

**“BD DOCTORS AID”**

**BY**

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This Report Presented in Partial Fulfillment of the Requirements for the  
Degree of Bachelor of Science in Computer Science and Engineering

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

**JANUARY 2024**

## **APPROVAL**

This Project/internship titled “BD DOCTORS AID”, submitted by FAHIM FAYSAL, ID No: 201-15-14052 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 26/01/2024.

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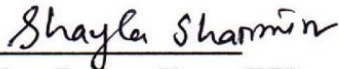
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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Zannatul Mawa Koli, Lecturer, Department of CSE Daffodil International University.**

We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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## **ABSTRACT**

The web-based project I am working on is called “BD DOCTORS AID”. Through this website, people can easily search for the required specialties in their nearby area and get the list of doctors in that area. Through this website, people can easily see all the information of the doctor. Users or patients who want to use this website must first log in to this website. Then all the people's information will be saved in the database. This information can be seen by the admin and doctor. By going to the doctor list, the user or patient can see the list of all doctors. Next to each doctor's name is his email and his specialties. The event has two options one is view and the other is session. If you go into the view, the doctor's name, address, and mobile number will show. During the session, the doctor I am seeing will show all the schedules of the doctor. The schedule includes the day and time each doctor has a session to see the patient. Users or patients can easily book the doctor's session by clicking on the book option from here. The user will have many options when he wants to see the doctor. The user can fix the schedule with the doctor of his choice for the total sessions of his choice. If you go to the booking, the user can see when and what time the doctor has a booking with him. And he can cancel it if he wants. Admin will input the doctor and set his schedule. Admin will have information about all doctor's appointments with the user. Admin can cancel those events if he wants. The doctor can only see his schedule and when he has appointments with the user. A doctor can cancel his sessions and appointments if he is busy for any reason.

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# CHAPTER 01

## INTRODUCTION

### **1.1 Introduction:**

The patient can quickly view a list of all the doctors by using my website. Additionally, you can locate and consult with physicians in the neighborhood. Patients can view a list of physicians and search for specialists based on the condition they have. A doctor in the vicinity is always available, as the patient may see on this one webpage. If he so chooses, the patient can schedule an appointment with any doctor. The patient will have a lot of alternatives on this website to schedule a visit with the doctor whenever it is convenient for him. Once again, the patient may cancel the appointment going forward if he has a problem or needs to attend to other business. A doctor can easily call or visit a patient using this website. We will need to keep patient and physician data on this website's database. The website is only accessible to patients and clinicians after all the data has been collected. The admin panel is in charge of overseeing the website. The patient can make house calls to his preferred physician. It is quite simple for the patient to see and communicate with the doctor using this website. Patients or people in Bangladesh cannot access any such services through this website. Bangladesh's healthcare system will benefit from this website, and each patient will receive the resources and direction they need. The doctor-patient interaction will remain cordial.

### **1.2 Motivation:**

The fact that people frequently have to wait in line to pay their doctors served as our motivation for this project. Frequently, the patient is unaware that there are medical professionals in his field who specialize in solving problems similar to his own. The patient will be able to see several local doctors fairly soon thanks to this website. Through this website, the patient can connect with and consult with the closest physician, discussing all of his concerns.

### **1.3 Objective**

My website is similar to having faith in others. Because all of the admin's details are taken when a doctor is added to the database by the admin. Consequently, no phony physician will be permitted to present a physician here. Because of this, it is also regarded as reliable in terms of patient care and safety.

### **1.4 Expected Outcome:**

My web-based project has been very beneficial to physicians and patients alike. Nowadays, everyone is using the internet. People can make online appointments to see their preferred physician in the neighborhood with the website I designed. Any user can utilize a computer or smartphone to accomplish his work. The patient and doctor are now closer thanks to this website. The doctor's list is visible to the patient. Additionally, the information is visible to every doctor on the list. When the doctor is available to see the patient at any time, the doctor can schedule a visit. The patient is not letting anyone else make reservations for the doctor. The patient is capable of working.

People will gain a lot from my website. Patients might visit their preferred physician to demonstrate the illness. Who has access to all of the local specialists' appointments? All nearby doctors with the required specializations can see the patient, if they so want. The patient can immediately view the necessary doctor's list on this website.

All his sessions are readily visible to doctors. The doctor has the right to end the session on their own, if you so choose. The patient has occasionally made a reservation to see the doctor when he is booking.

Every customer must first register with all of his details and then log in in order to use the website. No user or doctor will be able to access this website if you do not register. There is an admin panel within this system. All of their job can be completed by the admin panel.

## **1.5 Project Management and Finance**

All of the user's medical appointment records are kept up to date by this project. Patients can save time and schedule appointments online with the aid of this technology. The project's primary goal is to make scheduling doctor appointments simple and time-saving by enabling online scheduling. MySQL and PHP were used in the project's construction. Every patient receives a unique ID from the project, and all of their data is immediately saved.

Stakeholders in our "BD Doctor AID" project are limited to one kind. That person is a doctor. A portion of the money that comes from this website will have to be paid by the doctor using the money that they see on this website. This website may be operated without hiring any more staff members. This website can handle some administrative tasks without hiring more staff.

## **1.6 Report Layout**

The DIU table of contents for my report's layout is as follows. I learned everything by writing my report on the DIU website's chapter writing approach. In Chapter 1, I went over the introduction, motivation, aim, anticipated outcome, and objectives. In Chapter 2, I went over the introduction, the analysis of terminology comparisons, the scope, and the challenge. In chapter three, I addressed use cases, flowcharts, logical data models, business process modeling, requirement specifications, and design requirements. In Chapter 4, I go over the design specification, and we also talk about the language used during the development process. Among other things, we've discussed front-end and back-end design. I covered test implementation in Chapter 5. During this process, I was able to acquire the test results. Chapter 6 discusses the social environment and how sustainability is affected by it. Chapter 7 contains their discussion, conclusion, and future growth possibilities.

## **1.7 Project Overview**

Every day, we get used to new technologies. Every day, new technologies are offered to us. Technology has significantly streamlined our public lives. We use an online platform to give our full office and service. In light of this, I created a website with a health theme. By using this service, patients can promptly notify the doctor who is nearest to them their preferred physician about their sickness. The patient or user can easily make an appointment with the doctor of his choice by logging into this website. This website may be trusted because the administrator will personally register the doctors here. This will contain all of their data as well as their session. This website contains a list of all the local physicians. You are welcome to look at the list of doctors in any location.

## **1.8 Problem Statement**

There are numerous websites on health in Bangladesh. Their websites do, however, have a few problems. You may find out more about Sudu Doctor on their website. The doctor can view the content on the webpage I created. The patient can then choose to make an appointment to see the physician. People are now having problems making appointments, however if they use my website, this problem will be fixed. It will be simpler for people to make appointments.

## **1.9 Project benefits and beneficiaries**

The list of doctors by area is viewable by users. Users can get a list of the number of doctors that a specific expert has in a given area by searching by area and specialist. Users can now make an appointment with a doctor if they would like to see one. The physicians will give the business a portion of the money they collect from these patients.

## **1.10 Goals**

My main goal in creating this website is to increase customer satisfaction and service quality. On my website, patients can find all the doctors they need. This website will have a list of all specialized physicians. Every patient's data, including that of the doctors, will be stored in the database. Patients can schedule appointments with their preferred doctors. Through this website, the patient can watch every session with the doctor. After that, the patient is free to spend however long he wants at his doctor's appointment.

## **CHAPTER 02**

### **BACKGROUND**

#### **2.1 First Things First/Terminologies**

When using the system, people dislike errors and other problems. My system is very simple for users to operate. Before deploying any software or website, we have to make sure that it will be user-friendly. Before building software or websites, we need to complete some preparatory tasks. I started by reading the project specifications, after which I made the diagram and gathered information for the system architecture, among other things. I gained all the knowledge required to do the assignment step-by-step throughout the project. I now possess all the knowledge required to complete this project. I'm identifying every obstacle in the way of finishing this assignment. labored to identify answers. Thus, we can draw the conclusion that starting a small undertaking necessitates taking action.

#### **2.2 Associated Work**

DOCTOR BANGLADESH

DocTime

FIND DOCTOR 24

HEALTHx

#### **2.3 Analysis of comparisons**

The popularity of the internet is growing every day. Internet services are commonplace and well accepted around us. By going to the website I built, people may see a list of all the doctors who specialize in a particular specialty. Able to arrange appointments with doctors as well. Furthermore, the doctors know that the patient has appointments on specific days. People no longer find it difficult to get an appointment to see their doctor.

## **2.4 The extent of the issue**

Patients have been seen seeing pretend physicians on a regular basis. persons lacking any formal education, including a medical degree. People are traveling without knowledge of these doctors before they encounter them. They are making a lot of people's lives difficult. For the same reason, one could frequently not trust even the most skilled physicians. We must acknowledge the difficulty of this problem and take proper action. People will be able to meet their ideal doctor thanks to this service. I've made some adjustments to the level of customer happiness and service quality on my website.

