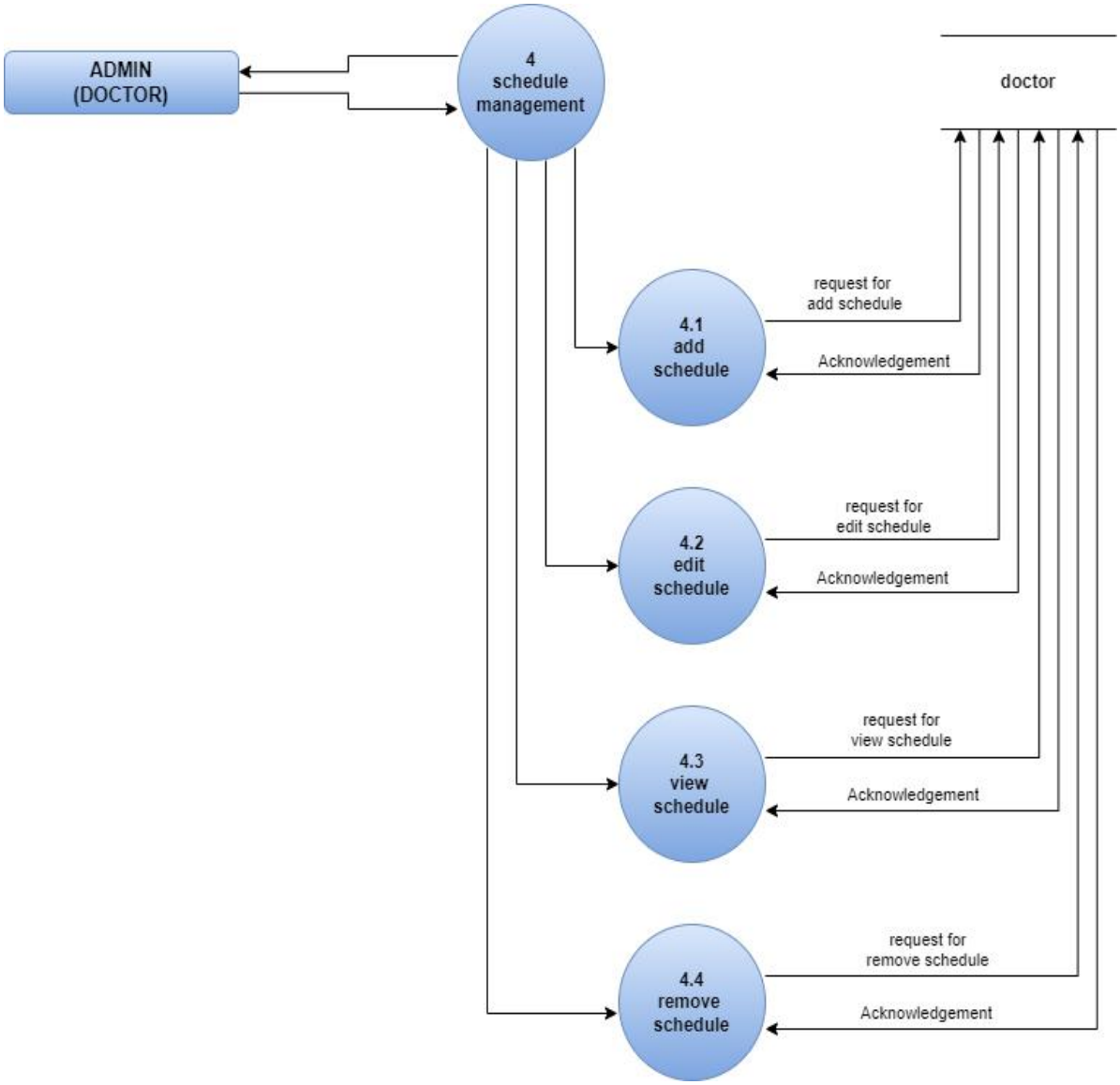

Fig 5.2.3.11 DFD Level-2 For Doctor Schedule

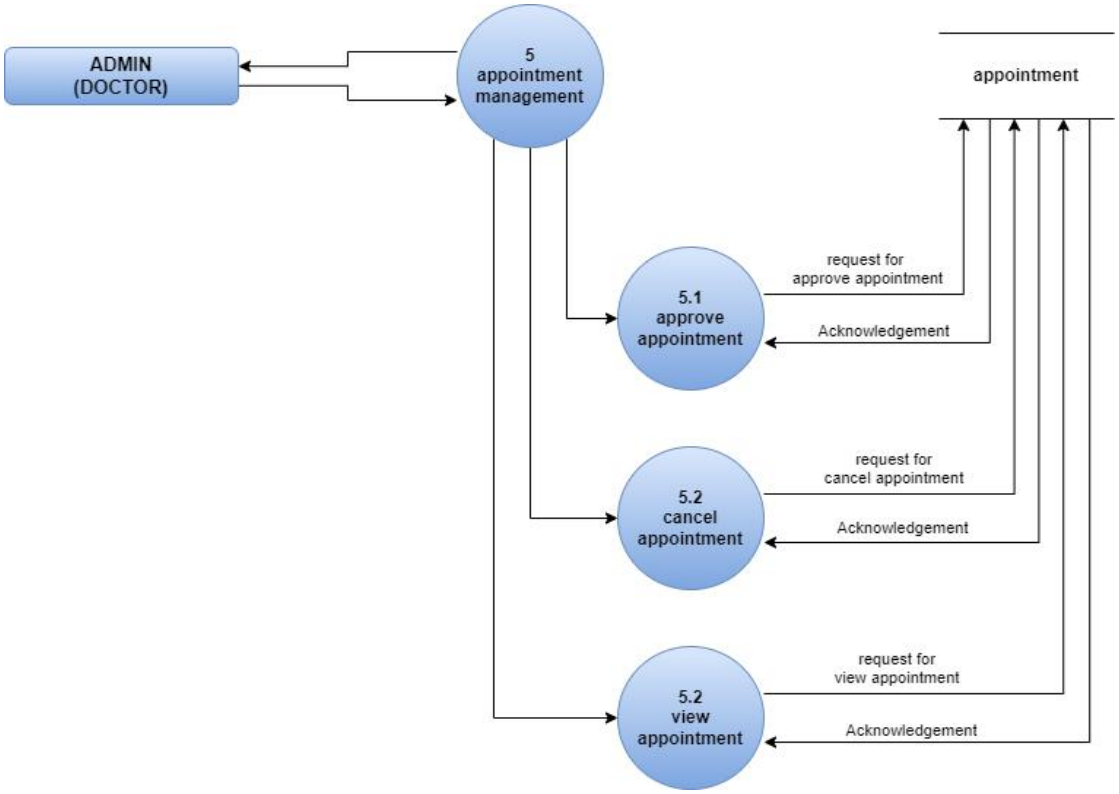

Fig 5.2.3.12 DFD Level-2 For Doctor Appointment

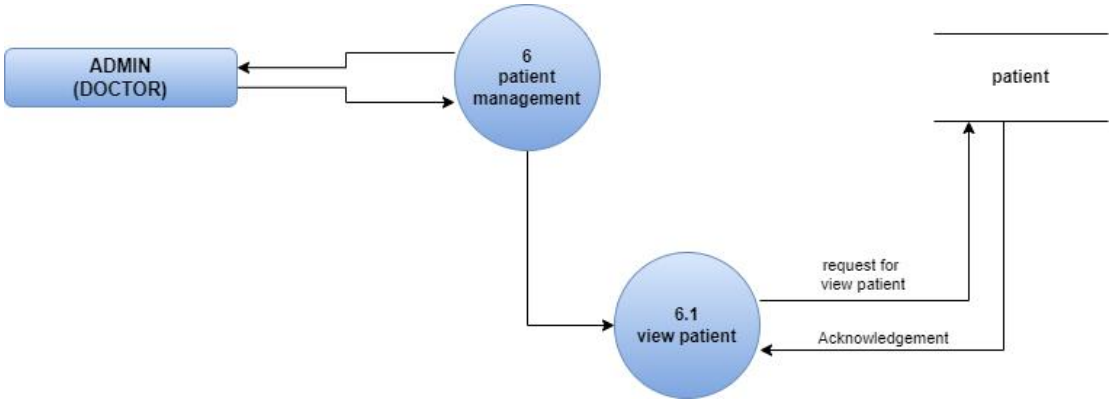

Fig 5.2.3.13 DFD Level-2 For Patient Management

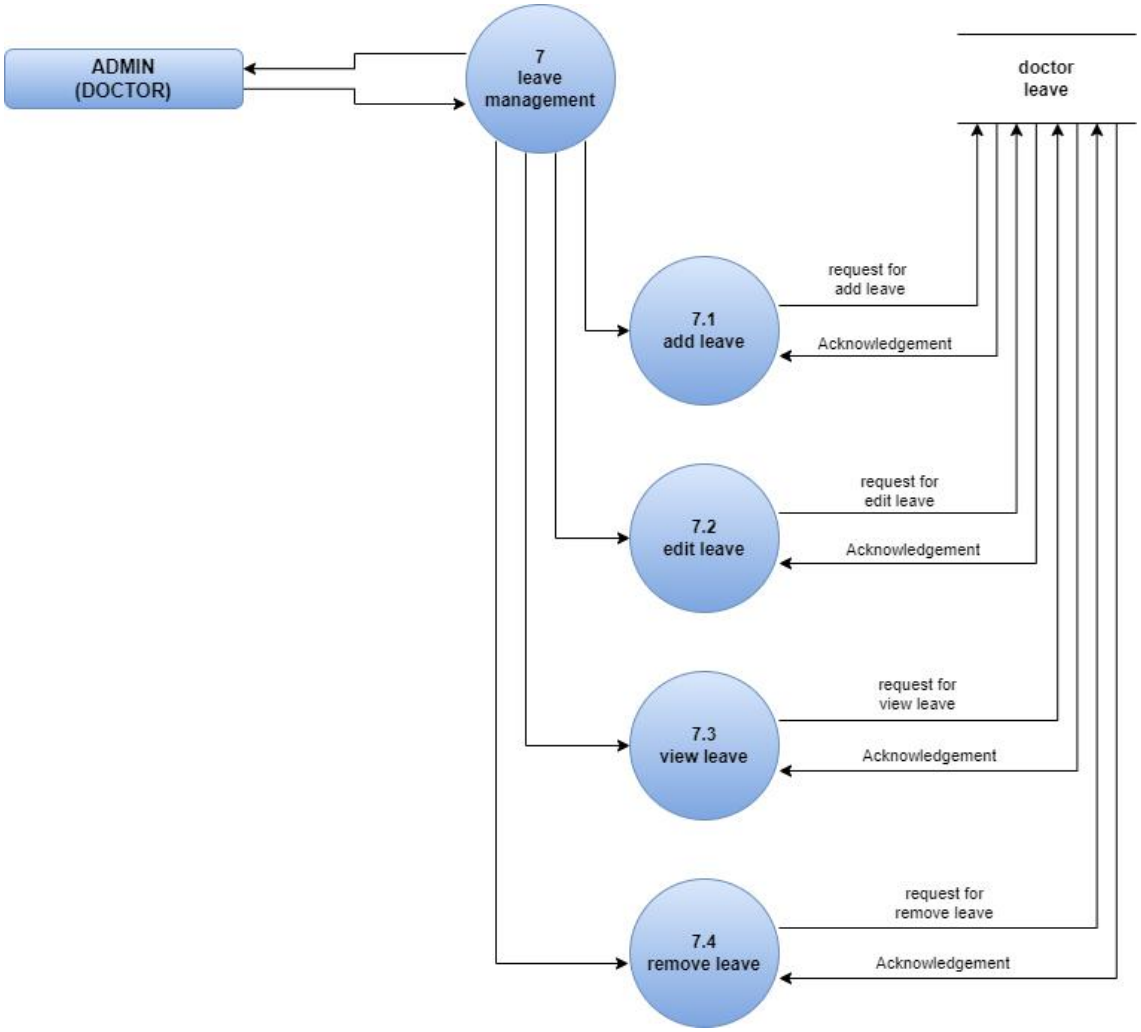

Fig 5.2.3.14 DFD Level-2 For Doctor Leave

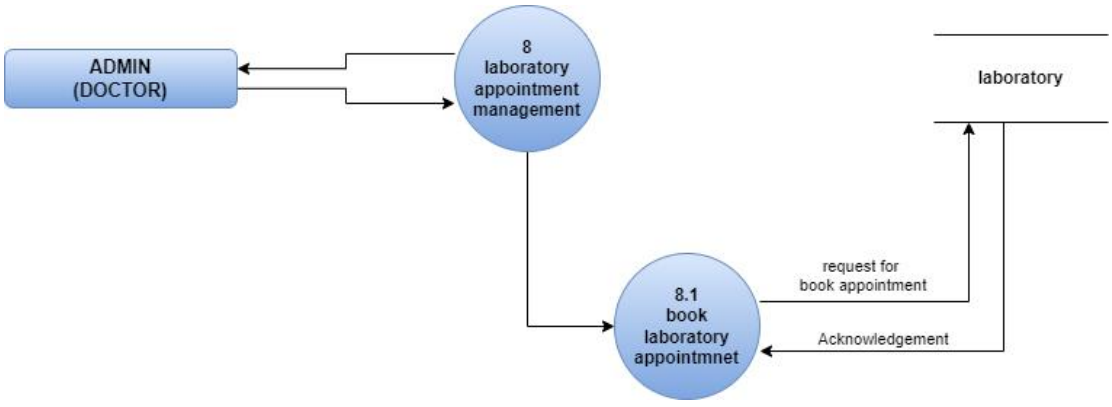

Fig 5.2.3.15 DFD Level-2 For Doctor Lab Appointment

5.3 ER DIAGRAM

An entity relationship diagram (ERD) shows the relationships of entity sets stored in a database. An entity in this context is an object, a component of data. An entity set is a collection of similar entities. These entities can have attributes that define its properties. By defining the entities, their attributes, and showing the relationships between them, an ER diagram illustrates the logical structure of databases. ER diagrams are used to sketch out the design of a database.

