

GET WELL SOON: AN ONLINE HEALTH CARE SYSTEM

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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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DHAKA, BANGLADESH

JANUARY 2022

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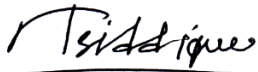
This Project titled “**GET WELL SOON : AN ONLINE HEALTH CARE SYSTEM**”, submitted by **SADIA TINA, MAHADI HASSAN** and **MD. REZAUL TANVIR TUHIN** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of 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 JAN 13, 2022.

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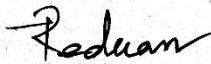
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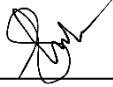
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ACKNOWLEDGEMENT

At first, We would like to thanks almighty Allah for divine blessing to make us possible to finish our final project successfully.

Our supervisor, **Md. Sabab Zulfiker, Lecturer (Senior Scale)**, Department of CSE, Daffodil International University, Dhaka, deserves our gratitude and indebtedness. To carry out our project, he has extensive knowledge and a genuine interest in the field of "**Get Well Soon: An Online Health Care System.**" His endless patience, authoritative leadership, persistent encouragement, constant and active supervision, formative criticism, important suggestions, and reading numerous poor drafts and revising them at every level enabled this project to be completed.

We'd like to convey our heartfelt gratitude to Dr. Touhid Bhuiyan (Head), Department of CSE, for his invaluable assistance in completing our project, as well as to our faculty members and the CSE department staff at Daffodil International University.

We'd like to express our gratitude to every of our classmates who participated in this discussion as part of their course work.

Finally, We'd like to convey our heartfelt gratitude to our parents; without their help, we wouldn't be able to do our senior project.

ABSTRACT

We always require new technology in the current world. Every day, more technology and tasks are moving online, and as a result, the number of web applications is growing. Everyone wants technology that is easy to use, and they want everything in their hands. My entire project is based on this reason. This is a website for the online health care system. The hospital can use this system to get patients and increase their profit. Patients can book hospital beds for him and get treatment from the hospital. This website also allows the patient to review hospitals and doctors daily, monthly, and annual data like who or which one is given better service or treatment of their patients. Patients can give them reviews with stars and by description.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Now-a-days mankind living in a universe of innovation. They utilizing innovation in their day-to-day necessities. Accordingly, piece of innovation, the web has turned out to be the most critical thing. It is because nowadays every single sort of gadget is associated with the cloud. Accordingly, a significant number of our day-by-day errands are turned out to be reliant on online.

Furthermore, we now search for whatever we require on Google using the internet. At that time, we obtain the necessary information or material. Our primary concern is that we do not want to waste our valuable time, thus we do it.

Many people are interested in starting their own internet health care business these days. However, this is a common issue with starting a healthcare business: they lack the necessary tools to sustain and manage the business.

On the basis of this, we've made steps to address these issues by developing a web-based point system for all hospitals.

We attempted to solve all types of problems that arise during the process of taking medical care from the hospital. Our website will assist the patients to decide for the best medical service. It will allow all of them to keep everything in one place, making it easier for patients to access.

1.2 Motivation

In our country, online health care is a frequent website, and we've explored the internet for a better web application for the Online Health Care System. However, we have discovered that there is almost no website that can assist every hospital. Then we discussed it with Md. Sabab Zulfikar, our respected sir (Lecturer, DIU). After some discussion, he suggested that we should conduct a study on an online health care system in which users can learn the simplest method to get medical treatment from a hospital. After hearing the entire concept,

he expressed his appreciation for our willingness to take on this project and offered us instructions on how to get started.

1.3 Objectives

Our online application will be based on the healthcare system. There are a few objectives we need to meet at that moment. Here is a list of some of the destinations' objectives that our system can provide.

- To make this program as user-friendly as possible.
- To locate a resource that is needed.
- Set up a payment and bed reservation system.
- To write the necessary code and construct an application.

1.4 Expected Outcome

This online health care system will produce a result.

