"CARE- A web Application Project Providing on Medical Services"

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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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APPROVAL

This Project/internship titled **"CARE- A web Application Project Providing on Medical Services"**, submitted by Md. Mahmudul Hasan, ID No: 171-15-8563 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 11 September 2021.

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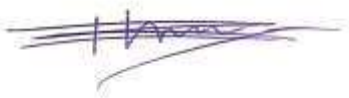

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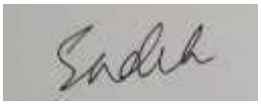

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Mr.Riazur Rahman, Sr. 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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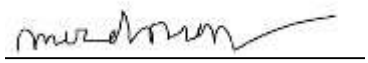

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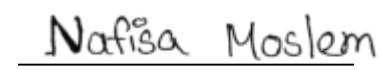

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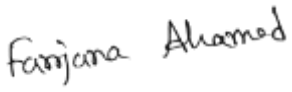

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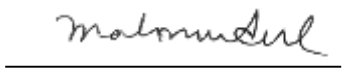

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ABSTRACT

Medical Service Management System (CARE) is our major emphasis. It will enhance the medical experience for both nurses and other healthcare providers. The whole Internet will be used to run the system. Scripts are developed in PHP, Java Script, query, as well as HTML as well as HTML and CSS. From any location with internet access, users will be able to log in to the system. connection. These individuals will thereafter be able to do different duties that have been assigned to them. Users can be divided into three groups: i.e. (Management, Patient and Doctor). The Every user who may profit from our service is our major priority. It can only be converted for doctors into a paid system. Where doctors are able to pay for more cloud storage. The number of patients also varies from physician to doctor, and different kinds of patients might be present. There are different patients a doctor may have. We may expect that physicians are going to need various cloud storage. For each physician we may assign a fixed cloud storage. You can request additional storage on request and they are charged for their request. We can produce different packages and attribute different costs. The patients are provided with some room to retain their data. Since the patient just need storage for himself he can use it as a free user. This makes the system more practical and convenient for everybody.

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CHAPTER 1 Introduction

1.1 Introduction

A one-of-a-kind cloud-based healthcare administration solution for both patients and hospital staff (Doctors, Management). The major goal of this design is to improve upon the present medical experience. Although no one likes to go to the hospital, there are instances when it is necessary. The previous medical system is not particularly user-friendly. The first large stem has been in line for some hours. There are several more issues that contribute to your negative hospital experience. Our major goal is to make people's lives simpler in times of crisis. . We are working on a solution that will remove a lot of documents and save time for users. Software already in place: In many hospitals in our country you will discover hospital management systems software. They have wonderful tools to support the hospital, but they can't handle their own data. This was what motivated us to create a system where the system works for everyone. To address these constraints, we are aiming to establish a social networking site for hospitals, which will benefit everybody and their patients in the hospital. Let us talk in depth about the system and see how it helps us. There are no such things, but we concentrated on overcoming the best that we could. We focused on defining patient characteristics. You are the huge community of this system and you deserve to take use of it. It is undoubtedly not in our present systems that our information relating to our hospital records and other critical documents, such as orders and test results, can be checked. At least we can at least be peaceful if this paper is close to us. We don't have to worry about the report and it will of course help us the best to lose and bother these priceless materials. The relief will be enormous and so the gain will be. This will hopefully provide us with the advantage we expect.

1.2 Motivation

We don't normally go to hospitals unless we have to, and even then, we don't always have a positive experience. We have a variety of issues there. There are automated hospital administration systems, however they don't offer any features that we need. Even doctors have no access to their patients' information when they are at home. It will be fantastic for patients to have an app that allows them

to maintain track of their personal information, such as prescriptions, test results, and other vital documents. I am certain that this product will be of assistance to them. All physicians accessible may be consulted by patients and their chosen doctor can be asked for an appointment. The same perks are likewise offered to a doctor. This reduces many effort on paper and makes it easier for everybody involved. I have some personal experience visiting the hospital and I have also collected experience from others by asking them about them and watching them for a while. People's greatest nightmares come true when they have to go to the hospital. Nobody goes to the hospital unless it's an emergency. People become enraged, although they have nothing to do with it. This provided me with the ideal incentive to construct something for them and assist them at a crucial time. I am certain that this product will be of assistance to them.

1.3 Objective

We want to improve its efficiency, and our major objective is to serve and aid others. Finding uncommon medicines causes pain. In remote areas and during crises, there is no professional on staff. The patient has no one to urge for injections or to treat the wound at home. In an emergency, there is no known blood donor. Through a single app, we want to tackle all of these difficulties at once." In Bangladesh, there is no app that offers all of these services. We are working to make medical care accessible to the public in a quick and easy manner. An individual may access the care app at any time and from any location.

1.4 Rationale of the Study

The study is important to the hospital patients since they could have medical information without experiencing delays and incorrect information. If they wanted to access their medical history, they would not be going through a difficult process. The hospital especially the pharmacy and billing department would not go through a lot of paper reports when it comes to payments and accounting records. The use of paper would still be there but it could be reduced so that excessive paper loads would not be a problem. The study was also significant to the staffs since they would be able to register, update, delete, and search information within the system. It was beneficial to the medical since it could improve their management through connecting all their existing computers in one system. In general, the study was important to the hospital and patients for it could serve as an

applicable tool to maintain the productivity and quality of service in the hospital. Hospital is a leading among the public hospital. Health system functioning depends on production and use of quality health data and information at all levels of the health system. This study serves as a starting point for the assessment of HIS based on the situation in public to identify the strengths and weakness of the system in improving health system functioning. The study forms a basis for further research on evidence based management of health services in general and specifically lead to generation of new ideas for better and more efficient management of health facilities in Nairobi and the country at large. The study will look at the use of hospital information system in a private and a public hospital.

Findings and recommendations of the study would contribute towards the ongoing efforts of ministry of health to develop better health management operations system that would benefit facilities and healthcare workers identify their weakness and thus propose better ways that could help improve their efficiency through improved information use. The findings of the study will be used by all health care workers and health care managers as and will not rely on haphazard personal experiences or subjective personal judgments or of friends /relative other than base their decisions and actions on concrete evidence and thus help re-invent themselves as problem solvers.

1.5 Expected Outcome

The project's major goal is to create a web based healthcare system based on a mobile video support device that allows ambulant patients to:

- Remote monitoring of the patient’s state.
- Patient’s continuous self-control.
- live contact from any place and any time with professional medical staff through modern communication network.
- Easily can purchase Medicine.
- Find out blood donor.

1.6 Research Questions

Completing this task was quite difficult for us. In order to provide a realistic, efficient and right answer to the issue, researchers would like to suggest the following points to communicate these feelings and outcomes.

- Can web-based intelligent healthcare be a way to prevent appropriate disorders?
- The Medical Care System's Impacts What?
- How effective is this initiative going to be in the long term?
- What is the relationship between this initiative and the Medical System?
- How precise will the solution and its outcomes be?
- On a large scale, how effective will this initiative be?

1.7 Report Layout

- In the first chapter, the project's purpose, motivation, research questions, and projected outcome are described, as is the report's overall structure.
- Chapter two discusses previous work in this area. The second chapter's last part demonstrates the breadth of their limitations. Last but not least, the research's primary hurdles or problems are described.
- Part three contains the Requirement Specification, which includes business procedure demonstration, necessity accumulation, use case demonstration, and legitimate information model and plan prerequisites of a web-based smart health system.
- The Front-end, Back-end, and Implementation of the Design Specification discussions are covered in Chapter 4. This chapter contains method images and a database that will help you complete the project.
- Usage and testing, database execution, and front-end and back-end structure implementation are all covered in Chapter 5. This chapter contains several design graphics and a database that will help you realize the project.