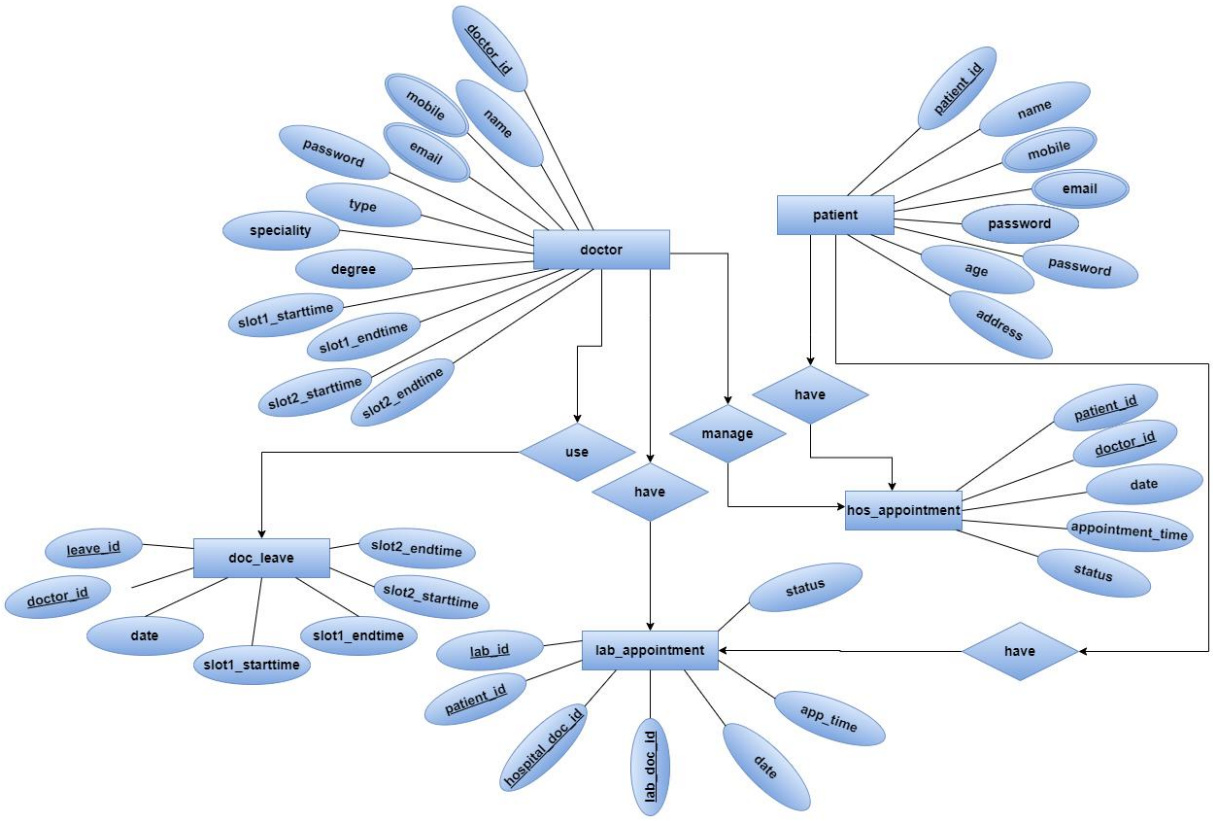

Fig 5.3 E-R Diagram

CHAPTER 6

IMPLEMANTATION

6.1 HARDWARE REQUIREMENTS

6.1.1 Hardware Requirement

	CLIENT SIDE	SERVER SIDE
PROCESSOR	>= i5	1.6 GHz
RAM	>= 4 GB	4GB
HARD DISK	5 GB (free space)	10 GB (free space)

6.2 SNAPSHOTS

❖ PATIENT SIDE

➢ Patient Sign Up

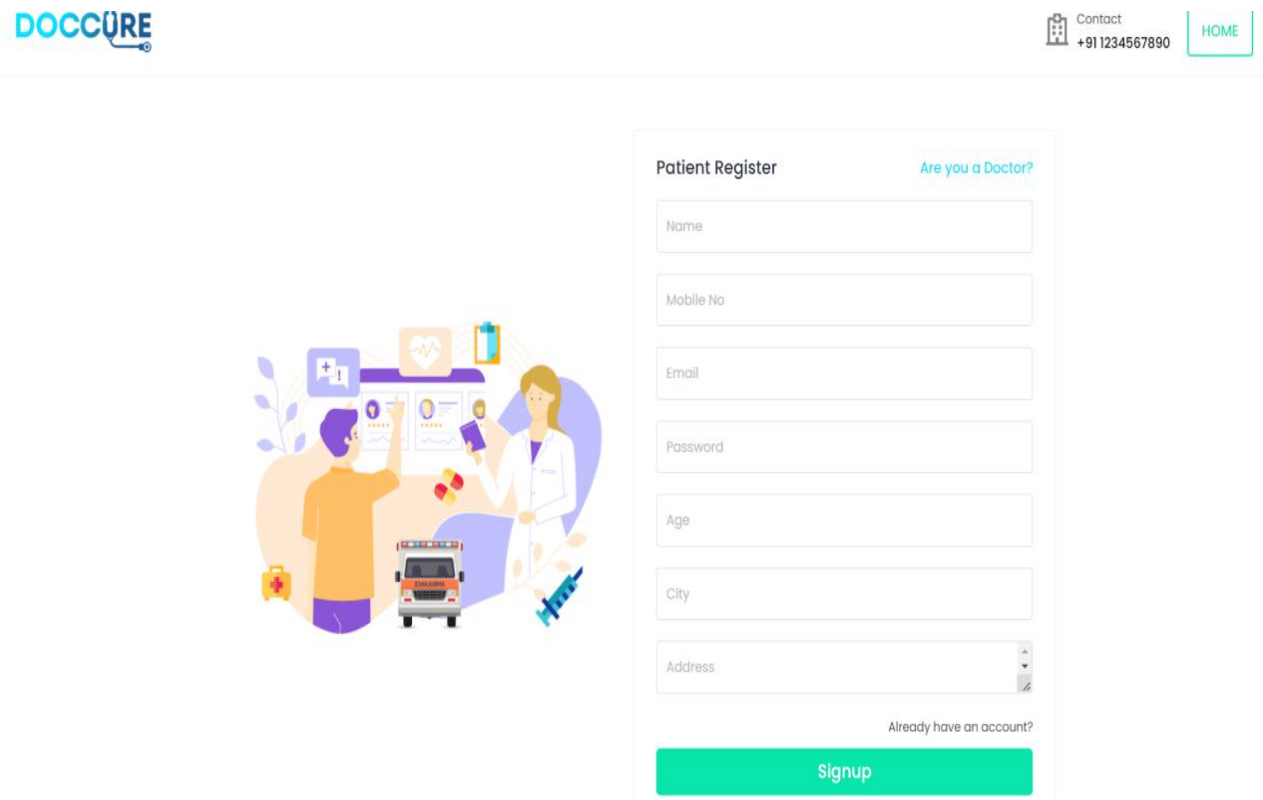

Fig 6.2.1 Patient Sign Up Page

- Patient can register yourself for entering their name, mobile no, email, password, age, city and address.

➢ **Patient Login**

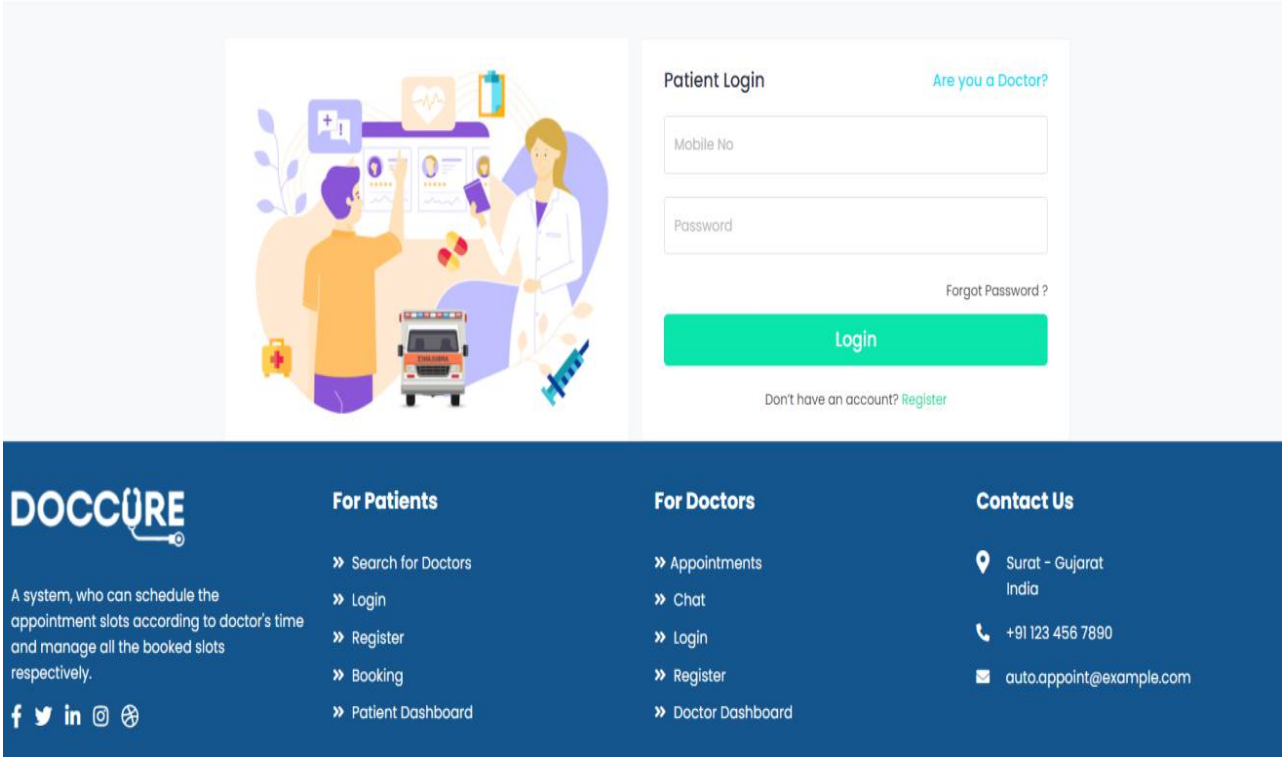

Fig 6.2.2 Patient LogIn Page

- Patient can login into system using mobile no and password.

