Doctor appointment management

A MINI-PROJECT REPORT

Submitted by

DEVDHARSHAN S R 2116220701060
BHARATH D 2116220701042

in partial fulfilment of the award of the degree

of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

RAJALAKSHMI
ENGINEERING COLLEGE
An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY, Chennai

RAJALAKSHMI ENGINEERING COLLEGE

AUTONOMOUS, CHENNAI

NOV/DEC, 2024

BONAFIDE CERTIFICATE

Certified that this mini project **“Doctor appointment management"** is the bonafide work of "**DEVDHARSHAN S R (**2116220701060**)** and **BHARATH D (**2116220701042**) "** who carried out the project work under my supervision.

SIGNATURE

Dr. N. Duraimurugan,

Assistant Professor,

Computer Science & Engineering

Rajalakshmi Engineering College

Thandalam, Chennai -602105.

Submitted for the End semester practical examination to be held on

INTERNAL EXAMINER **EXTERNAL EXAMINER**

ACKNOWLEDGEMENT

I express my sincere thanks to my beloved and honorable chairman **MR.S.MEGANATHAN** and the chairperson **DR.M.THANGAM MEGANATHAN** for their timely support and encouragement.

I am greatly indebted to my respected and honorable principal **Dr. S.N.MURUGESAN** for his able support and guidance.

No words of gratitude will suffice for the unquestioning support extended to us by my head of the department **Dr. P. KUMAR,** and my Academic Head **Dr.SABITHA,** for being ever supporting force during my project work.

I also extend my sincere and hearty thanks to my internal guide **Dr.DURAIMURUGAN.N** for her valuable guidance and motivation during the completion of this project.

My sincere thanks to my family members, friends and other staff members of Computer Science and Engineering.

DEVDHARSHAN S R (2116220701060)
BHARATH D (2116220701042)

ABSTRACT

The Doctor Appointment Management System is a web-based solution designed to facilitate the booking and management of medical appointments. It allows patients to schedule appointments with doctors easily, reducing wait times and improving overall efficiency. The system includes features for doctors to manage their schedules, view patient appointments, and track patient information securely. This project aims to enhance the patient experience while providing healthcare providers with an organized and streamlined method for managing appointments and patient data.

TABLE OF CONTENTS

CHAPTER 1

1.1 INTRODUCTION

The Doctor Appointment Management System is a web-based application designed to

streamline the appointment scheduling process between patients and healthcare

providers. This system aims to minimize the time spent on managing appointments and

reduce the challenges faced by both patients and doctors in coordinating visits. By

utilizing modern technology, the platform facilitates easy access to appointment slots,

enhances communication, and provides a structured method for tracking patient visits.

1.2 SCOPE OF THE WORK

The scope of the Doctor Appointment Management System encompasses the

development of a user-friendly platform that caters to both patients and doctors. Key

features include appointment booking, cancellation, and rescheduling, as well as an

integrated notification system to remind patients about upcoming appointments. The

system also allows doctors to manage their schedules, view patient information, and

track appointment history. The project aims to enhance the overall efficiency of

healthcare delivery by simplifying the appointment process.

1.3 PROBLEM STATEMENT

Managing medical appointments is often a cumbersome task for both patients and

healthcare providers. Patients face challenges in securing timely appointments, leading

to long wait times and dissatisfaction. Simultaneously, healthcare providers struggle

with scheduling conflicts, missed appointments, and inefficient use of time. This project

seeks to address these issues by developing an automated Doctor Appointment

Management System that streamlines the booking process, improves patient-provider

communication, and optimizes appointment management.

1.4 AIM AND OBJECTIVES OF THE PROJECT

The current Doctor Appointment Management System faces several challenges, including inefficient scheduling processes, lack of real-time updates, and inadequate communication between patients and healthcare providers. These issues lead to increased wait times, scheduling conflicts, and frustration among patients and doctors alike. Consequently, there is a growing need for a comprehensive web-based solution that facilitates seamless appointment management. This system is designed for users with web access who are looking to efficiently book, manage, and track medical appointments. It aims to enhance the overall experience for both patients and healthcare providers by providing a user-friendly interface, automated notifications, and secure access to patient information.

In addition to improving accessibility and user satisfaction, the Doctor Appointment Management System prioritizes data security and privacy, ensuring that sensitive patient information is protected. It also aims to foster better communication and transparency between healthcare providers and patients, making vital information readily available to all stakeholders.
Ultimately, a well-implemented appointment management system can significantly enhance the patient experience, leading to better health outcomes and increased satisfaction for everyone involved in the healthcare process.

