

# **Dialysisbook, An E-commerce Website For Dialysis Patients**

**BY**

**ABDULLAH IBN ATIQ**

**ID: 191-15-2481**

**AND**

**ABDUR RAHMAN**

**ID: 191-15-2488**

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

Supervised By

**Amit Chakraborty Chhoton**

Sr. Lecturer

Department of CSE

Daffodil International University

Co-Supervised By

**Tania Khatun**

Assistant Professor

Department of CSE

Daffodil International University



**DAFFODIL INTERNATIONAL UNIVERSITY**

**DHAKA, BANGLADESH**

**FEBRUARY 2023**

## APPROVAL

This Project titled “**Dialysisbook, An E-commerce Website For Dialysis Patients**”, submitted by Abdullah Ibn Atiq, ID No:191-15-2481 and Abdur Rahman, ID No:191-15-2488 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilment 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 *04/02/2023*.

### BOARD OF EXAMINERS



5/2/23

**Dr. Touhid Bhuiyan**  
**Professor and Head**

Department of Computer Science and Engineering  
Faculty of Science & Information Technology  
Daffodil International University

**Chairman**



**Dr. S. M. Aminul Haque**

**Associate Professor and Associate Head**

Department of Computer Science and Engineering  
Faculty of Science & Information Technology  
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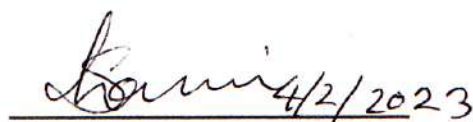


**Dewan Mamun Raza**

**Senior Lecturer**

Department of Computer Science and Engineering  
Faculty of Science & Information Technology  
Daffodil International University

**Internal Examiner**



4/2/2023

**Dr. Shamim H Ripon**

**Professor**

Department of Computer Science and Engineering  
East West University

**External Examiner**

## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Amit Chakraborty Chhoton, 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.

**Supervised by:**

  
05.02.2023

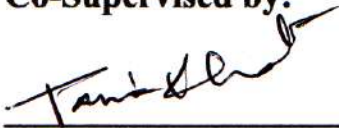
**Amit Chakraborty Chhoton**

Sr. Lecturer

Department of CSE

Daffodil International University

**Co-Supervised by:**



**Tania khatun**

Assistance professor

Department of CSE

Daffodil International University

**Submitted by:**



**Abdullah Ibn Atiq**

ID:191 -15-2481

Department of CSE

Daffodil International University



**Abdur Rahman**

ID: 191-15-2488

Department of CSE

Daffodil International University

## ACKNOWLEDGEMENT

First, we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project/internship successfully.

We really grateful and wish our profound our indebtedness to **Amit Chakraborty Chhoton, Sr. Lecturer**, Department of CSE Daffodil International University, Dhaka. Deep Knowledge & keen interest of our supervisor in the field of “*web development*” to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to Dr. Touhid Bhuiyan, Professor and Head, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

## **ABSTRACT**

Our project named “Dialysisbook, An E-commerce Website For Dialysis Patients” is a website that includes features like buying peritoneal dialysis products and also booking hemodialysis appointments at the listed hospital in our website. The webpage includes registration and log in for the users and after that they can explore the pages where they can browse peritoneal dialysis related products and add them to cart to purchase and they can also browse listed hospitals for hemodialysis appointments at the location of their need. There will also be an admin panel, only admin will be able to add hospitals or products to the list. We have created this project using HTML, CSS, PHP, SQL java script and bootstrap for front end and back-end work. The tools we have used are software such as visual studio code, XAMPP, PhpMyAdmin. This project includes a very attractive front end which will create a user-friendly environment. The back end and the database will provide the support it needs to be a proper website. In conclusion, the purpose of this project was to help dialysis patients with their regular needs and it will do so.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

Our project is a complete guideline for Dialysis patients. Here they can get all the online help they need as a regular dialysis patient. There are two kinds of dialysis patient, peritoneal dialysis and hemodialysis. Peritoneal dialysis requires a few products that can only be found in one or two places in our country and no online service is not available, where they can order them or buy them from the internet. Our website will sell those products so users can buy them from online. Hemodialysis patients required to go to hospital and get their treatment twice or three times a week. For this reason, they cannot go far from their hospital area on those days. Which can be a problem if they need to be somewhere important. From our website they will be able to book an appointment for hemodialysis in that location beforehand.

### 1.2 Motivation

Our motivation always has been helping people with what we have and can do. As today's youth we have a responsibility towards our society. We have been studying computer science and engineering, which can bring big changes in our world and it is a great way of helping people if we tried to. In last few decades our society and the world we live in has changed a lot because of the advancement of technology, and we understand that real change can only come if we try to achieve it via learning, understanding and implementing computer science and technology. We have not seen society change so quickly before its existence. Now the world runs on it, and whatever we want to do, if we want to do business and earn money or help people who needs it, we can do it with computer science. If we can do those things one or another, then why not both. Why not help people in need, and help ourselves to do good in life at the same time? We certainly have the technology for it. We just need the idea and knowledge. And our years in Daffodil international university we

have learnt from our respectable teacher's how to convert an idea into an opportunity, how to turn a dream into a reality.

They are a big part of my motivation. But our real motivation came from the people we have seen suffering from the illness of kidney disease.

After a point when kidney does not work, not even 10% of its capability, a patient needs dialysis. To put it in exact words,

Renal replacement therapy (RRT) is therapy that replaces the normal blood-filtering function of the kidneys. It is used when the kidneys are not working well, which is called kidney failure and includes actual kidney injury and chronic kidney disease. Renal replacement therapy includes dialysis (hemodialysis or peritoneal dialysis), hemofiltration, and hemodiafiltration, which are various ways of filtration of blood with or without machines. Renal replacement therapy also includes kidney transplantation, which is the ultimate form of replacement in that the old kidney is replaced by a donor kidney.<sup>[1]</sup>

Two of the key treatments which are mentioned are hemodialysis and peritoneal dialysis. They are most popular in our country, hemodialysis has in a popular treatment in our country from ages, but peritoneal dialysis is relatively new but for its patient friendly nature it is becoming an obvious choice for a lot of people even though it is a lot more expensive than hemodialysis.

But the Main problem which is faced by patients who are getting these treatments is they cannot go anywhere because they need to be at hospital two to three times a week. So, they cannot live their normal lives. And hospitals being a busy place you cannot go into a new hospital and ask for the service cause the place is very busy. So, we came up with a solution. If we can book a slot for dialysis at any hospital then we have to just be there at the booked time and we cannot be denied of that service. So, we have made a website that can book any given hospital in the website and book a time slot for the service.

On the other hand, peritoneal dialysis is performed at home. But you need a lot of things or we can say medical equipment for this treatment, and sadly no website in our country made it available for the patients to order it from a website. And only one or two places in our whole country sell those products. So, our motivation came from a desire to help out those patients who are in need of this essential service to live a normal life like everybody else. And from our project hopefully we will be achieved that for the people who are suffering.

### **1.3 Objective**

Our objective has been to help patients who cannot lead a normal life, because they are unable to move, give them a normal life by giving them the opportunity to book dialysis at any hospital listed in the website.

1. Creating a website that helps hemodialysis patients by allowing them to book hospitals.
2. Giving patients the opportunity to buy peritoneal dialysis products or CAPD products from where they are located at from our website.

The above two points are our main objectives for creating this project.

### **1.4 Expected outcome**

With our project we are trying to solve some problem that exists for dialysis patients. let me state those and how we are going to solve them.

1. The main problem is patients are unable to move, and we are going to solve that by creating a list of hospital in our website and make the available for booking beforehand, so that patient can book the hospital at a time of their choice and at a place of their choice.
2. Peritoneal dialysis cannot be accessed from anywhere in our country, cause only one or two places' sales them.
3. Other medical product which are not exactly peritoneal dialysis product but they are very much necessary for the process are not really available online.

4. Not only that even the physical stores that sales those products are not very accessible for patients of peritoneal dialysis, because they are advised to be clean and sanitary but those shops are in very crowded places and getting there could be very harmful from there.
5. It can be said that, best way for them to get that product via a website where they don't need to move anything other than their fingers, unfortunately those are not available.
6. We are making it available for peritoneal dialysis patients to order their required treatment remedies from our website and they can order it from anywhere in our country.

Above mention problem will be solved by our project as we mentioned in this section, and solving those is our main motive and expected outcome.

### **1.5 Social impact**

A thing we do has no value if it does not impact our society in a beneficial way. So, our work would only be meaningful if it solves the problems that's exists in our society.

As we have already mentioned our work is dedicated to the patients who are suffering from kidney related illness. They are in pain but also people who are close to them, people who look after them are also suffers from mental and emotional trauma because of the illness of their loved ones.