There are numerous rivals in the area. These commercial locations are widely dispersed throughout our country. New doctors are being trained every day. Many companies maintain an ongoing roster of doctors and half. This is the main thing holding back the expansion of our business. As a result, we should investigate this problem and put some fixes in place.

## **2.5 Obstacles**

I had very few difficulties working on this project. They must gather all of the doctors' data before adding them to the doctor list. When patients are willing to see them is something those doctors need to know. The schedule then has to be added. Numerous issues arise when service hours or a doctor's workload fluctuate. Inaccurate information is frequently provided by inexperienced scheduling and information technology personnel.

### 3.1 Modeling Business Processes

The Business Process Modeling of the project I created is given below. Here users can view doctor and half details and book appointment. Admin can add and delete doctors.

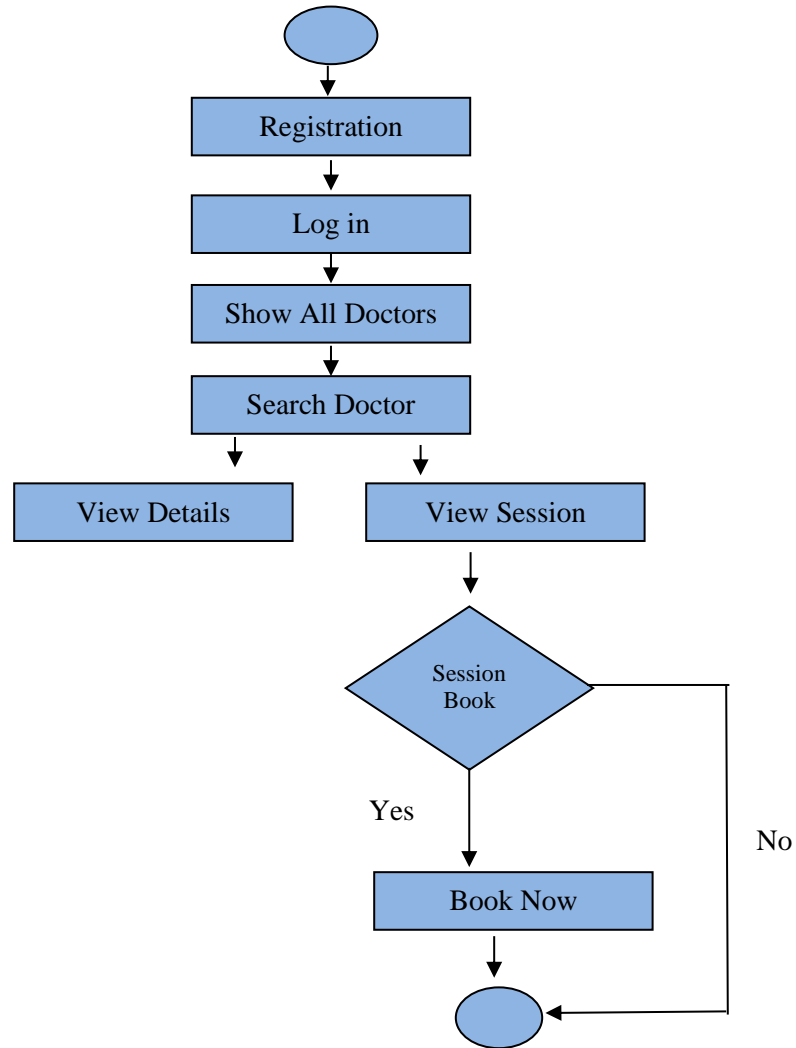


Figure 3.1: Business Process Model



## **3.2 Requirements Gathering and Evaluation**

1. Windows 10 Operating System
2. Visual Studio Code for coding
3. Html
4. CSS
5. Bootstrap
6. JavaScript
7. PHP
8. MySQL
9. XAMPP

The goal of requirement collecting is to identify and manage project requirements that a product or solution may need to meet. It is the process of knowing what we are trying to develop as a product and why we are making it. The process of figuring out what your projects must accomplish and what must be made in order to make it happen is called requirements gathering. It's likely no surprise to you that everyone has different ideas about what should be included in a project.

### 3.3 Modeling and Description of Use Cases

The Use Case for our solution is depicted in the 3.3 figure that follows. The admin and user scenarios are described through use case modeling.

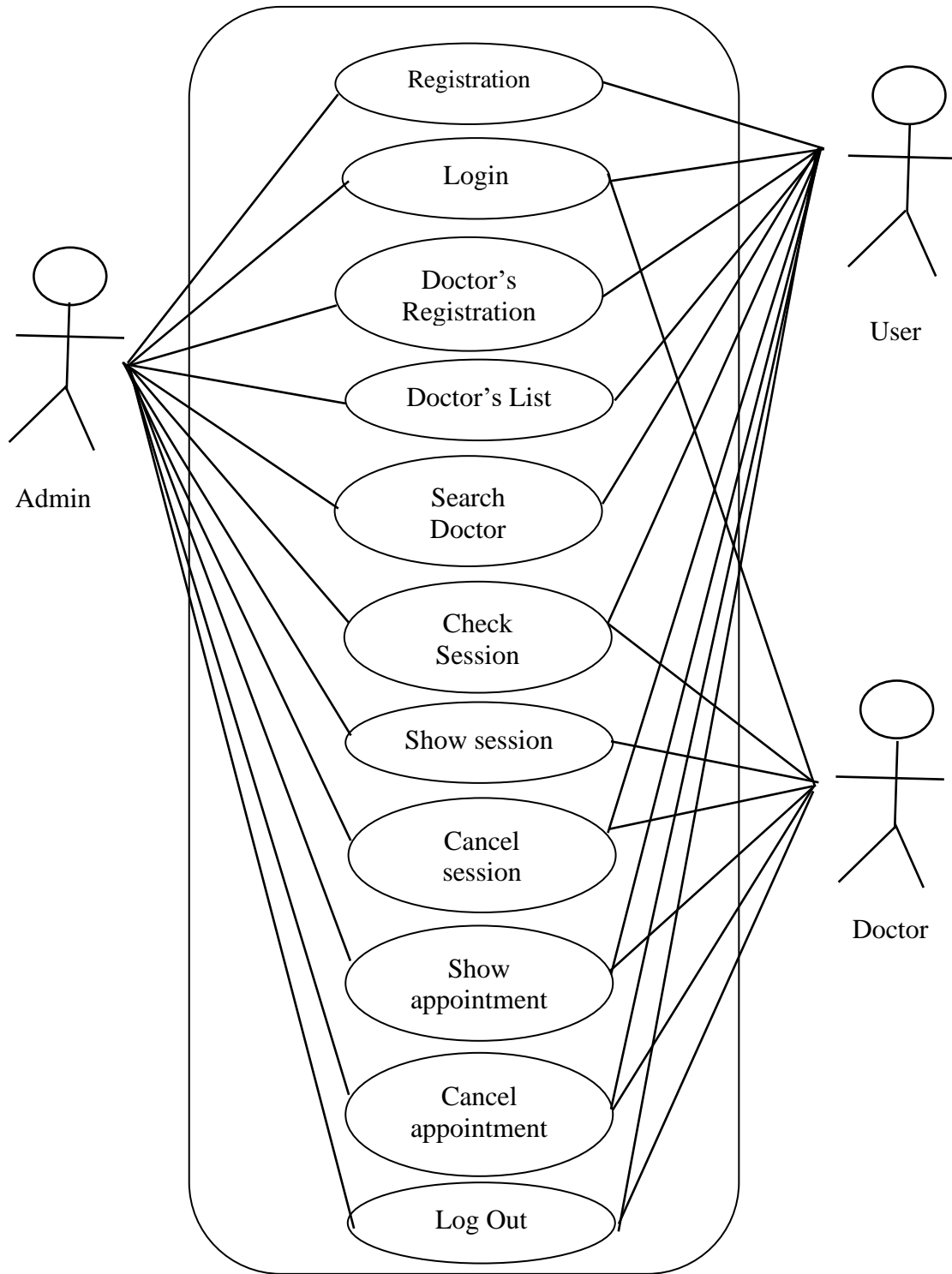


Figure 3.3: Use-Case diagram

### 3.3.1 Table of Use-Case

This table describe the use cases of registration.

Table 3.3.1.1: Registration user

<b>Use Case Title</b>	Registration User
<b>Use Case ID</b>	UC-1
<b>Pre-Conditions</b>	The user will go to the registration form and fill the form with all his details.
<b>Actors</b>	User, Admin
<b>Success End Conditions</b>	Direct enter home page
<b>Failure End Conditions</b>	Please fill out this field
<b>Trigger</b>	User's show home page
<b>Description</b>	After giving all his information in the user registration from he can register in the system and go to the home page.

This table describe the use cases of Login.