➢ Patient DashBoard

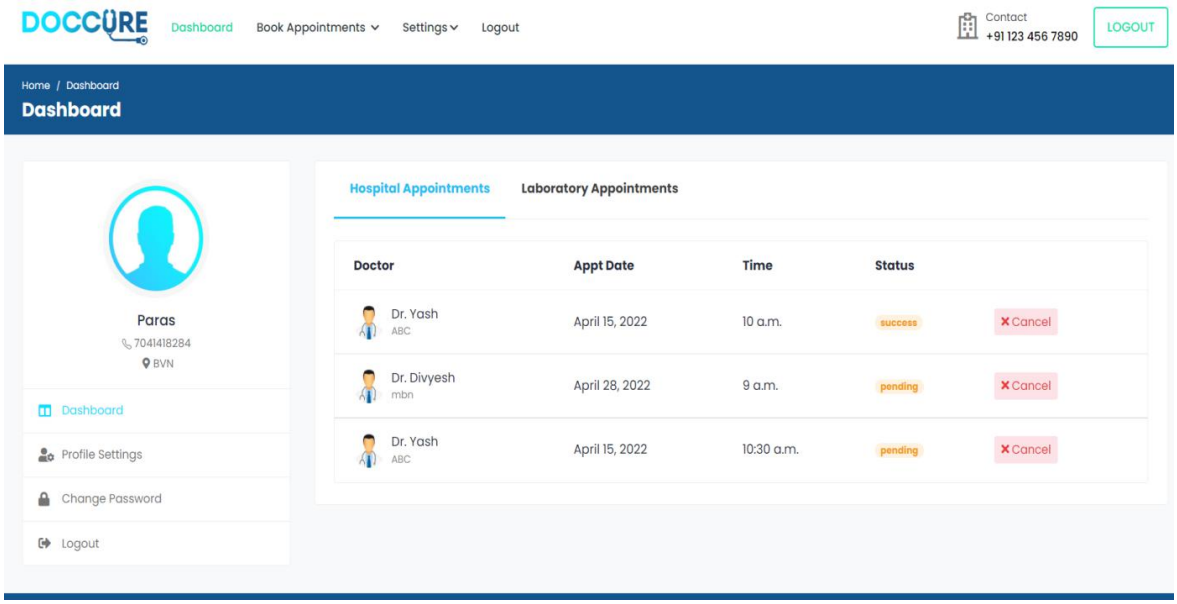

Fig 6.2.3 Patient DashBoard

- Patient can see their all appointment that booked previously and ongoing. Also check their lab appointment.

➢ Patient Profile Setting

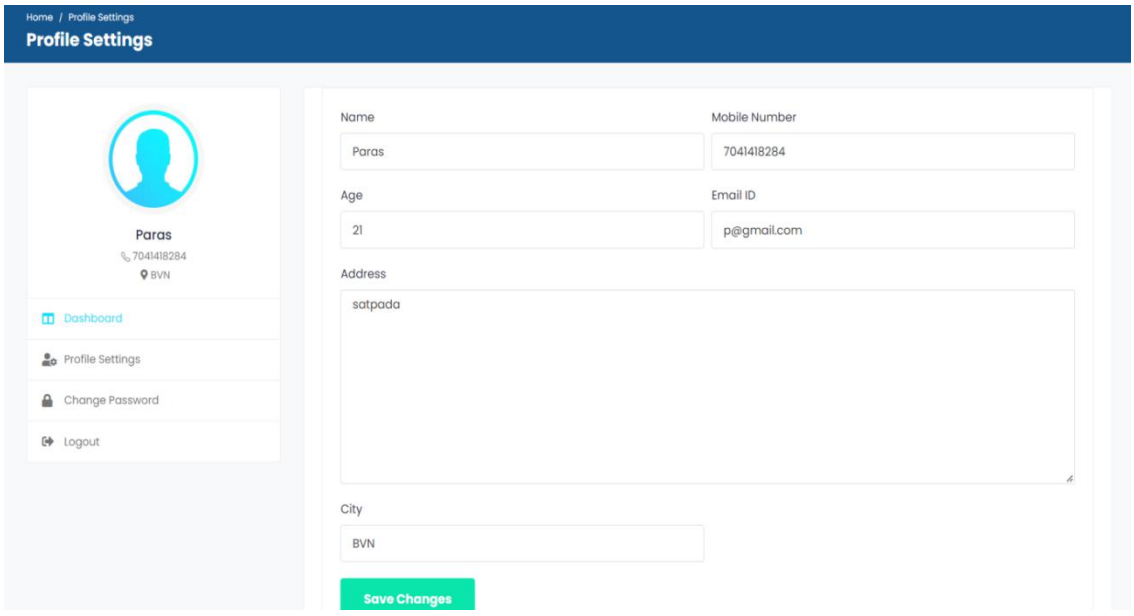

Fig 6.2.4 Patient Profile Setting

- Patient can update profile after registration via profile setting.

➢ Patient Change Password

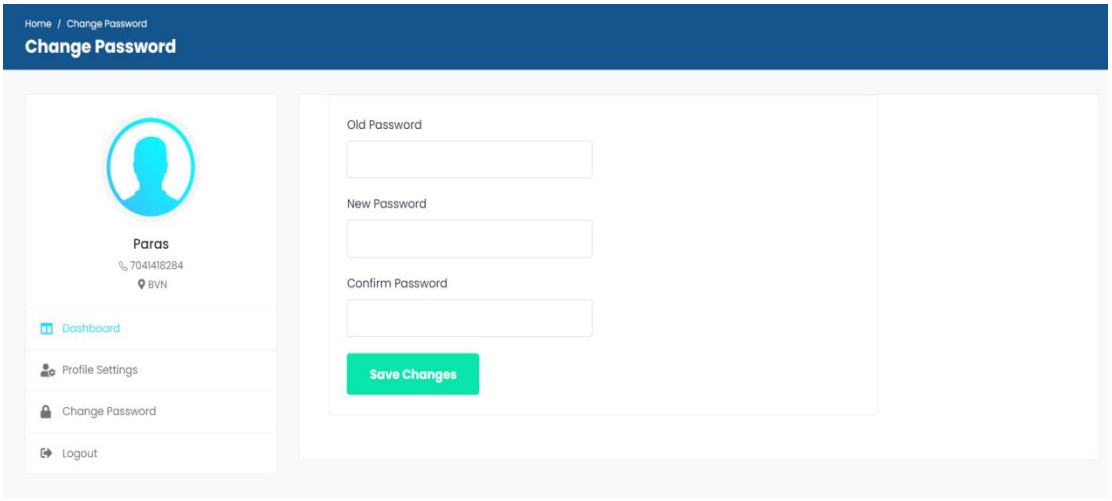

Fig 6.2.5 Patient Change Password

- Patient can change their password if need using change password function. They have to enter old password while changing new password for security.