At this point, their lives would be a whole lot easier if they get help from a trusted source related to the treatment. For this reason, our project will help them fully and they will get a little bit of relief in those moments when their lives haven't been easiest. This brings our project a meaning, an impactful reason which motivates and will motivate us in the future when we will be working on other projects.

Cause the core reason why we study computer science is to make peoples life easier specially when they are in need.

## **1.6 Report layout**

In this section we will let you know what will be the layout of our project. As we have already finished chapter 1, which was the introduction to our project report, we will lay out a list of the things you will get from upcoming chapters.

### Chapter 2: Background

- 2.1 Related work and comparative analysis
- 2.2 Scope of problem
- 2.3 Challenges

### Chapter 3: Requirement specifications

- 3.1 Requirement collection and analysis
- 3.2 Logical data model
- 3.3 Business process model
- 3.4 Design requirements

### Chapter 4: Design specification

- 4.1 Front-end design
- 4.2 Back-end design
- 4.3 Interaction design and user experience
- 4.4 Implementation requirements

### Chapter 5: Implementation and testing

- 5.1 Implementation of database
- 5.2 Implementation of front-end design
- 5.3 Testing implementation and test results

### Chapter 6: Conclusion and future scope

- 6.1 Discussion and conclusion
- 6.2 Scope for further development

And references.

## CHAPTER 2

### BACKGROUND

#### 2.1 Related works and comparative analysis

We are making a website that sells medical product which is related to peritoneal dialysis and also, we have a facility for patients to book dialysis at a hospital that is located to an area where they would visit.

Similar kind of work exist and, in this section, I will be talking about them also we will get some pictorial explanation of that kind of website.

First, we will be talking about Fixlastmile.com, it is website where you can order medical remedies from the comfort of your home.



Fig 1: Fixlastmile.com

It has a similar motive to ours, but the method they use is a little bit unusual and not similar to ours. There is a message section, where you can give your information and address and make them a list of what you need, and they will deliver the product to you. It is more of a medicine delivery service.

Where we will make the products necessary visible on our website and user can choose from the product. Also, it is not a service that is available in Bangladesh.

Next, I want to write about Bumrangrad.com Which is product of Bumrangrad International hospital, it allows its patients to have a lot of services from it's website like appointment booking, incurrence, medical travel assistance etc.

But what attracted me to compare this with my project is its appointment booking service which is pretty similar to our dialysis booking service.

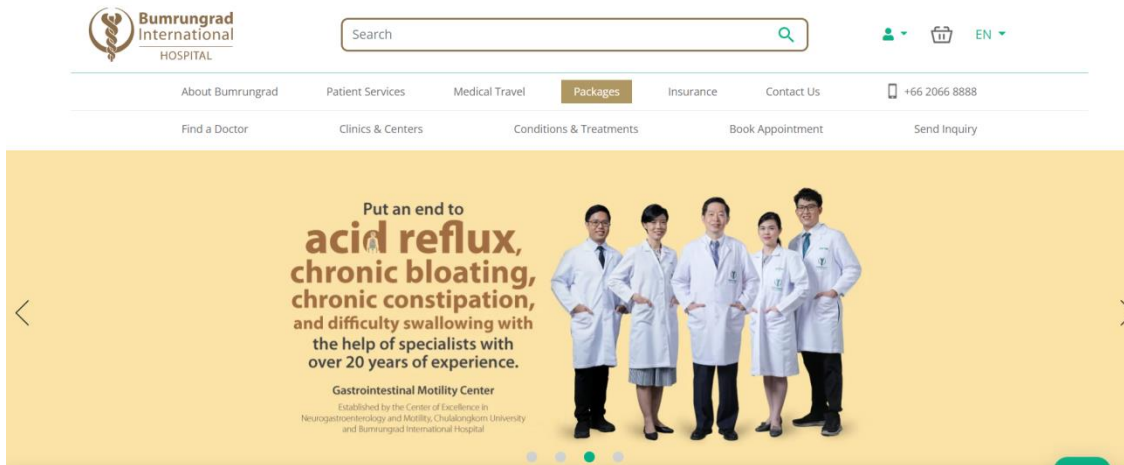


Fig 2: Bumrungard.com

In the fig-2 we can see the facilities of this website. With some similarities there is also a lot of dissimilarities. Like it is a website for that hospital, and patient can only book appointment with doctors and other services from only that hospital. As we will see in the next figure.



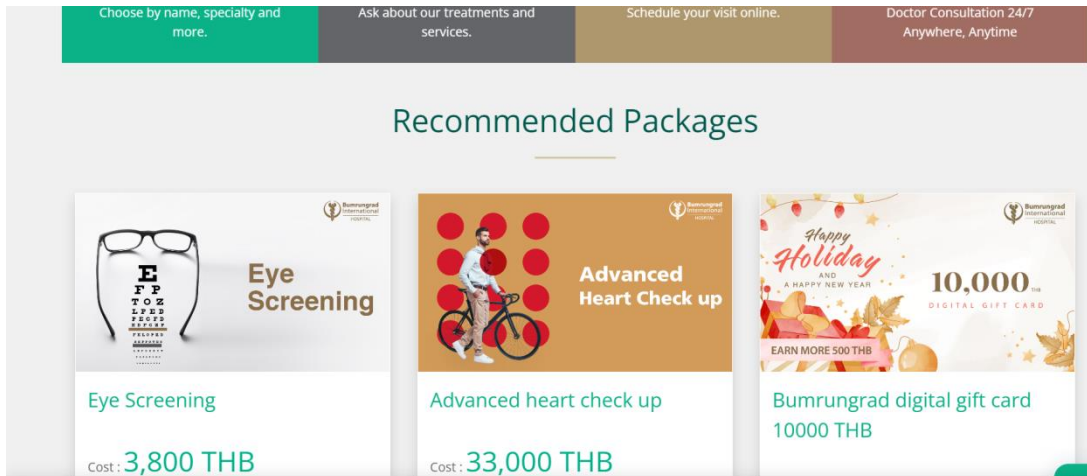


Fig 3: Bumrungrad.com

We can see in figure-3 that even though you can only get the services of one hospital in this website. You can get various kinds of treatments as we can see in the figure-3, that it offers eye related and heart related and also other treatments.

where in our website we will offer many hospitals, but you can get only one treatment, which is the purpose of our project.

Finally, a website that is available in Bangladesh and We will discuss what they offer and what is our similarities and dissimilarities with them.

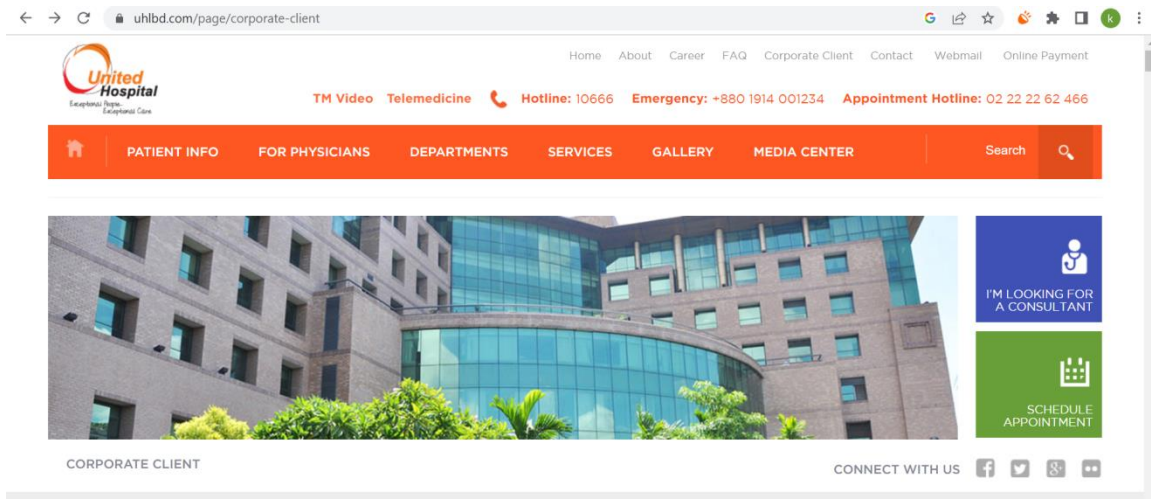


Fig 4: Uhlbd.com

From the above figure we can see, similar to the last website this website also belongs to a hospital. They offer anything within this hospital's services. We can see in the fig-4 at the far right in a blue and green box they have highlighted what is their main services. Which is Online consultation, and appointment booking.

Booking theme is similar to our project, and as a website which is from a hospital of our country and have similar motive to ours', we thought it's worth mentioning.

We have Benn searching this kind of website or work which will be similar to what we are trying to achieve, it will be help full for us to reach our destination.

## 2.2 Scope of problem

Sometimes even when the website is very good and very helpful customers are afraid to use it in fear of theft, malware and pop-up advertisements.