Table 3.3.1.2: Login

<b>Use Case Title</b>	Login
<b>Use Case ID</b>	UC-2
<b>Pre-Conditions</b>	First you have to register. Then the user will fill up the log in form and enter the system.
<b>Actors</b>	User, Doctor, Admin
<b>Success End Conditions</b>	Direct enter home page
<b>Failure End Conditions</b>	We can't find any account for this email.
<b>Trigger</b>	User's, Doctor and Admin show home page
<b>Description</b>	The user will enter the system by logging in after filling his email and password correctly.

This table describe the use cases of Homepage.

Table 3.3.1.3: Homepage

<b>Use Case Title</b>	Homepage
<b>Use Case ID</b>	UC-3
<b>Pre-Conditions</b>	Must be login then show
<b>Actors</b>	User, Doctor, Admin
<b>Success End Conditions</b>	All are show Homepage
<b>Failure End Conditions</b>	Invalid email or password
<b>Trigger</b>	Homepage show
<b>Description</b>	If the login is correct, the user can enter the homepage. If you do not provide correct information for login, the user will not be able to enter the system on the homepage.

This table describe the use cases of All Doctors.

Table 3.3.1.4: All Doctors

<b>Use Case Title</b>	Doctors list
<b>Use Case ID</b>	UC-4
<b>Pre-Conditions</b>	Must be login then show
<b>Actors</b>	User, Admin
<b>Success End Conditions</b>	User go to All Doctor's section then choose his favorite doctor.
<b>Failure End Conditions</b>	Failed to find his/her favorite doctor
<b>Trigger</b>	Show Doctor list
<b>Description</b>	User can find the doctor of his choice by going through all doctor's section. From there, the user will get all the information about the doctor

This table describe the use cases of Sessions.

Table 3.3.1.5: Sessions

<b>Use Case Title</b>	Sessions
<b>Use Case ID</b>	UC-5
<b>Pre-Conditions</b>	Must be login then show
<b>Actors</b>	User, Doctor, Admin
<b>Success End Conditions</b>	Successfully find doctor session
<b>Failure End Conditions</b>	Failed to find doctor session
<b>Trigger</b>	Show doctor session
<b>Description</b>	User will find the doctor of his choice by going through the All doctor section. From there, if you click on the session, you will see all the sessions of a particular doctor.

This table describe the use cases of Booking.

Table 3.3.1.6: Booking

<b>Use Case Title</b>	Booking
<b>Use Case ID</b>	UC-6
<b>Pre-Conditions</b>	Must be login then show
<b>Actors</b>	User, Doctor, Admin
<b>Success End Conditions</b>	Show users booking number and time.
<b>Failure End Conditions</b>	Show failed users booking number and time.
<b>Trigger</b>	Show Booking page
<b>Description</b>	User can see the booking number and time here when booking sessions to meet the doctor.

This table describe the use cases of Appointment.

Table 3.3.1.7: Appointment

<b>Use Case Title</b>	Appointment
<b>Use Case ID</b>	UC-7
<b>Pre-Conditions</b>	Must be login then show
<b>Actors</b>	Doctor, Admin
<b>Success End Conditions</b>	Show Appointment time and date
<b>Failure End Conditions</b>	Show failed to Appointment time and date
<b>Trigger</b>	Show Appointment page
<b>Description</b>	By going to the doctor's appointment section, he can see all his appointment times and dates.

A use case is a way for organizing, defining, and identifying system needs in system analysis. A use case is a collection of potential interactions between people and systems in a certain setting that are all aimed at achieving a specific objective. An index of use cases is frequently included, with multiple use cases for each stage of a software or platform's operation. Use cases pertaining to online e-commerce purchases could have distinct reports for each of the following: adding an item to the basket, picking a payment method, and deciding on shipping and delivery.

### 3.4 Diagram for a Flow Chart

View the flow chart diagram below for a front-end and back-end explanation. Everything may be viewed and managed by both admins and front-end users. This flow chart describes the user, doctor, and admin cases.

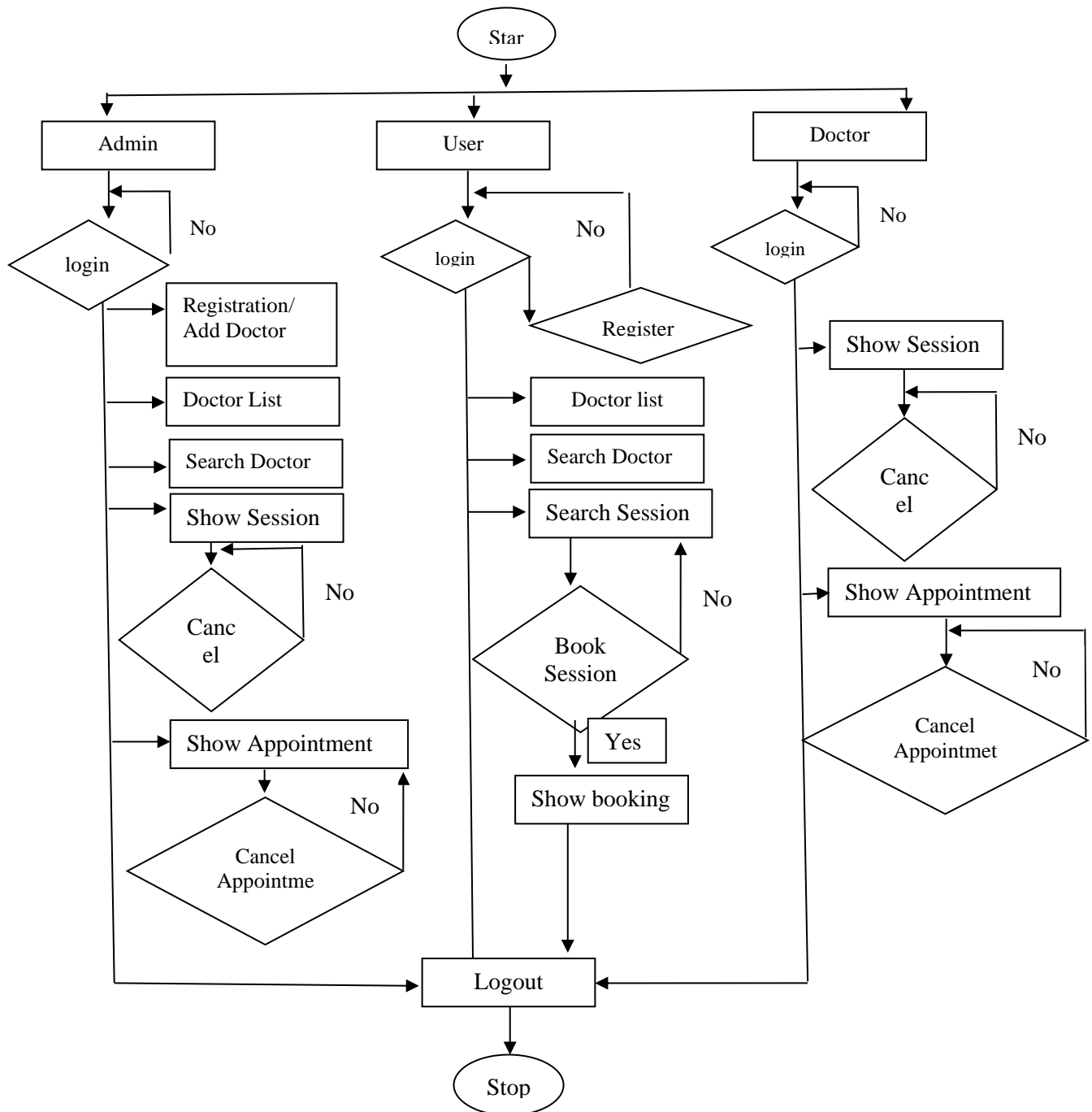


Figure 3.4: Flow Chart Diagram

### 3.5 Model of Logical Data

The logical data model is illustrated in the figure below. Each and every one of the logical data models shown in this image is discussed in detail. All the data types and functions are described in this model.