➢ Search Doctor

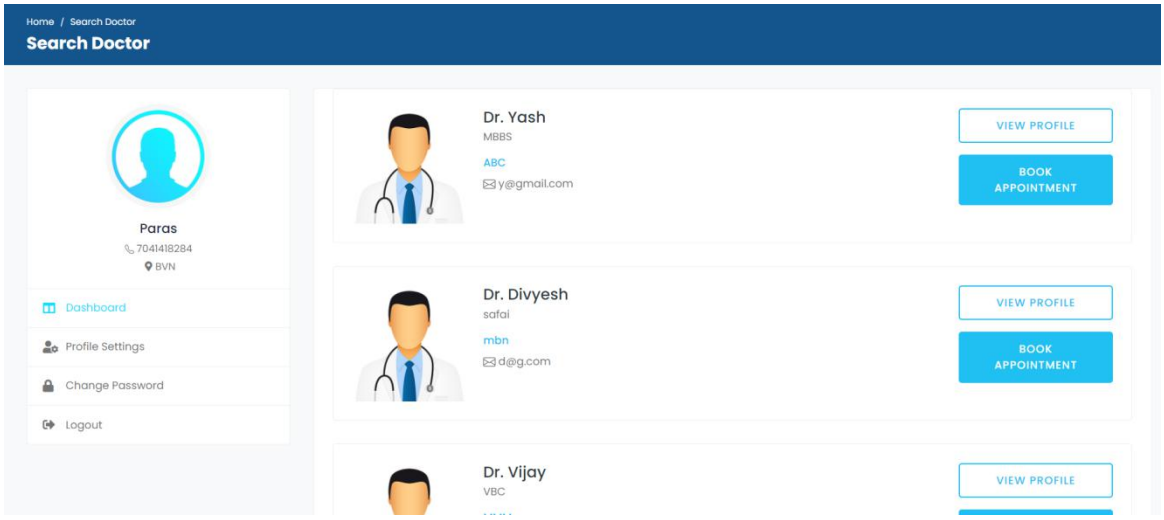

Fig 6.2.6 Patient Search Doctor

- Patient can search doctor from this page as per requirement and selct doctor for book appointment.

➢ Book Appointment

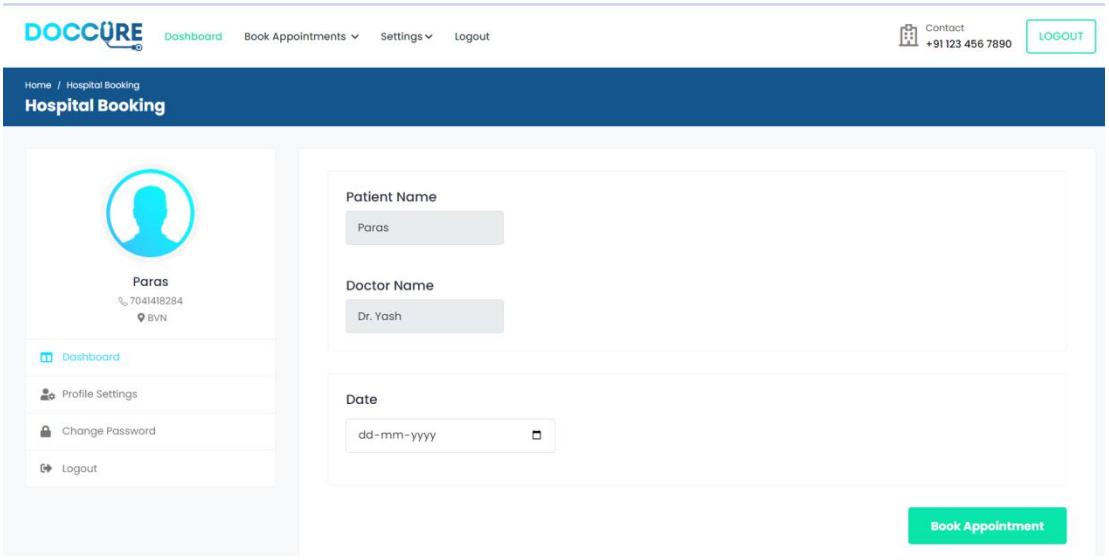

Fig 6.2.7 Patient Book Appointment

- Patient can book their appointment after choosing specific doctor. Patient have to select only date for book appointment and time of appointment given automatically by the system.

➢ Doctor Profile

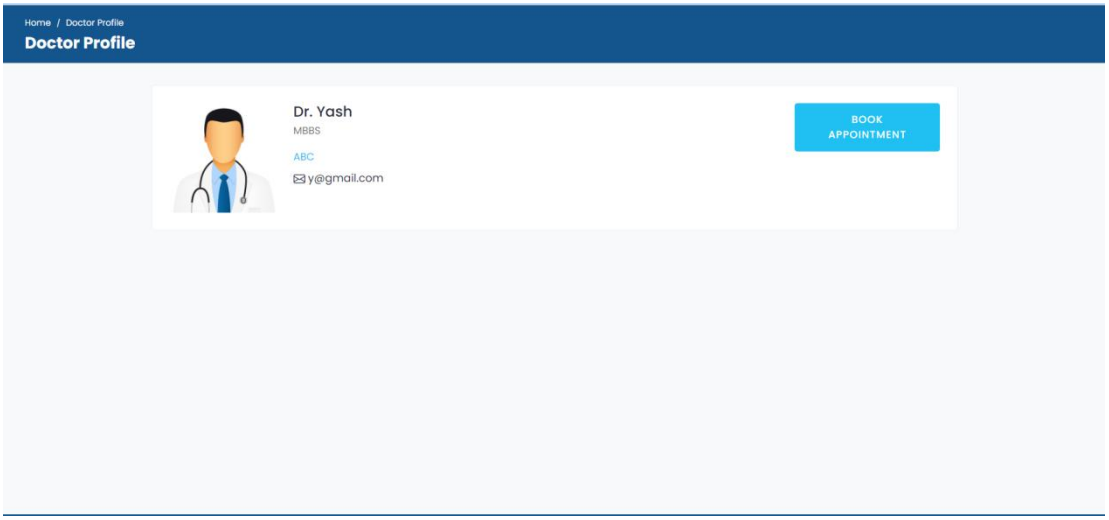

Fig 6.2.8 Doctor profile from patient side

- Patient can open doctor profile from click on their name and see doctors specifications.

❖ DOCTOR SIDE

➢ Doctor Registeration:

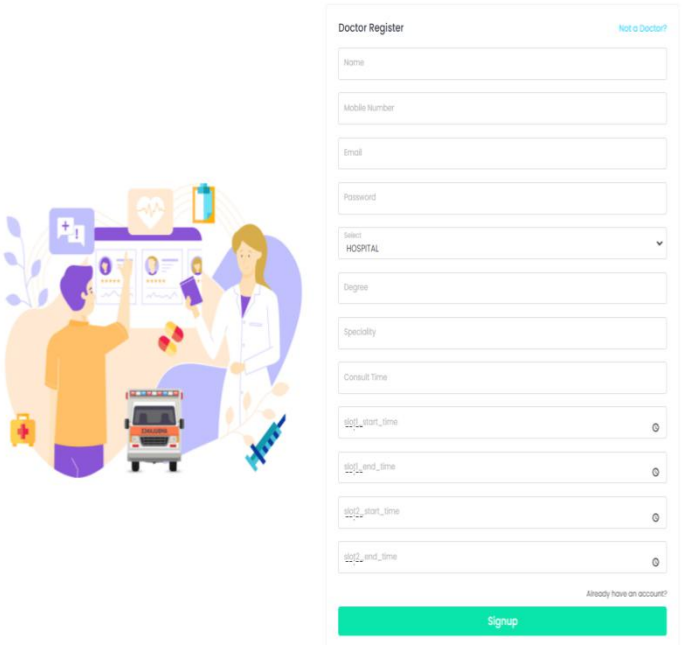

Fig 6.2.9 Doctor Sign up

- Doctor can register into the system via entering all detail in the sign up page.

