E-medicine Service: A web application

TABLE OF CONTENT

ABSTRACT

This project is about helping users to find their necessary medicines and doctors that are based on web applications. This project helps to create an easy, faster, and smooth healthcare system. This project also offers some opportunities which will help users to find well-known doctors and make appointments to them online as per their necessity. So, for a better healthcare system, we developed our project based on a website that will help the users a lot. This project will help to increase the confidence of the users to make a fast appointment inside Dhaka city and also outside Dhaka. Most patients are not willing to waste their valuable time, or a large number of patients just feel shy or introverted to talk to other unknown people to know their medical information or appointment information. But our project will bring a cool solution for them. Our project creates the whole system online. We hope it will be useful for all kinds of users by using the internet.

LIST OF FIGURES

CHAPTER 1

Introduction

1.1 Introduction

“He who has health has hope, and he who has hope has everything”. Nobody can deny this proverb. To keep our health safe and sound, the significance of a doctor can’t be denied. They are giving up their own lives to save ours. Their contribution to human health is beyond comparison. Their benefaction in saving, extending, improving our lives, and controlling epidemics are undeniable. There are lots more things these apron-wearing armies make for us.

Doctors save lives, but their importance goes far beyond. Doctors also make a difference by helping patients minimize pain, recover from a disease faster or learn to live with a disabling injury. A patients’ ability to enjoy life, even if they can’t be cured, makes a huge difference to them and to their families.

Medicines are chemicals or compounds used to cure, halt or prevent disease; ease symptoms; or help in the diagnosis of illnesses. The role of medicine has been described as to cure sometimes, to heal often, and to comfort always. Advances in medicines have enabled doctors to cure many diseases and save lives. Medicines bridge the gap between science and society. Today there is much focus on medicine optimization, which is about ensuring that the right patients get the right choice of medicine at the right time.

In this current situation, no other thing cannot be more crucial than medicine and one other man than a doctor. We always owe them. No word can be found to complement their hard work.

1.2 Motivation

The motivation to work on this project is actually our real-life experience. I remembered that, when I came to Dhaka city for the first time, I faced that kind of problem. I didn’t understand how to book an appointment easily and which doctor I should consult with. After that, I also felt the need to get some medicine details. For

this reason, I understood that many people are suffering from this problem like me. So we decided to solve this problem so that no one can suffer like me.

1.3 Objective

The key objective of this project is to build a platform where users can book their appointment as preferred and find medicine store details both inside the city and outside the city. Where patients can

- Find his medicine details.
- Find doctors with their details.
- Book an appointment with his flexible time and preferred specialist.
- Add/Modify/Delete posts on the blog page.
- Find contact details with the organization.
- Subscribe for the newsletter.
- Find medicine or a doctor by searching.

1.4 Expected Outcome

The outcome of a project is very important. Some points are given below

- Patients can find medicine details and book an appointment with their flexible schedule by using this website. It will increase their ability to get to know about an unknown medicine and make an appointment with their preferred specialist.
- Patients can know the doctor's details and specialty easily by using this website. It will remove their confusion about the suitable treatment they need.
- This website will help to write posts on the blog page. All the authenticated users can do this. Users can view, comment on posts. They can also modify and delete their previous posts.

1.5 Report Layout

We developed a website called **"E-Medicine Service".** We completed our project in time. Respecting our workflow we design our project report.

Background discussions about the Introduction, Related Works, Comparative Studies, Scope of the Problem, Challenges are in chapter 2.

Business Process Modeling, Requirement Collection and Analysis, Use Case Modeling and Descriptions, Logical Data Model, Design Requirements are discussed in chapter 3.

Front-end Design, Back-end Design, Interaction Design and UX and Implementation Requirements are explained in chapter 4.

Implementation of Database, Implementation of Front-end Design, Testing Implementation, Test Results and Reports are described in chapter 5.

We discussed the Future Scope, Discussion and Conclusion of the whole project in chapter 6 named Discussion and Conclusion.

CHAPTER 2

Background Study

2.1 Introduction

Medicine is very important for everyone in their daily life. It is a part and parcel in our daily life. People have to take medicine or book an appointment with a doctor when they feel sick. On the other hand, Dhaka is the most densely populated city in the world. Many new people come to Dhaka every day for many purposes. Most of them don't know the city. On the other hand, crowds are a common scenario in Dhaka city. For this reason, most of the people face many problems in finding a hospital inside Dhaka city and outside the city also. They don't know how to schedule an appointment with their preferred specialist. They also don't know which medicine will be suitable for them to take when they feel sick. It creates a lot of confusion, time-killing, and uncomfortable situations for them. In the base of this thinking we wanted to make a website which can solve this problem and make sure people's safe and easy medical support.

2.2 Related Works

There are few websites in other countries which are related to our project. But the maximum is not the same as our project. But our country hasn't any other websites which are similar to our project. There are some websites that are information-based.

2.3 Comparative Studies

There are lots of renowned hospitals and enormous medical shops in our country with amazing facilities. But still, the people of our country aren't getting the proper medical treatment they need. People living in rural areas can't have service from a well-being hospital because communicating with that kind of hospital is really hard for them. Also, we don't have this kind of online platform so far that could help these people living in remote areas.

So, we thought that it is high time to solve this problem and bring medical treatment close to each and every people of our country equally through our website.

2.4 Scope of the Problem

As we said, people face some difficulties to book an appointment inside or outside Dhaka city. Our current appointment booking system isn't as fast as the demand is going. So, we can discuss some problems here;

- There is some manual system, but this is fully online based.
- People should have a smartphone or pc to take this service.

According to these problems, our website offers solutions that will help people. We will look after this from perspectives given below:

For user, helps

1. To get hospital appointment faster [1]
2. To get the doctor's details.
3. Easy option to know the medicine information.
4. Get to subscribe and write blogs.
5. Stay up to date.

2.5 Challenges

There is no work without challenges. As transportation is the key target so we have to face some challenges.

1. It is a website, so if a user doesn't have a mobile phone or pc then this site will not help him.
2. It is a website. So, the user must be connected to the internet before opening the website.

CHAPTER 3

Requirement Specification

3.1 Business Process Modeling

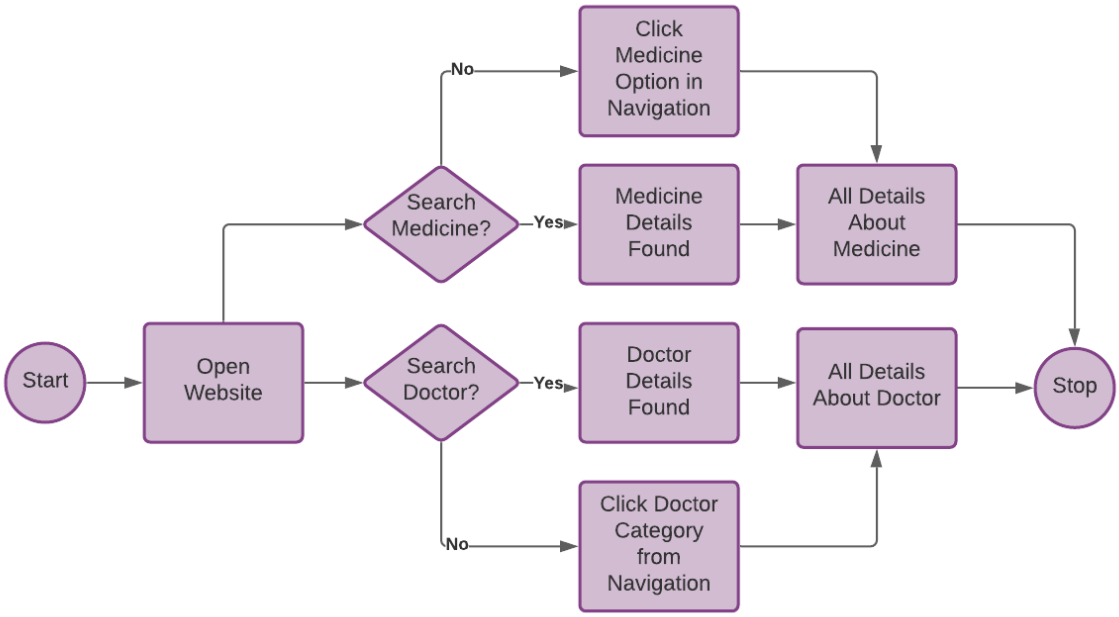


Fig 3.1: Business Process Modeling of E-Medicine Service

3.2 Requirement Collection and Analysis

When we start to do our project, there is a distribution time to complete the project in time. For this reason, we have to work very seriously to complete this project in time and deliver the project with a solution.

Our project is a web-based E-Medicine Service system. So, we had to collect data with reality. We had to insert data accurately. Because people can find their information accurately and have no complaints about this project.