CHAPTER 2

SYSTEM SPECIFICATIONS

2.1 HARDWARE SPECIFICATIONS

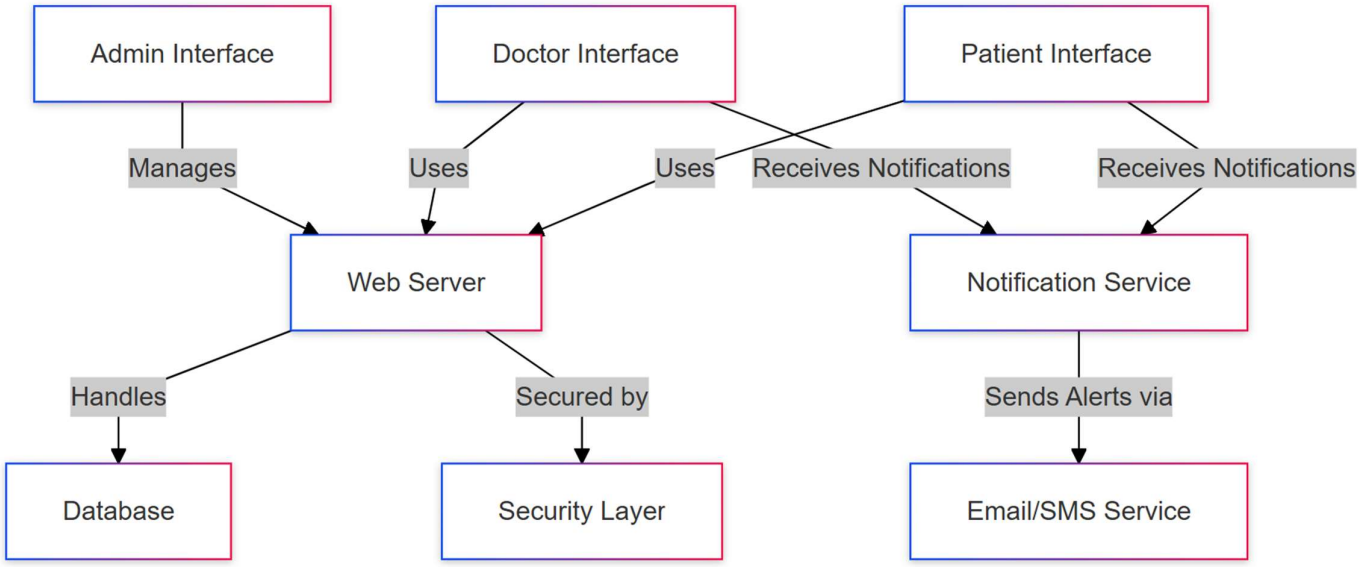
Processor	:	Pentium IV Or Higher
Memory Size	:	128 GB (Minimum)
HDD	:	40 GB (Minimum)

2.2 SOFTWARE SPECIFICATIONS

Operating System	:	WINDOWS 7 AND PLUS
Front – End	:	HTML, CSS, JAVASCRIPT
Back – End	:	PHP, MYSQL

CHAPTER 3

ARCHITECTURE DIAGRAM



CHAPTER 4

MODULE DESCRIPTION

4.1. User Registration and Login Module:

This module enables patients and doctors to register and create accounts on the platform. Users are required to provide essential information such as their name, email address, password, and role (patient or doctor). Upon successful registration, users can log in using their email and password to access the system's features.

4.2. Appointment Management Module:

This module enables patients to book or cancel appointments with doctors. Doctors can view, approve, or reject appointment requests based on their availability.

4.3. Doctor Availability Management Module:

This module allows doctors to manage their availability by specifying time slots during which they can accept appointments. Doctors can block slots as needed for personal or administrative reasons.

4.4. Appointment Viewing Module:

This module provides patients with a view of their booked appointments and doctors with their daily or weekly schedules. It ensures both users have access to relevant appointment details.

4.5. Notification Module:

This module manages communication between the system, patients, and doctors. Notifications are sent for appointment confirmations, cancellations, and updates, keeping users informed.

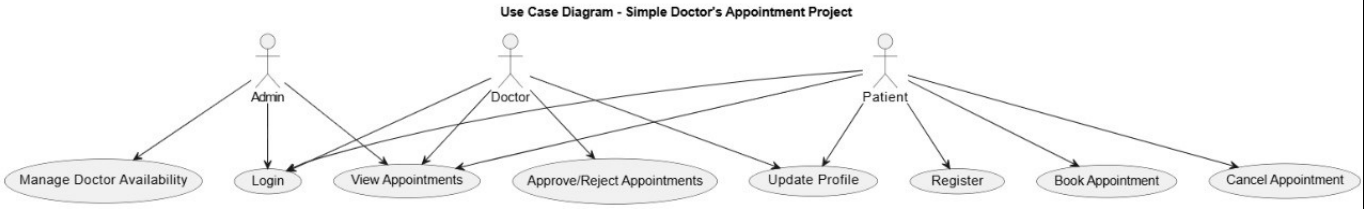
4.6. Admin Dashboard Module:

This module gives the admin the ability to manage user accounts, oversee doctor availability, and monitor appointment activities. The admin can also generate reports for system analysis.