Here's what we'll say about it:

Making a whole web application :

- Our system is simple to use.
- The system can display a patient's previous report.
- The system has the ability to register new patients.
- The system can look for blood groups in the stock that meet the patient's needs.
- The system will tell you which doctor will be the best for disease and whether he/she is available or not.
- The patient's can pay bills by Bkash and Nagad.

1.5 Report Layout

This is the report format used to make this report on the web application of the online health care system.:

- Each topic has been discussed in depth with relevant information.
- Each topic has been separated into paragraphs to make it easier to understand.
- Figures and illustrations are utilized to make the material of the topic more understandable.
- The report's contents are organized using the required font and size.
- The information is formatted with specific margins and spacing.
- Key points mostly used to convey the content value more explicitly.
- The format and menus are utilized to make it easier to access all of the content

1.6 Summary

How can we keep a strategic distance from innovation in this cutting-edge age? Because innovation is faster than anything else. As a result, now that we've reached At this elderly age, we don't have to rely on anyone for anything. The main goal of developing this online health-care system is to make the patient's life easier and more comfortable. As a result, patients will get the easiest path for consultation. As a result, we decided to create an online health-care system that will be more user-friendly and efficient for hospitals, doctors and patients

CHAPTER 2

BACKGROUND STUDY

2.1 Introduction

The main purpose of an online healthcare system is to make our life easier and comfortable for patients and doctors too. Those people who aren't able to go to the hospital now can take service at home as needed. So, here we have tried to find something that has not moved into this type of system. In this pandemic situation, we have faced a lot of problems. We found some web applications a little similar to our project but we tried to add some more new features to make them more user-friendly and effective.

2.2 Comparative Work

Because of the pandemic situation, we saw some related systems like our system. We have been in home quarantine for a long time. So many people tried to make an online health care system to solve this problem by providing online services so that people can stay home and take services from home. We have tried to improve it and also will add some more new features to that. We will also provide a lot of information about ambulances so that people find ambulance service easily in an emergency on our website.

2.3 Challenges

In this whole system, we have faced so many challenges. It was difficult to reach our goals after all those challenges but we tried our best to solve every problem and reach the goal. Creating the structure of this system as we wanted was quite difficult for us. We have faced many challenges there and our hard work helps us to reach the goal and we give it an easily understandable look. So that people feel comfortable using it. It will save money too. We will add a payment option so that whoever takes the services can pay online easily.

2.4 Research Summary

Before this pandemic we faced many serious problems like that before. But this time so many people tried to find a solution for that. But we noticed some difficulties on that so we decided to improve it and solve those problems people are facing there. We tried our best to evacuate those lacking and fix it and make our online health care system more user friendly.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Model

It is an online health care system so that people can get any kinds of medical facilities through our website. But the hospital, doctor and patient should be concerned about money because it is a profitable business idea.

Like if any hospital wants to use our website then they should register first into our website. When every process of registration is completed then they can earn money through our website. They will get patients by our platform and for better treatment hospitals can invite them to take medical care physically from their hospital.

The second one is for doctors. If any doctor individually wants to use our website for making his livelihood then the process is the same. So the process to make money through our platform is that we are going to take some percentage from hospital and doctors profile. It will be based on numbers that show how many take treatment from that hospital or doctors. And finally for patients, they are free to use our platform. We do not take any kinds of fees from them.

3.2 Requirement Collection and Analysis

At first we researched what kinds of resources we need and then we began this task.

1. Used Coding: The fundamental requirements of our project need no coding.

We used react.js and asp.net for making our project.

2. Tools and compiler: Chrome.

3.3 Workflow Diagram Modeling and Description

A workflow diagram is a flowchart-based visual representation of a business cycle. It use normalized pictures to depict the particular steps required to complete a cycle, as well as identifying the individuals responsible for each step.

1. When it comes to analysis, a process diagram may be highly useful.
2. You can find possible defects, weaknesses, and places for development by looking at the firm from the top down.