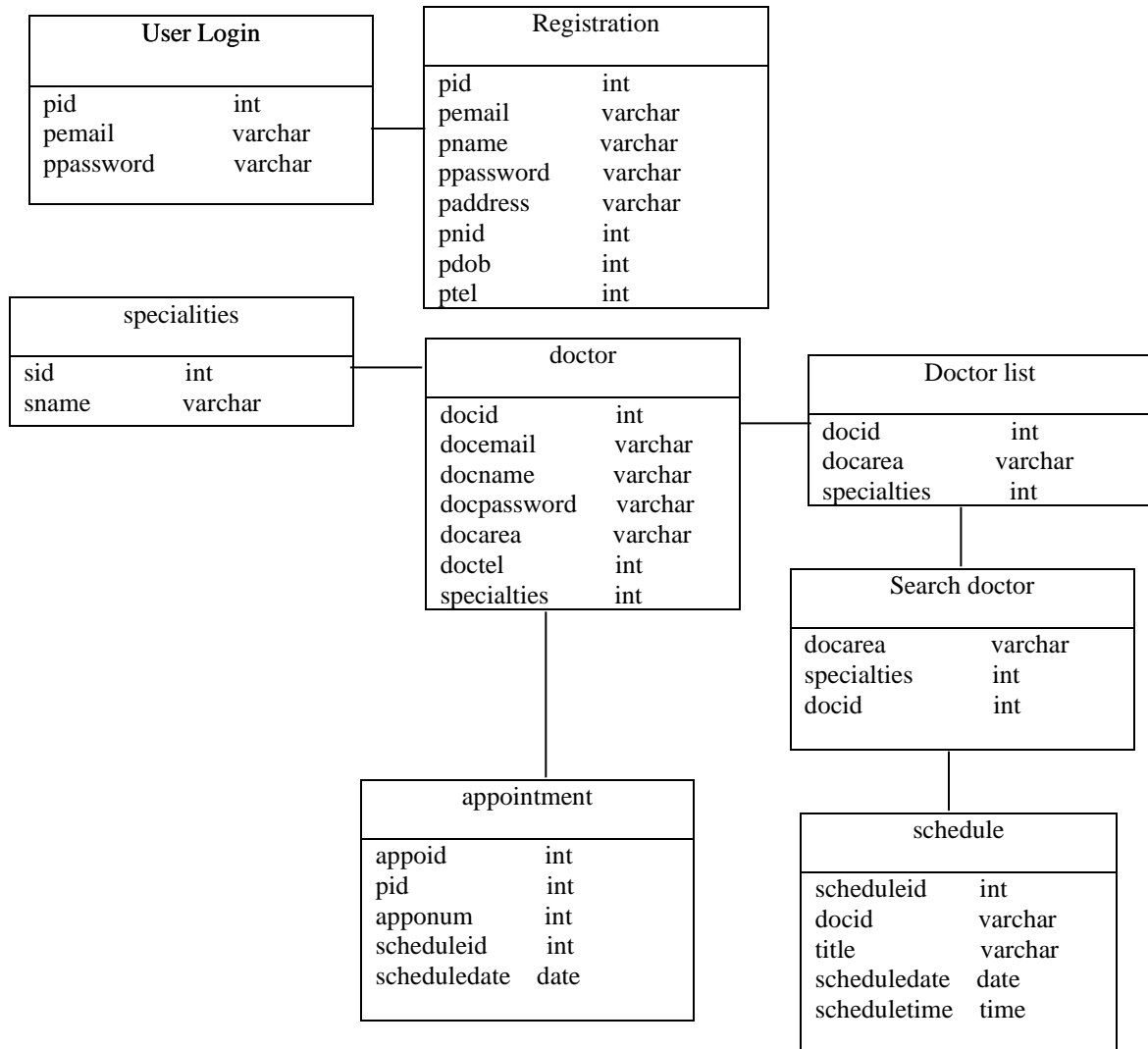


Figure 3.5: Logical Data Model



### **3.6 Design prerequisite**

I'm developing a website that will facilitate patients' scheduling of appointments with doctors. I'm dividing my website's database design, front-end, and back-end development into three areas. I use it in my website's front-end JavaScript, HTML, CSS, and Bootstrap. PHP is then used by me as the backend. My database was designed with MySQL.

## **CHAPTER 04**

### **DESIGN DETAILS**

#### **4.1 Design at the Front End**

Front-end development uses three languages: JavaScript, CSS, and HTML. Web apps and webpages employ these languages. Therefore, users may view anything directly on the website. And this is the application's client side, also referred to as front-end web development. The portion of a website that users can view and interact with is referred to as the front end. Patients and doctors may view everything and fulfill their obligations through the front end. The website's developer needs to check if anything is broken. The problem with front-end adjustments is that the tools and methods used to create a website's front end are always evolving, requiring the developer to stay up to date with the most recent developments in the industry.

#### **4.2 Design at the Back-End**

In web development, PHP is a popular language for server-side programming. PHP is a popular, reasonably priced, and useful substitute for rivals like Microsoft's ASP that is useful for building dynamic, interactive websites. PHP's versatility, ease of use, and interoperability with numerous database types make it a popular choice for backend web development. PHP has the ability to send emails, handle databases, send and receive cookies, create sessions, generate dynamic website content, and receive form submission data. PHP is a dependable and secure server-side programming language since it provides a wide variety of hash algorithms for encrypting user input. All of the main operating systems, including Windows, Linux, Unix, and Mac OS X, can readily execute PHP. Nearly all of the popular servers available today, including Apache, support PHP. Numerous databases are compatible with PHP.

### 4.3 User Experience and Interaction Design (UI and UX)

Homepage: The Home Page is displayed in figure 4.3.1 below. Every user displays this page. When a user visits the website, this page is the first thing they see. After that, log in to the system.

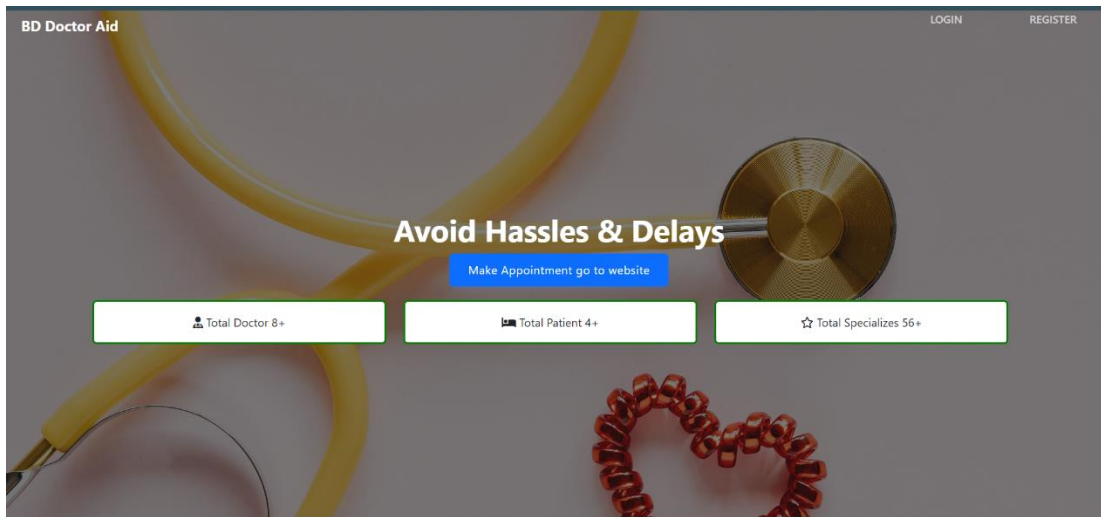


Figure 4.3.1: Home Page

Login Page: The following figure 4.3.2 shows Login Page. User fill the all requirement and then login.

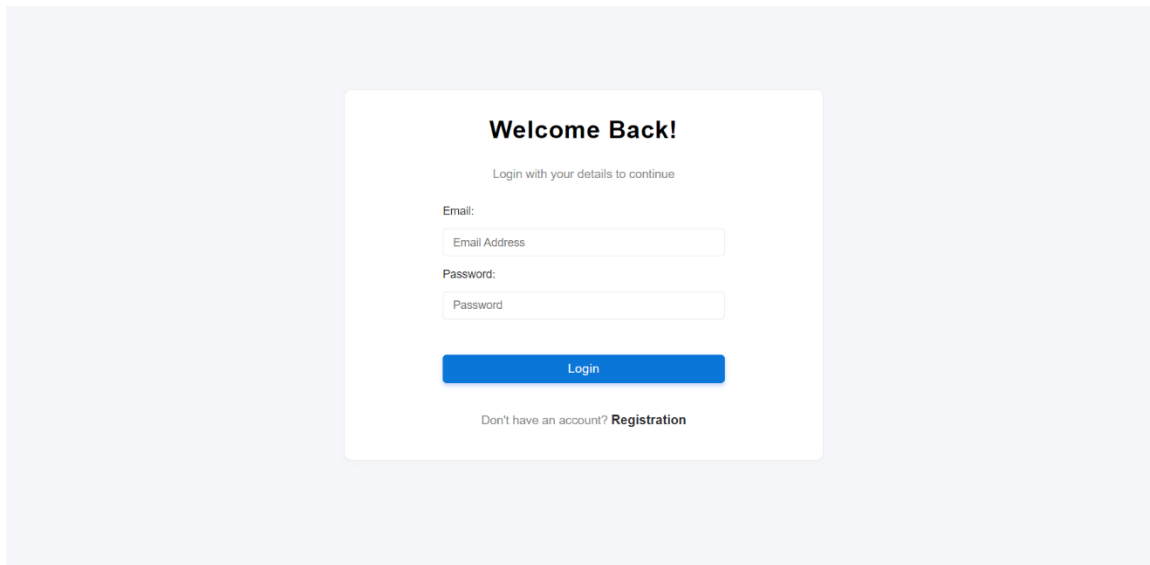


Figure 4.3.2: Login Page

User registration Page: The following figure 4.3.3 and figure 4.3.4 shows User Registration Page. User can register in this page.