CHAPTER 2 Background

2.1 Introduction

In this section, we will look at important works, study summaries, and difficulties related to this research-based activity, among others. We shall cover other research articles and their works, methodologies, and projects that are important to our study in the related works section. This section will provide a short description of our work. In the part of challenges section, we'll look at how far the gadget will provide information about a patient's health.

2.2 Related Works

There are a number of different management plans to choose from, but few of them are beneficial to patients. Although the healthcare system has been digitized, it has not benefitted everyone. I've come to the conclusion that there must be something for the patients in such a situation. Using simple capabilities for tracking appointments, requesting appointments, medications, and test reports can save you up to 70% to 80% of the time. Because these are the places where we face the most challenges and where we can find a solution, we will be able to accomplish something for which we have waited so long. Because the world is changing to the internet, now is an excellent time to consider this problem. On the internet, I looked at many hospital management systems as well as several local programs used by the medical personnel in my region. They're also well designed and feature-rich, but there's nothing about them that will make patients pleased. If we consider the benefits and satisfaction from all angles, we cannot conclude that something is beneficial to everyone. If a system does not provide help to all user groups, it cannot be considered perfect. In terms of maximizing everyone's benefit, we've come a long way. There are many more things that could be included, but for the time being, this is the most we can hope for.

2.3 Research Summary

Every sector in this digital world is undergoing substantial development as a result of the IT industry. The health business, on the other hand, is not as technologically advanced as other industries. We created a model for a better health system that integrates online, cloud, and data mining technologies. Those who have previously dealt with a web-based health system have been

unable to make informed judgments. We realized after performing study that our technology is really useful to patients and others. Our effort, we feel, will lead to the birth of something new.

2.4 Scope of the Problem

Lack of quick retrievals: Certain information, such as the patient's history, is difficult to get and discover. For example, the user must search through many registries to learn about the patient's past. This results in awkward circumstances and time waste. Inadequate archiving of current data: Storing the data generated by many transactions in the right location takes time and effort. Lack of timely updating: Due to the paper labor needed, many updates to information such as patient records or child vaccination details are difficult to make Manual computations are error-prone and time-consuming, which might lead to erroneous information. Calculation of a patient's bill depending on various treatments, for example.

2.5 Challenges

The main issues with this project are database maintenance and processing; dealing with the data set was too complex. Those that worked with web-based health management systems previously couldn't provide diverse services. As a result, providing this sort of service presents a number of problems. Experiments in the real world provide a big challenge for us. Our research-based project is not yet complete. We noticed that Bangladesh has a restricted number of patient service systems. If we manage more patient data, we will be able to predict more. This system must be capable of power management. We had to start with our own motive because there was little proof earlier. This system must have power management capabilities. Because there was insufficient evidence previously, we had to begin with our own motive.

CHAPTER 3 Requirement specification

3.1 Introduction

We'll go through the requirements for our project in this section. Our research-based project additionally requires method investigation. The three elements of our project will be discussed in this chapter.

3.2 Login System

Same page for every group of users:

A basic login screen for all users, in which they must pick their chosen login method. After entering the correct user name and password, you will be able to log in and utilize all of the features that have been created specifically for you. This is a single user interface for all users connected to the system.

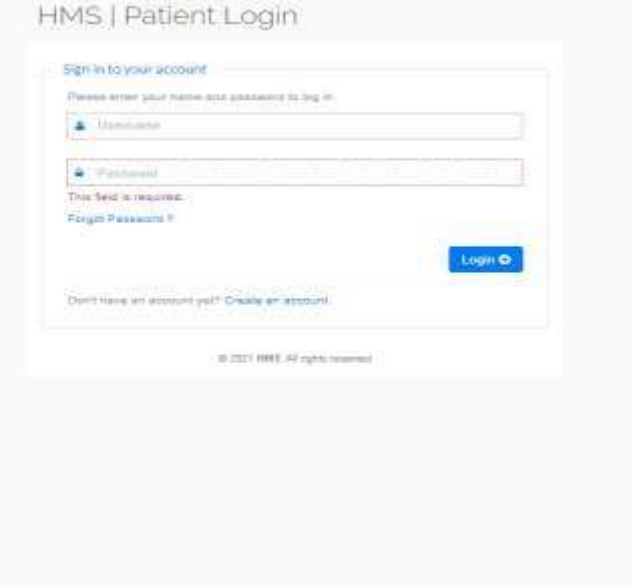

Figure 3.2: Login Page

User Groups:

Users are divided into three groups. Depending on your user type, the functionality will change. You'll be able to complete some tasks in one area that aren't required in others.

Management:

Both patients and physicians can have user profiles created by management. They will be in charge of scheduling appointments and reviewing pending test results. They will be in charge of the most critical tasks. As a result, a great deal will be dependent on their actions.

Patient:

Patients are regular people like us. We'll be able to look for available doctors and make appointments with them. We can also look at our past records. The patient's functioning is restricted due to their condition. They will only be able to make changes to their personal information and a few other items. They may, of course, seek for their preferred physicians and make an appointment with them.

Doctor:

Doctors have the ability to check and arrange appointments on their own. By selecting the appointment list, they may begin prescribing for their patients. It will take them straight to the page of prescriptions A variety of automated options are available on the prescription page tools that allow doctors to set up and allocate medications to their patients. Every area a doctor requires to write a great prescription is accessible. As a result, doctors' burden will be reduced, and they will be able to devote more time to their patients. They will only need a few clicks to create correct prescriptions

3.3 Management Features

This is yet another crucial managerial duty. They must include the doctor's account in the information. A doctor is responsible for a variety of tasks. There are numerous fields for the doctor to fill out under personal details, doctor information, chamber information, and settings. After a doctor has been successfully inserted, the management can assign patients to them and appoint them to requests. All of the information from each tab must be properly entered because it will appear alongside the doctor's information Patients will not be able to view all of the information that the doctor has if they input less information. This may result in the system failing to give us with the promised benefit. As a result, managers must exercise caution.