Software Requirements:

- Users/Patients
- Easy to use for everyone
- Searching system for the patients

- Time suitability
- Simply reachable

Hardware and Software Requirements for our system:

When we are buying any device which can be software or hardware, we have to ensure that our computer can support this device or system. They are the essential terms our computer can have, so that we can use the computer smoothly with comfort. All kinds of software needs it's hardware mechanisms software needs certain hardware mechanisms or additional software properties present in the computer.[2]

For the development of a website, the system needs all tools and platforms described below:

- XAMPP/WAMPSERVER
- PHP
- Any text editor

3.3 Use Case Modeling and Description

Fig 3.2: Use Case Modeling of E-Medicine Service

Use Case 1: Book Appointment

Primary Actor: User/patient

Precondition: Actor has connected internet and opened the website

Main Success Scenario:

1. Actor select ‘Book an appointment’ option
2. Actor selects doctor
3. Selects date
4. Actor submits

Exception Scenario:

1. Internet connection is lost
2. Not submitted

Use Case 2: Search medicine (Alphabetically)

Primary Actor: User/patient

Precondition: Actor has connected internet and opened the website

Main Success Scenario:

1. The actor navigates to the alphabet search buttons
2. Actor taps on a button.
3. Medicine list appears.

Exception Scenario:

1. Must press a button
2. No medicine found

Use Case 3: Search Medicine/Doctor

Primary Actor: User/patient

Precondition: Actor has connected internet and opened the website

Main Success Scenario:

1. Actor must navigate to the search icon
2. Actor writes medicine/doctor name
3. Medicines/Doctor names appear.

Exception Scenario:

1. Must contain text.
2. No medicine/no doctor found.
3. Connection lost.

Use Case 4: Find all medicine

Primary Actor: User/patient

Precondition: Actor has connected to the internet and opened the website.

Main Success Scenario:

1. Must click on the medicine option from header or footer navigation
2. The Medicine list appears.

Exception Scenario:

1. Internet connection lost.

Use case 5: Find all doctor

Primary Actor: User/patient

Precondition: Actor has connected to the internet and opened the website.

Main Success Scenario:

1. Must click on the primary doctors option from navigation
2. Doctor list appears

Exception Scenario:

1. The Internet is disconnected.

Use Case 6: Find doctor category wise

Primary Actor: User/patient

Precondition: Actor has connected to the internet and opened the website

Main Success Scenario:

1. Select the preferred category from the list on navigation and click.
2. Doctor list appears

Exception Scenario:

1. Connection lost.
2. Must select a category.

Use Case 7: Subscribe to the newsletter

Primary Actor: User/patient

Precondition: Actor has connected to the internet and opened the website

Main Success Scenario:

1. Click on the contact option from header navigation or navigate to footer subscription option

2. Type email address and submit.
3. Subscription is successful.

Exception Scenario:

1. Connection lost.
2. Must type email address.

Use Case 8: Find featured topics

Primary Actor: User/patient

Precondition: Actor has connected to the internet and opened the website

Main Success Scenario:

1. Select preferred topic from the list on homepage and click.
2. Topic details appear.

Exception Scenario:

1. Connection lost.
2. Must select a topic.

Use Case 9: Find services

Primary Actor: User/patient

Precondition: Actor has connected to the internet and opened the website

Main Success Scenario:

1. Select preferred service from the list on the homepage and click.
2. Service details appear.

Exception Scenario:

1. Connection lost.
2. Must select an option.

Use Case 10: Write post on blog

Primary Actor: User/patient

Precondition: Actor has connected to the internet, opened the website and signed in

Main Success Scenario:

1. Must click on write post
2. Write title details, content and choose from category

Exception Scenario:

1. Connection lost.
2. Must select a category

Use Case 11: Find featured topics

Primary Actor: User/patient

Precondition: Actor has connected to the internet and opened the website

Main Success Scenario:

1. Select preferred topic from the list on homepage and click.
2. Topic details appear.

Exception Scenario:

1. Connection lost.
2. Must select a topic.

Use Case 12: Edit/delete post on blog

Primary Actor: User/patient

Precondition: Actor has connected to the internet, opened the website and signed in

Main Success Scenario:

1. Must click on manage post
2. Posts appear
3. Must click on the delete post/ edit post option

Exception Scenario:

1. Connection lost.
2. Must choose an option

Use Case 13: Edit/delete category on blog

Primary Actor: User/patient

Precondition: Actor has connected to the internet, opened the website and signed in

Main Success Scenario:

1. Must click on add category/delete category button
2. List appear
3. Must click on the submit option

Exception Scenario:

1. Connection lost.
2. Must choose an option

Use Case 14: Comment or reply on blog

Primary Actor: User/patient

Precondition: Actor has connected to the internet, opened the website and clicked on the blog page

Main Success Scenario:

1. Must click on a post category
2. Posts appear
3. Click on comment/reply option
4. Type a text
5. Submit

Exception Scenario:

1. Connection lost.
2. Must choose a category
3. Not submitted

3.4 Logical Data Model

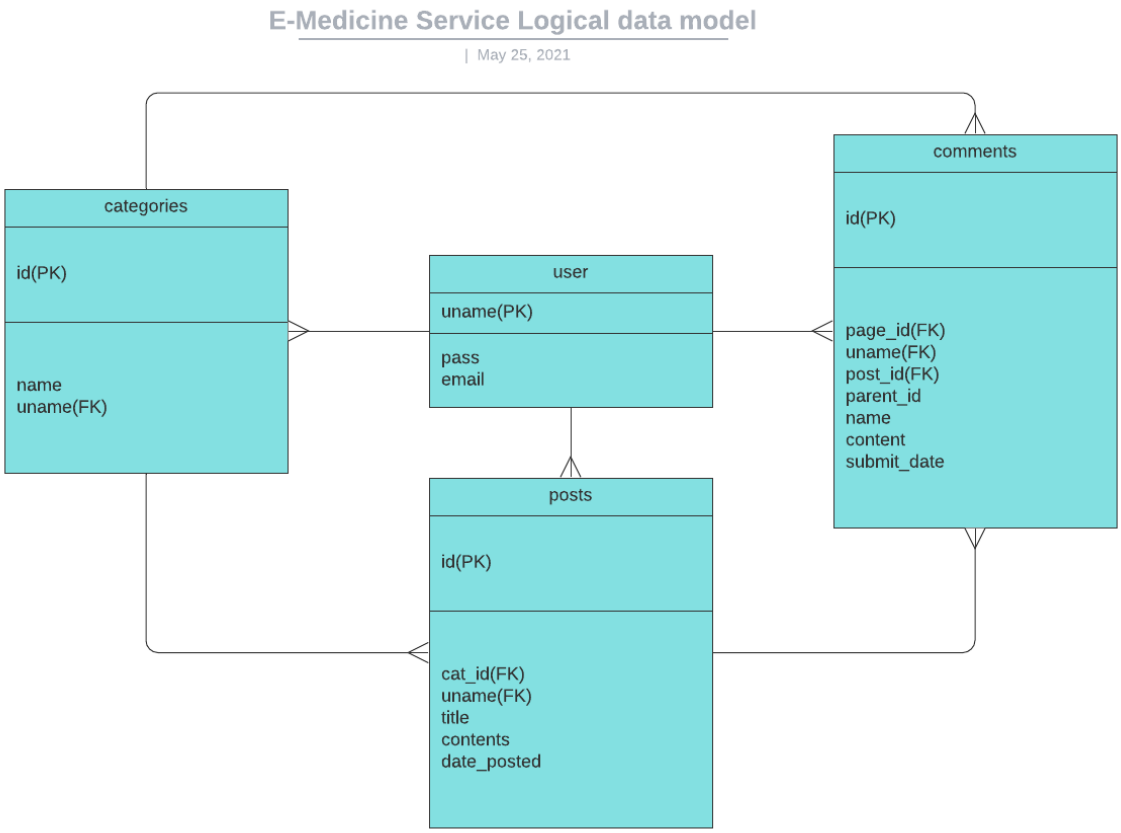


Fig 3.3: Logical Data Model of E-Medicine Service

3.5 Design Requirements

To design a software or system, we deliberate some requirements so that our project can be finished well. The given requirements are most important and obligatory to do.

Ensure the system Facile and Flexible: This system will be intended as a way that the peoples like, comfort and flexible to use it.

Make the system Well-adjusted: This system must be appropriate for the entire system and future care.

Proficiency: software's proficiency is the most important thing. The system has to be capable to run and work with a nominal level of hardware resource available with decent use of time.

CHAPTER 4

Design Specification

4.1 Front-end Design

There are two parts that design the front-end. They are web design and front-end web development. At this time, we know that there are big differences in HTML, CSS and Photoshop design. It will be very important when people work with Javascript and jQuery.

All those things are a mixture of HTML, CSS and JavaScript. These include things like fonts, drop-down menus, buttons, transitions, sliders, contact forms etc. We use XAMPP for our database[3].

4.2 Back-end Design

There are three parts which are generally designed in the backend: a server, an application and a database. For example, if we want to book an appointment, we have to open the website first and connect with frontend. The website will store in the database after we input the data[4]. The database was created on the server.

For the back-end system, we create the database to store data that the server gets through users. To develop the application, we used PHP.