Solving those problems are very important. Also, sometimes a website can be very hard to use because of hard-to-understand functions and difficult designs. That's a problem we have to solve along the way.

### **2.3 Challenges**

A website can face a lot of challenges. some of those common challenges are,

1. Cyber security.
2. Competition.
3. Order fulfillment.
4. Customer experience.
5. Quality website traffic and visitor conversion.
6. Visibility.
7. Return and refund policies.
8. Finding the right market.

We have to face those challenges and we have to solve them along the way of working on our website.

## **CHAPTER 3**

### **REQUIREMENT SPECIFICATIONS**

#### **3.1 Requirement Collection and analysis**

Our project is a website which will allow its user to book and buy dialysis appointment and dialysis product. To make this happen we have to use some methods, some tools and some languages which are usually used to the making of websites.

First, we will list out the languages we will be using for our project and we will be describing its general use and how we will be using them.

And after that we will be listing the tools we will use, and also, we will describe how we will be using them, and in the next sub-chapter we will also Use pictures to Show you how we used them.

At first, we have used HTML, CSS, PHP and SQL. These are very common languages we use for the construction of a website.

The Hyper Text Markup Language or HTML is the standard markup language for what documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.<sup>[2]</sup>

We started our work by designing the website where we used HTML, From the above definition we can see how the html language work.

to be in details, HTML is the language used to tell my web browser what each part of a website is meant to be. So, while using HTML, we can create headers, paragraphs, links, images, and other, so the browser can understand how to structure the web page we are trying to build.

For our website we are trying to build we will be needing a homepage, a registration page, a log in page, dashboard which will include an admin panel, a page for buying CAPD products and a page for booking dialysis appointments.

First, we make a design with that we will define which page is what and to do that we will be using html.

We made our home page first, then we added buttons to access every other page that exists on the website, including sign in, log in, booking, buying and dashboard.

Then we use CSS to define those pages. As we know CSS is the beautifier.

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML or XML (including XML dialects such as SVG, Math ML or XHTML).<sup>[3]</sup>

CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript.<sup>[4]</sup>

CSS also known as Cascading Style Sheets is used to style, beautify and create the layout of web pages for example, to change into suitable font, color, size, and spacing of our content, split it into multiple columns, or add decorative features to it.

We used CSS to make our project look good and vibrant and welcoming.

It makes the website vibrant and user friendly. It is a very good way of marketing to, even though it is not our core purpose of the project, but we want people to visit our website and use it for their benefit. If we want to attract people to visit our website the look of it is very important and we cannot deny the importance of CSS in that field.

Next, we will be needing PHP. Which is also known as Hypertext preprocessor is used for open-source general purpose scripting language that is most suited for web development and can be embedded into HTML.

PHP can perform anything related to server-side scripting which is more commonly known as the backend of a website. As an example, PHP can receive data from forms, create dynamic page content, can work with databases, create sessions, send and receive cookies.

we converted our HTML files into PHP files to add in into the server so that I can later lace it with the data base so that we create database to log in, sign in or register, store our hospital booking information and CAPD product information.

Speaking of database, we will create all the needed database with the help of SQL.

Structured Query Language, abbreviated as SQL is used in programming and designed for managing data held in a RDBMS, or for stream processing in a RDSMS. It is particularly useful in handling structured data, i.e., data incorporating relations among entities and variables.<sup>[5]</sup>

SQL is usually used for storing and retrieving data from databases, but it can also do so much more than that. Anything we need to do with a database, we can do with SQL. It's flexible That means we can use it however we need according to our requirement, powerful that means we can use it without many hazards and it will be as helpful to us as it could be, and quick that means our project will not take much time to load data while it is very accessible and affordable for us.

We have used SQL to store the registration information for us, so that this database can be used when we access and log in with our information, it will also hold booking and product information and also it will give access to us to the available product and hospital database. Now to make above languages and methods useful to us, we have to use some tools, some software's. Now I will explain which software I have used for what.

First I used Visual Studio Code. It is a source code editor used for creating and editing source code. Some more included features are support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, etc. We can do a lot of work with it because it offers a lot of extension. And we can download them and use them as we please.

We have used it for creating and editing our source code which includes HTML, CSS, SQL, and PHP. First, I have designed our project using this tool with HTML, then I have styled and beautified it with CSS. After that I have converted it into PHP and while creating a database, I have connected them with my website using this tool with PHP and SQL queries. All of this work we have done with the support of Visual Studio Code. And to host all these databases we need a server. With this we will use XAMPP.

XAMPP is an open-source multi-platform web server and solution stack package, which is completely free to use, it was developed by Apache Friends, consisting mainly of the Apache HTTP Server, Maria DB database, and also an interpreter for scripts written in the PHP and Perl programming languages.

We have used XAMPP as the webserver for our PHP files and for all databases to be hosted.

And to create a database we have used phpMyAdmin.

The main reason why we used phpMyAdmin is to handle the administration of MySQL over the web. It is a very popular application for MySQL database management. We can create, update, drop, alter, delete, import, and export MySQL database tables by using this software.

We have used it to create a database for registration, log in, and hospital information for booking dialysis and to hold information of CAPD products.

### 3.2 Logical Data model

Here we will present a class diagram for our project.

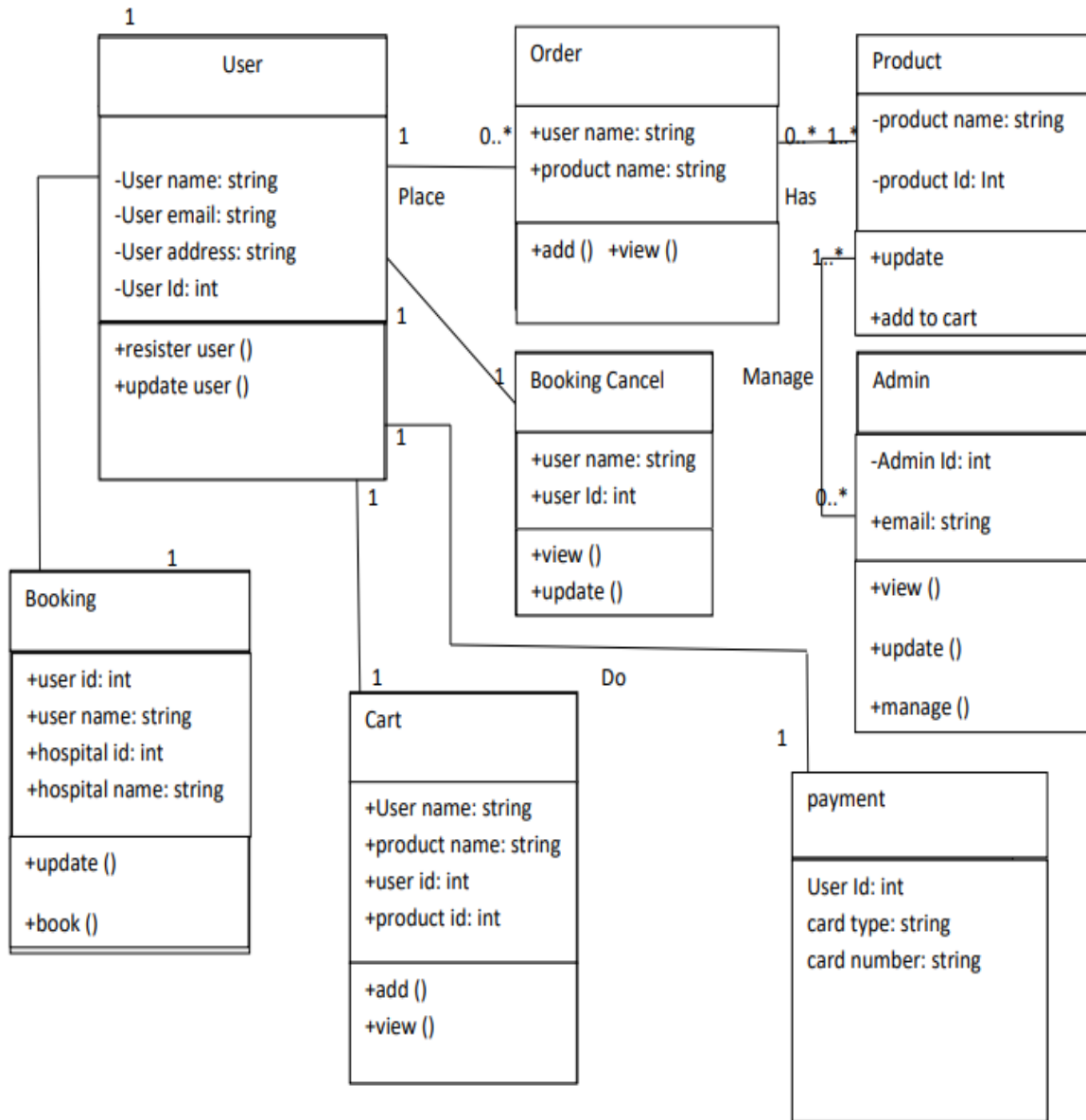


Fig 5: Class diagram



We know that, class diagram is one of the most important UML diagrams for software development. which shows the object classes in the system and the associations between those classes.