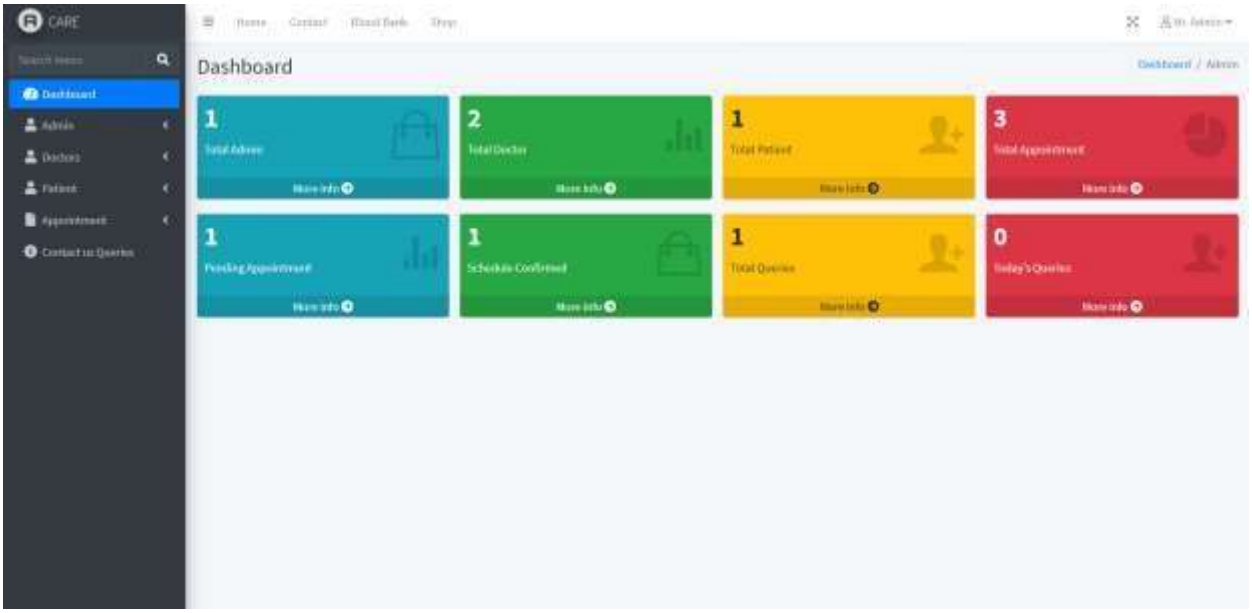

Figure 3.4: Management adding doctor

3.4.1 Add appointment

Management can manually book an appointment for a user if they request it. They must pick the doctor's name, the patient's name, and the date to add an appointment. This will create appointments for both the doctor and the patient. The part on appointments is also very important. This offers everyone the ability to save time and effort. A patient can simply request an appointment; however, management must make the appointment. The management has several key responsibilities in this situation they must determine whether or not the doctor is available. This will decrease the likelihood of several appointments for the same doctor at the same time. Doctors can also schedule appointments for them if necessary. This will be assigned to them directly, and management will be uninvolved in the process. This is a crucial responsibility.

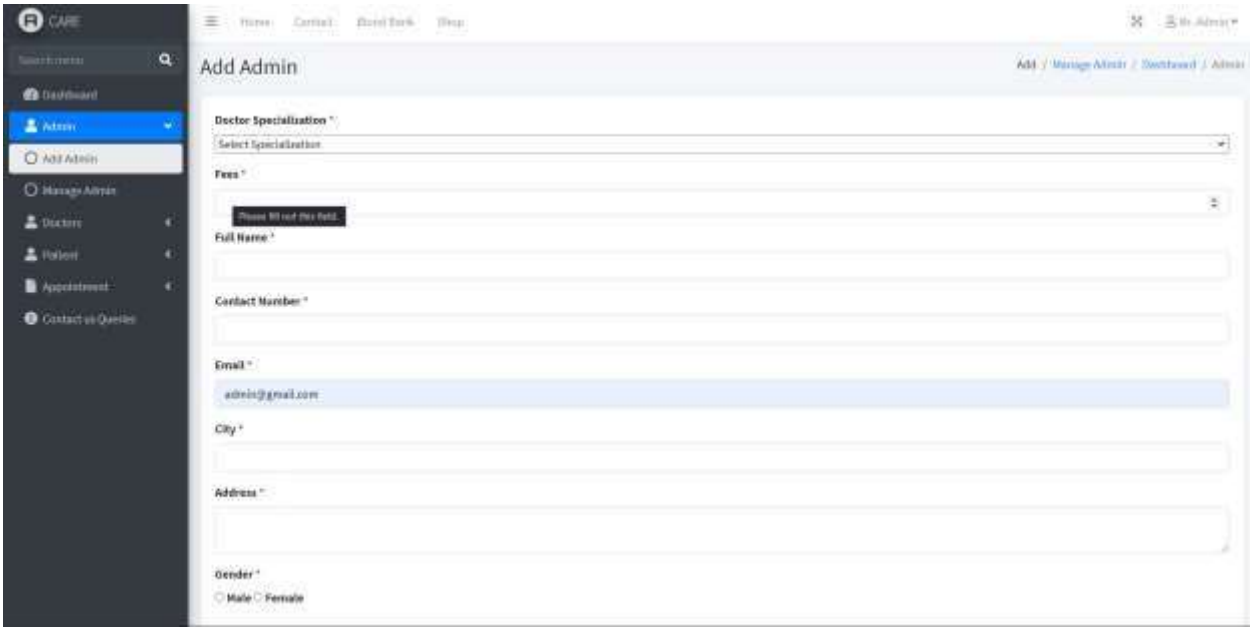

Figure 3.4.1: Management adding appointment

3.4.2 Appointment request

Appointments approval is yet another critical role for management. Patients can request an appointment from home, but management must authorize it before it can be scheduled. They will find any outstanding appointments and, depending on the availability of physicians, they will make arrangements to see them, will either schedule or cancel them. The management may see all of the pending appointments here and take relevant action. This will be the first item the management will examine in the morning before taking appropriate action. People linked with it will be notified after their activity. Both the party doctor and the patient will be informed about the appointment once it has been set up. This underlines how important this stage is. Any of these processes are not required for visits that are scheduled directly by doctors.

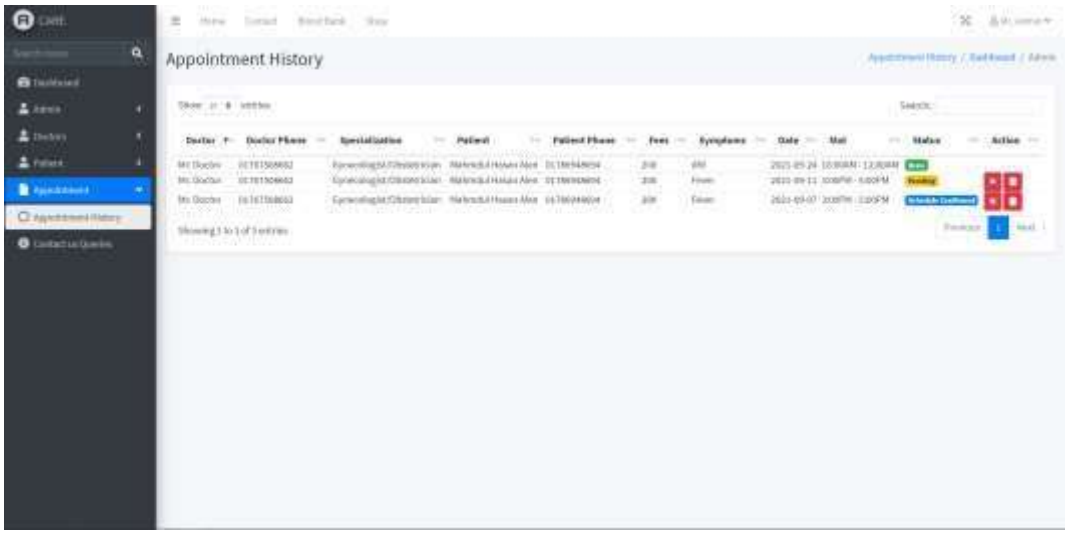

Figure 3.4.2: Management approving appointments

3.4.3 Pending Tests

Doctors will assign outstanding tests to patients, which will be visible to management. They must finish the tests and report back to the patients. Patients' tests will be marked as pending until management approves them. On the management profile, this will display dependent on time. They will be given a healthy test queue that will allow them to structure tests appropriately without the need for a separate queue or anything else. This is beneficial to both us and the management. After finishing their tests, patients are free to depart. Individuals will be able to view their findings online as soon as their tests are done. They'll be able to track the changes and view the test results while also looking for pending tests.