➢ Doctor Login:

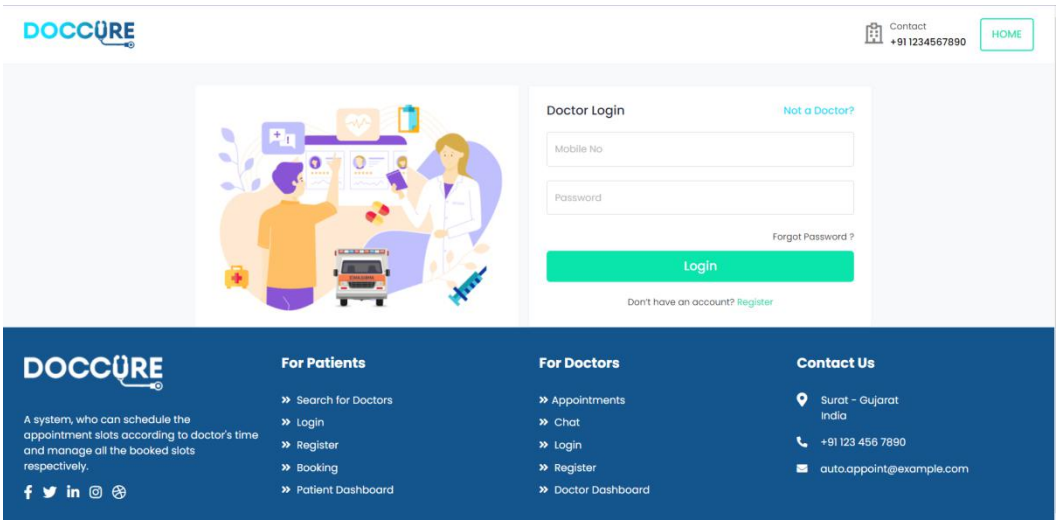

Fig 6.2.10 Doctor Login

- Doctor can login into the system via entering valid login id and password.

➢ Doctor Dashboard

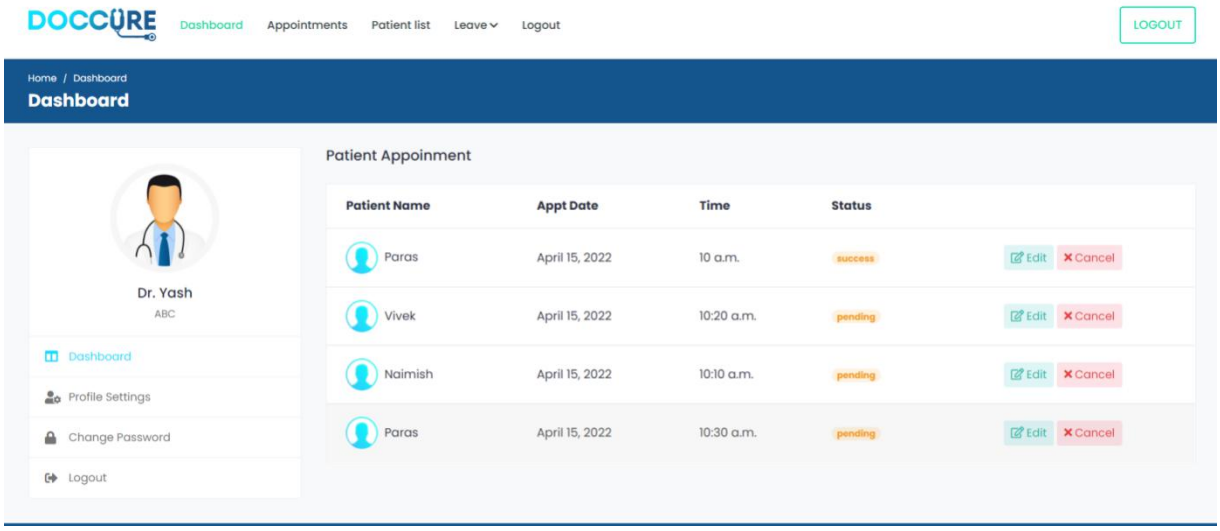

Fig 6.2.11 Doctor Dashboard

- Doctor can see their all received appointment from every patients and after treatment change their status into success from pending.

➢ Doctor Profile Setting

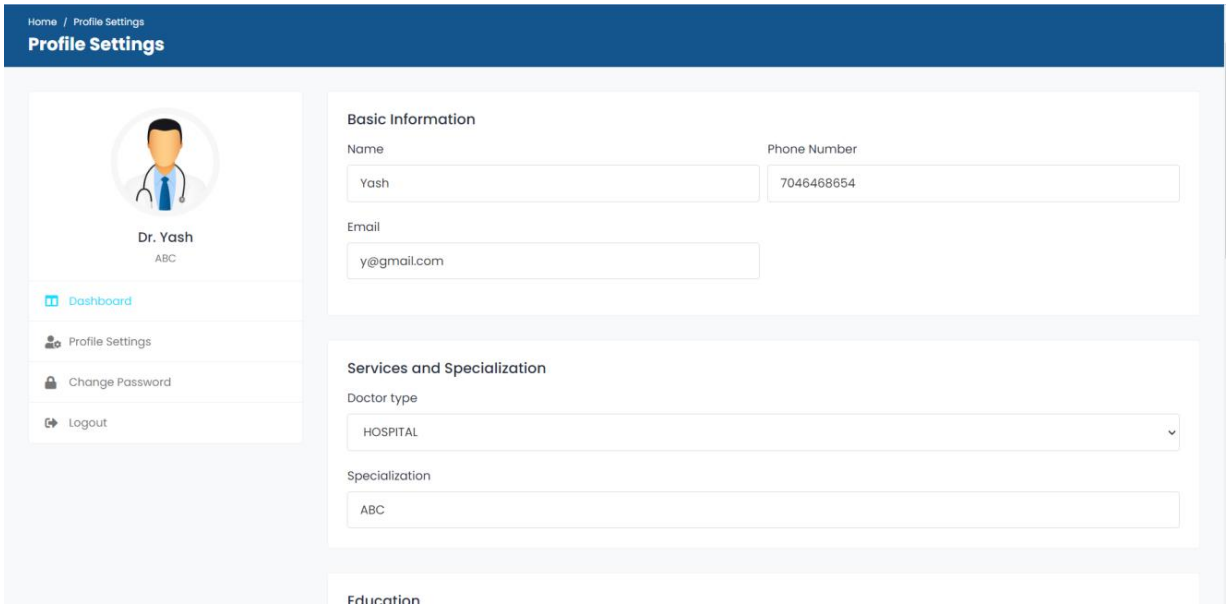

Fig 6.2.12 Doctor Profile Setting

- Doctor can change their profile after registration and update their details.

➢ Doctor Appointments

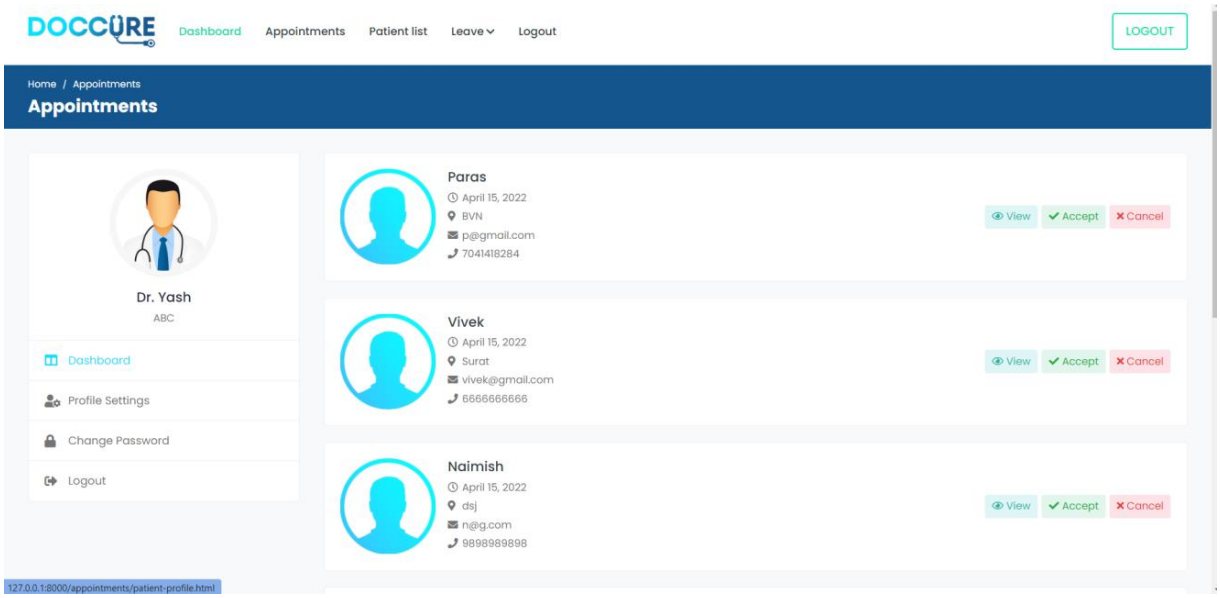

Fig 6.2.13 Doctor Appointments

- Doctor can see their all patients details.