From the above diagram we can see how the website will work even before it is made. It is a very effective way of showing how a website will work before it's created and showing how it will work helps to create it so that we do not miss any detail and make sure the website will work perfectly, in other words it can be make sure by the diagram that the website will be made how it was meant to be.

We can also understand what kind of tools, methods and software we will need to make this project happen.

### **3.3 Business process Model**

Before we create an activity diagram, we need to fully understand what an activity diagram.

Activity diagram is a way of describing the dynamic of the system, Activity diagram is basically a flow chart to represent the flow of one activity to another activity.

As we have mentioned before that our website will have two main activities. One being, booking dialysis appointment from given or listed hospitals on the website, and the other being, Buying peritoneal dialysis product.

Two of them are two different activities therefore, it needs to be two activity diagrams. One will represent the buying section of the website. and the other will represent the booking section of the website.

Activity diagram for buying peritoneal dialysis product:

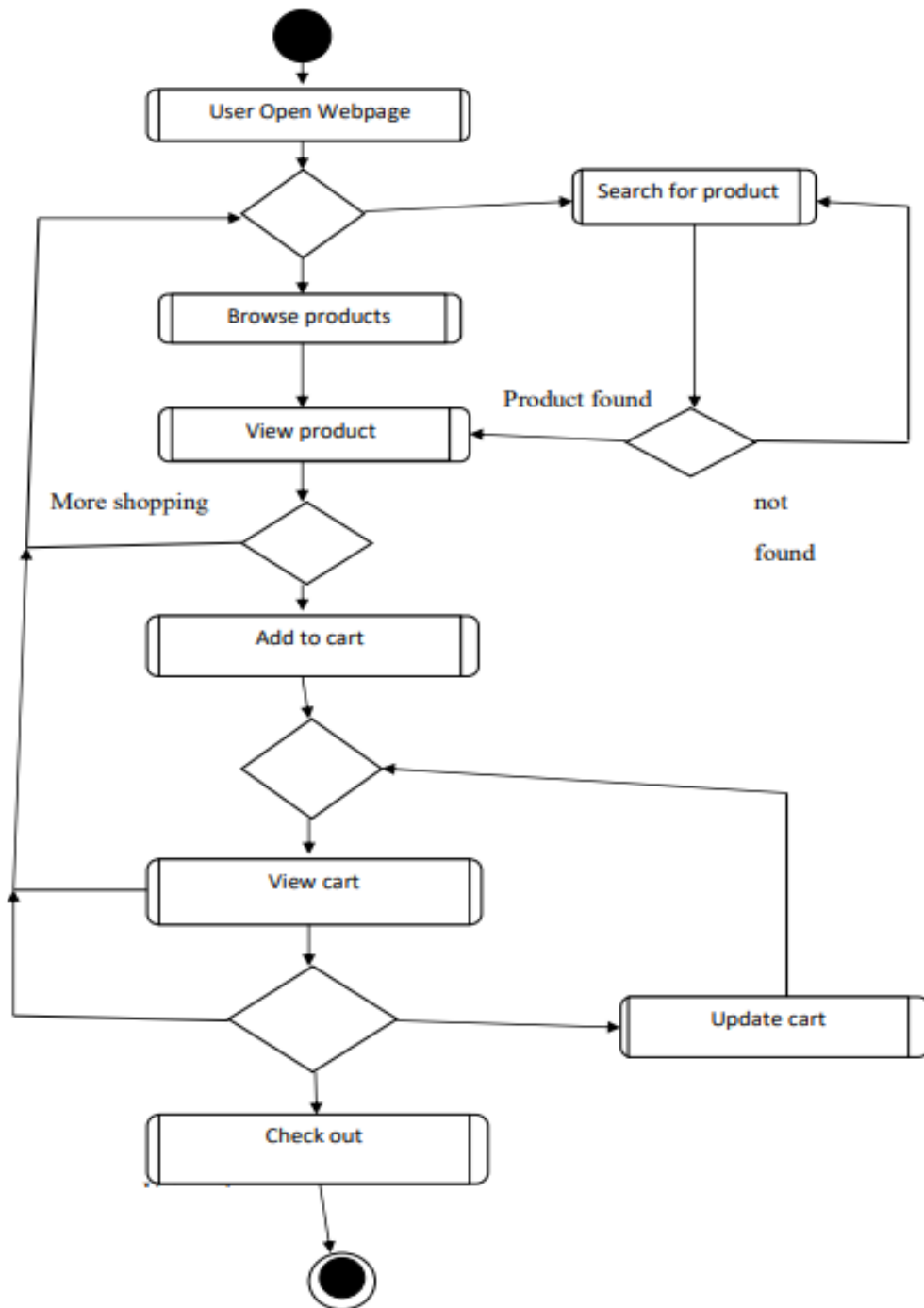


Fig 6: Activity Diagram (buying)

Activity diagram for dialysis appointment booking section:

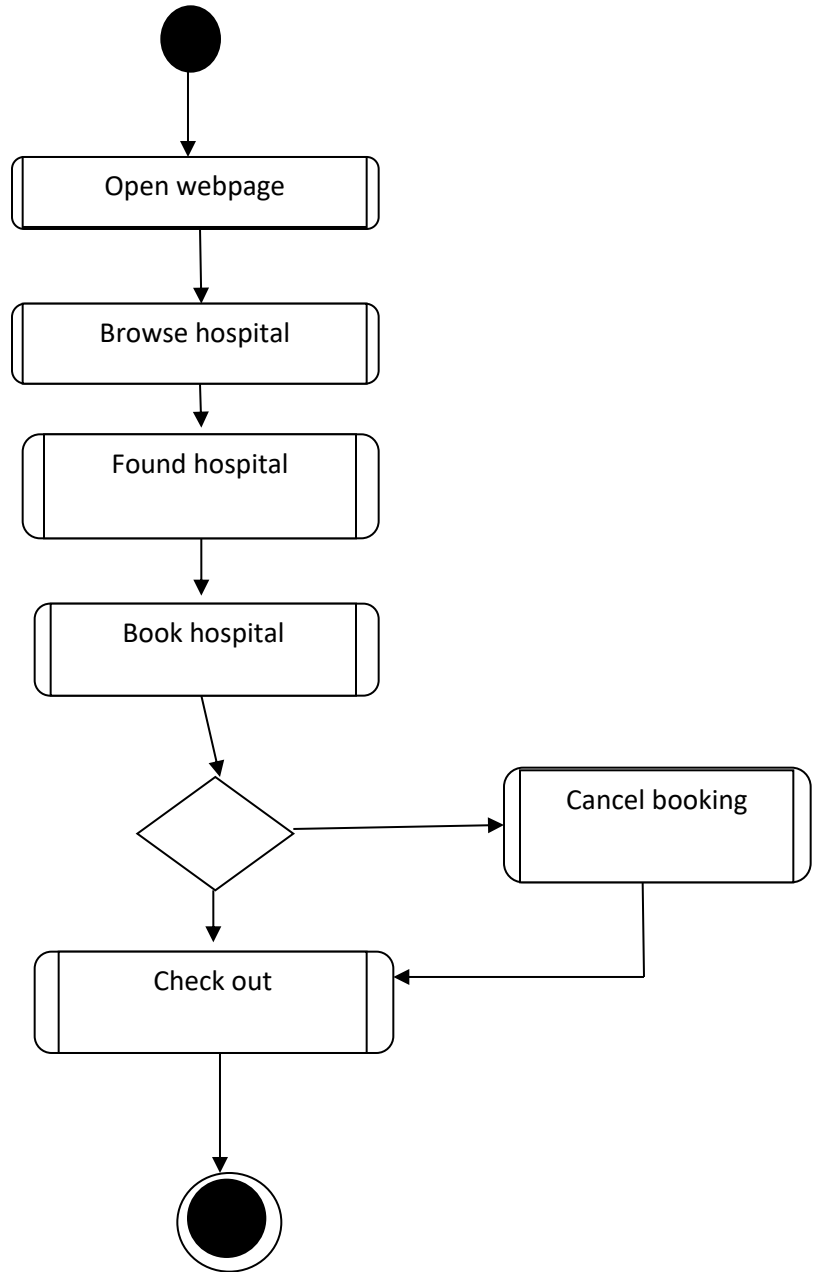


Fig 7: Activity diagram (booking)

### **3.4: Design Requirements**

We will follow some design requirements while we are working on our project. Those Requirements would be,

1. Clean Design.
2. Effective Color Scheme.
3. Branding.
4. Functionality.
5. Usability

I have already explained the requirements in the first sub-chapter 3.1, which has already let us know what will I need, how will I need It and how will I use everything to achieve what our project requires.