**Create Account**  
Add Your Personal Details to Continue

Name:  
First Name  Last Name

Address:  
Address

NID:  
NID

Date of Birth:  
mm/dd/yyyy

Please select this type:  
User

Already have an account? [Login](#)

Figure 4.3.3: User registration page

**Create Account**  
It's Okay, Now Create User Account.

Patient Nid:  
 No file chosen

Email:  
Email Address

Mobile Number:  
Mobile Number:

Create New Password:  
New Password

Conform Password:  
Conform Password

Already have an account? [Login](#)

Figure 4.3.4: User registration page

Doctor registration Page: The following figure 4.3.5 and figure 4.3.6 shows Doctor Registration Page. Doctor can register in this page.

**Create Account**  
Add Your Personal Details to Continue

Name:  
First Name  Last Name

Address:  
Address

NID:  
NID

Date of Birth:  
mm/dd/yyyy

Please select this type:  
Doctor

Already have an account? [Login](#)

Figure 4.3.5: Doctor registration page

**Create Account**  
It's Okay, Now Create User Account.

Doctor Nid:  
 No file chosen

Doctor Certificate:  
 No file chosen

Email:  
Email Address

Mobile Number:  
Mobile Number:

Create New Password:  
New Password

Conform Password:  
Conform Password

Figure 4.3.6: Doctor registration page

Home Page and area wise specialties search: The following figure 4.3.7 shows Home Page and area wise specialties search. User fill the all requirement and then show result.

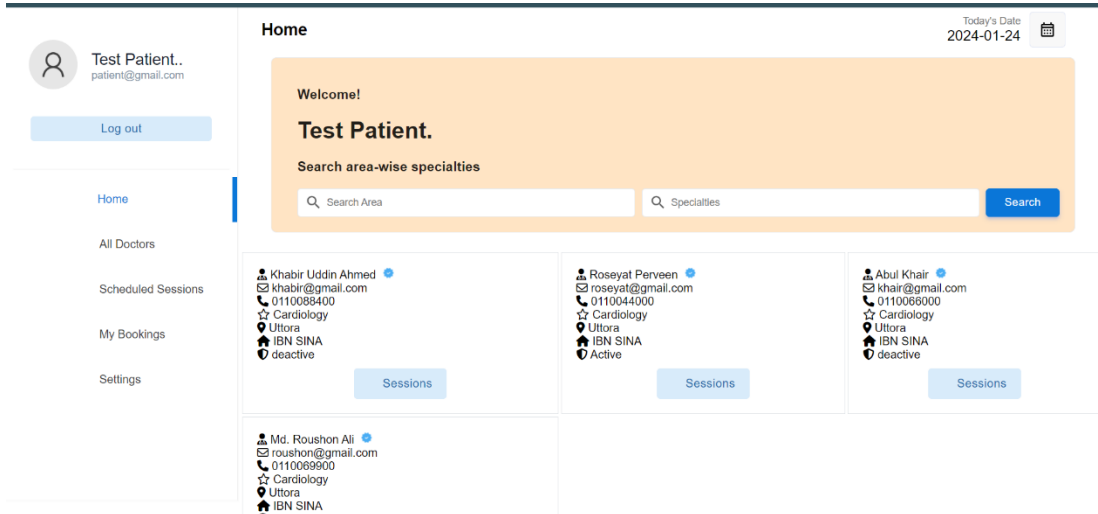


Figure 4.3.7: Home Page and area wise specialties search

Doctor list: The following figure 4.3.8 shows Doctor list. User can show all doctor from doctor list.

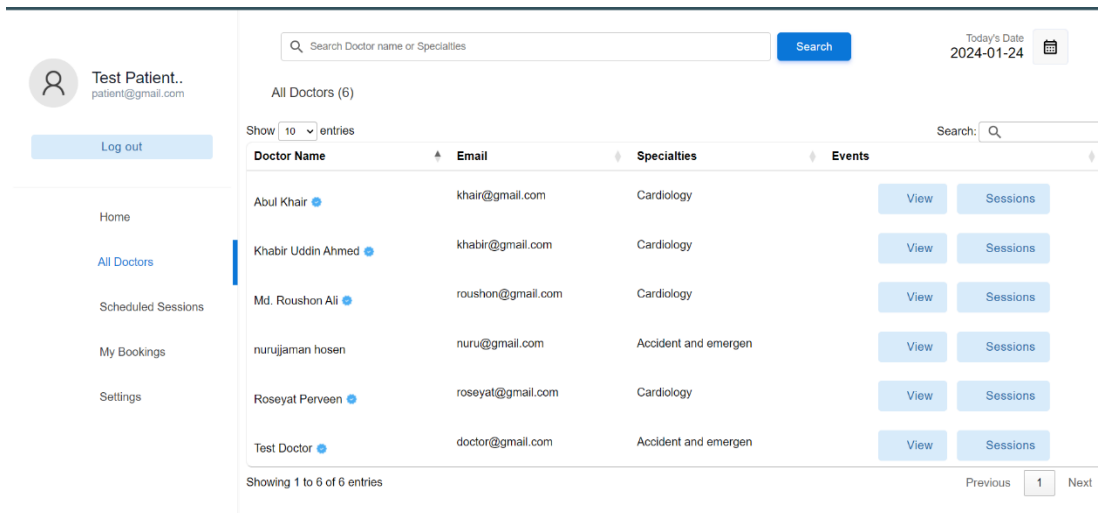


Figure 4.3.8: Doctor list

Doctor Schedule: The following figure 4.3.9 shows Doctor Schedule. User can show all doctor Schedule from the list.

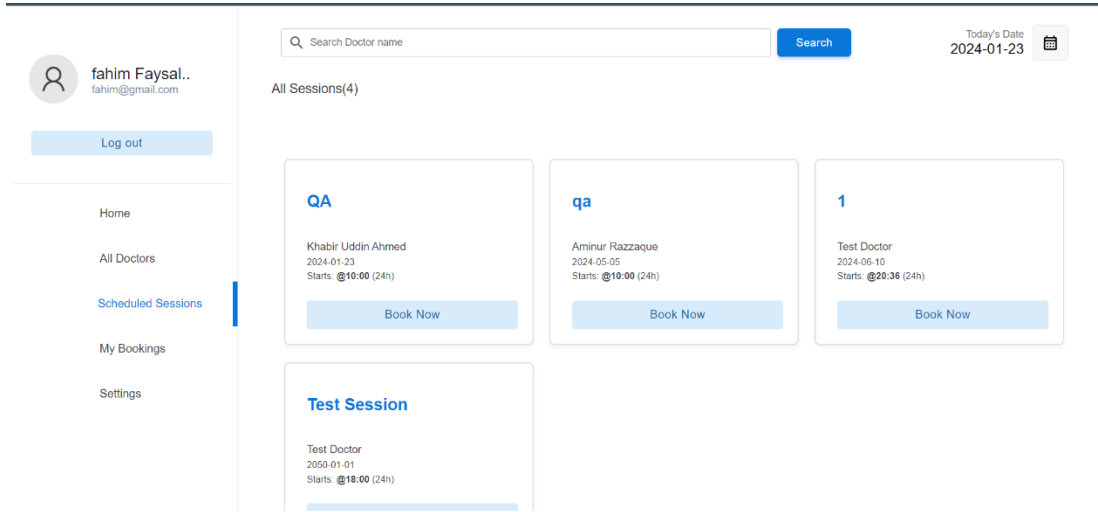


Figure 4.3.9: Doctor Schedule

User Booking: The following figure 4.3.10 shows booking. User can show my all booking.