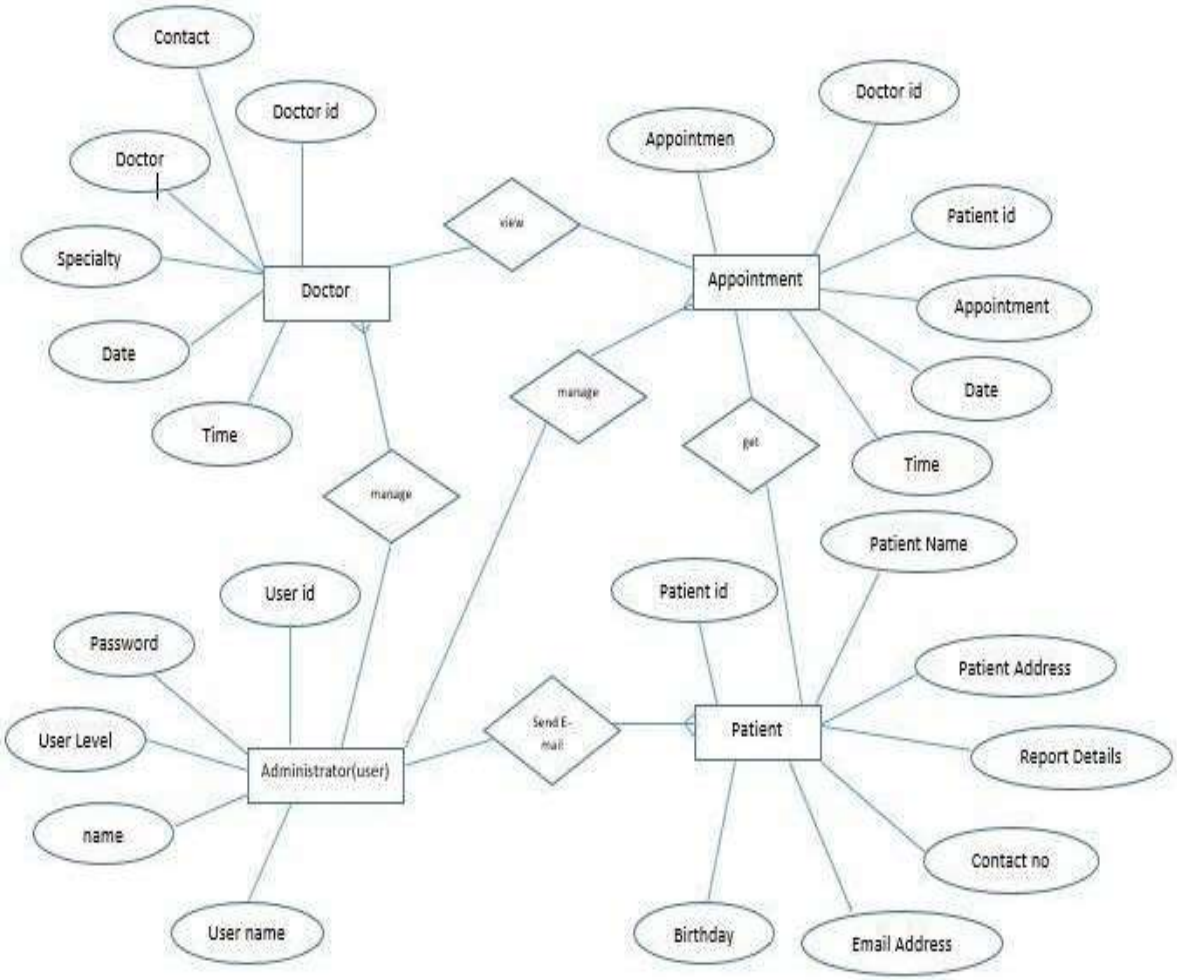
CHAPTER 5

SYSTEM DESIGN

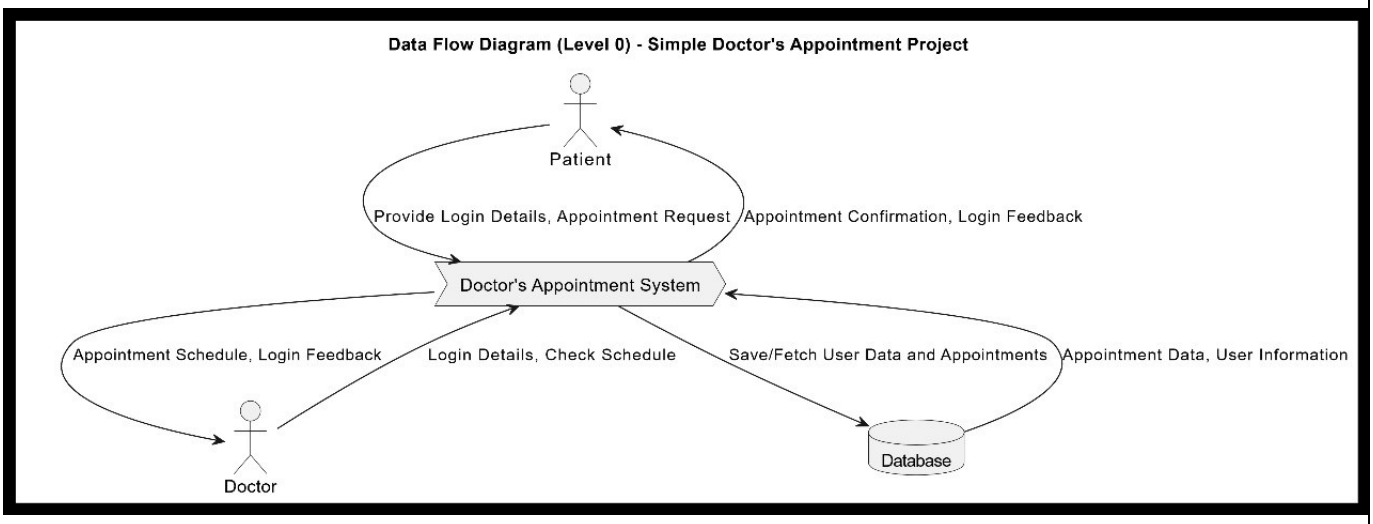
5.1 USE CASE DIAGRAM



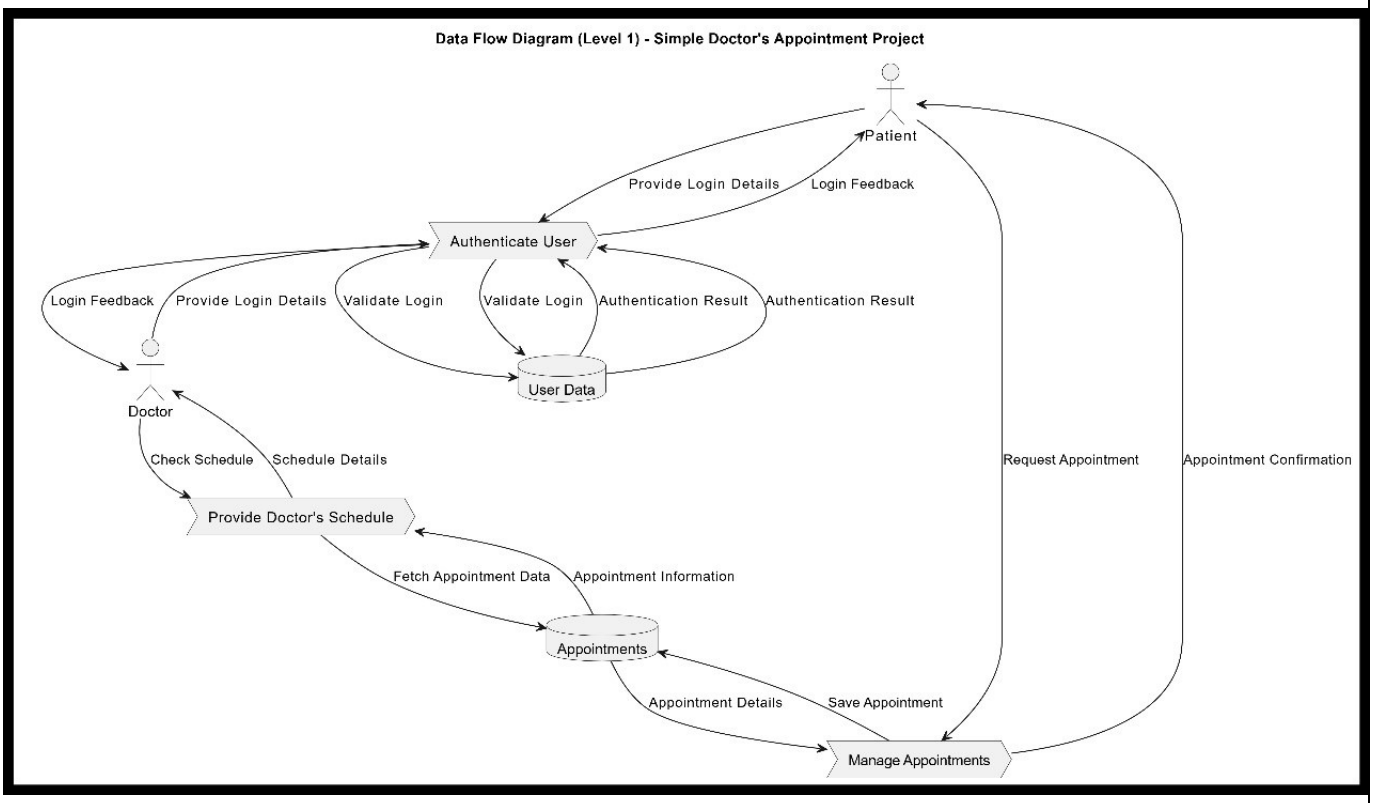
5.2 ER DIAGRAM



5.3 DFD DIAGRAM

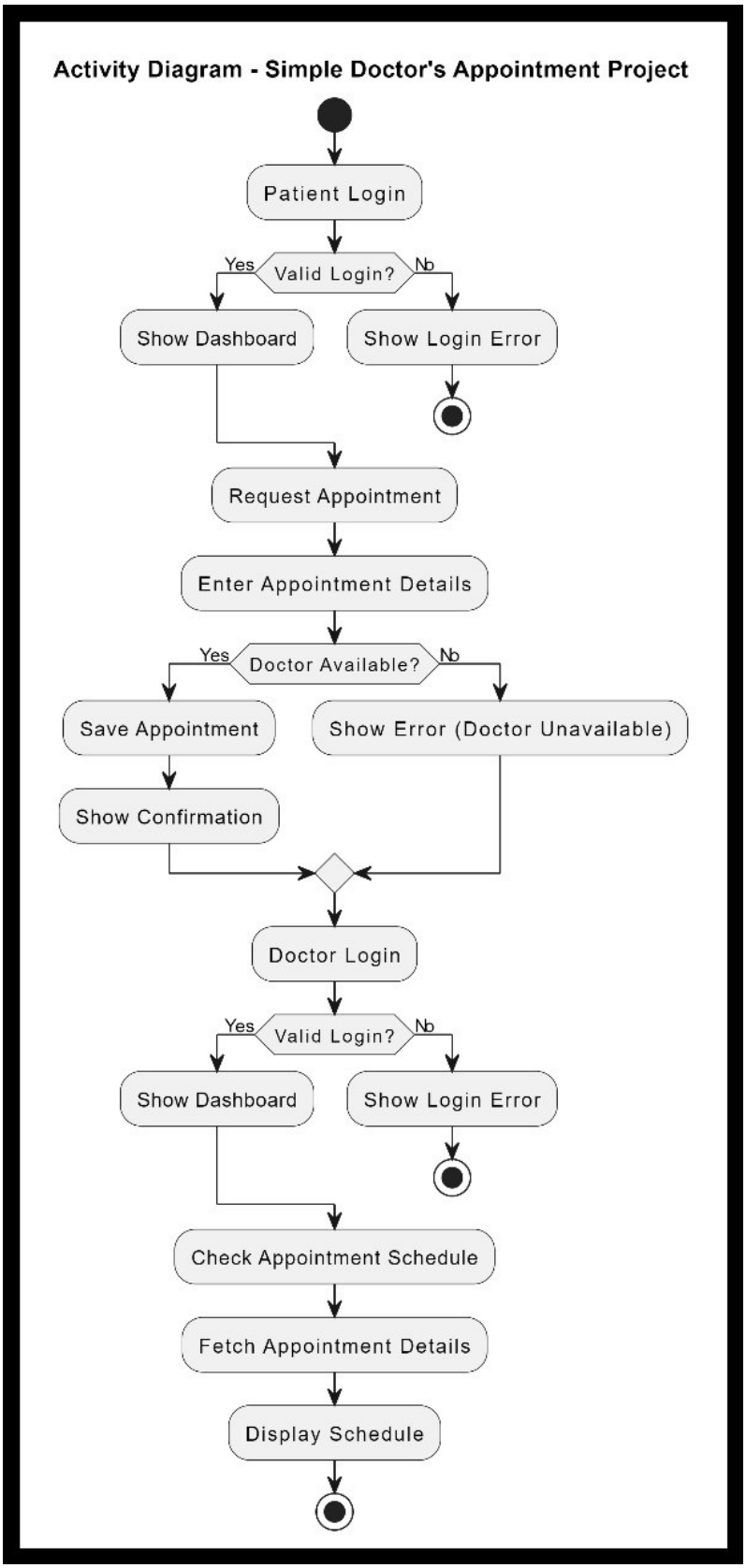


DFD Level-0 Diagram



DFD Level-1 Diagram

5.4 ACTIVITY DIAGRAM



CHAPTER 6

SCREEN SHOTS

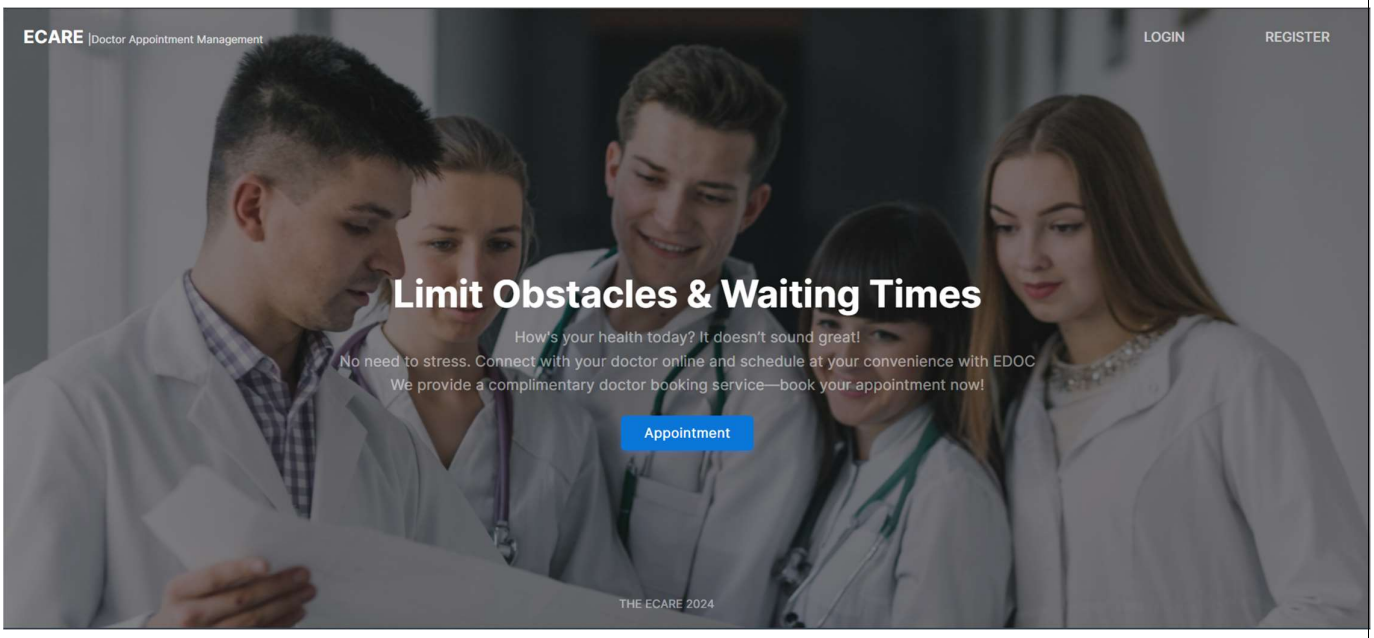


Fig. 7.1. Index Page

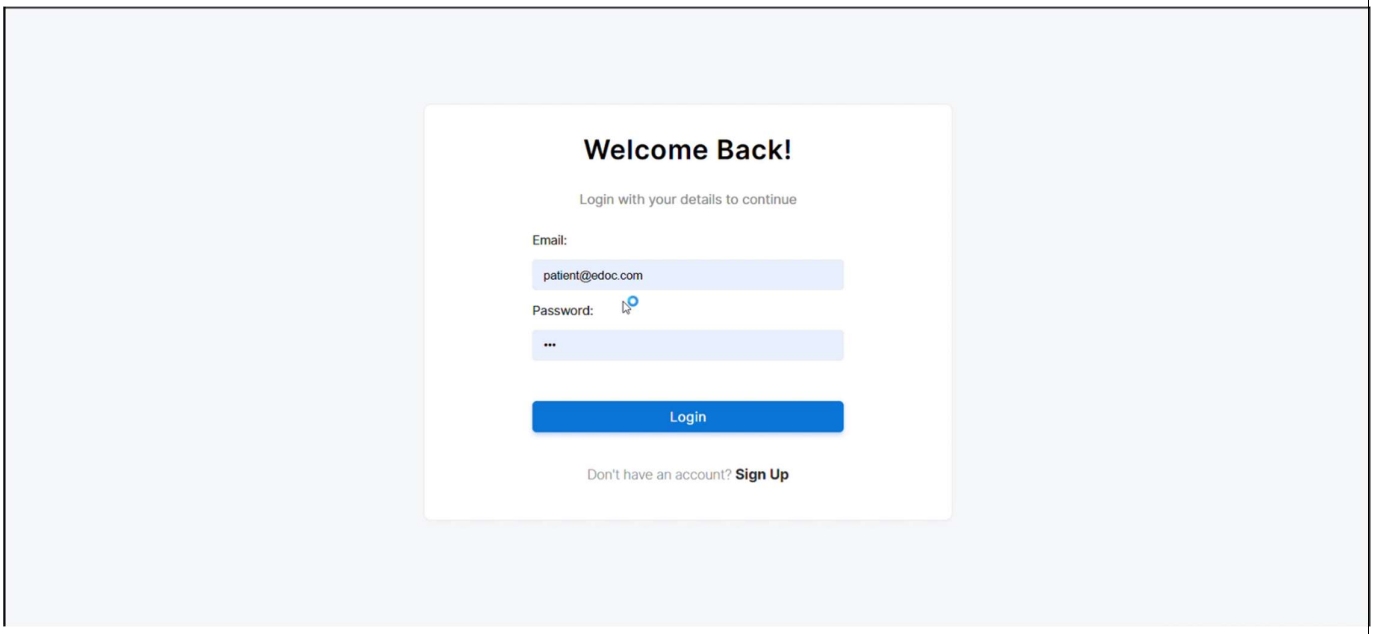