4.3 Implementation Requirements

The implementation Requirements gave a very unique thought. The main task is to make all things easier, pleasant. Some implementation requirements are below;

- Easier to make
- Easier to manage
- Easier to analyses
- Easier to interact
- Dynamic pages
- User-friendly

CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

We are using MySQL as the database for this project. MySQL is an open-source relational database management system(RDBMS) and free software under the GNU license. It is one of the most popular languages for accessing and managing the records in the table. One of the most important things about using MySQL is to have a MySQL specialized host. It is easy to use and we can build and interact with MySQL by using only a few simple SQL statements. MySQL is faster, more reliable, and cheaper because of its unique storage engine architecture. It provides very high-performance results in comparison to other databases without losing an essential functionality of the software. It has fast-loading utilities because of the different cache memory.

It is secure. MySQL consists of a solid data security layer that protects sensitive data from intruders. Also, passwords are encrypted in MySQL. It also follows the working of a client/server architecture. It can handle almost any amount of data, up to as much as 50 million rows or more. The default file size limit is about 4GB. However, we can increase this number to a theoretical limit of 8 TB of data.

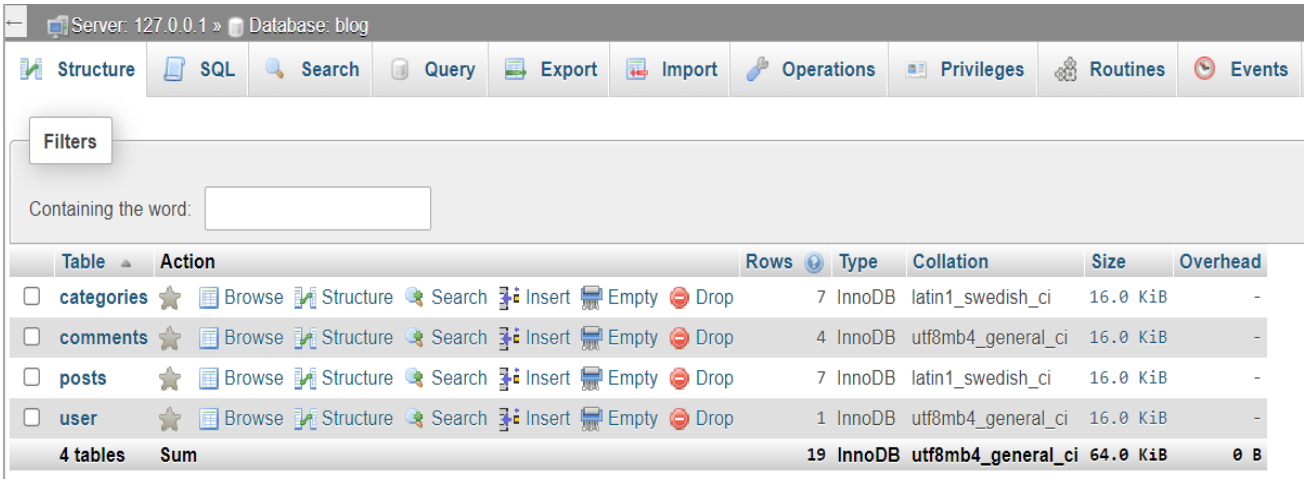


Fig 5.1.1: ‘blog’ Database Implementation Model

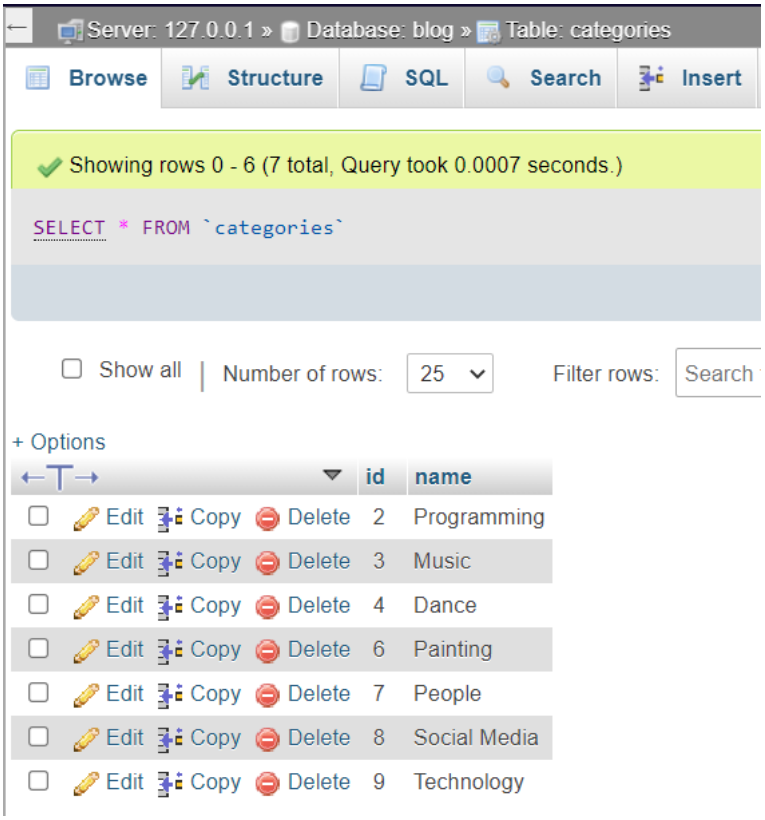


Figure 5.1.2: 'categories' table from 'blog' database Implementation Model

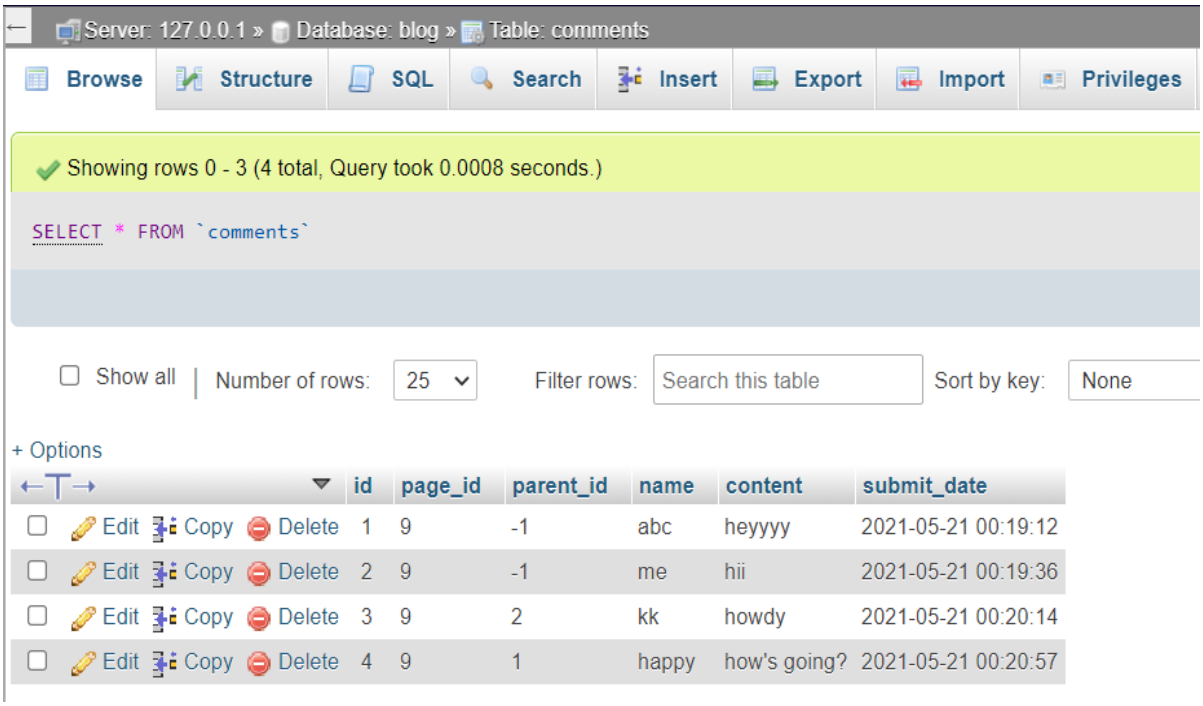


Figure 5.1.3: 'comments' table from 'blog' Database Implementation Model

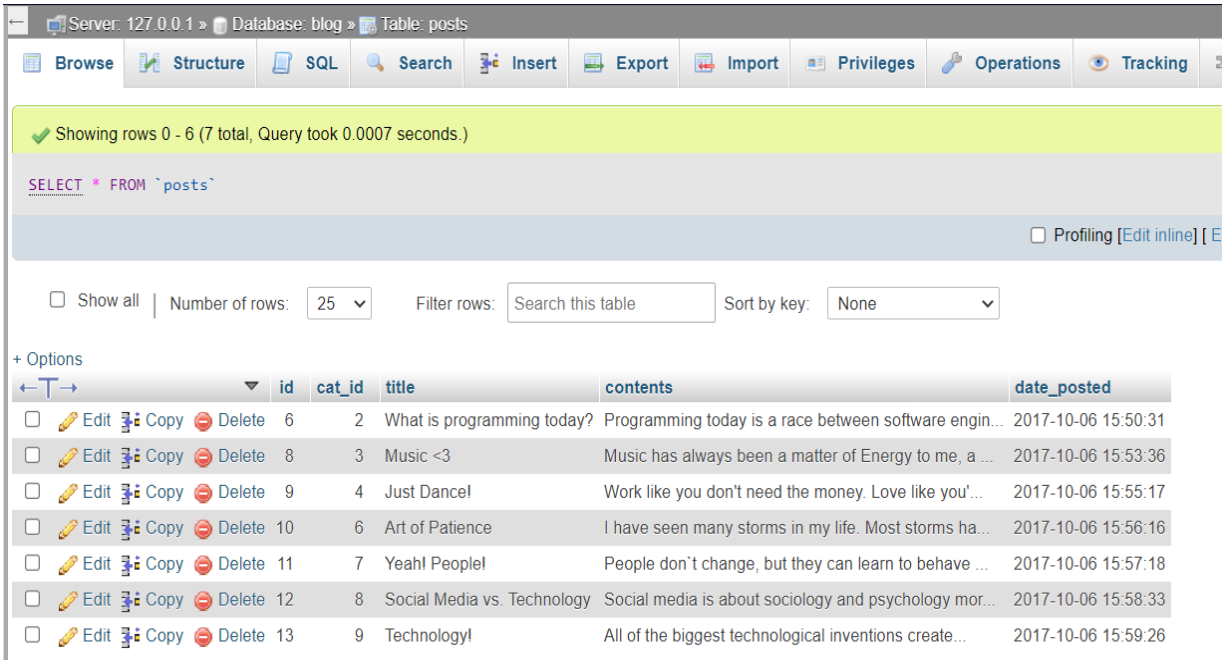


Figure 5.1.4: ‘posts’ table from ‘blog’ Database Implementation Model

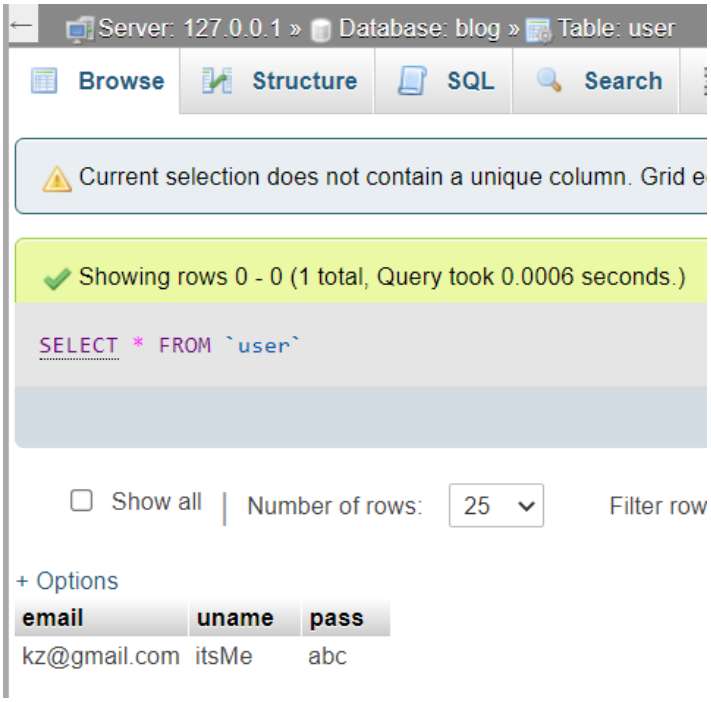


Figure 5.1.5: ‘user’ table from ‘blog’ Database Implementation Model

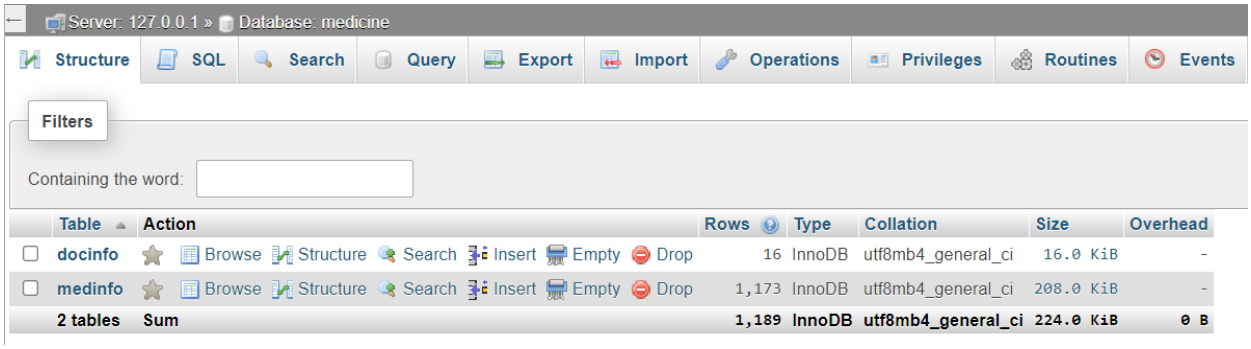
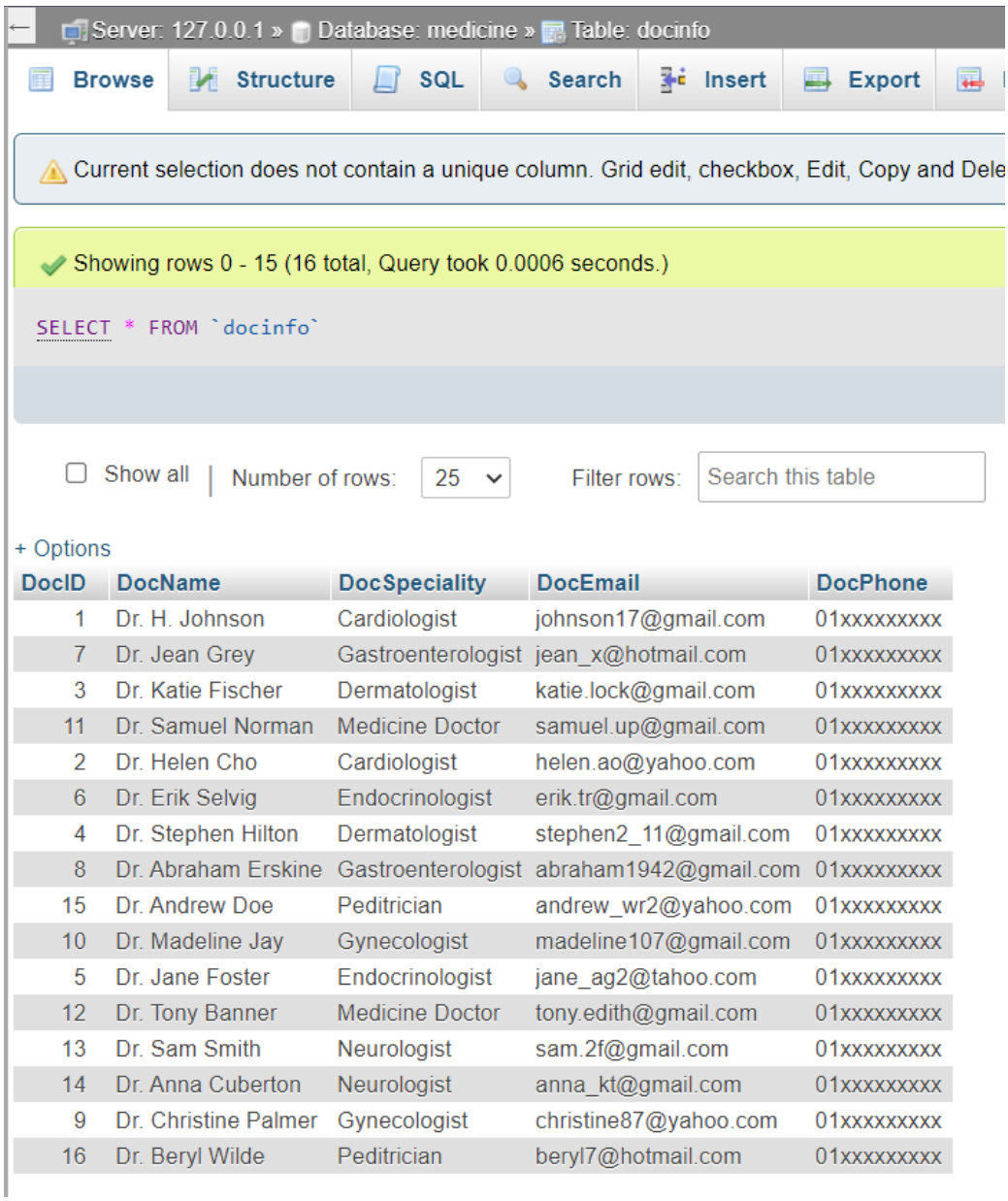
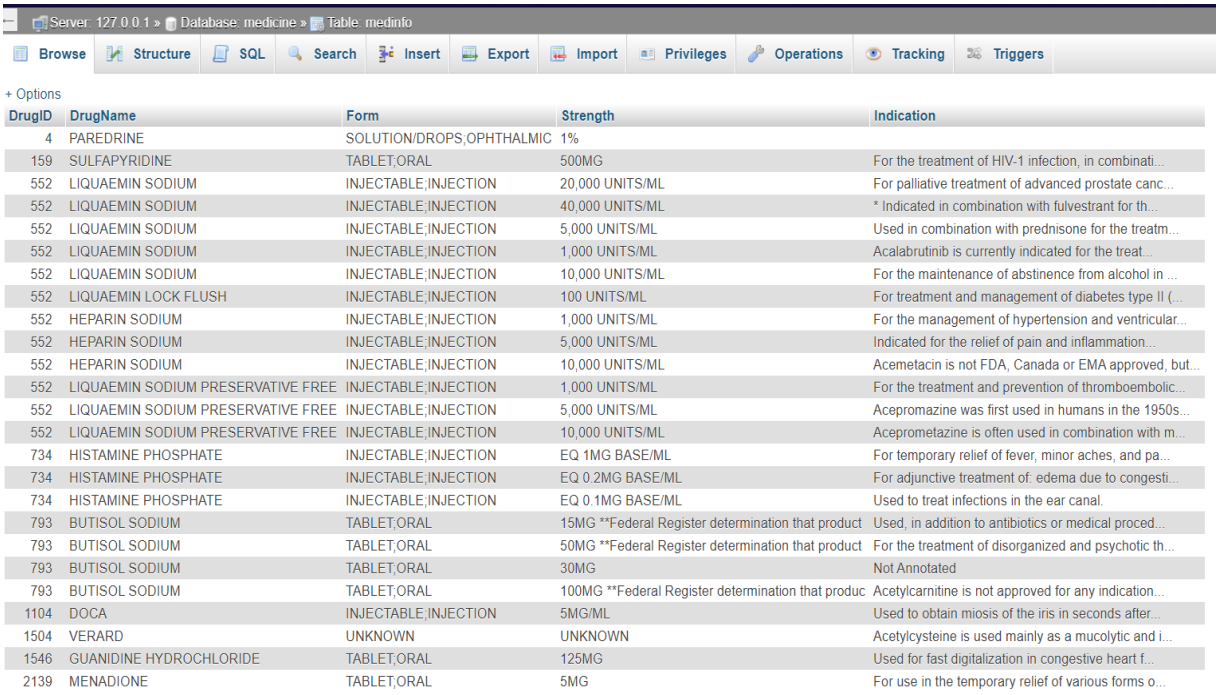