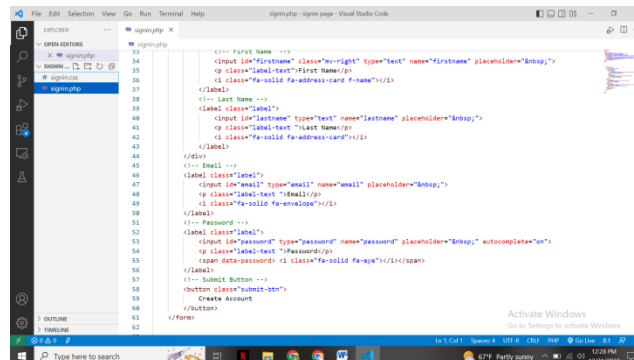
In this chapter I will explain How everything has come together, and what it looks like now.

Let me start with log in and registration, it will give you an idea of how we will implement all the requirements.

First, we have used HTML to give it the structure it needed and then I used CSS to make it presentable or we can say, we have used it to style it.

For this method we have used visual studio code.

To give you a little show of that I will show some pictures,

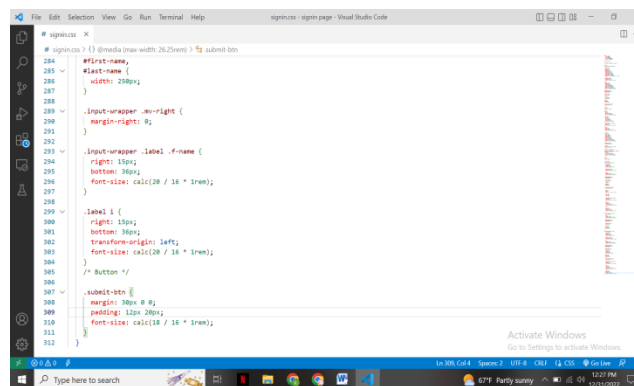


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35 <input type="text" name="lastname" placeholder="&nbsp;";
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37 <input type="password" name="password" placeholder="&nbsp;";
38 <input type="password" name="password" placeholder="&nbsp;";
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55 <input type="text" name="password" placeholder="&nbsp;";
56 <input type="text" name="password" placeholder="&nbsp;";
57 <input type="text" name="password" placeholder="&nbsp;";
58 <input type="text" name="password" placeholder="&nbsp;";
59 <input type="text" name="password" placeholder="&nbsp;";
60 <input type="text" name="password" placeholder="&nbsp;";
61 <input type="text" name="password" placeholder="&nbsp;";
62 <input type="text" name="password" placeholder="&nbsp;";

```

Fig 8: Visual studio code (Registration html)