Fig. 7.2. Login page Section

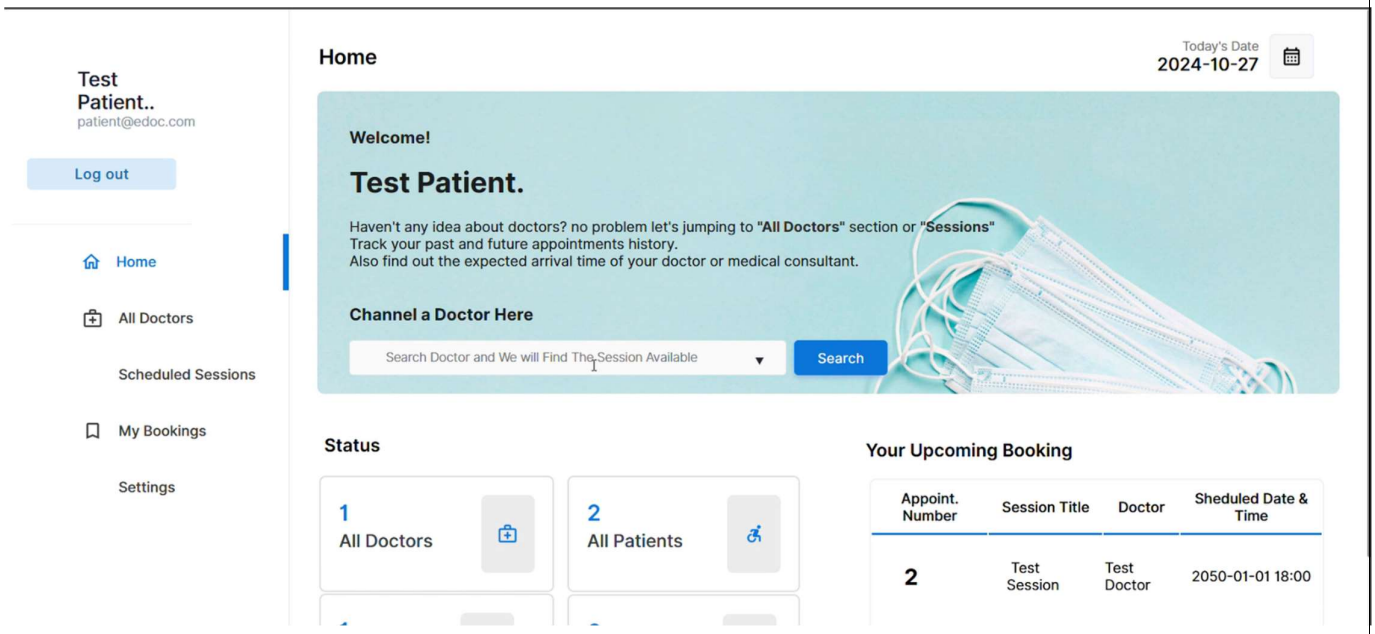


Fig. 7.3. Patient's Home page

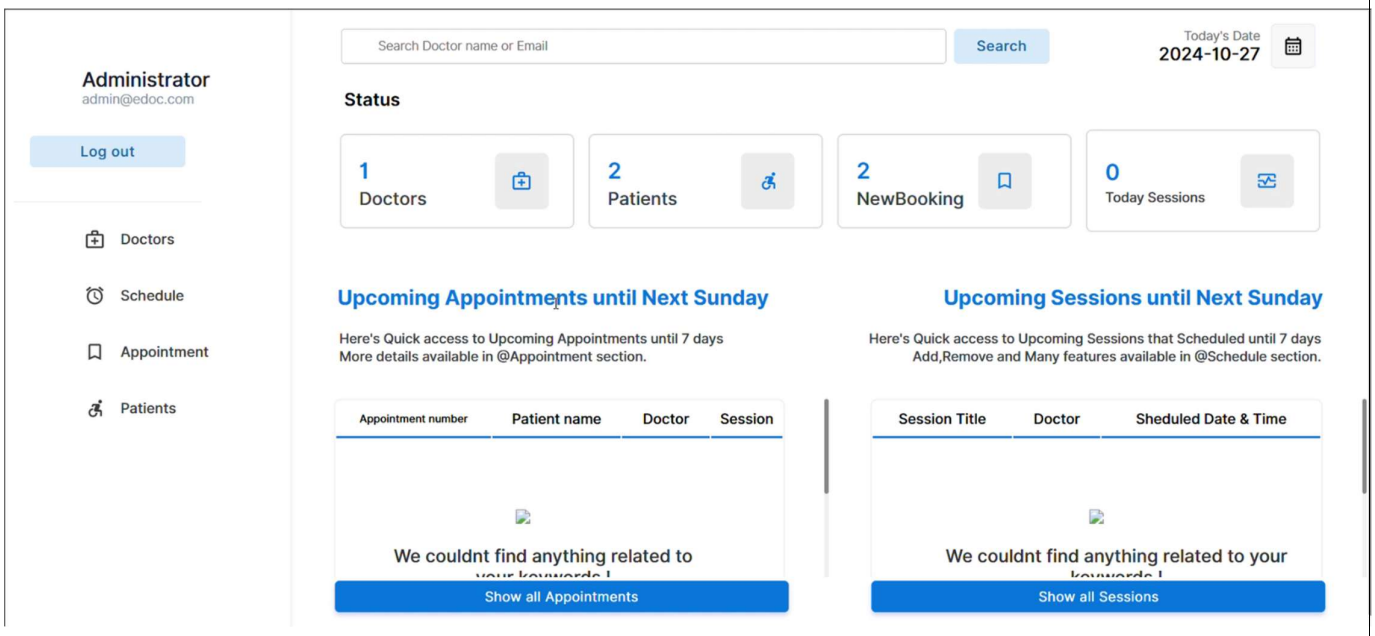


Fig. 7.4. Administrator's Home page

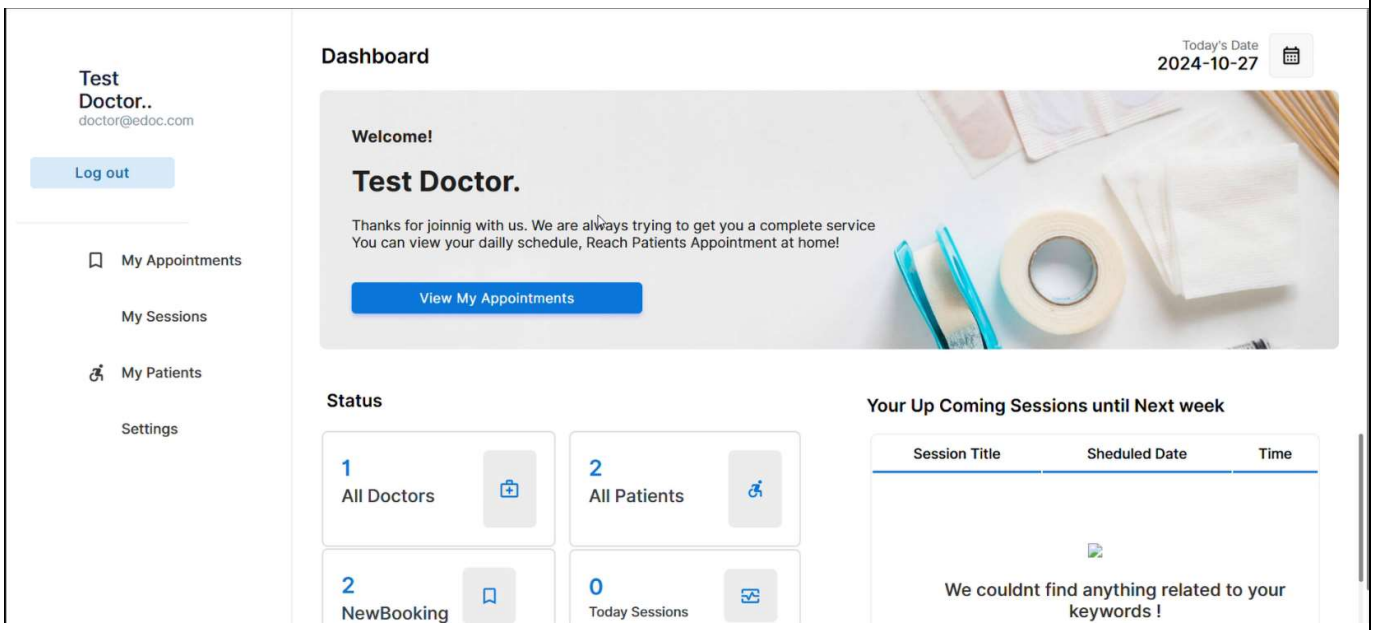


Fig. 7.5. Doctor's Home page

CHAPTER 7

CONCLUSION

In conclusion, the **Simple Doctor's Appointment Project** is a comprehensive solution for managing patient appointments and doctor availability in a