Figure 5.1.6: 'medicine' Database Implementation Model



DocID	DocName	DocSpeciality	DocEmail	DocPhone
1	Dr. H. Johnson	Cardiologist	johnson17@gmail.com	01xxxxxxxx
7	Dr. Jean Grey	Gastroenterologist	jean_x@hotmail.com	01xxxxxxxx
3	Dr. Katie Fischer	Dermatologist	katie.lock@gmail.com	01xxxxxxxx
11	Dr. Samuel Norman	Medicine Doctor	samuel.up@gmail.com	01xxxxxxxx
2	Dr. Helen Cho	Cardiologist	helen.ao@yahoo.com	01xxxxxxxx
6	Dr. Erik Selvig	Endocrinologist	erik.tr@gmail.com	01xxxxxxxx
4	Dr. Stephen Hilton	Dermatologist	stephen2_11@gmail.com	01xxxxxxxx
8	Dr. Abraham Erskine	Gastroenterologist	abraham1942@gmail.com	01xxxxxxxx
15	Dr. Andrew Doe	Peditrician	andrew_wr2@yahoo.com	01xxxxxxxx
10	Dr. Madeline Jay	Gynecologist	madeline107@gmail.com	01xxxxxxxx
5	Dr. Jane Foster	Endocrinologist	jane_ag2@tahoo.com	01xxxxxxxx
12	Dr. Tony Banner	Medicine Doctor	tony.edith@gmail.com	01xxxxxxxx
13	Dr. Sam Smith	Neurologist	sam.2f@gmail.com	01xxxxxxxx
14	Dr. Anna Cuberton	Neurologist	anna_kt@gmail.com	01xxxxxxxx
9	Dr. Christine Palmer	Gynecologist	christine87@yahoo.com	01xxxxxxxx
16	Dr. Beryl Wilde	Peditrician	beryl7@hotmail.com	01xxxxxxxx

Figure 5.1.7: 'docinfo' table from 'medicine' Database Implementation Model



DrugID	DrugName	Form	Strength	Indication
4	PAREDRINE	SOLUTION/DROPS;OPHTHALMIC	1%	
159	SULFAPYRIDINE	TABLET;ORAL	500MG	For the treatment of HIV-1 infection, in combinati...
552	LIQUAEMIN SODIUM	INJECTABLE;INJECTION	20,000 UNITS/ML	For palliative treatment of advanced prostate canc...
552	LIQUAEMIN SODIUM	INJECTABLE;INJECTION	40,000 UNITS/ML	* Indicated in combination with fulvestrant for th...
552	LIQUAEMIN SODIUM	INJECTABLE;INJECTION	5,000 UNITS/ML	Used in combination with prednisone for the treatm...
552	LIQUAEMIN SODIUM	INJECTABLE;INJECTION	1,000 UNITS/ML	Acalabrutinib is currently indicated for the treat...
552	LIQUAEMIN SODIUM	INJECTABLE;INJECTION	10,000 UNITS/ML	For the maintenance of abstinence from alcohol in ...
552	LIQUAEMIN LOCK FLUSH	INJECTABLE;INJECTION	100 UNITS/ML	For treatment and management of diabetes type II (...
552	HEPARIN SODIUM	INJECTABLE;INJECTION	1,000 UNITS/ML	For the management of hypertension and ventricular...
552	HEPARIN SODIUM	INJECTABLE;INJECTION	5,000 UNITS/ML	Indicated for the relief of pain and inflammation...
552	HEPARIN SODIUM	INJECTABLE;INJECTION	10,000 UNITS/ML	Acemetacin is not FDA, Canada or EMA approved, but...
552	LIQUAEMIN SODIUM PRESERVATIVE FREE	INJECTABLE;INJECTION	1,000 UNITS/ML	For the treatment and prevention of thromboembolic...
552	LIQUAEMIN SODIUM PRESERVATIVE FREE	INJECTABLE;INJECTION	5,000 UNITS/ML	Acepromazine was first used in humans in the 1950s...
552	LIQUAEMIN SODIUM PRESERVATIVE FREE	INJECTABLE;INJECTION	10,000 UNITS/ML	Acepromazine is often used in combination with m...
734	HISTAMINE PHOSPHATE	INJECTABLE;INJECTION	EQ 1MG BASE/ML	For temporary relief of fever, minor aches, and pa...
734	HISTAMINE PHOSPHATE	INJECTABLE;INJECTION	EQ 0.2MG BASE/ML	For adjunctive treatment of: edema due to congesti...
734	HISTAMINE PHOSPHATE	INJECTABLE;INJECTION	EQ 0.1MG BASE/ML	Used to treat infections in the ear canal.
793	BUTISOL SODIUM	TABLET;ORAL	15MG **Federal Register determination that product	Used, in addition to antibiotics or medical proced...
793	BUTISOL SODIUM	TABLET;ORAL	50MG **Federal Register determination that product	For the treatment of disorganized and psychotic th...
793	BUTISOL SODIUM	TABLET;ORAL	30MG	Not Annotated
793	BUTISOL SODIUM	TABLET;ORAL	100MG **Federal Register determination that produc	Acetylcarnitine is not approved for any indication...
1104	DOCA	INJECTABLE;INJECTION	5MG/ML	Used to obtain miosis of the iris in seconds after...
1504	VERARD	UNKNOWN	UNKNOWN	Acetylcysteine is used mainly as a mucolytic and i...
1546	GUANIDINE HYDROCHLORIDE	TABLET;ORAL	125MG	Used for fast digitalization in congestive heart f...
2139	MENADIONE	TABLET;ORAL	5MG	For use in the temporary relief of various forms o...