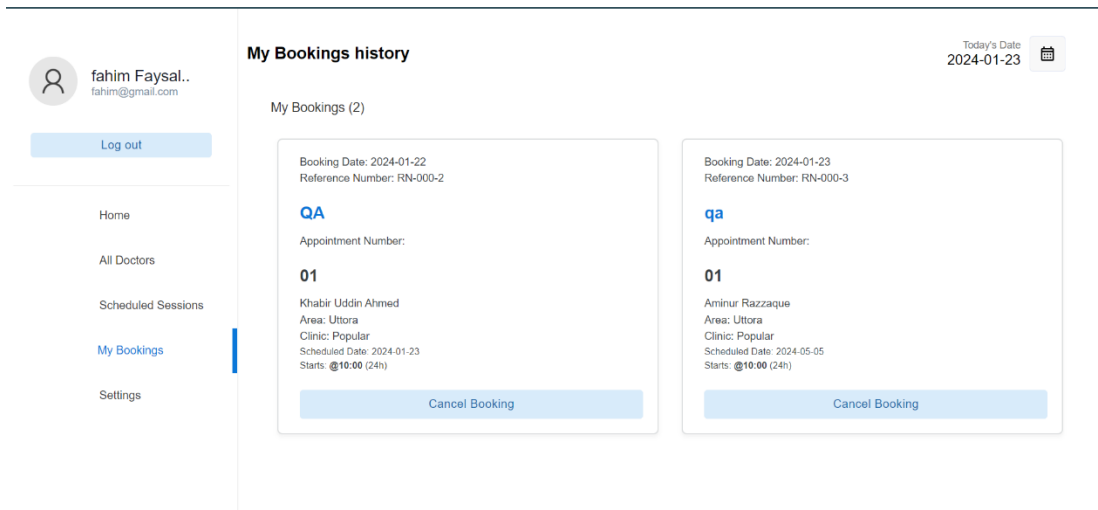


Figure 4.3.10: My Booking

Setting Page: The following figure 4.3.11 shows Setting page

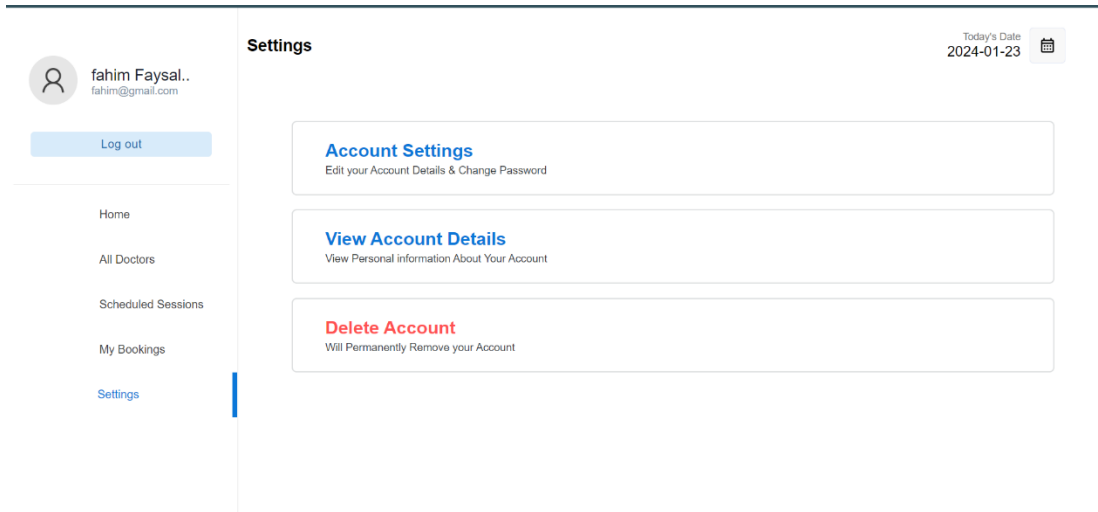


Figure 4.3.11: Setting

Doctor home page: The following figure 4.3.12 shows Doctor home page

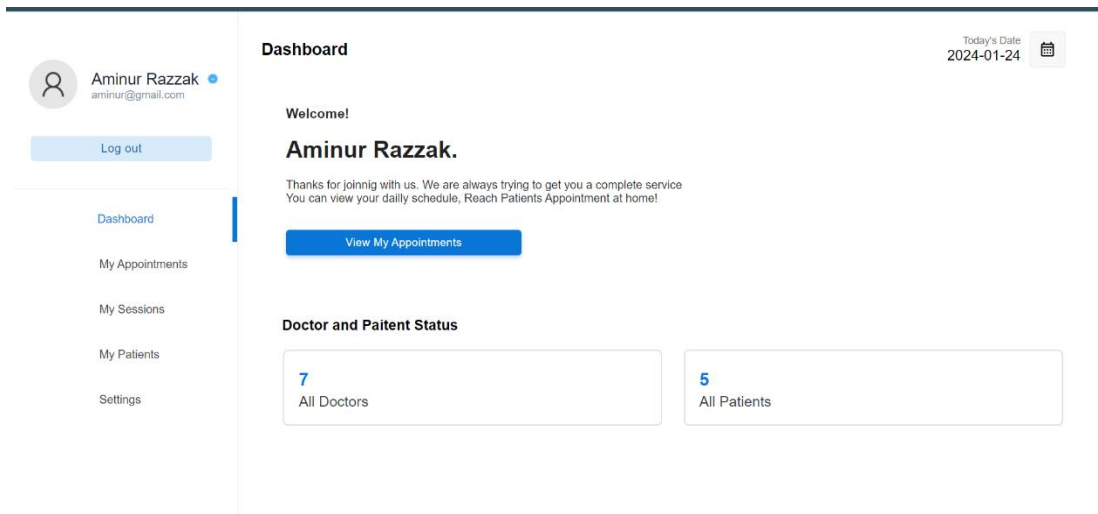


Figure 4.3.12: Doctor home page



Doctor Session: The following figure 4.3.13 shows Doctor Session. Doctor can show own all Session.

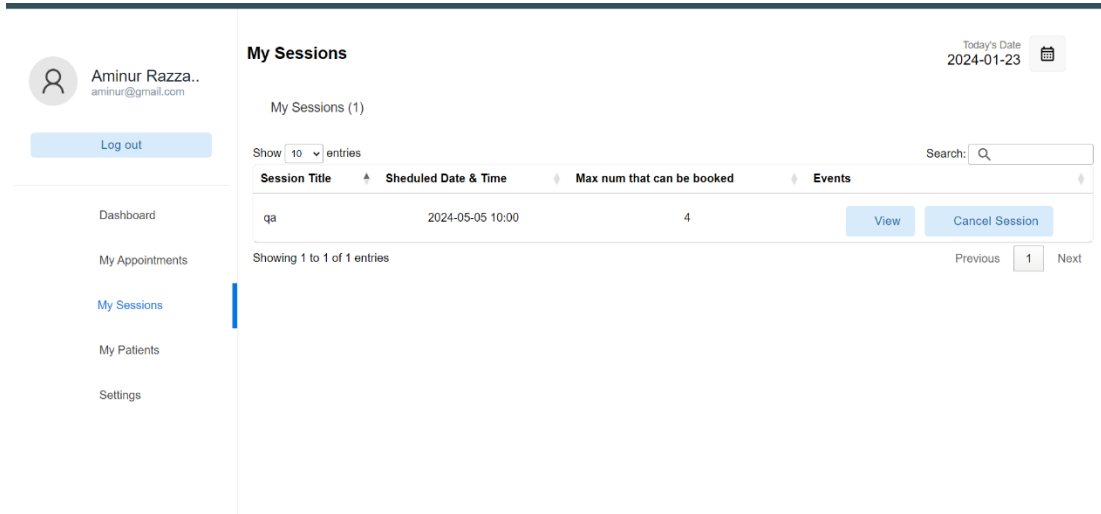


Figure 4.3.13: Doctor Session

Appointment: The following figure 4.3.14 shows Appointment. Doctor can show his/her own all Appointment.

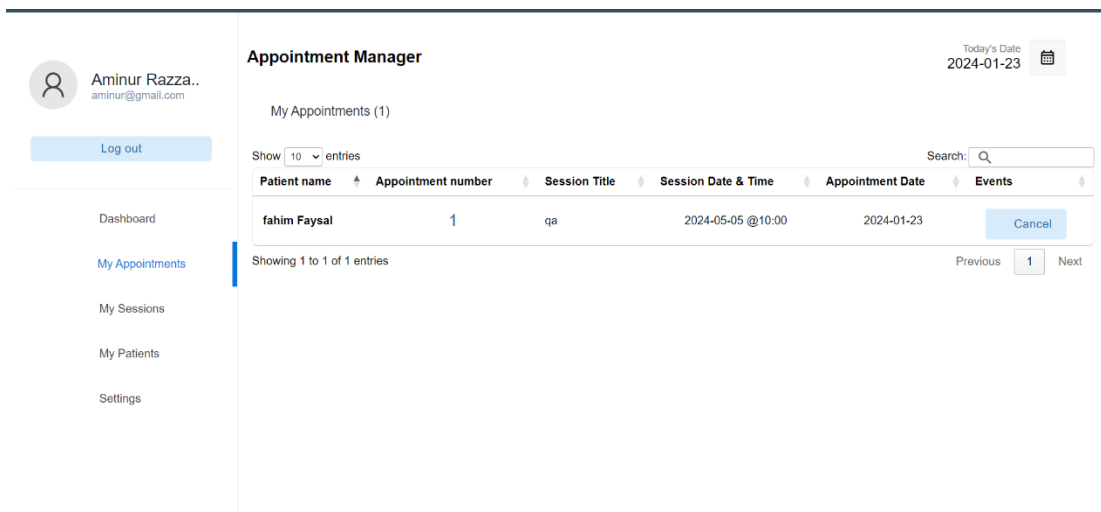


Figure 4.3.14: Appointment

Doctors Patient: The following figure 4.3.15 is shown Admin Panel. Admin can control all process, update, doctor registration and seeing the all activities.