3.3.1 Activity Diagram for Patient

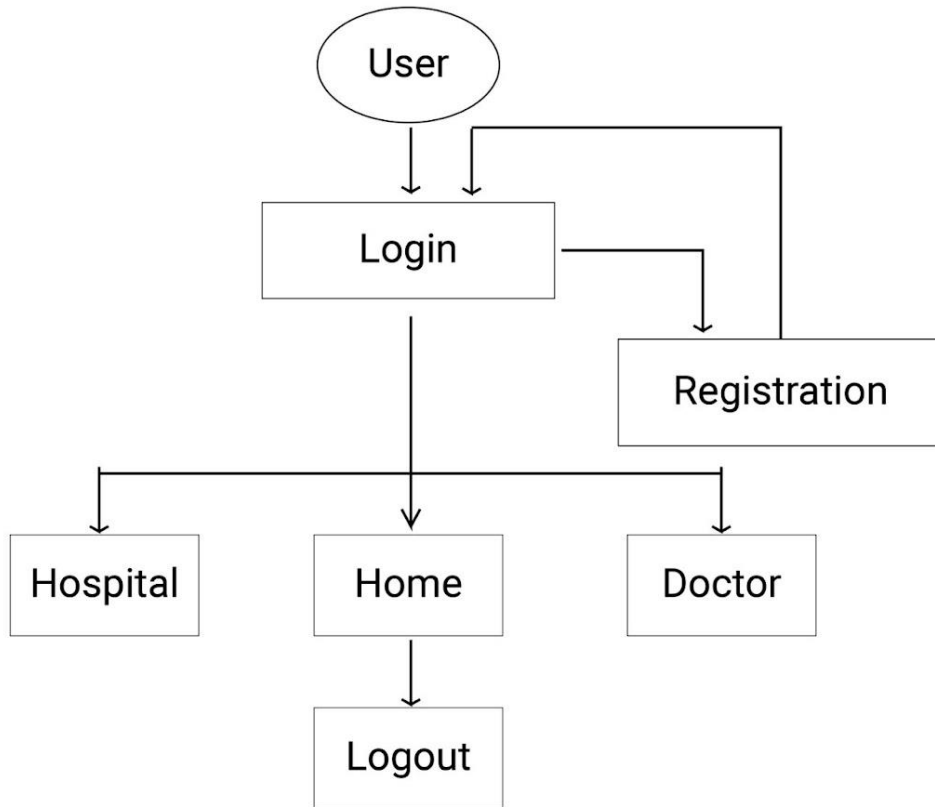


Figure 3.1: Activity diagram for patient

Table-1: Activity Diagram for Patient Details

<p>Start: User can start</p> <p>Homepage: See the homepage of the site</p> <p>About IHS: Users can know about the site</p> <p>Services: User gets 3 services: Medical Assistance, Travel Assistance, Blog</p> <p>Contact: Find the contact option</p>

3.3.2 Activity Diagram for Admin

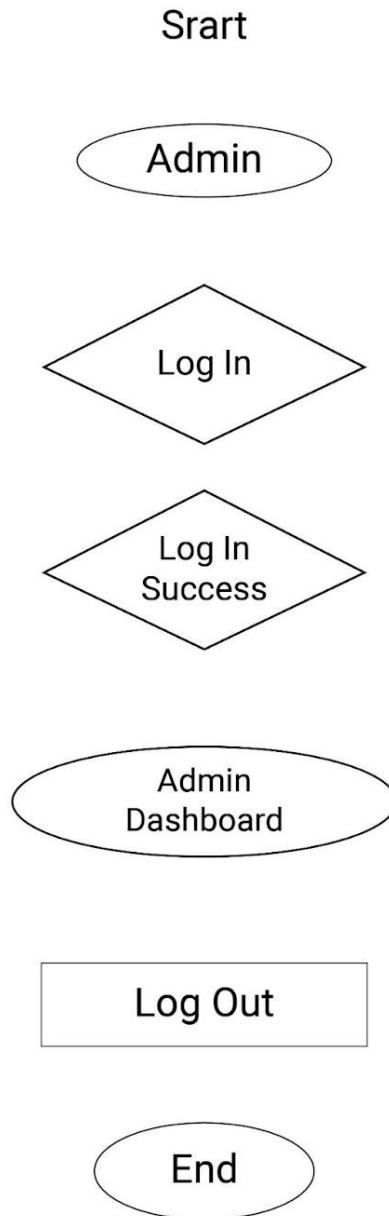


Figure 3.2: Activity diagram for Admin

Table 2: Activity Diagram for Admin Details

<p>Start Log In : Admin start the site : Admin can Log In using a password And Log In success Admin Dashboard: Dashboard panel from where Admin can control Log out: Admin can Log out from Admin panel End: Process</p>
--