Figure 5.1.8: ‘medinfo’ table from ‘medicine’ Database Implementation Model

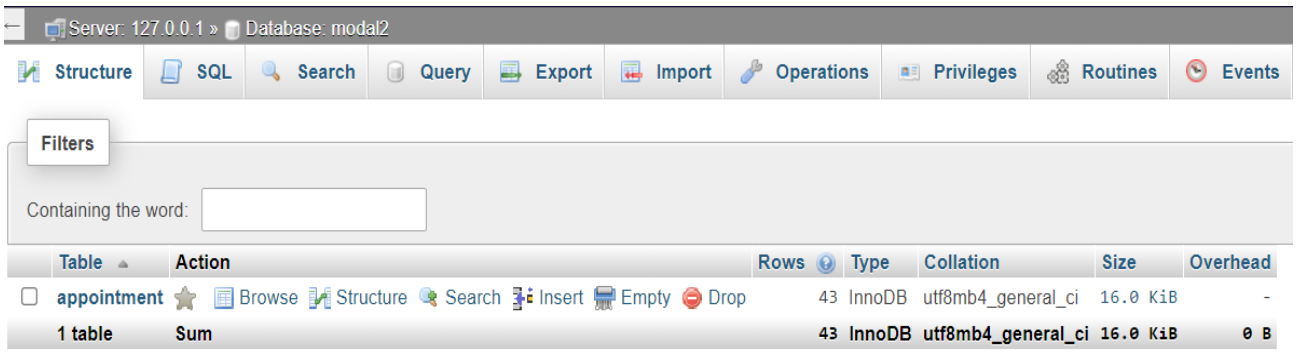


Figure 5.1.9: ‘modal2’ Database Implementation Model

Server: 127.0.0.1 » Database: modal2 » Table: appointment

Browse | Structure | SQL | Search | Insert

+ Options

pname	email	contact	doctor	date
ja	ja@hsd.com	123	doctor2	2021-02-16
hhh	hhh@gsa.cd	567	doctor2	2021-02-15
45	rt@df.cg	564	doctor3	2021-02-09
rt	gh@gh.bh	57556	doctor4	2021-02-15
ik	ik@shdj.com	1293	doctor5	2021-02-08
lk	rt@dfg.cod	3433	doctor2	2021-02-22
kk	kk@sd.cvf	678	doctor5	2021-02-27
klk	klk@jsd.cv	456	doctor2	2021-03-07
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
hlh	hlh@sjh.cdf	0123	Dr. Sam Smith	2021-02-21
titi	tit@as.com	019	Dr. Beryl Wilder	2021-02-25
df	df@sdj.com	9239	Dr. Christina Green	2021-02-15
df	df@sdj.com	9239	Dr. Christina Green	2021-02-15
df	df@sdj.com	9239	Dr. Christina Green	2021-02-15
df	df@sdj.com	9239	Dr. Christina Green	2021-02-15
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df	df@sdj.com	9239	Dr. Christina Green	2021-02-15
df	df@sdj.com	9239	Dr. Christina Green	2021-02-15
df	df@sdj.com	9239	Dr. Christina Green	2021-02-15

Figure 5.1.10: ‘appointment’ table from ‘modal2’ Database Implementation Model

Server: 127.0.0.1 » Database: newsletter

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | Events

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
subscribe	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_general_ci	16.0 KiB	-
1 table	Sum	3	InnoDB	utf8mb4_general_ci	16.0 KiB	0 B

Figure 5.1.11: ‘newsletter’ Database Implementation Model

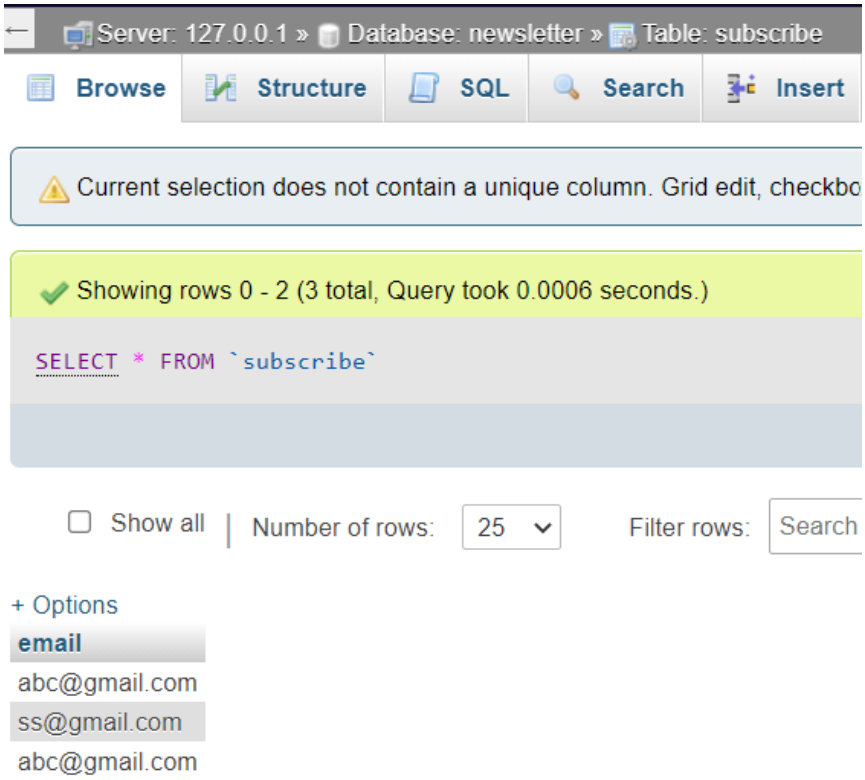

Figure 5.1.12: ‘subscribe’ table from ‘newsletter’ Database Implementation Model

In Fig 5.1.1 to 5.1.12, The implementation of data in the database is given.