➢ Doctor's Patients

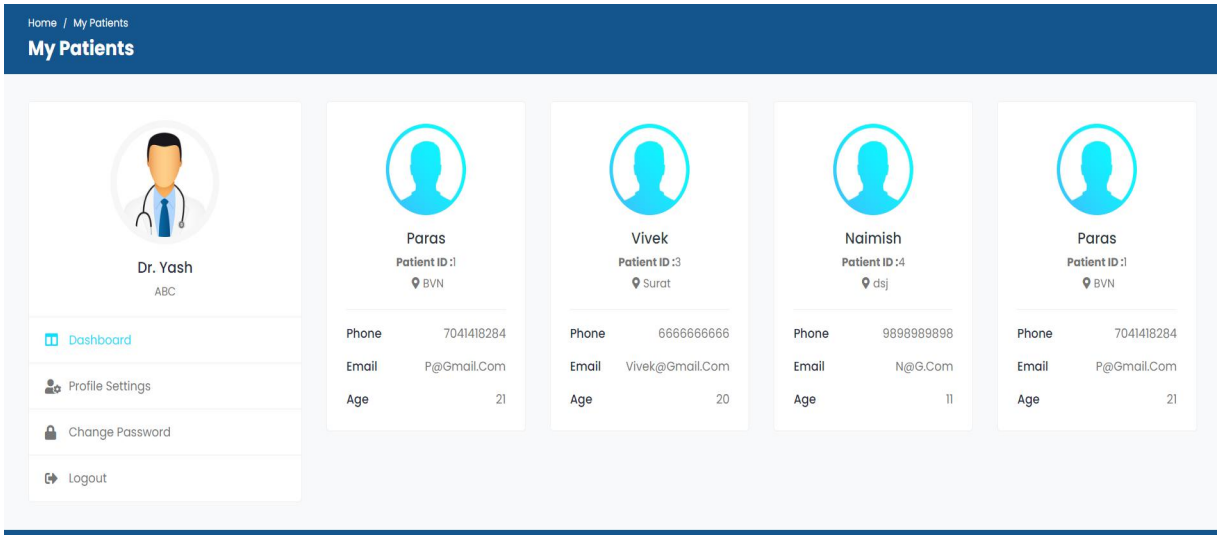

Fig 6.2.14 Doctor's Patients

- Doctor can see their all patients visited by each day.

➢ Doctor Leave Add

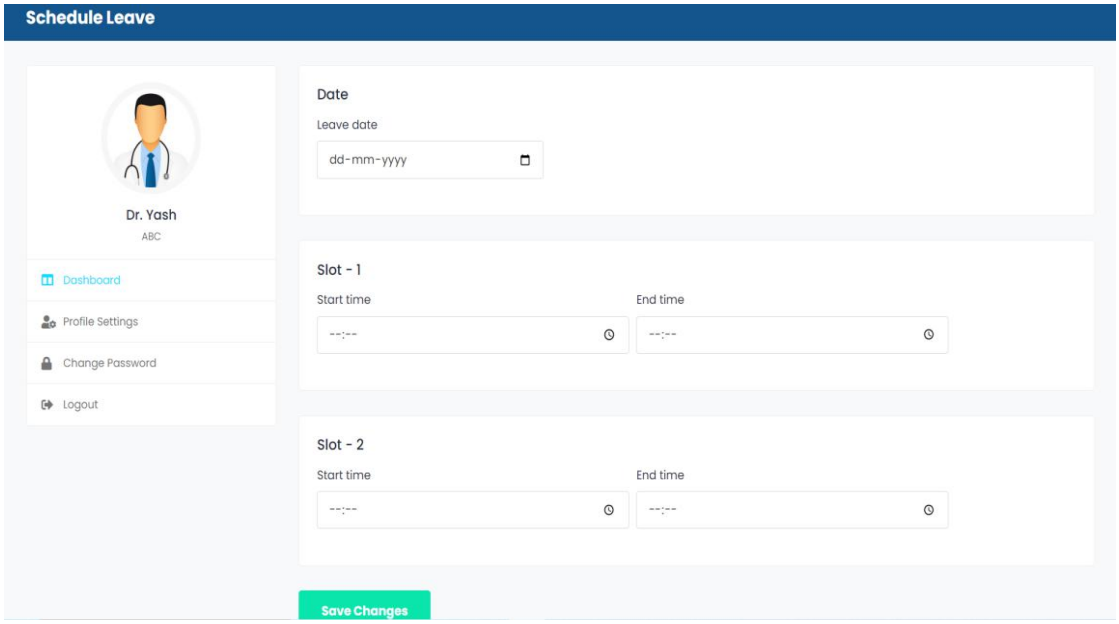

Fig 6.2.15 Doctor Leave Add

- Doctor can add their leave while he/she is not available in hospital for such time.

➢ Doctor Leave List

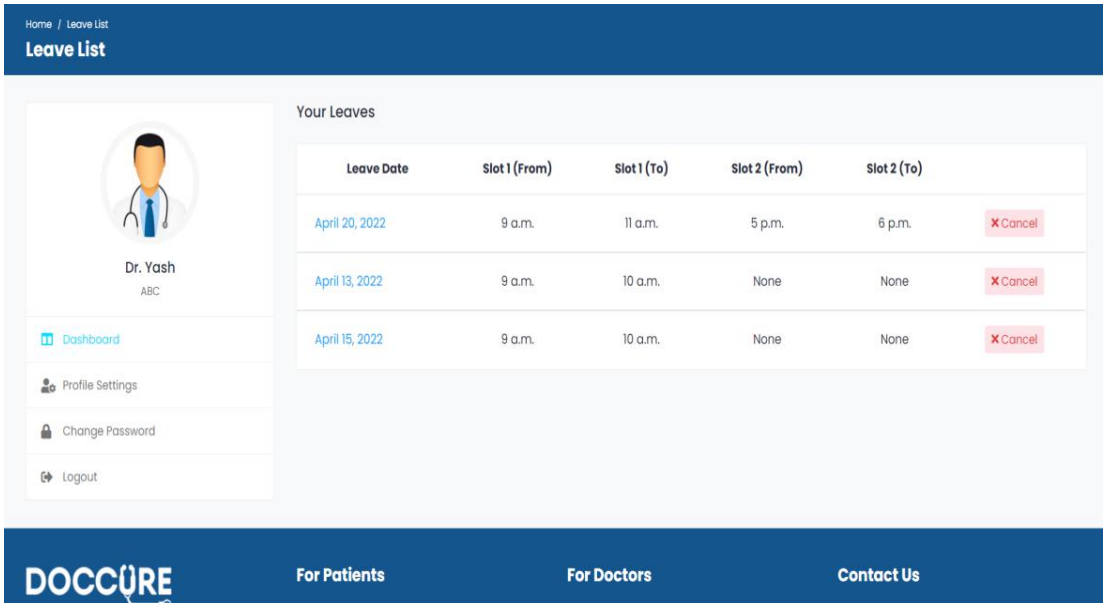

Fig 6.2.16 Doctor Leave List

- Doctor can see their all leave in form of list and also able to delete it.