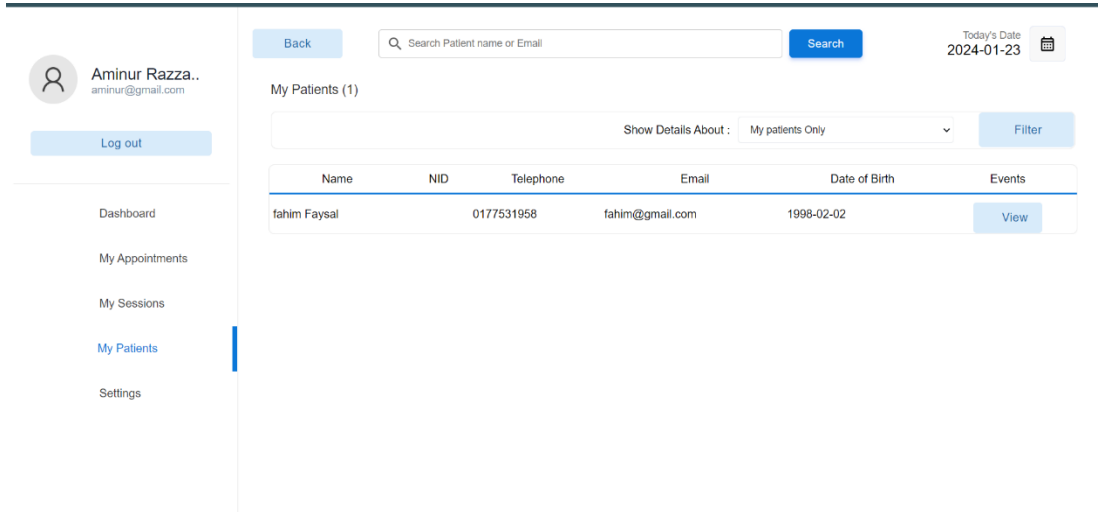


Figure 4.3.15: Doctors patient

Admin Panel: The following figure 4.3.16 is shown Admin Panel. Admin can control all process, update, doctor registration and seeing the all activities.

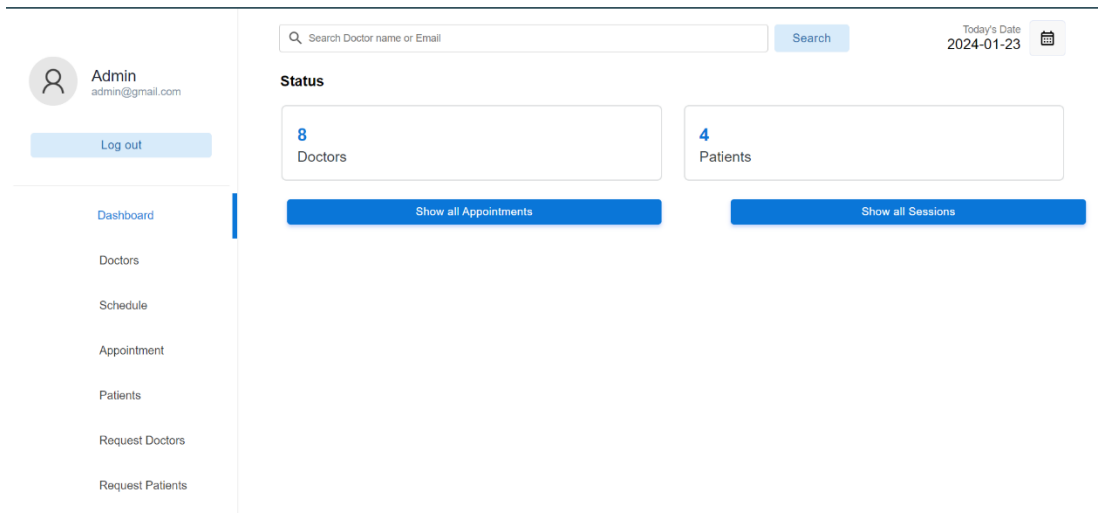


Figure 4.3.16: Admin Panel

## 4.4 Requirements for Implementation

When I'm working on my project, I need to be aware of certain facts, notions, templates, guidelines, protocols, or ideas that guided the creation of my project. Using these materials, I created my project. A project requires the efforts of numerous departments to finish.

Method for Putting BD Doctor Aid into Practice:

Planning and analysis: I started by setting goals. then created a spending plan and schedule. carried out study for discovery. designed the site's structural layout. enhanced user experience. designed a visual style with the brand in mind. All of my material is original to me. The website was created and tested. A crucial component of web development is business analysis, in addition to website planning.

User Interface: An application's user interface, which encompasses both its appearance and interactivity, is created by the user interface.

HTML, CSS, and Bootstrap: Three key tools for web development are HTML, CSS, and Bootstrap. A website is structured using the markup language HTML, and it is styled and made to look good using CSS. Popular front-end framework Bootstrap offers pre-made JavaScript and CSS components for creating websites that are mobile-first and responsive.

PHP: PHP is an open-source, widely-used general-purpose scripting language that can be embedded in HTML and is especially well-suited for web development. It is a language for server-side programming that is used to make dynamic websites and online apps.

MySQL: Relational database management system MySQL is popular and suitable for small and large applications. It is widely used to develop dynamic web pages and web applications in conjunction with PHP, a server-side programming language.

## **CHAPTER 05**

### **IMPLEMENTATION AND TESTING**

#### **5.1 Database Implementation**

With the MySQL database management system, we store a lot of data. Database management systems (DBMSs) are computer programs that let users create, define, manipulate, and maintain databases. In the implementation phase of the database development life cycle, issues with the new system are identified, tested, and data is transformed and loaded. phpMyAdmin supports a wide range of MySQL functions. Any SQL statement can still be executed immediately at the same time. Because MySQL is more user-friendly, I use it. When we use a dataset or subset, MySQL searches it globally. I use MySQL because I find it to be more convenient. A collection of internal processes in MySQL are used to convert data kept in any format.

#### **5.2 Putting Front-end Design into Practice**

We used HTML, CSS, and Bootstrap in the front-end design for my project. Front-end development is the process of creating user-interactive components. Almost all of the local businesses have a website. I can complete this project more quickly because I'm utilizing Bootstrap in my. Bootstrap is the cornerstone of HTML and CSS. Working on my project with HTML and CSS is easy and will make it very user-friendly. In Bootstrap, many pre-made templates are used. Bootstrap is pre-built with forms, tables, buttons, navigation, and image carousels. We have to link Bootstrap before we can use it. A clear and simple layout will make it easier for patients to navigate your website and find the information they need. Including patient reviews and testimonials on websites can help build trust with potential patients.

### 5.3 Testing the Application

There are websites that can be used to assist sufferers. I learn new things from visiting the websites of those companies. And I tried to showcase a few exceptional people. The "BD Doctor Aid" website allows users to look up doctors, see medical procedures, and make appointments. My project has a lot of features that require testing. Testing is done to make sure visitors can navigate the website easily and do all of the activities.

#### Testing strategy

For my project, I'm testing the system's overall functionality. The main purpose of testing is to ensure that my system is functioning correctly. I ran several testing cycles for my app. I have looked over the admin panel, doctor, and user webpages in their entirety. Following a careful examination, my project was accepted.

### 5.4 Test Findings and Reports

Features	Priority	Description
Test case 1: Login	3	Authenticated User
Test case 2: Registration	2	User must be registered
Test case 3: Search Doctor	3	user have to enter area and specialist requirement for search doctor
Test case 4: Doctor Session	3	User can view available Doctor Session
Test case 5: Appointment book	1	User can book doctor appointment
Test case 6: Add Doctor	2	Add add the doctor
Test case 7: Add Session	1	Admin add a session for Doctor
Test case 8: Logout	3	Destroy season of logout

Test case 1: The following table 5.4.1 describe the login cases and also describe the pre-conditions, Post-conditions and result.

Table 5.4.1: Login

<b>Test case #1</b>		<b>Test case name:</b> Login		
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A		
<b>Short Description:</b> If the user input valid data in the form, then login Successfully				
<b>Pre-conditions:</b>				
<ul style="list-style-type: none"> <li>• The user need to registration for the system</li> <li>• Username is fahim@gmail.com and password is 1234</li> </ul>				
<b>Step</b>	<b>Email</b>	<b>Password</b>	<b>Expected result</b>	<b>Pass/Fail</b>
1	fahim	1234	Please include an '@' in the email address	Pass
2	fahim@gmail.com		Please fill out this field	Pass
3		1234	Please fill out this field	Pass
4	fahim@gmail.com	1234	Login on to the system successfully	Pass
<b>Post-conditions:</b> The system homepage is visible when user successfully login.				