5.2 Implementation of Front-end Design

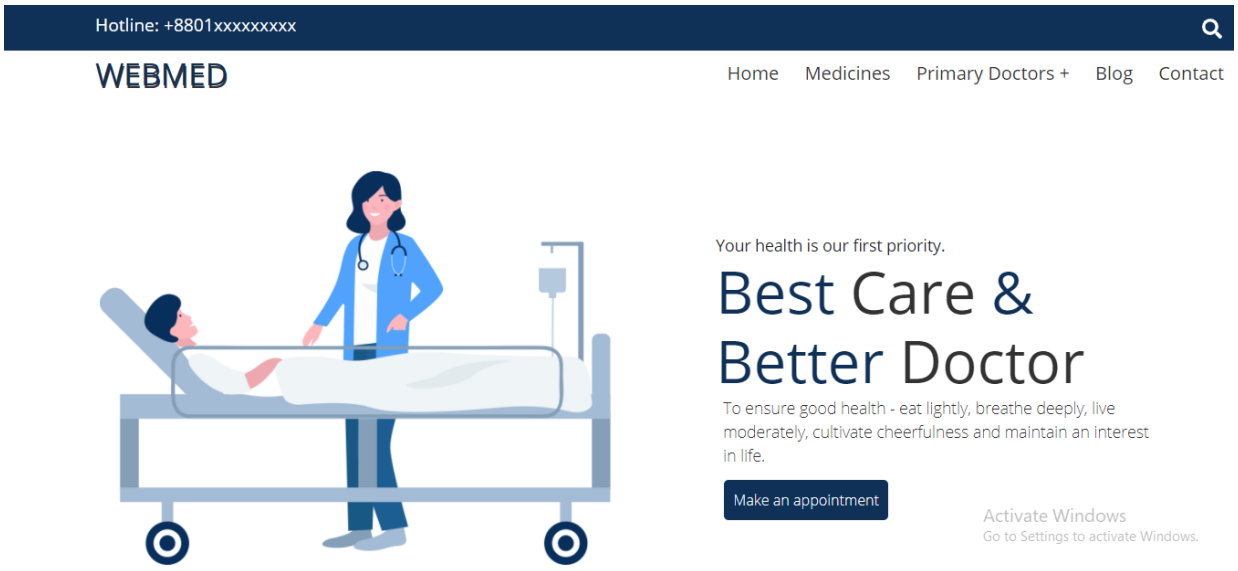

Fig 5.2.1: Opening of "WebMed" website

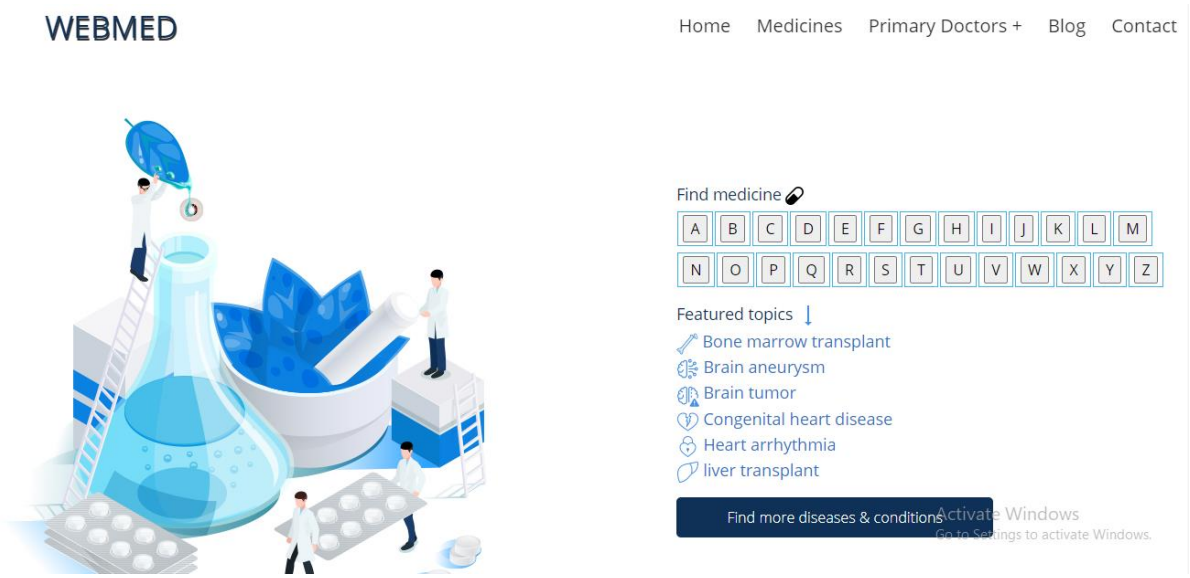

Fig 5.2.2: Featured topics and medicine index

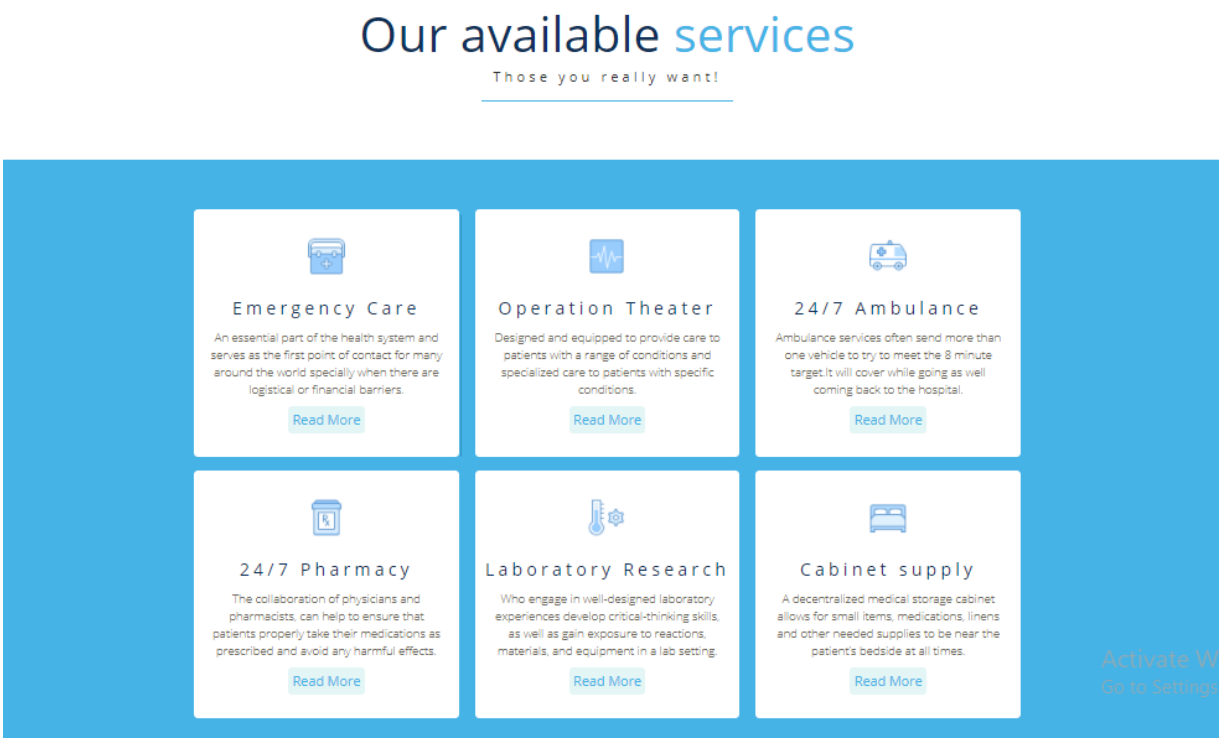

Fig 5.2.3: All the available features

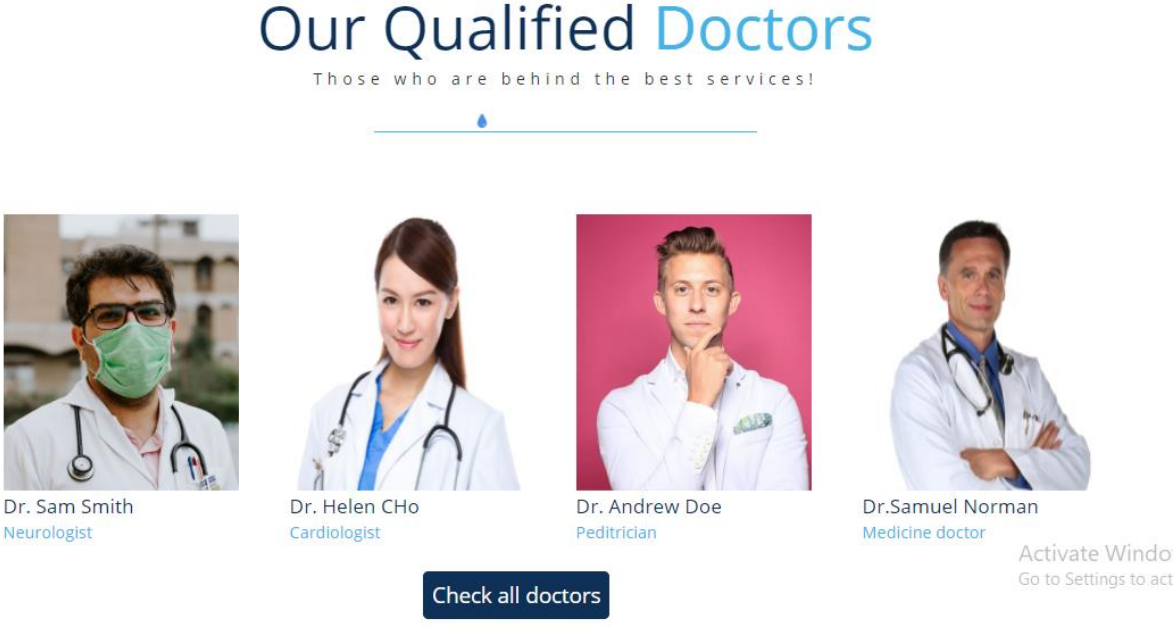

Fig 5.2.4: Details of Doctors

Fig 5.2.5: Some of the notable features of the hospital

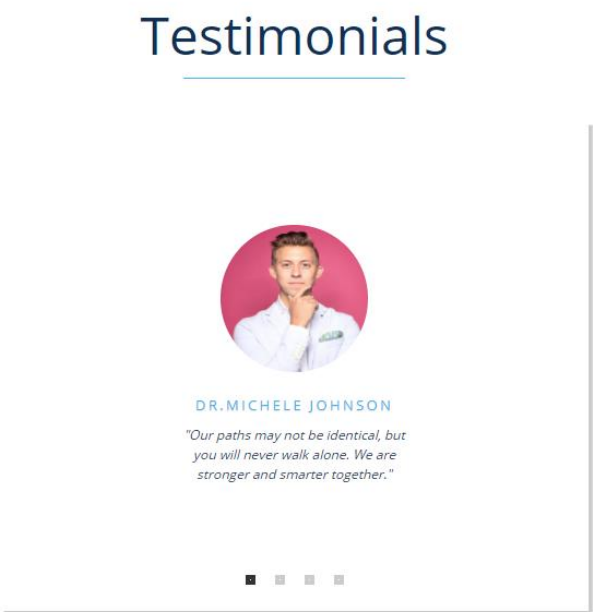

Fig 5.2.6: Testimonials of the doctors

In the all Figures above, All the main features, motive, objective are presented.