➢ **Patient Profile**

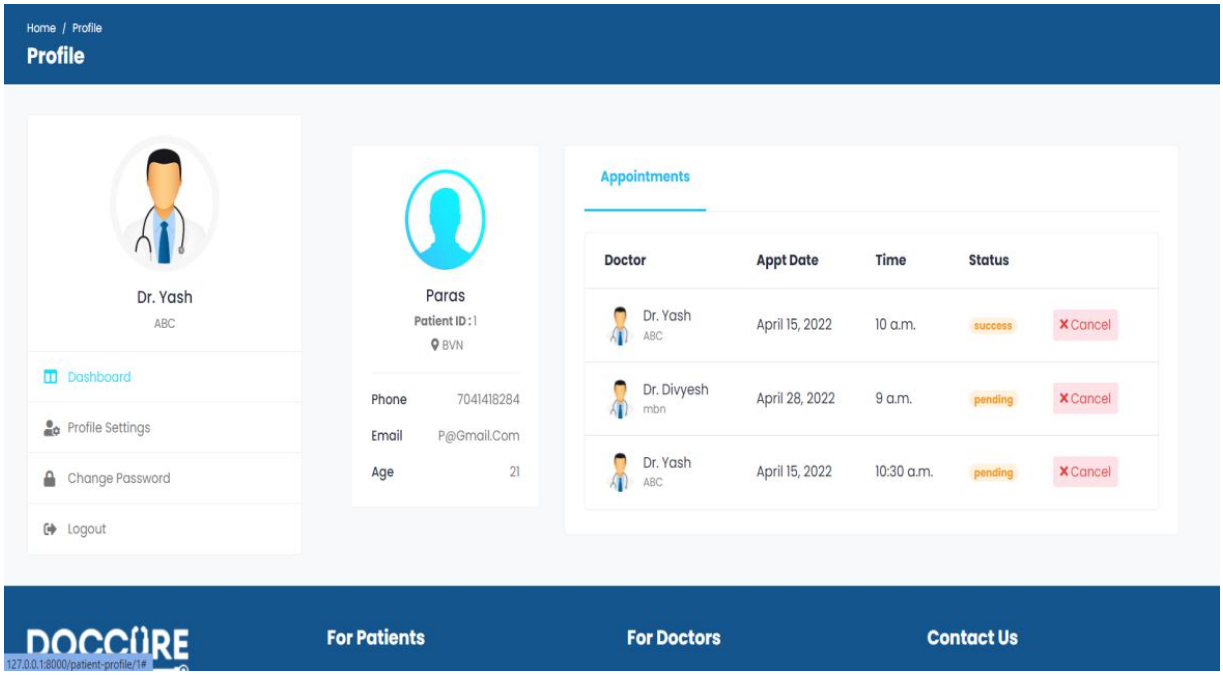

Fig 6.2.17 Patient Profile from doctor side

- Doctor can see patient profile to click on their name.

CHAPTER 7

TESTING

7.1 INTRODUCTION

7.1.1 What is Testing?

Testing provides information about the product, and it is the first feedback to the developers. That's all. It doesn't ensure or prove anything. Testing helps people (the developers, the testers, the managers, the customers) understand what the product does and how well it does it.

7.1.2 Types Of Testing

7.1.2.1 Accessibility Testing

Accessibility testing is the practice of ensuring your mobile and web apps are working and usable for users without and with disabilities such as vision impairment, hearing disabilities, and other physical or cognitive conditions.

7.1.2.2 Acceptance Testing

Acceptance testing ensures that the end-user (customers) can achieve the goals set in the business requirements, which determines whether the software is acceptable for delivery or not. It is also known as user acceptance testing (UAT).

7.1.2.3 Integration Testing

Integration testing ensures that an entire, integrated system meets a set of requirements. It is performed in an integrated hardware and software environment to ensure that the entire system functions properly.

7.1.2.4 Non Functional Testing

Non functional testing verifies the readiness of a system according to nonfunctional parameters (performance, accessibility, UX, etc.) which are never addressed by functional testing.

7.1.2.5 Performance Testing

Performance testing examines the speed, stability, reliability, scalability, and resource usage of a software application under a specified workload.

7.1.2.6 Security Testing

Security testing unveils the vulnerabilities of the system to ensure that the software system and application are free from any threats or risks. These tests aim to find any potential flaws and weaknesses in the software system that could lead to a loss of data, revenue, or reputation per employees or outsides of a company.

7.1.2.7 Unit Testing

Unit testing is the process of checking small pieces of code to ensure that the individual parts of a program work properly on their own, speeding up testing strategies and reducing wasted tests.

7.1.2.8 White Box Testing

White box testing involves testing the product's underlying structure, architecture, and code to validate input-output flow and enhance design, usability, and security.

7.2 TEST CASES

7.2.1 Test Case Login

Table 7.2.1 Test Case Login

Test Case Description	Expected Result	Actual Result	Pass/Fail
Check response when invalid username is entered	Username is Incorrect	Error	Fail
Check response when invalid password is entered	Password is Incorrect	Error	Fail
Check response when invalid username and password is entered	Username and Password is Incorrect	Error	Fail
Check response when valid mobile no and password is entered	Login should be successful	Login was successful	Pass

7.2.2 Test Case Registration

Table 7.2.2 Test Case Registration

Test Case Description	Expected Result	Actual Result	Pass/Fail
Check response when invalid name is entered	Name is Incorrect	Error	Fail
Check response when invalid address is entered	Address is Incorrect	Error	Fail
Check response when invalid city is entered	City is Incorrect	Error	Fail
Check response when invalid mobile no is entered	Mobile no is Incorrect	Error	Fail
Check response when invalid age is entered	Age is Incorrect	Error	Fail
Check response when invalid email is entered	Email is Incorrect	Error	Fail
Check response when valid all detail is entered	Registration should be successful	Registration successful	Pass

7.2.3 Test Case Leave Add

Table 7.2.3 Test Case Leave Add

Test Case Description	Expected Result	Actual Result	Pass/Fail
Check response when invalid slot 1 is entered	Please Enter both slot time	Error	Fail
Check response when invalid slot 2 is entered	Please Enter both slot time	Error	Fail
Check response when valid slot 1 and slot 2 is entered	Leave added successfully	Leave was added	Pass

7.2.4 Test Case Profile Update

Table 7.2.4 Test Case Profile Update

Test Case Description	Expected Result	Actual Result	Pass/Fail
Check response when invalid name is entered	Name is Incorrect	Error	Fail
Check response when invalid address is entered	Address is Incorrect	Error	Fail
Check response when invalid city is entered	City is Incorrect	Error	Fail
Check response when invalid mobile no is entered	Mobile no is Incorrect	Error	Fail
Check response when invalid age is entered	Age is Incorrect	Error	Fail
Check response when invalid email is entered	Email is Incorrect	Error	Fail
Check response when valid all detail is entered	Profile should be updated successful	Profile Updated successfully	Pass

7.2.5 Test Case Booking Appointment

Table 7.2.5 Test Case Booking appointment

Test Case Description	Expected Result	Actual Result	Pass/Fail
Check response when selected date already have booking	You have already booking on his date	Error	Fail
Check response when appointment status is pending	You have already booking on his date	Error	Fail
Check response when selected date have booking and status is success	Your appointment booked successfully	Appointment was booked	Pass

CHAPTER 8

CONCLUSION & FUTURE SCOPE

8.1 CONCLUSION

This web system will help patients to book the doctor's appointment without visiting the hospital and also they can cancel appointment by themselves. Doctors can schedule their leave, so sytem will disable that day slots automatically and allocate remainings. In short, doctors have not to provide extra time for giving appointments and consequently, they can save their time also.

8.2 FUTURE SCOPE

This system is essential for maintaining detail about patient, doctor and their appointment booking data. We understand that by using of AutoAppoint system the work became very easy and we save lot of time. System administrative would be able to significantly improve the operational control and thus streamline operation. This would enable to improve the response time to the demands of patients care. This system maintain all patient data properly. This would be a time saving and faster than offline booking appointments.

8.3 DATES OF CONTINUOUS EVALUTION (CE-I AND CE-II)

Table 8.3 Date of Continuous Evalution

CE - I	**5th March, 2022**
CE - II	**20th April, 2022**

REFERENCES

WEB REFERENCES

- https://www.tutorialspoint.com/index.htm
- https://docs.djangoproject.com/en/4.0/
- https://stackoverflow.com/
- https://www.geeksforgeeks.org/
- https://www.w3schools.com/