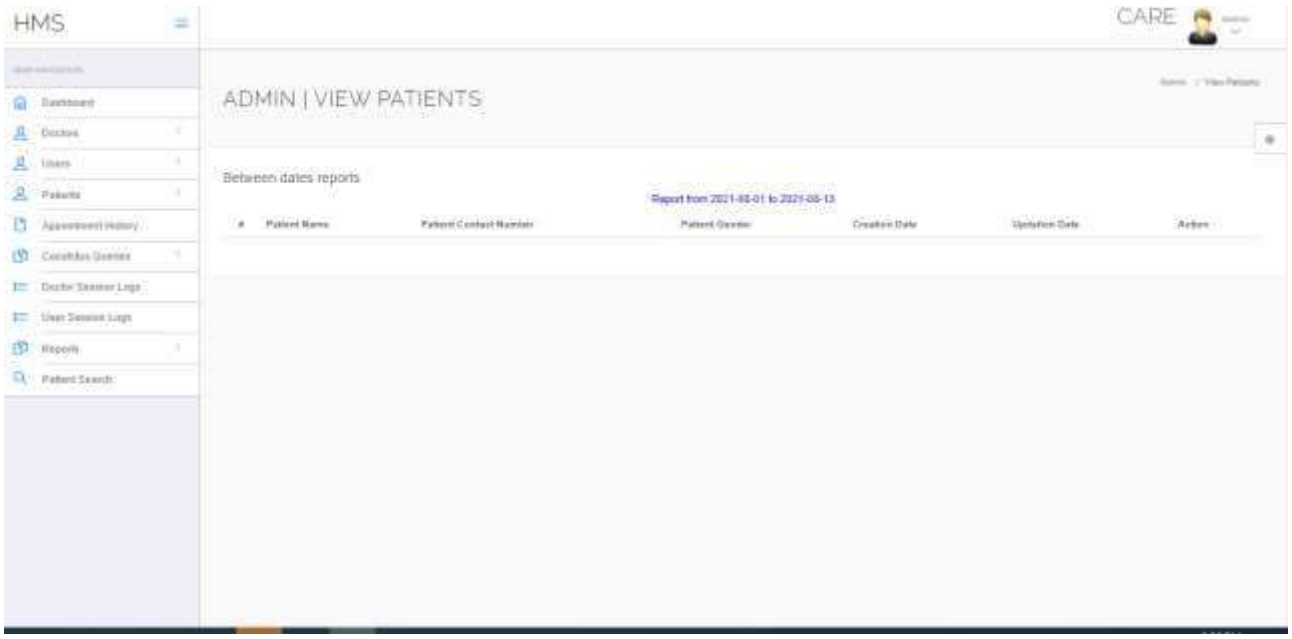

Figure 3.4.3: Pending tests on management page

3.5 Patient Features

They must get the patient's full name, gender, age, address, user name and password, and email address. The user's tracking key is their email address. The primary key has been allocated to it. Management is always held to a high standard of accountability. They must ensure that all fields are filled out accurately so that the patient does not get into any problems. If they make a mistake, it will be difficult for us to achieve our aim. They must use extreme caution while entering their age and email address. The email is also significant since it will serve as the identification for all users linked with the system.

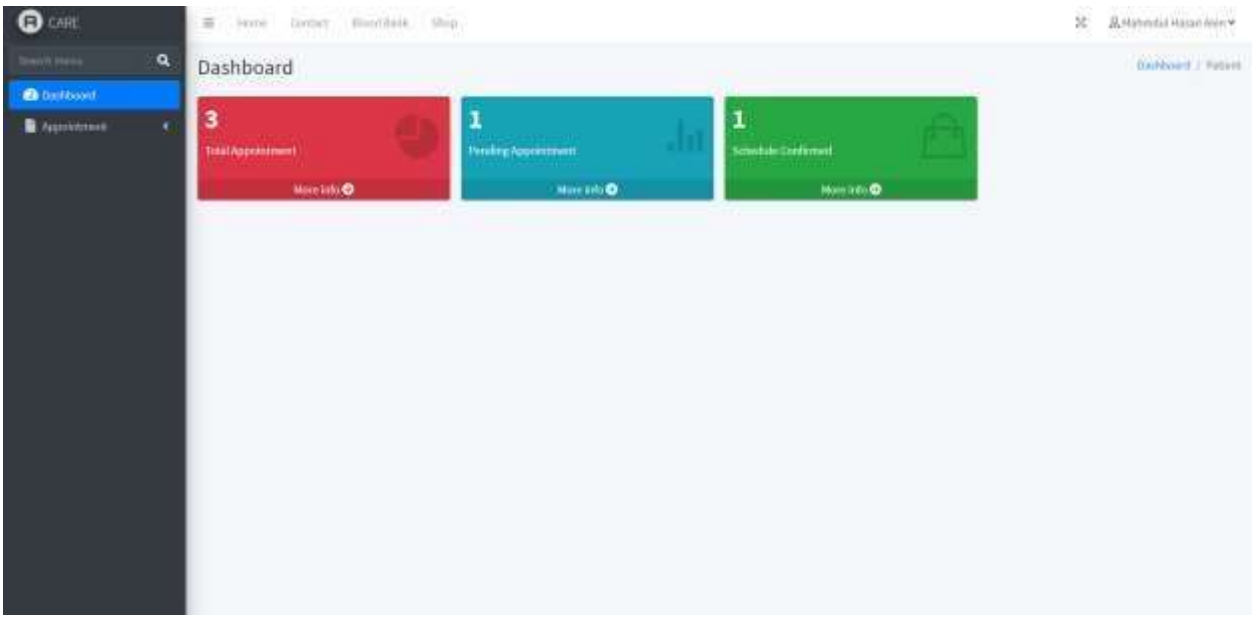

Figure 3.5: Patient Account

3.5.1 Personal details

After checking in, patients will receive a brief description of themselves. It will display their name, age, gender, address, username, and password. They will have access to all of the critical information they require. This is merely a patient's profile page. They don't have many options from this page, but they may verify and update their information.

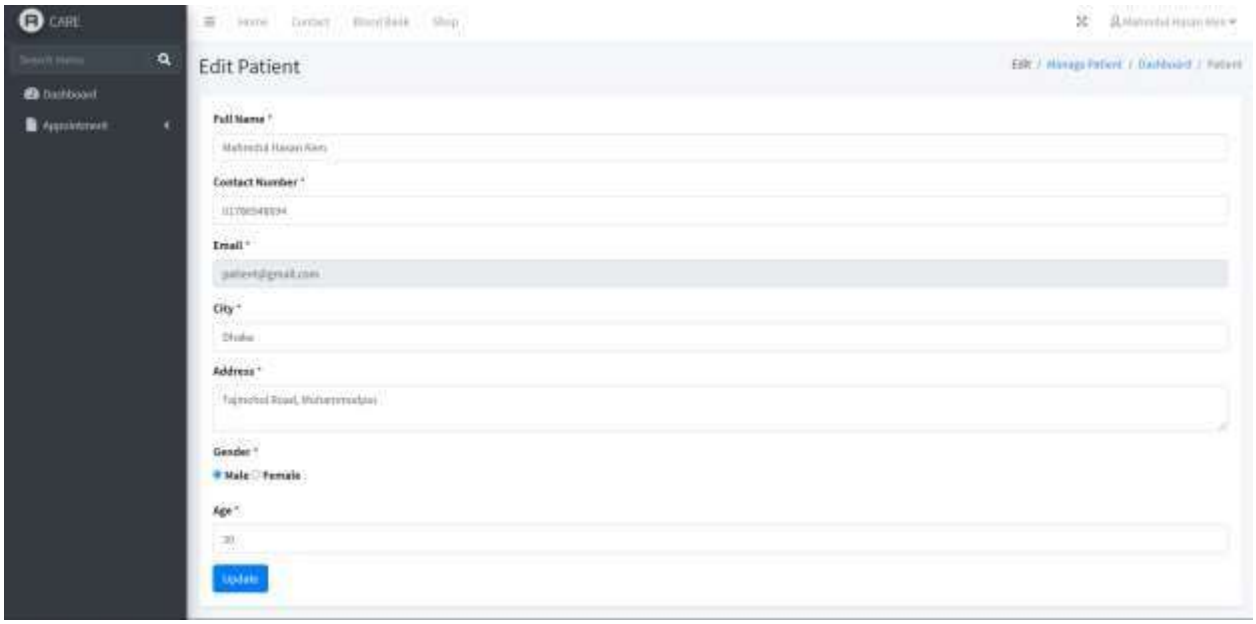

Figure 3.5.1: Patients personal details

3.5.2 History

If they have any past prescriptions, they may check them in the history area of the patient page. Many individuals will benefit from this. It is extremely normal for us to misplace medications on a regular basis. Rather than the profile page, the patient's history provides the most relevant information. They can look up their medications in a list that lists them by the date they were issued to them. We will be able to check our previous medications as well as new prescriptions whenever we choose. This is something that allows you to keep up to date on all of the knowledge we require to combat our sickness and tragedy.