healthcare setting. By incorporating features such as user authentication, appointment scheduling, and profile management, this system streamlines the process for both patients and healthcare professionals.

The project aims to reduce the administrative burden on medical staff, ensuring that appointments are handled efficiently, and patients have a seamless experience in booking and managing their appointments. Moreover, the system provides essential functionalities like viewing and updating appointments, which enhances the overall usability for all users.

With the increasing reliance on digital solutions in healthcare, the implementation of this system represents a step towards a more automated and organized approach to appointment management. By simplifying the appointment process, it helps in improving communication between doctors and patients, reduces scheduling conflicts, and enhances the overall experience for both parties.

Looking to the future, the system can be expanded with additional features like integration with medical records, SMS/email reminders for appointments, and the use of AI to predict patient needs or optimize scheduling. These enhancements would not only improve operational efficiency but also elevate the quality of patient care and service delivery.

As technology continues to advance, healthcare management systems such as this can play a significant role in transforming the way healthcare services are provided, leading to improved healthcare outcomes and greater patient satisfaction.

REFERENCES

HTML , CSS , JS – www.w3schools.com

PHP, MYSQL – www.youtube.com

Product Details– www.amazon.in

Carousel Slider – www.glidejs.com

Font Awesome Icons – www.fontawesome.com

PHP Mailer - https://github.com/PHPMailer/PHPMailer