3.3.3 Class Diagram

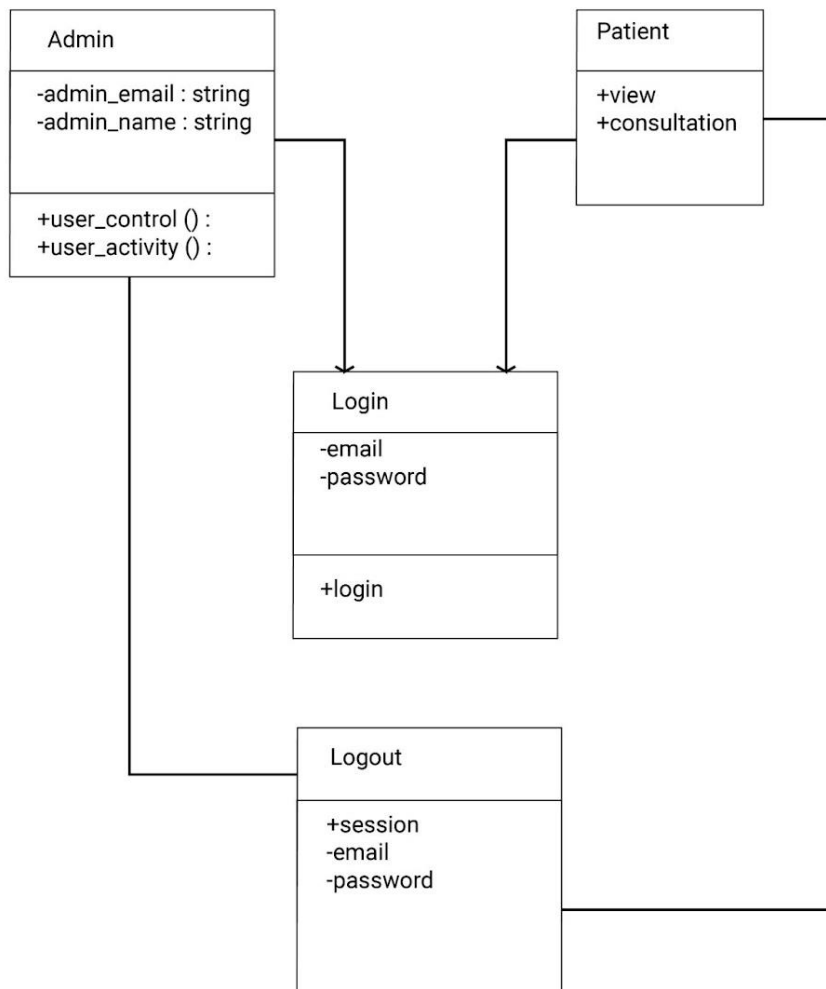


Figure 3.3 : Class Diagram

3.3.4 Entity Relationship Diagram

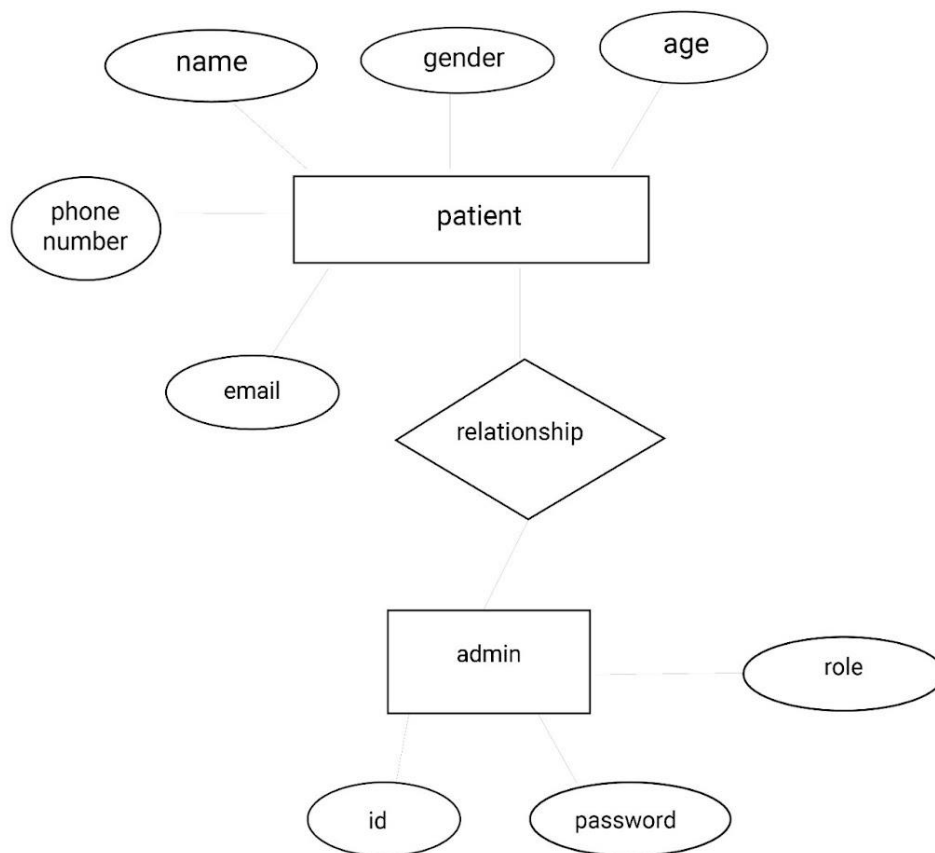


Figure 3.4 : Entity Relationship Diagram

Table-3 : Relationship Diagram Details

Patient: name, gender, age, email, phone number Admin: id, password, role
--

3.4 Design Requirements

The web-based application needs to plan particular subtleties that have data that gives UIs As typically patients and consultants get simpler data.

The design uses many technologies: The fundamental requirements of our project needs To know WordPress and some coding.

3.4.1 Front-end Design

1. Home page
2. Doctor Page
3. Hospital Page
4. Doctor's Blog Page
6. Login Panel
7. Registration Panel
8. Layout design etc.

3.4.2 Back-end Design

1. Admin
2. Doctor
3. Patient
4. Massage/Mail Service
5. Payment Service
6. All process control back-end

CHAPTER 4 DESIGN SPECIFICATION

4.1 Introduction

We'll go over the features of our system in this section. The methodology was covered in the preceding section. So, we'll discuss the system's highlights, front-end configuration, back-end database, and execution requirements in this section.

4.2 Front-end Design

The front page represents the website's main view. The web-based application needs design specification details that have information that provides the user interfaces are called UI (user interfaces).

4.3 Web Application Feature

This is a variety of feature based web applications. So, the features are-

- Registration - User & Admin login panel. Doctors , Hospital & Patients must have to fulfill their registration first.
- Login into the system - Must have to log in to take any service.
- Search Bar - Users can search for any specific doctor & hospitals.
- Reports - Users can see the previous service report.
- Money receipt - After every transaction of payment the user will get a money receipt.
- Payment - Online payment service will be available.
- Book Appointment - In this feature users can book appointments at their chosen hospital or doctors.

4.4 User Interface

We are going to describe how this system actually looks after completing some main features of it. Including Search panel , Registration , Doctor login panel, Hospital Login panel etc.