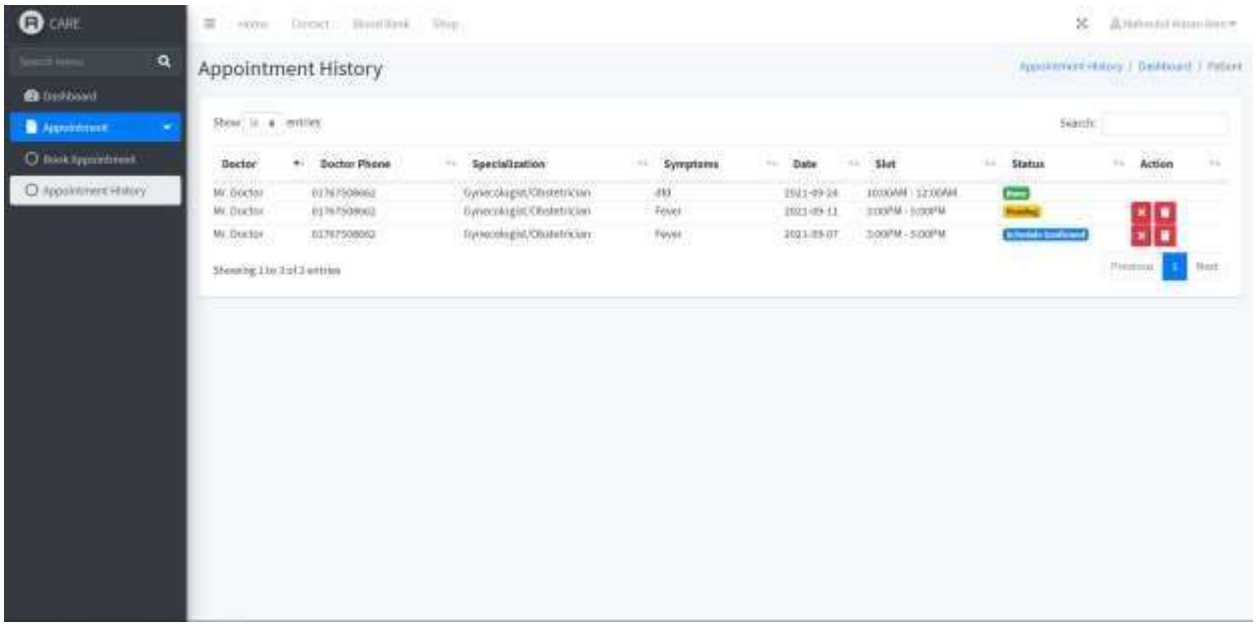

Figure 3.5.2: Patient history

3.5.3 Appointment Request

A patient may go through all of the doctors that are available and request an appointment with their favorite doctor in this section. They'll have to wait for confirmation from management when they approve the appointment request. Another essential benefit for a patient is the ability to schedule appointments with their preferred doctors from the comfort of their own home. We haven't come up with anything similar yet. We can now request appointments over the phone, but it is not as easy as this, where you can obtain what you want in a few clicks and without having to wait.

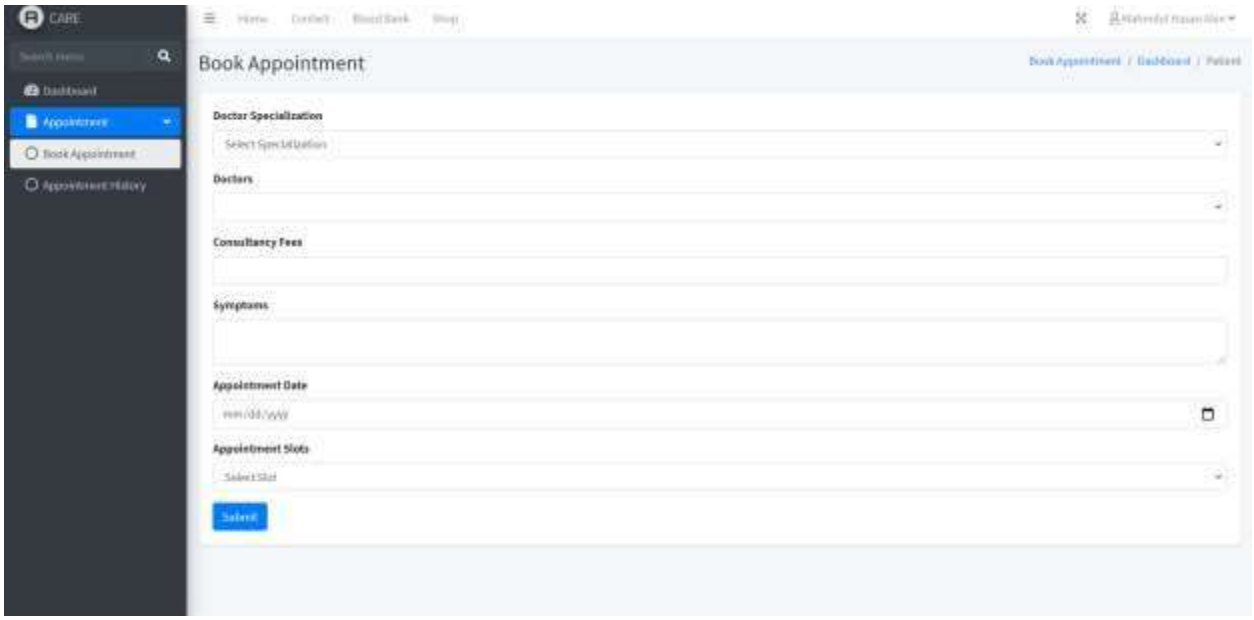

Figure 3.5.3: Patient appointment request

3.5.4 Pending Tests

Patients will be able to keep track of their pending testing. It will vanish once the test is over. They will be able to see when their tests are finished as a result of this. They won't have to go somewhere or call anyone to find out whether or not their tests are complete. Here you'll see the name of the doctor who ordered the test, as well as the test's name. This is something that can also help us better our present heath situation. As a result, we may anticipate that this will be of great use to us in a variety of ways.