```

284 #first-name,
285 #last-name {
286 width: 250px;
287 }
288 .input-wrapper {
289 margin-right: 0;
290 }
291 .input-wrapper .label {
292 right: 15px;
293 bottom: 10px;
294 font-size: calc(18 / 16 * 1rem);
295 }
296 .input-wrapper .input {
297 right: 15px;
298 bottom: 10px;
299 transform-origin: left;
300 font-size: calc(18 / 16 * 1rem);
301 }
302 .input-wrapper .button {
303 margin: 10px 0 0;
304 padding: 10px 20px;
305 font-size: calc(18 / 16 * 1rem);
306 }

```

Fig 9: Visual studio code (Registration CSS)

After applying HTML and CSS We have sort out the front end of those section of our project. Next step is to create the back end or to put it other words, we have to create a database where the registered information will go, so that we can use them to log in later.

To do this, first we have to convert our HTML files into PHP format, so that we can host them on the local server. we have to install XAMPP and download all the extension required with this software in to our computers. Then we have to turn on XAAMP and turn on first two buttons called Apache and MySQL.

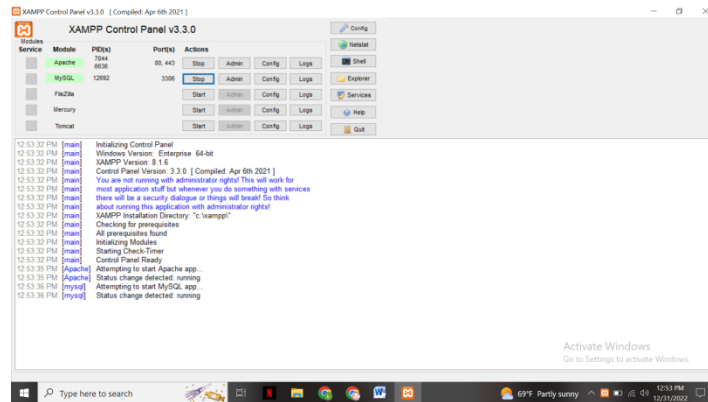


Fig 10: XAMPP Control Panel

After we have done this like it is shown in fig-7, we will have to write PHP codes to connect to the database. Then we have to open php My admin to create a database to store registered information. And after that we have to write sol query on visual studio code to connect the database to the front end.

Fig 11: Registration form (front end)

When user will put information in the front end of this registration form and it will be saved in the data base created by PhpMyAdmin.

Fullname	MobileNumber	Email	Password	Register	UpdateDate
365	88@gmail.com	20234952e50873664671524236279	2022-12-30 11:30:28	NULL	
88@gmail.com	8877099142	88@gmail.com	20234952e50873664671524236279	2022-12-30 10:51:00	NULL
88@gmail.com	88@gmail.com	20234952e50873664671524236279	2022-12-30 10:51:11	NULL	

Fig 12: Registration database.

Using this database when users will log in, they will be using this database to check the information, if it is correct or not, and after logging in that data will be saved in a different data base which has been created almost the same way.

### Login

Already our customer

Nullam quisque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Vestibulum tortor quam, feugiat vitae, ultricies eget, tempor sit amet, ante. Donec eu libero sit amet quam egestas semper. Aenean ultricies mi vitae est. Mauris placerat elestid leo.

Email  
admin

Password  
\*\*\*\*\*

[Forgot Password](#)

[Log in](#)

[New? Register Here](#)

DIALYSISBOOK SHOP  
BANGLADESH

Useful Links  
[Home](#)

Our Social Network  
[Twitter](#)
[Facebook](#)
[Instagram](#)
[Telegram](#)
[LinkedIn](#)

Activate Windows  
Go to Settings to activate Windows.

Fig 13: Log in form (front end)

The process of it has been the same as the registration from. And the database that allows the registered users to log in and keep their information saved is the log in database which is also created in almost similar way.

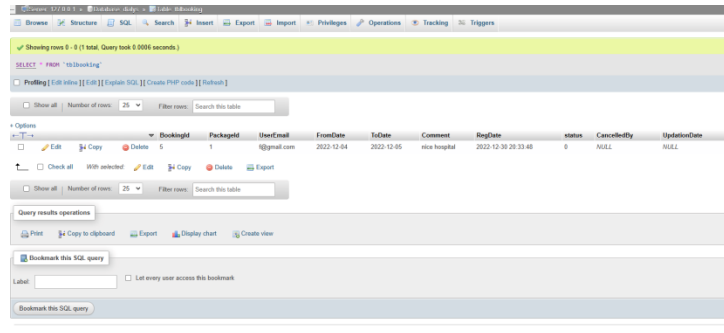


Fig 14: Login Database.

From the above pictures and explanations, it should be clear how we have used all the required method and tools. The other parts of the website are made with similar methods, we have used them however the situation has demanded. we will add all the pictures of the output in the next chapter which is ‘results’ and we will give the full review of the whole project in that section. This was just for explaining the methodology as the chapter demands. We hope, we were able to do it and anyone reading this will understand all the methodology and requirements of our project.



# CHAPTER 4

## DESIGN SPECIFICATION

### 4.1 Front-end Design

Now that we have finished our work, we have our output in front of us. We now have our output, and we can now give an analysis of our output with output pictures.

First, we would like to discuss about the Dialysisbook shop page, which will allow our users to buy from our page.

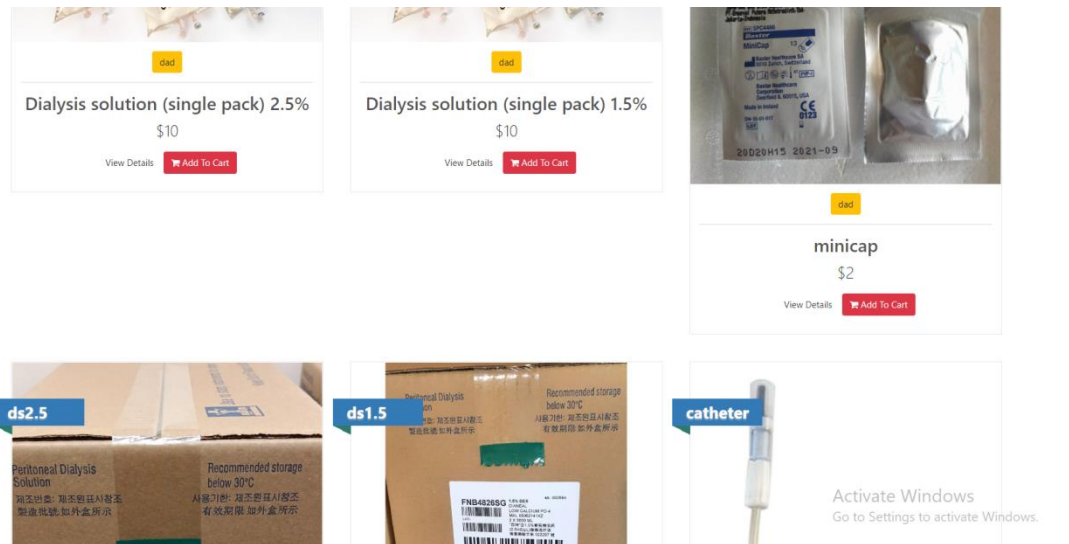


Fig 15: Product view