Test case 2: The following table 5.4.2 describe the Registration cases and also describe the pre-conditions, Post-conditions and result.

Table 5.4.2: Registration

<b>Test case #2</b>		<b>Test case name:</b> Registration		
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A		
<b>Short Description:</b> When a user input his all accurate details, then registration would be successful.				
<b>Pre-conditions:</b>				
<ul style="list-style-type: none"> <li>When the user does not have an account, first he registers and opens an account for him</li> </ul>				
Step	Email	Password	Expected result	Pass/Fail
1	fahim	1234	Please include an '@' in the email address	Pass
2	fahim@gmail.com		Please fill out this field	Pass
3			Please fill out this field	Pass
4	fahim@gmail.com	1234	Registration successfully	Pass
<b>Post-conditions:</b> The system homepage is visible when user successfully Registration.				

Test case 3: The following table 5.4.3 describe the Search cases

Table 5.4.3: Search doctor

<b>Test case #3</b>		<b>Test case name:</b> Search doctor	
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A	
<b>Short Description:</b> user have to enter area and specialist requirement for search doctor			
<b>Pre-conditions:</b> <ul style="list-style-type: none"> <li>• Registration and logging in is required.</li> <li>• All mandatory fields must be completed.</li> </ul>			
<b>Step</b>	<b>Action</b>	<b>Response</b>	<b>Pass/Fail</b>
1	Not yet filled out are all mandatory fields.	No doctor will show	Pass
2	The user fills up all input fields.	Doctor show	Pass
<b>Post-Conditions:</b> When user searches for doctor then show area and specialist wise doctor list			

Test case 4: The following table 5.4.4 describe the Search doctor Schedule

Table 5.4.4: Doctor Schedule

<b>Test case #4</b>		<b>Test case name:</b> Doctor Schedule	
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A	
<b>Short Descriptions:</b> The user must submit the required information to find a doctor before the doctor's appointment is displayed.			
<b>Pre-Conditions:</b> <ul style="list-style-type: none"> <li>• User must be searching for a doctor name.</li> </ul>			



Step	Action	Response	Pass/Fail
1	Not fill properly search doctor name	We couldn't find anything related to your keywords!	Pass
2	Fill search Doctor name properly	Available doctor session show	Pass
<b>Post-Conditions:</b> User show available Doctor schedule from the list.			

Test case 5: The following table 5.4.5 describe the Appointment book

Table 5.4.5: Search doctor

<b>Test case #5</b>		<b>Test case name:</b> Appointment booking	
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A	
<b>Short Description:</b> user have to search area and specialist doctor for appointment.			
<b>Pre-conditions:</b> <ul style="list-style-type: none"> <li>● Registration and logging in is required.</li> <li>● Search specific doctor</li> <li>● Booking a session of doctor.</li> </ul>			
Step	Action	Response	Pass/Fail
1	Confirm booking by clicking on Book Now option.	Booking Successfully	Pass
2	If you do not click on the Book Now option, the booking will not take place.	No booking	Pass
<b>Post-Conditions:</b> After booking the appointment, go to my booking option to see whether my booking is done correctly or not			

Test case 6: The following table 5.4.6 describe Add Doctor

Table 5.4.6: Add Doctor

<b>Test case #6</b>		<b>Test case name:</b> Add Doctor		
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A		
<b>Short Description:</b> When a user inputs his all accurate details, then registration will be successful.				
<b>Pre-conditions:</b>				
<ul style="list-style-type: none"> <li>● Must admin login</li> <li>● Admin fillup doctor registration form to add doctor list.</li> </ul>				
<b>Step</b>	<b>Email</b>	<b>Password</b>	<b>Expected result</b>	<b>Pass/Fail</b>
1	ashok	1234	Please include an '@' in the email address	Pass
2	ashok@gmail.com		Please fill out this field	Pass
3			Please fill out this field	Pass
4	ashok@gmail.com	1234	Registration successfully	Pass
<b>Post-conditions:</b> Admin will enter all the doctor's information correctly in the form then that doctor's name will be added in the doctor's list.				

Test case 7: The following table 5.4.7 describe the Add Session for Doctor

Table 5.4.7: Add Session

<b>Test case #7</b>		<b>Test case name:</b> Add Session		
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A		
<b>Short Description:</b> Admin will take that information to see what time the doctor is available to see the patient. Admin will open session for doctor when available.				
<b>Pre-conditions:</b>				
<ul style="list-style-type: none"> <li>● Must admin login</li> <li>● Admin fillup session form for doctor</li> </ul>				

Step	Doctor Name	Date and Time	Expected result	Pass/Fail
1	ayesha	01/01/2024 11:00:AM	Please fill out this field	Pass
2		01/01/2024 11:00:AM	Please fill out this field	Pass
3			Please fill out this field	Pass
4	Dr. Ayesha Siddika	01/01/2024 11:00:AM	Session create successfully	Pass
<b>Post-conditions:</b> When admin create a session then doctor and user are show the session and user booking appointment.				

Test case 8: The following table 5.4.8 describe the Add Session for Doctor

Table 5.4.8: Logout

<b>Test case #8</b>		<b>Test case name:</b> Logout User	
<b>System:</b> BD Doctor Aid		<b>Sub-system:</b> N/A	
<b>Short Descriptions:</b> The user will select the logout button and press it if they want to log out.			
<b>Pre-Conditions:</b> <ul style="list-style-type: none"> <li>User has to login every time to enter the system.</li> </ul>			
Step	Action	Response	Pass/Fail
1	From the options, select logout.	Successfully logged out.	Pass
2	Click back and reload after logging out	Redirect to the login page	Pass
<b>Post-Conditions:</b> The session will be terminated.			

## **CHAPTER 06**

### **IMPACT ON THE ENVIRONMENT, SUSTAINABILITY, AND SOCIETY**

#### **6.1 Effects of the Society**

The "BD Doctor Aid" project will significantly affect our nation. This program has significant benefits for both physicians and patients. People or patients may simply find the location of a doctor and all of his information thanks to this project. Prior to this initiative, people needed a lot of time to finish a task. People are now scheduling appointments faster. Through this effort, users can quickly locate and schedule appointments with the specialty physicians who are needed in their area. We think that everyone who uses this program—doctors and patients alike—will reap benefits.

#### **6.2 Effects on the Environment**

In order to schedule doctor appointments, patients must wait a long time in lines. Patients suffer as a result, and time and resources are wasted. Many patients' or people's lives are being saved by the "BD Doctor Aid" effort. The patient can perform any other critical tasks throughout that period of survival.

#### **6.3 Moral Considerations**

Both the company's business and the welfare of the average person will benefit from this effort. The project's moral component is that the business is making little money. adding a list of reputable physicians to a database in order to enhance client support. This project's primary goals are to guarantee patient-friendly service and satisfy customers. This initiative will assist in treating patients more effectively in less time.

#### **6.4 Plan for Sustainability**

Introducing patients to high-quality physicians is the primary sustainable plan for my project. To let people know about my website and business, I need to set up advertisements on TV, social media, and other platforms.

## **CHAPTER 07**

### **CONCLUSION AND FUTURE SCOPE**

#### **7.1 GitHub Link:**

<https://github.com/Fahimfaysal6598/final-project>

#### **7.2 Discussion and Conclusion**

I first discussed the project I intended to work on with the supervisor. I have met with my boss multiple times to discuss how I am carrying out my work. I then make a photograph of the same object with its feature for the Amar project. I have divided my project into several pieces. Database, connection, front-end, and back-end are the four of them. After the design is finished, I start coding my project. I test the project after the coding is complete. I evaluate the project's effectiveness with my supervisor during our conversation.

#### **7.3 Project Restriction**

I designed my idea with my thoughts in mind. I think my project will be better if I can make a few more changes in the future. Later on, I'll try to implement it. It should be made clear that the doctors who receive the highest first scores will be the ones who contact the patients. This is the limitation of my project.

#### **7.4 Successes and Setbacks**

I faced some hurdles while implementing my project.

There is a shortage of money

Payment gateway not available

Error in coding

Collecting doctor's information

I have achieved a lot in this project.

Learned to deal with stress and situations.

Many new ideas came to mind.

With those thoughts, I can build a lot of good projects in the future.

Will add more areas to the project.

Add more features.

## **7.5 Potential for Further Improvements**

In the future I will add many features to expand my project. This will greatly improve the project. I will use React frontend to run my project smoothly. In future, we will use node.js in backend, MongoDB in database

project's future scope:

- I will be using a large database in my project.
- Adding more options to help customers.
- 24/7 online or offline doctor's appointment booking facility.

## **Reference:**

1. HTML and CSS learn at [https://www.w3schools.com/html/html\\_css.asp](https://www.w3schools.com/html/html_css.asp)
2. Bootstrap is available at <https://getbootstrap.com/>
3. PHP is available at <https://www.php.net/>
4. MYSQL learn at <https://www.w3schools.com/mysql/default.asp>

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