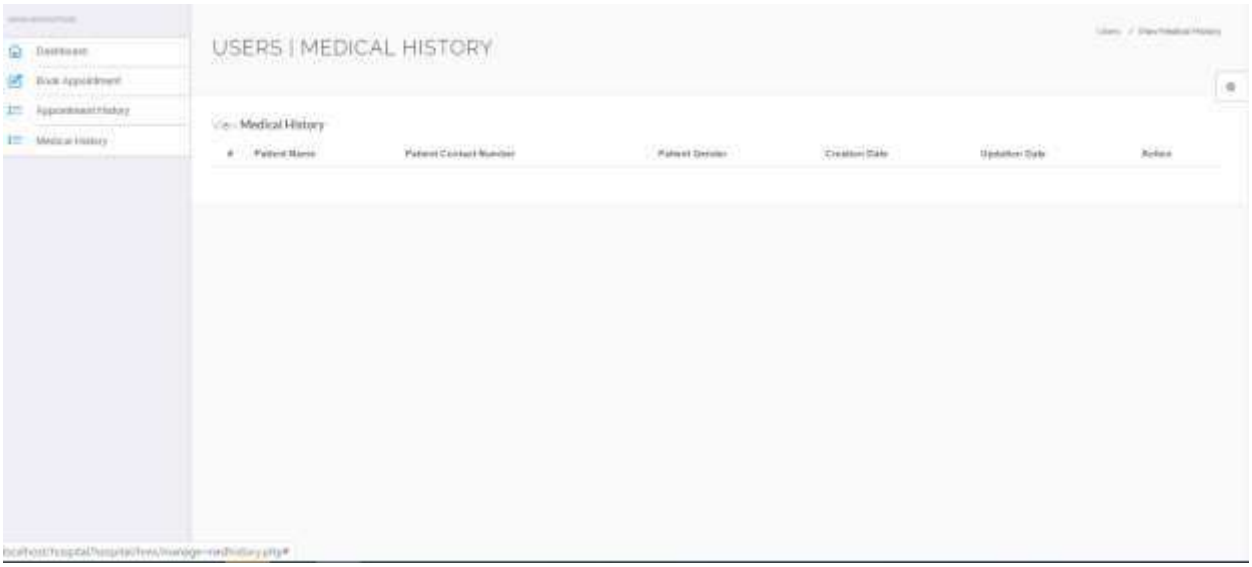

Figure 3.5.4: Patient pending tests

3.6 Doctor Feature

Doctors will be able to see their appointments immediately after logging in. This will assist them in determining what they must do. By clicking on the patient's name, they will be able to prescribe for them, assign those tests, and track their progress. An entire page of activities that must be completed by a doctor.

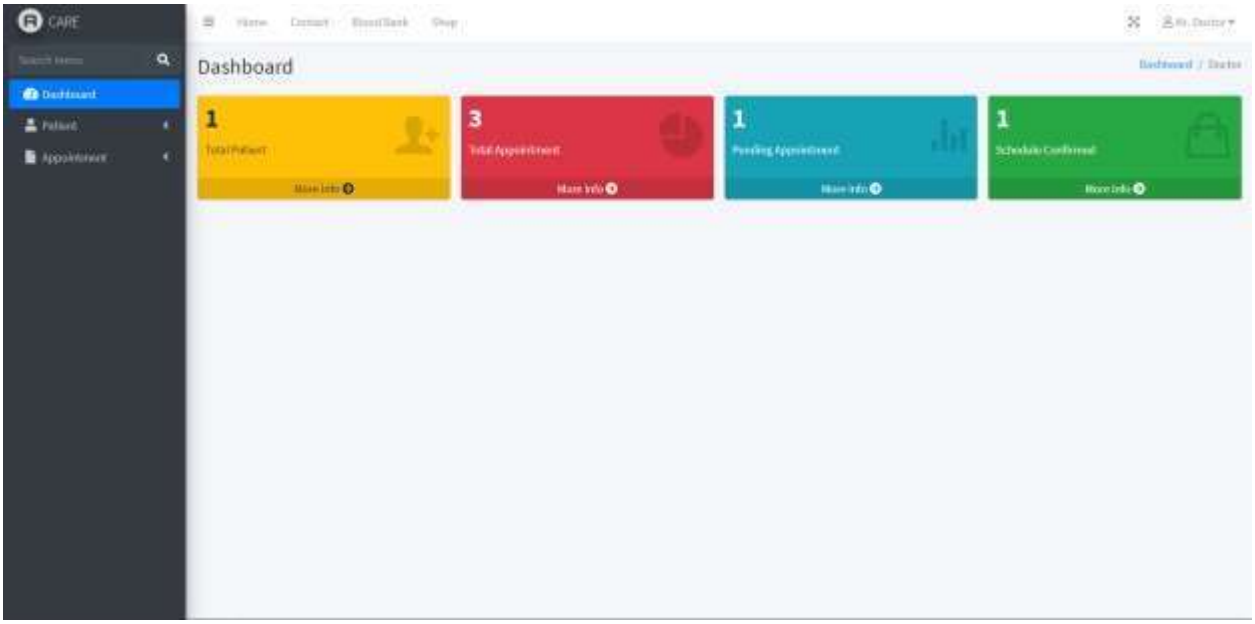

Figure 3.6: Doctor Appointment page

3.7 Medicine Shop

The major goal of this medical Booking Shop system is to bring the entire medical store online so that consumers may access it at any time. It also aspires to eliminate cash transactions. It will give customers a greater sense of visibility. As a result, the company's performance will improve. The medical Booking Store will be a web-based system with an extremely user-friendly interface, making the whole management process simple to manage and administer with no redundancies. Overall, the online medical booking shop will become a very efficient, rapid, and precise system.

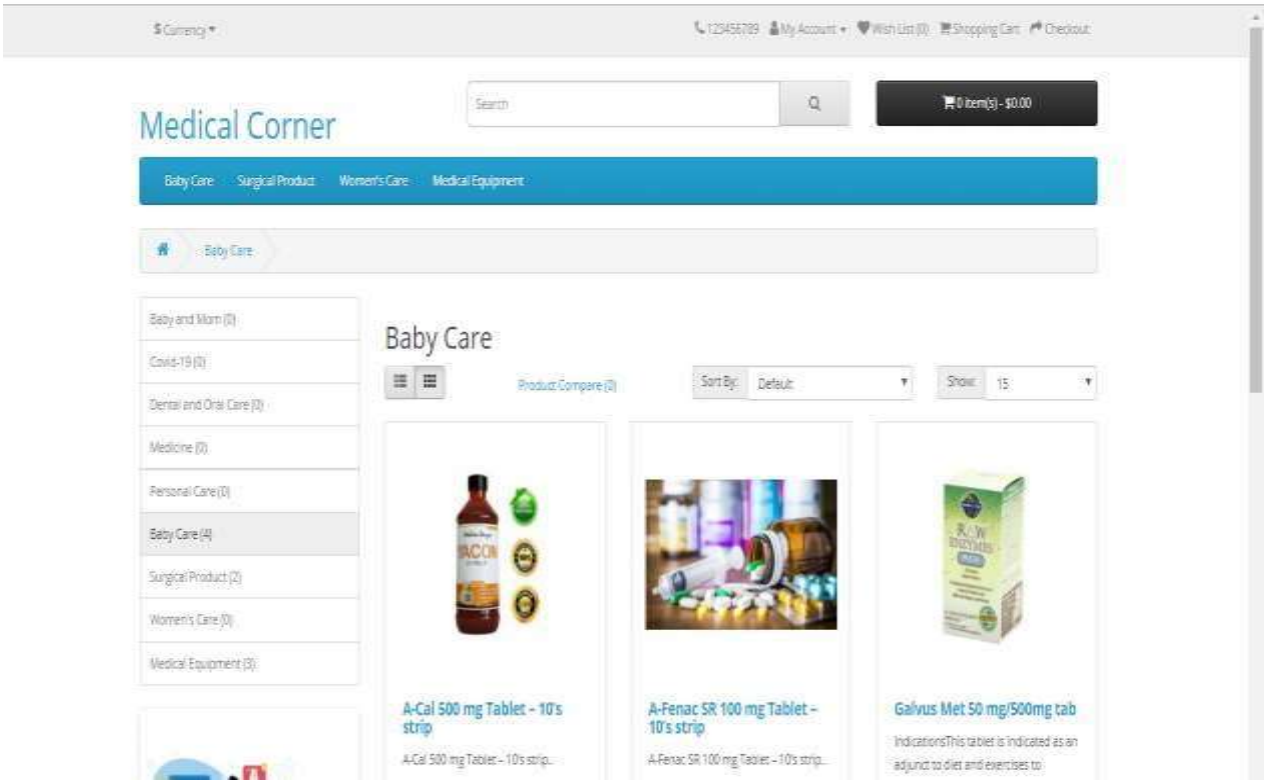

Figure 3.7: Medical Shop

3.8 Blood Donor Registration

People may look for blood by typing in their blood group and address. After that, they can get the blood they want, and we can also give blood. The primary goal of this website is to offer information about a donor who wishes to donate blood. Anyone who is interested in giving blood can do so by registering on this website. Furthermore, if a common user wants to make a blood request online, he may utilize this site; the searching should be much faster so that they can locate the information they need quickly. The purpose of this website is to promote human welfare. When the donor feels the desire to donate blood, he can do it whenever he wants. If the user wants to know the blood group of a donor, he can do so without reluctance at the hospital. There are two categories of users in this project:

1. A customer who can view the information on this website and register as a donor.
2. The administrator has the power to add, delete, and modify donor information in the database as necessary.