From here users can add products to carts, and then they will proceed into further features.

Clicking on Add to cart will take them to 'add to the cart' page, which shows the user shopping cart and also shows other products from this page, which they might also like to purchase and last but not the list they will be able to buy those products from this option.

Our next option is booking hospital for dialysis. User will be able to book hospital at a time and date of their choice in any hospitals that is listed on our website.

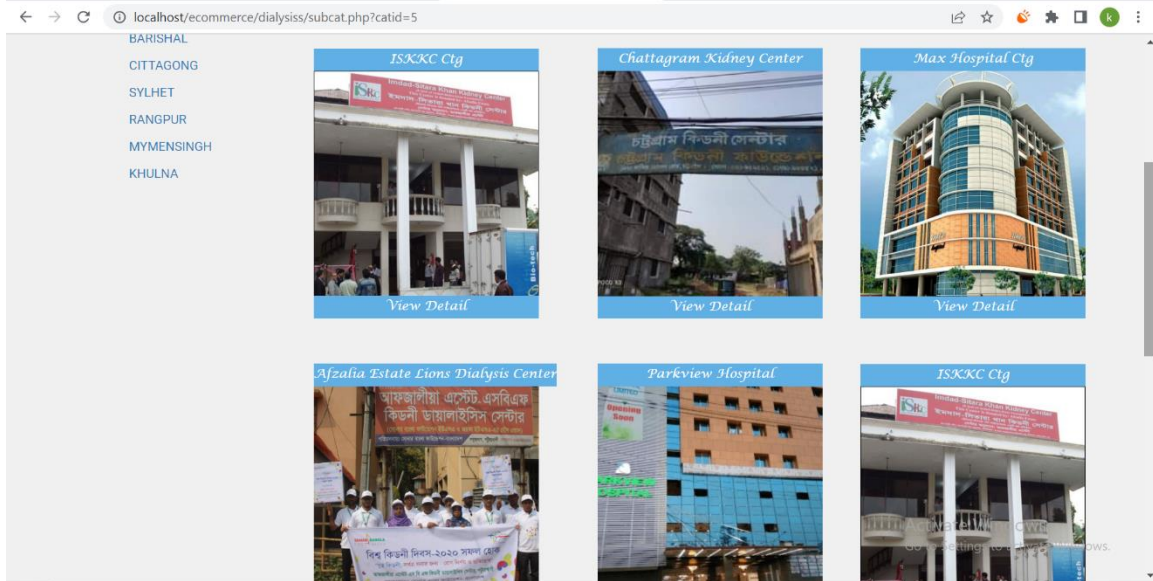


Fig 16: Hospitals

This page holds all the listed hospitals that are available on our website. Clicking on details will take them where they will be able to book hospitals.

## 4.2 Back-end design

To control all the option, to add hospitals to the list and adding product to the product section and to monitor everything so that users can get their service. we needed an admin panel.

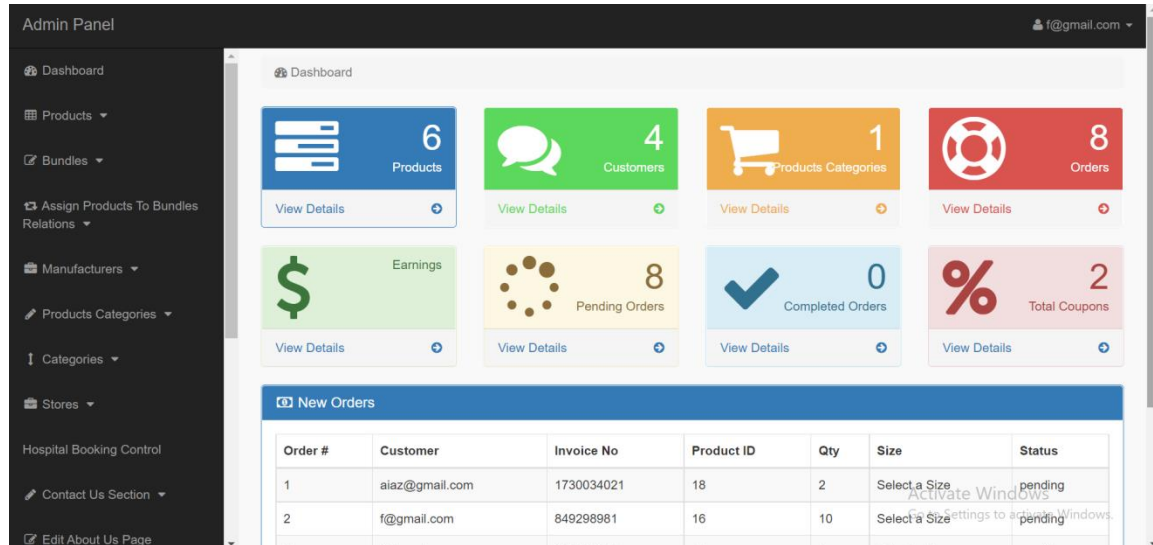


Fig 17: Admin panel (dashboard)

In a very similar way admins have to register in to the admin panel and they can control many things in the admin panel including seeing all the activities happening on the website as we can see in the picture.

For hospital adding and manage all the booking section activities there is another panel.

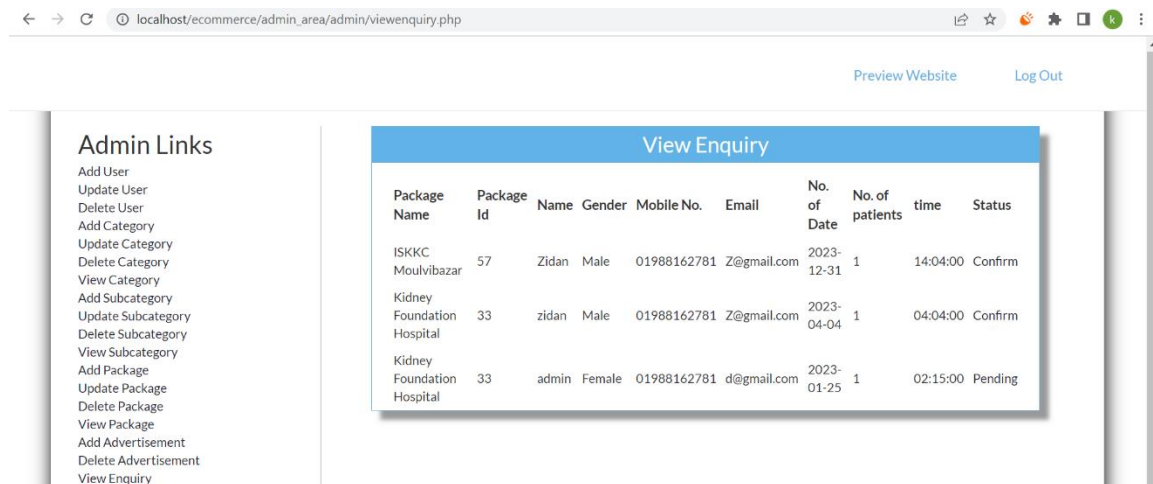


Fig 18: Admin panel (hospital booking)

Admin will be able to view products and edit them, and also able to create new product.

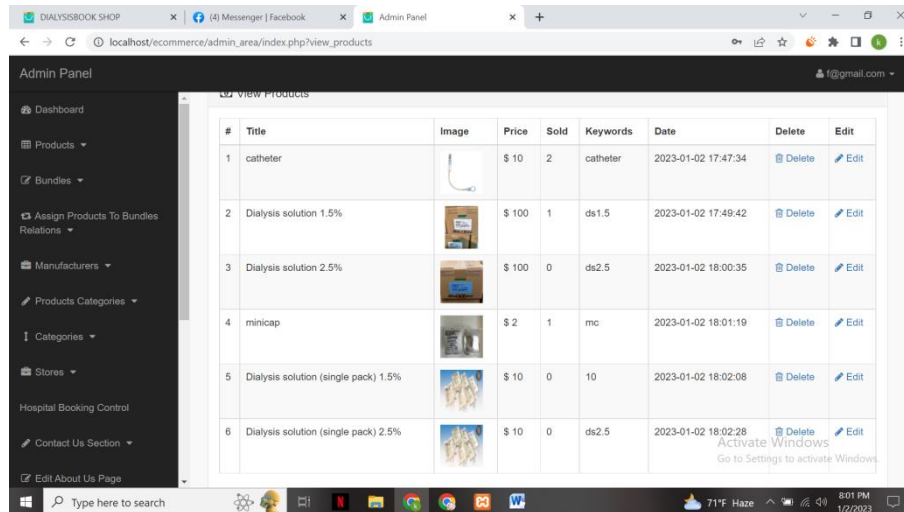


Fig 19: View and edit product.

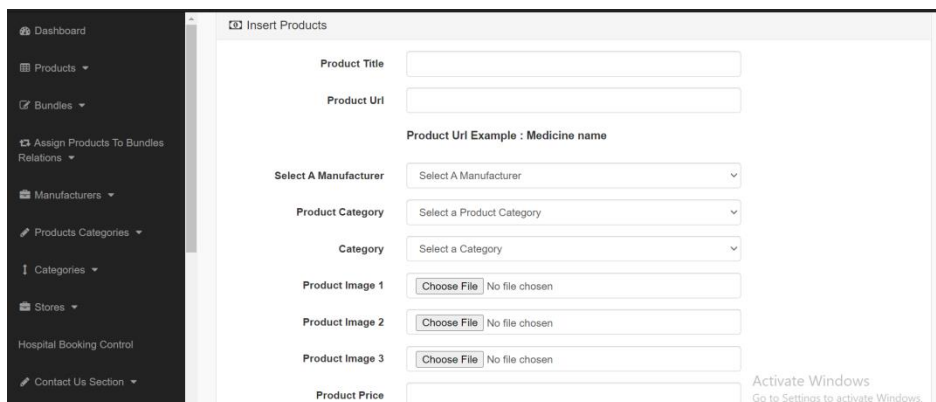


Fig 20: Create product.

In a very similar way admins will also be able to view hospitals and add hospitals in the website.

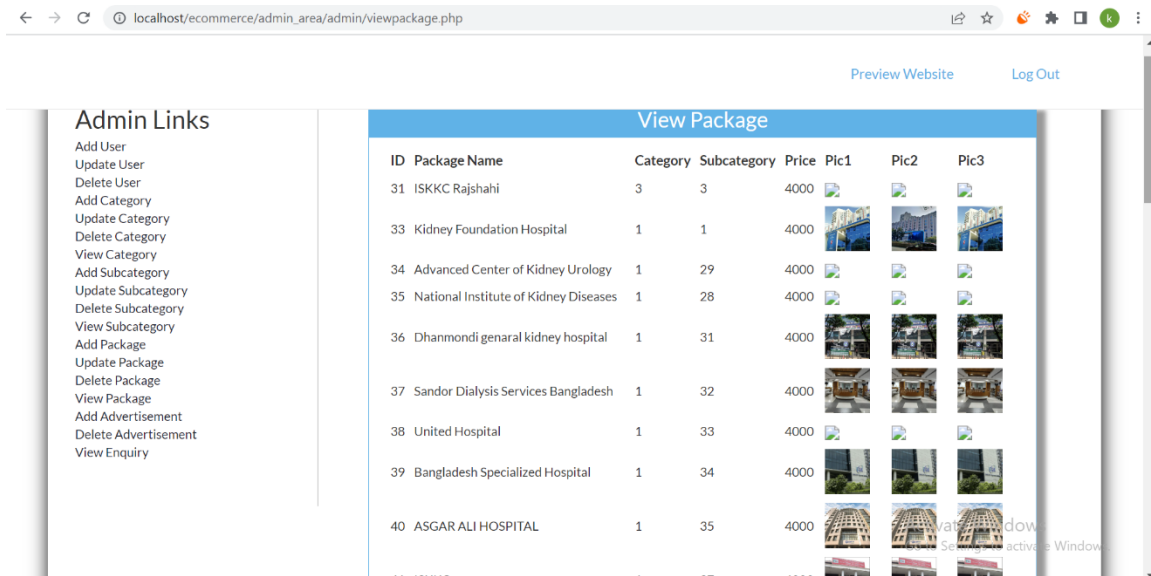


Fig 21: View details of hospital and Edit details.

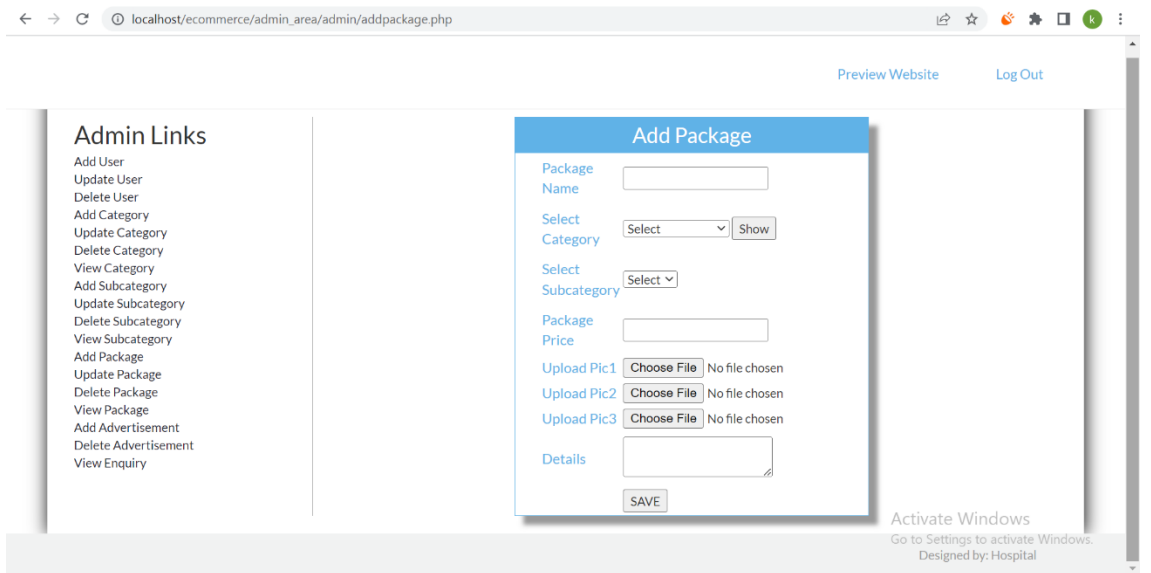


Fig 22: Add hospital to the website

Admin will be able to Add hospital and also will be able to view details and edit details of the hospitals.

This was a pictorial explanation of our project output. I hope we were able to explain the key features of our project.

### 4.3 Interaction design and user experience

When a user will click on a product they will engage in an interaction with the website. What they do next purchase the product or keep browsing, select more product, checking out everything is the part of that interaction. And that will decide their experience as a user so this part of a website is very important.

Let us show a picture and then we will give further explanation.

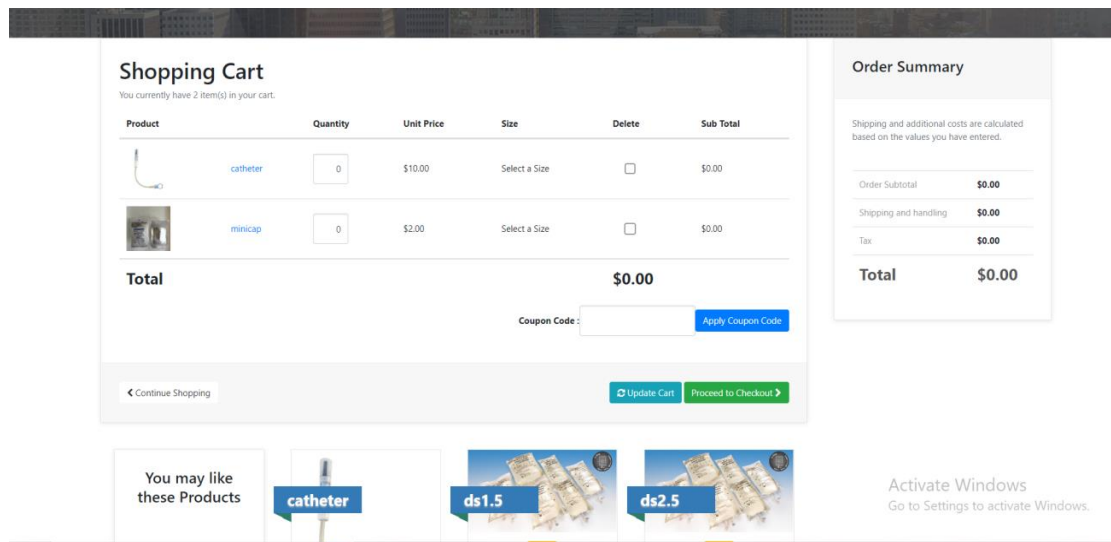


Fig 23: Shopping cart

From this page users will be able to see added products and the total price .and then they will be able to buy the products.

If they click on the date option of, they will be able to enter date of their choice and proceed to book the hospital.

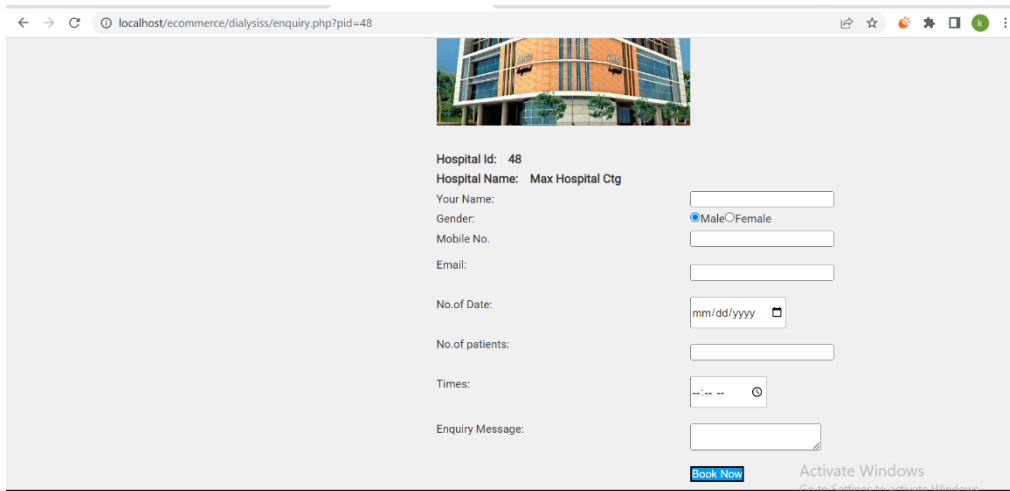


Fig-24: Hospital booking

Further process is almost similar to the buying process which has been pictorially explained.

#### 4.4 Implementation Requirements

Our project's main features are buying peritoneal dialysis products and booking hospital for hemodialysis appointments. And our Requirements has been fulfilled.

We have now created a website which is able to do both and it is a complete guideline for any kind of dialysis patients.

From our website user will be able to buy CAPD products also known as peritoneal dialysis products. Users also be able to book Dialysis appointments on the listed hospitals.

Admins will be able to manage all the activities of the website.

How many users are currently using the website, how many orders are pending, how many orders have been completed, how many hospital appointments has been booked all of these will be monitored by the admin.

Admins will also be able to give out usable coupons and offers which are business decisions. Admins will be able to view product detail and edit and same thing is applied to the hospital details. Adding new hospitals to the list and adding new product will also be available for admin.