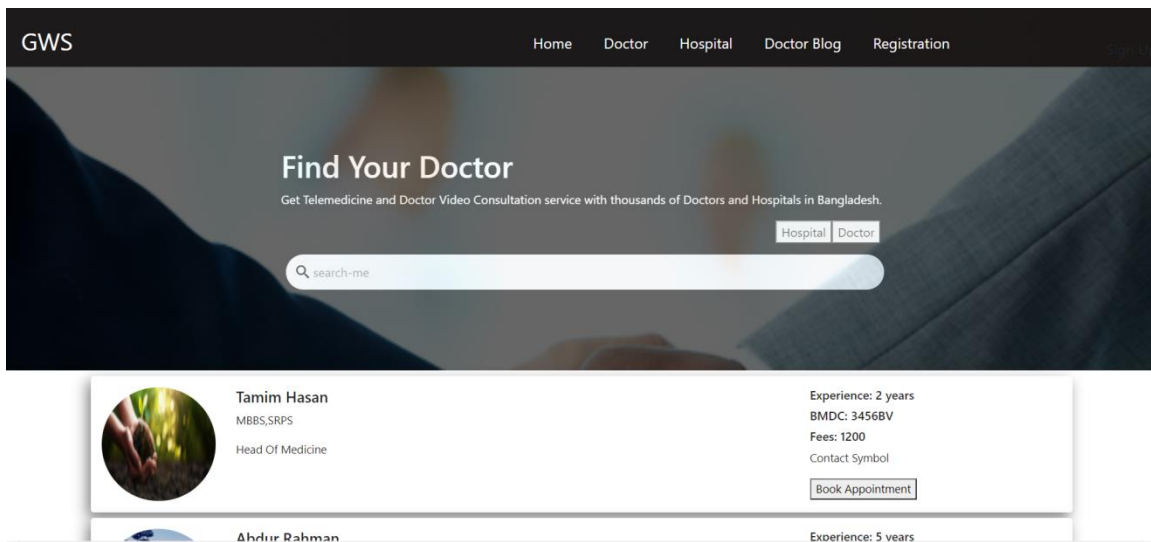


Figure 4.4.1: Front-end home page

In this section users will be able to see doctor details, search for any doctor & hospital and can book appointments at home page.

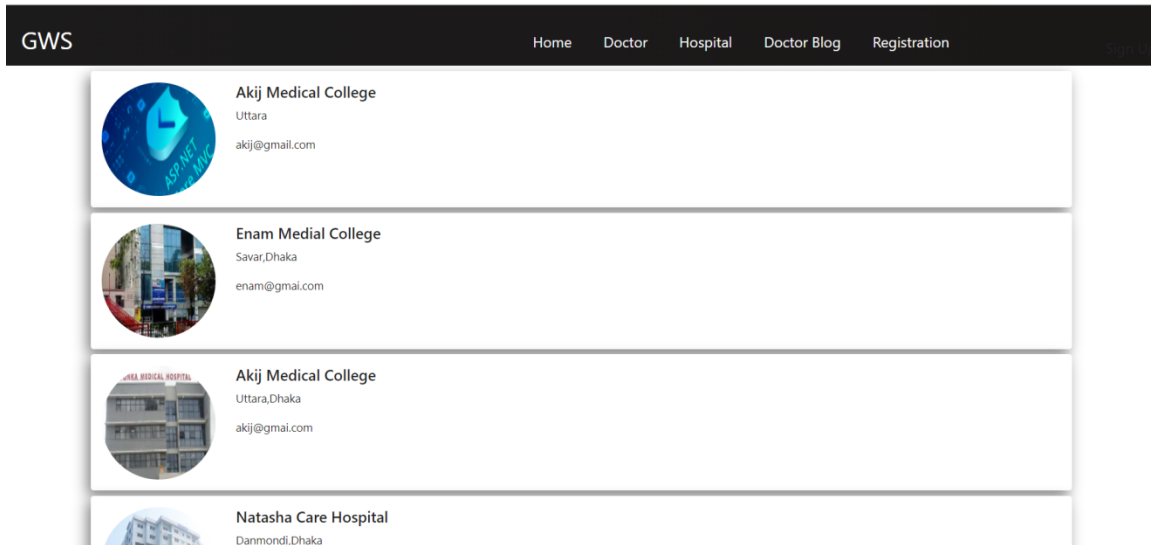


Figure 4.4.2: Front-end home page

In this section users will be able to see doctor details, search for any doctor & hospital and can book appointments at the home page.