Figure 3.8: Donor Registration

CHAPTER 4 Design Specification

4.1 Front-end Design

The front end is a layer on the rear and includes all PC programs or equipment that are customer-facing. Human or propelled customers have direct access to various elements like as client-inputted data, catch, project, and site information as part of a program's front-end choice.

Fig 4.1: Front end Design

4.2 Back-end Design

Back-end configuration is a form of programming that ensures that a website, application, or data structure is correctly synced. While working on the back end of the development process, you are mostly concerned with how the site operates.

Back end designers write code that gives the database information to the application. A back-end engineer, for example, develops databases and servers that are not visible to the naked eye. The following people are in charge of our company's back end: MySQL Dataset.

Snap shoot of the database:

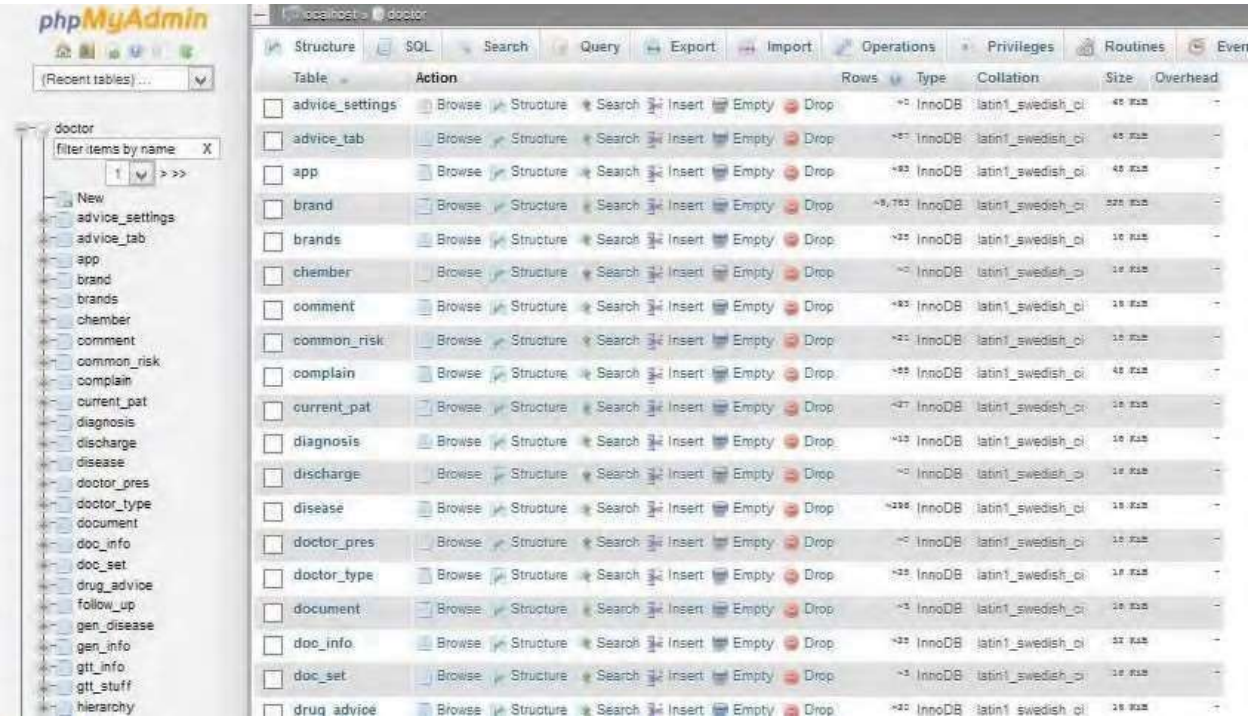

Fig 4.2: MySQL Database

There are several tables and other relationships in the database. The primary key is a person's mobile phone number. There would be no collision between any two persons on the database because the cellphone number is meant to be unique.

The majority of the database was designed using MySQL Workbench. This program includes a very excellent Graphical User Interface that may be used to assist users in creating databases. A database management system (DBMS) is a computer software program that interacts with the user, other programs, and the database itself to gather and analyze data. To define, build, query, update, and administer databases, a general-purpose database management system (DBMS) is employed. DBMSs include MySQL, PostgreSQL, MongoDB, Microsoft SQL Server, Oracle, Sybase, SAP HANA, and IBM DB2. Although a database is generally not convertible between DBMSs, standards like SQL and ODBC or JDBC can be utilized to allow a single application to interface with many DBMSs. The most popular database systems have all supported the relational model as represented by the SQL language since the 1980s. The term 'database' is sometimes used to refer to a database management system (DBMS).

4.3 Interaction Design and UX

The plan of interaction between clients and objects may be summarized in simple (but not simplified) terms: it is the plan of interaction between clients and items.

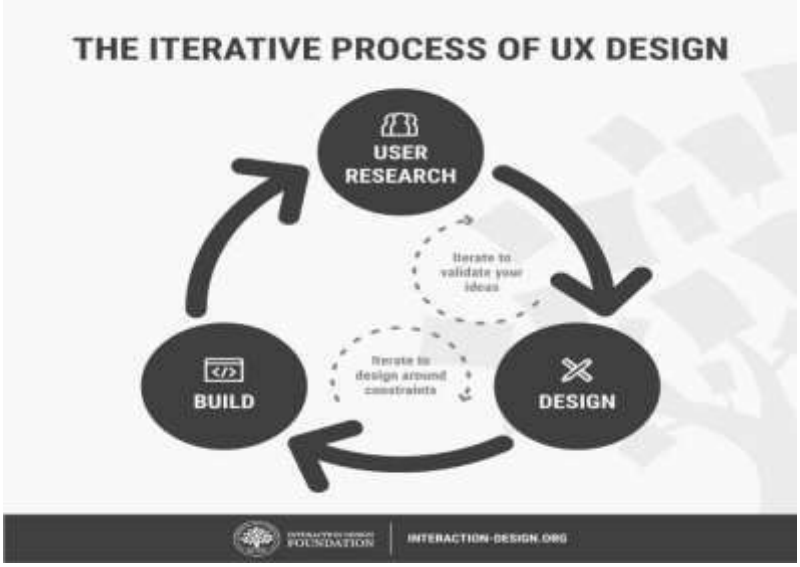

Fig 4.3.1: The iterative process

For our projects, we first had to create three separate parts. Such as (Medicine Corner, Care, and Blood Donor). Finally, we had to face lots of problem to write, read data from server.

CHAPTER 5 Implementation and Testing

5.1: Introduction

The process of putting strategies and plans into action in order to accomplish major goals and objectives is known as implementation. Execution testing is, in general, a technique to test the usage of specialized information. Additionally, they assist to enhance usage compliance by offering systematic ways for checking for conformity to well-defined standards. Adventures must be tested in order to be realistic. The software must be free of mistakes, which might become costly in the future or in subsequent development cycles.