From the above we can get a summary of the features of our project and I hope it will be helpful for the reader to understand our project even better.



## CHAPTER 5

### IMPLEMENTATION AND TESTING

#### 5.1 Implementation of database

We created the database for this website using PhpMyAdmin and connected them with the website using SQL. Every data entered in the website in way will be saved in the database.

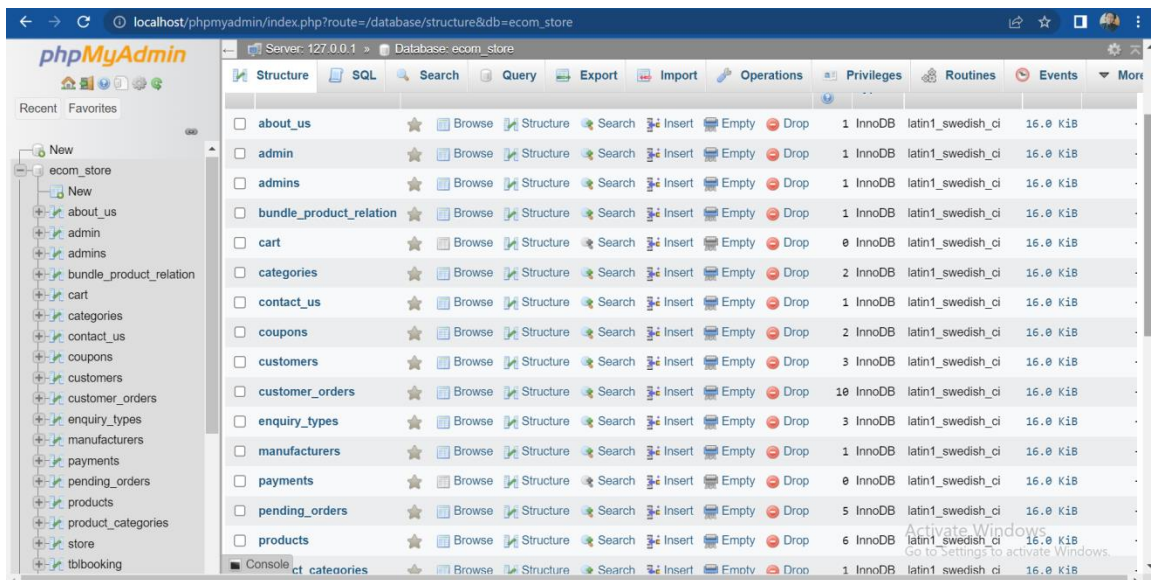


Fig 25: Database Implementation.

As we can see in the fig-26, there is a database dedicated to every function of the website where user or admin can enter data.

#### 5.2 Implementation of front-end design

We have shown the front-end design before in many figures in this report. In figure 11 we can see registration form, in figure 13 we can see log in form and from figure 15 to 25 we can see every other front-end design which has been implemented. In Chapter 4.1(front-end design) We have discussed everything about front-end design of our project.

### 5.3 Testing implementation and test results

I have tested every function of the website and created a table which shows the results of testing.

	Data entered	times	Successful run	Unsuccessful run	Good or Bad
Registration	10	10	10	0	good
Log in	10	10	10	0	good
Product create	6	6	6	0	good
Product edit	4	4	4	0	good
Hospital create	10	10	10	0	good
Hospital edit	4	4	4	0	good
Add to cart	5	5	4	1	good
checkout	5	5	4	1	good
booking	5	5	5	0	good
Add admin	3	3	3	0	good

Table 1: Testing Table.

In this table we have put all the data we got from running tests on our project, it helped us with a few errors and we detected them and fixed them.

## CHAPTER 6

### CONCLUSION AND FUTURE SCOPE

#### 6.1 Discussion and Conclusion

When we started the search for ideas for our final project, we were concerned about two things, one being, it should help as many people as possible. And the other thought we had was about the future. How can we create something that will be beneficial to us even in the future?

So, we came up with our idea, we named it Dialysisbook. A website which will help patients book dialysis appointment in any hospital listed in our website at their desired location and time slot, and it will also sell product related to peritoneal dialysis. In a sentence we can say, our project will be guideline for dialysis patients who cannot lead a normal life due to their illness, our goal will be make their life as normal as possible.

#### 6.2 Scope for further development

Even though, we have finished our project. We always believed there is always room for improvement, there is always a way to make thing better than they were before. So, we will continue work on our project in the future to make it even better than it is now, we will try to keep it up to date and always try to improve the way it helps the users so that it can help them even more.

for example,

-Expand its hospital database, means add as many hospitals as possible to make it available all over Bangladesh.

-Expand the product list so that all the patients can get whatever they need for their dialysis treatment including medicine and other medical tool.

-Making Bangla available as a language for the website so that language barrier would not be an issue for the users.

These are some improvements we would like to make for our project in the future. And many more improvement will be done in the future but we couldn't think about them yet. We hope we will be able to work on our project more in the future.

We also hope it will bring us good fortune and we will be able to help as many kidneys or dialysis patients as possible.

## REFERENCES

[1] "Overview of Renal Replacement Therapy - Genitourinary Disorders". Merck Manuals Professional Edition.

[2] Learn about Wikipedia, available at << <https://en.wikipedia.org/wiki/HTML>>>

[3]"CSS developer guide". MDN Web Docs. Archived from the original on 2015-09-25. Retrieved 2015-09-24

[4] Flanagan, David (18 April 2011). JavaScript: the definitive guide. Beijing; Farnham: O'Reilly.

[5] Learn about Wikipedia, available at<< <https://en.wikipedia.org/wiki/SQL>>>

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