Create Doctor

Full Name	Position
Phone No	Years of Experience 0
Email	Fees 0
Password	Choose File No file chosen
BMDC Number	Gender: <input type="radio"/> Female <input type="radio"/> Male <input type="radio"/> Other
Degree	Department

SUBMIT

Figure 4.4.3: Front-end section home page

In this section doctors can create their own profile after completing the registration it will take time to verify the information. After authentication, the doctor profile will be visible on our system.

The screenshot shows a web application interface for creating a hospital profile. At the top, there is a black navigation bar with the text 'GWS' on the left and a menu of links: 'Home', 'Doctor', 'Hospital', 'Doctor Blog', and 'Registration'. The 'Registration' link is highlighted in blue. Below the navigation bar, the main content area is titled 'Create Hospital'. It contains a registration form with the following fields: 'Hospital Name', 'Phone No', 'Email', and 'Address' on the left; 'About Us', 'Website Url', and a file upload field (labeled 'Choose File' and 'No file chosen') on the right. A blue sidebar menu on the right side of the form lists 'Hospital Registration', 'Doctor Registration', and 'Agents Registration'. A 'SUBMIT' button is located at the bottom right of the form. The browser's address bar at the bottom left shows 'localhost:3000/registration'.

Figure 4.4.4: Front-end feature page

In this section hospital management can create their own profile after completing the registration it will take time to verify the information. After authentication, the Hospital profile will be visible on our system.





	Abdur Rahman MBBS Head Of Cardiology	Experience: 5 years BMDC: 3456BV Fees: 1200 Contact Symbol <input type="button" value="Book Appointment"/>
	Asif Huda MBBS,SRPS Head Of Medicine	Experience: 1 years BMDC: 123456 Fees: 800 Contact Symbol <input type="button" value="Book Appointment"/>
	Saklain MBBS,FCPS Head Of Medicine	Experience: 12 years BMDC: t5766578 Fees: 700 Contact Symbol <input type="button" value="Book Appointment"/>
	Habibur Rahaman MBBS,FCPS	Experience: 15 years BMDC: 54445

Figure 4.4.5: Front-end hospital name list

Visible hospital name list on our website. They have completed their authentication verifying all the correct information.

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Figure 4.4.6: Front-end footer section

CHAPTER 5 IMPLEMENTATION IN FUTURE

5.1 Summary of the Study

This online based health care system will help to take treatment in any situation from anywhere in Bangladesh. Especially for the rural area. It's difficult for them to reach a far city to get treatment. Sometimes they didn't get proper treatment from a nearby village consultant. It's not only a waste of money but also can risk life. Now they can take treatment at home from any hospital in our country by our system. It saves travelling costs & struggle at bad health and patients will get the proper treatment.

5.2 Conclusion

This pandemic situation shows us how much technology can make lives easy and comfortable. In this modern era we are still not getting the proper treatment as we should get. People can get appointments easily with this system from anywhere. The most irritating thing is to stay in line for hours to collect the ticket in serious condition. Now this system is going to vanish the old standing in line system. Sometimes we face the dalal problem. They try to provoke us to take treatment from their suggested consultant. Which keeps us away from taking the proper treatment from the expert consultant. Now, No chance to get affected by DALAL. Blood group data availability is another major problem for the patients. Our system will keep all the available blood group data. Now it's too easy to find it. Sometimes, Patients lose their old prescription and it affects treatment. Our system will keep saving all previous data. So, the patients will get that easily if they lose. Prescribed data will be very efficient to cure disease.

5.3 Future Work

As we described about our project that we want to add some features that will make life more easy. We already made our doctor, hospital registration panel. But there is one insecure thing was anyone could register to create doctor and hospital account. So we keeps an admin panel to justify the information before approve anyone as doctor or hospital. After approving anyone can be declined for license or other issues. So no one can pretend to be a doctor on our website.

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