5.2 Implementation of Database

The process of putting strategies and plans into action in order to accomplish major goals and objectives is known as implementation. Execution testing is a technique for evaluating the use of specialized data in general. They also help to improve use compliance by providing systematic techniques to verify for conformance to well-defined standards. To be realistic, adventures must be put to the test. The program must be error-free, as errors might be expensive in the future or throughout later development cycles.

The taking after are the steps within the usage stage:

- Set up a MySQL database.
- Tune the setup variables based on the equipment, programming, and use circumstances.
- Make a database table.
- Get data from the webserver and load it.
- Create a secure environment.

5.3 Testing

Software testing is a technique for determining if the actual software product meets the expected criteria and ensuring that it is defect-free. In contrast to real requirements, software testing's goal is to find flaws, gaps, and missing requirements. In our project, the testing outcome is largely reliant on the database's proper transaction. We already know that patients, administrators, and doctors may use the search function to find answers to their questions. As a result, anytime users search for or upload information, data in the database should be changed using SQL commands.. At the same time, a fantastic authentication mechanism is connected here. As a result, the testing outcome is nearly entirely dependent on the authentication system. During testing, all exceptions should work regardless of the mistake. All toasts and error messages must be shown flawlessly. There are several aspects of our project that must be executed flawlessly in order for it to succeed. As an example, the authentication system, the fragment presented, the button listener's flawless listening, the intent from one activity to the next, and so on. The most crucial aspect is reliable internet access. The permission was obtained from the web server's manifest file. Internet access is required for application messaging, seeing patients, adding patients, adding doctors, and meeting doctors. Because we've already said that we're utilizing a live server for our real-time database. Users cannot access the database if their internet connection is down. As a consequence, they will not receive sufficient notification at the appropriate moment.

5.4 Implementation

We'll talk about how to put the testing results into action in this section. Incorrect Login Credentials, for example. It might, for example, be due to the administrator panel being accessed with the incorrect login account and password. If your login credentials have recently changed, you will be unable to access your database using the previous credentials. As a result, the first thing you should do is double-check that the login credentials you're using are correct. To create an account in our project, users must submit some basic information as well as some unique information. An exception notice will appear if someone refuses to submit the correct information or provides incorrect information. After completing the sign-up process, you will be asked to enter your username and password during the sign-in process. If someone provides false genuine information, an exception notice will appear. This sort of authentication mechanism is typically utilized across the system to make the application more secure. As a result, it is regarded as the

most fragile and sensitive area. There are a variety of circumstances in which users' information and details are taken and utilized for personal gain.

5.5 Result and Discussion

The project's outcome is determined by the results of all testing and the implementation phase. All of these occurrences, including question searching by suitable query, prior question with solution, and donation, are recorded directly in the database. Particularly in the case of a contribution system, the user must first register in, then enter the essential information of the question in the contribution fragment, before browsing the question from his device's hard drive. After uploading to the database, it becomes available to all users, allowing them to search for data or get information from the database. This is the application's real algorithm. If the UI is straightforward and good, all of the tasks should be completed more clearly. The user interface in this project is highly user friendly, and there is also a user guide where the user can receive all of the information about the system. There is also a link to the authority's contact action, which users may use to contact them if they have any problems using the program. We already know about the room database from the last chapter, which uses convenience annotations to save repetitious and error prone boilerplate code. It’s a very good opportunity for further development of this project. It saves a developer from writing a lot of boilerplate code to create and manage databases. It also provides compile-time validation of SQL queries.

CHAPTER 6 Conclusion and future scope

6.1 Introduction

In this phase, we will discuss the results obtained through this system, conclusion, recommendation and implications for future health sector research; first, the key findings of each study, which has been established within the research destinations, will be considered, when the conclusion of the ponderers' findings is reached, and finally the investigation will propose proposals

6.2 Scope for the Further Developments

Physicians can readily monitor the patient's condition while under lockdown. This approach can also be applied to COVID-19 patients. Because it reduces travel time, the approach may be tweaked to make it easier for patients to come in for regular checks from afar. Andhra cards may be used to link all of a person's data in order to track the health of the country. In the event that the patient is late for the hospital visit or otherwise departs early, his or her travels can be tracked. Make it into a web application for all physicians.

- The starting space for a doctor will be 250mb.
- You must pay to save patient details for the additional cloud storage (Example: Prescriptions, Test Reports).
- A smartphone application to facilitate and bring objects closer to each other.

Installing the Cloud takes time, but the advantages are unpredictable. All goes to the internet, as we used to say. Such a comment has proven to be worthwhile. I think we made the whole internet changeover. Every major programed, and there are even cloud versions, has something to do with the cloud. Each new development has a direct cloud-related component. Cloud is nothing new and we have already started harvesting its advantages. In future, clouds may store a lot of data for us, and whichever gadget you are using now does not matter. And bring them closer. We've grown highly device-oriented, and the loss of devices would be devastating to many people. The image has entirely changed now. We've adjusted to the new machine world, where our gadgets are simply tools for doing our jobs, and clouds give the much-needed mobility. Many industrialized nations have already adopted cloud computing in the medical sector, but we, like hundreds of other sectors, are still lagging behind. As a consequence, our medical services will enter a new era. Our country

is made up of people from many walks of life. Our computer abilities are inadequate. We still have a significant number of people who are computer literate. These days are destined to change, and we will be the ones to bring it about. We cannot simply sit back while the rest of the world profits from the computer age. Smart phones have become ingrained in our daily routines. They supply us with thousands of helpful functions, and we have happily become reliant on them. Many apps are used to fuel smart phones. Which are often downloaded by users, as well as certain default programs preloaded by the smartphone's manufacturer. People will have greater control if they can use an app that allows them to carry and review their whole medical record. They will be able to check anything on the fly, and they will always have the option to edit or amend any data to keep things up to date. We're approaching a new era of patient-centered healthcare, in which people may be better educated, acquire a limitless amount of information about their disease, and participate more fully in medical decision-making Patients now have complete access to their digitized personal medical records, which aids in patient education about their illness. As a result of these developments, it's only logical that people will wish to employ medical algorithms that were previously exclusively available to doctors. In any case, excluding them from access will be very difficult.

6.3 Conclusion

This was a fantastic project to work on, and I learnt a lot in the process of completing it. A number of fresh ideas have come to mind, as well as numerous issues that may arise in such a system. I'm not going to promise that this application has all of the features you're looking for. It has incredible functionality, but when working on it, I discovered how we can make it even better for us. This project has been fun for me, and I want to keep working on it to improve it... I feel I can make something unique in such a way that people will like the end product. Our inventiveness distinguishes us from every other creature on the earth. We create devices and gadgets to make our lives easier and more comfortable. This began at a young age, and we have never ceased building or designing new items since then. Because of this inventiveness, our world has evolved into something very different from what our forefathers knew. Artificial intelligence (AI) is a notion that has been around for a long time, yet it is still relevant today.

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APPENDIX

Appendix:

We began our quest to create a system through which we can monitor patient health for the health industry in the Spring of 2021. This system can help both a doctor and a patient. We also considered a simple and painless method that would allow us to save time. We followed the methodology to build and monitor our system with a lot of effort and time spent, and we were ultimately able to achieve our goal. This is why we are confident that our Smart Health Application System would be useful and beneficial to users. We shall be ready to upgrade our system on a regular basis as soon as possible.

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APPROVAL

This Project/internship titled **"CARE- A web Application Project Providing on Medical Services"**, submitted by Md. Mahmudul Hasan, ID No: 171-15-8563 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 11 September 2021.

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