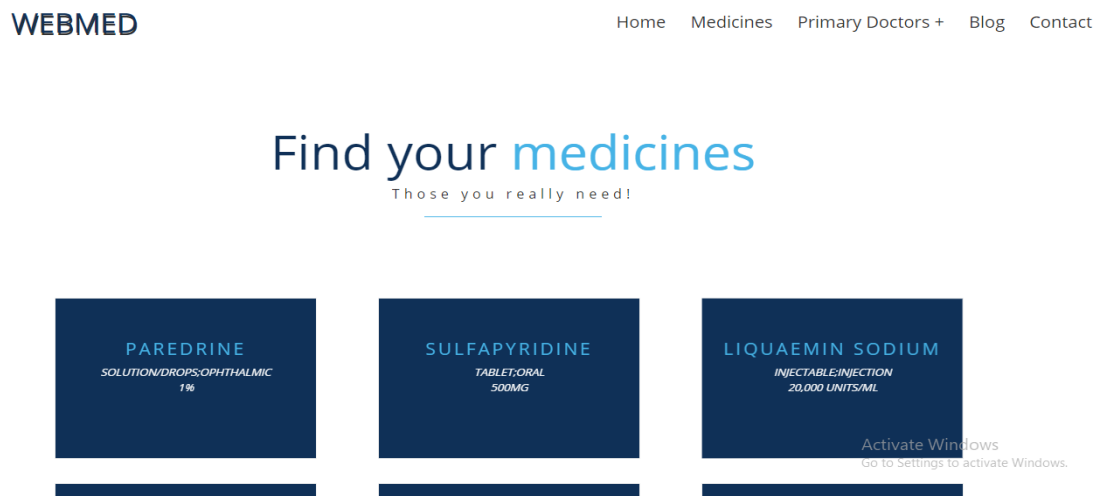

Fig 5.2.7: Medicine page

Fig 5.2.8: Hover on the cards to view medicine usage method

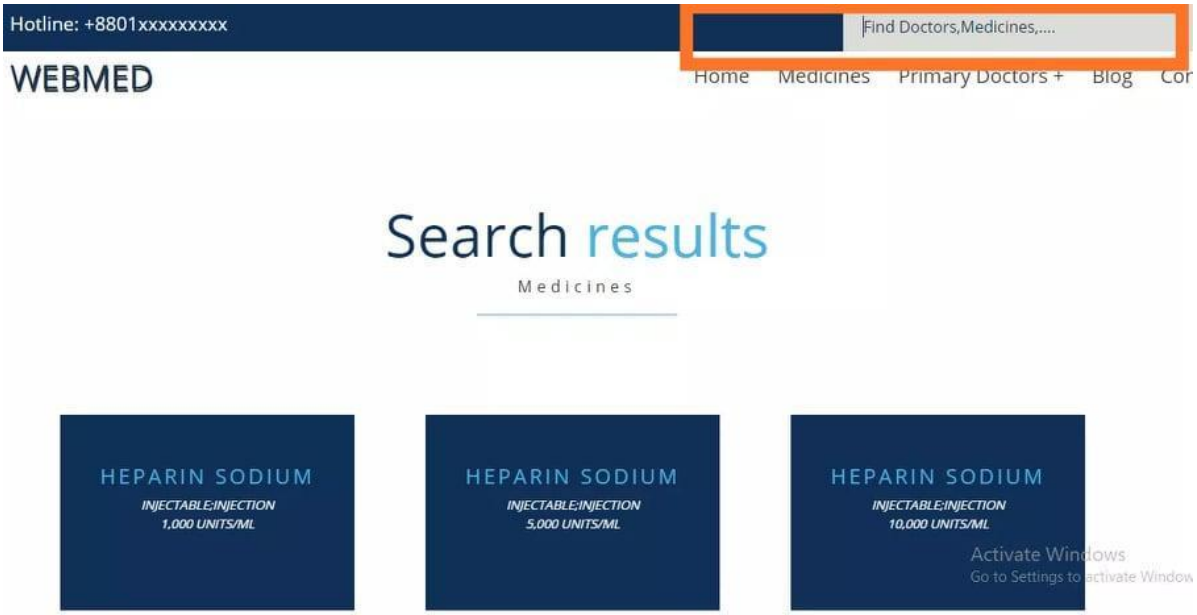

Fig 5.2.9: Search Medicine and Doctor

In Fig 5.2.7 and Fig 5.2.8, and Fig 5.2.9 Medicine page is presented. Doctors and Medicine can be searched by name through the search button.

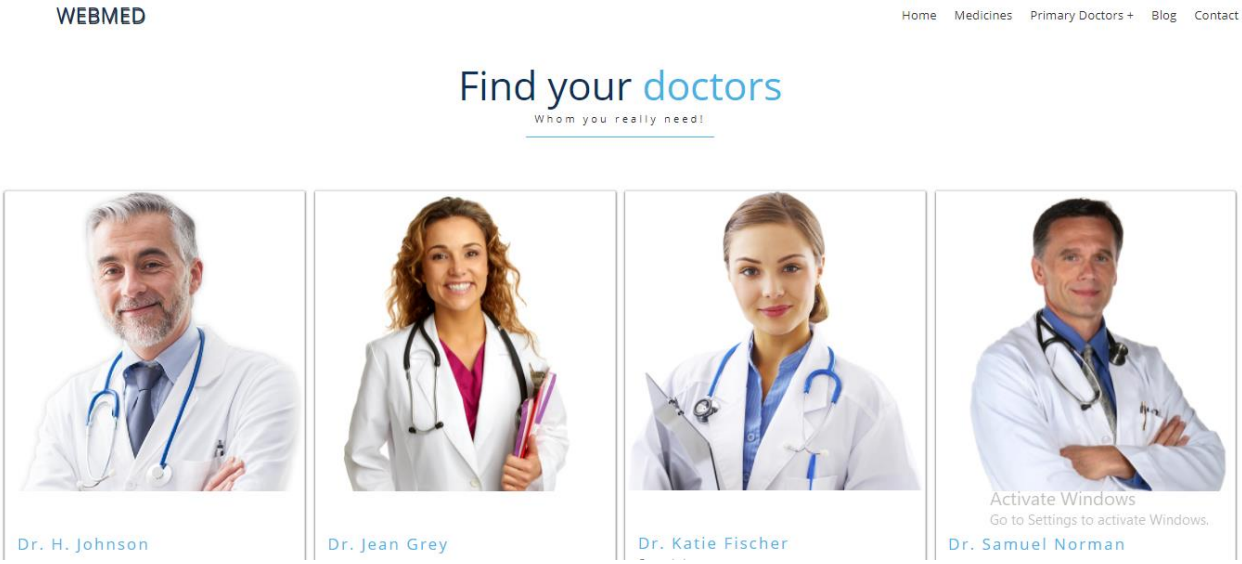

Fig 5.2.10: View the doctors' details

Fig 5.2.11: Browse for different categories of doctors

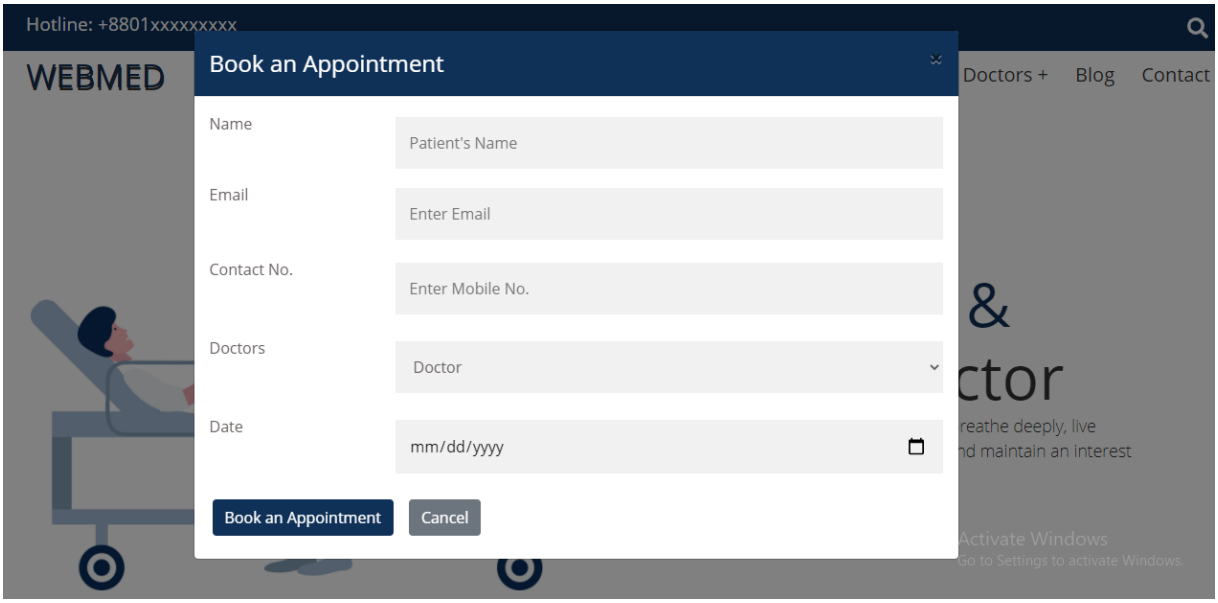

Fig 5.2.12: Book an appointment

In Fig 5.2.10, Fig 5.2.11, and Fig 5.2.12 Doctors details are given. Users can book appointment from the available doctors.

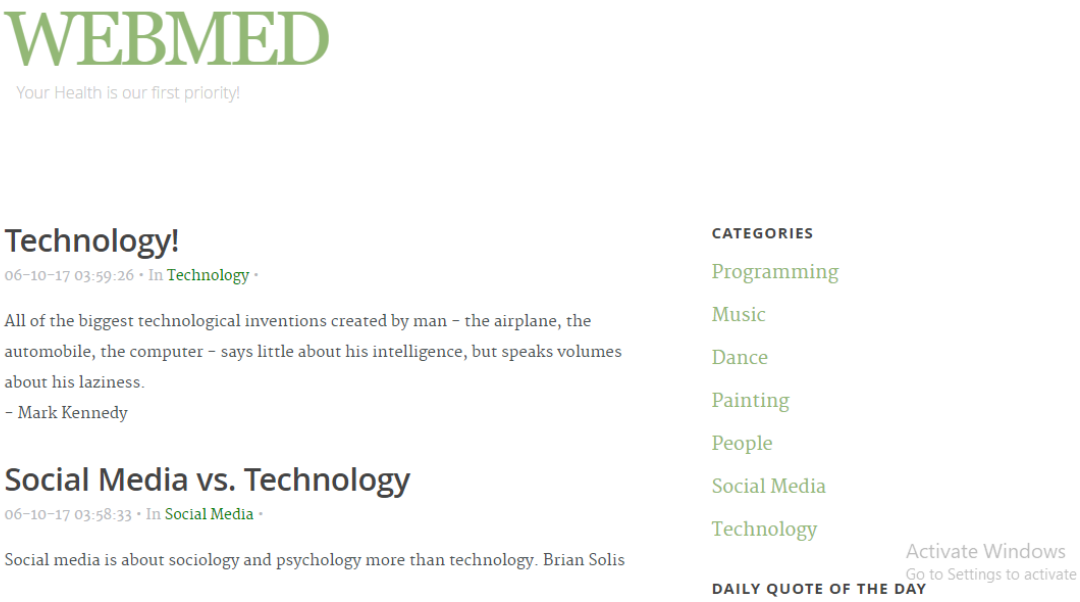

Fig 5.2.13: Blog page

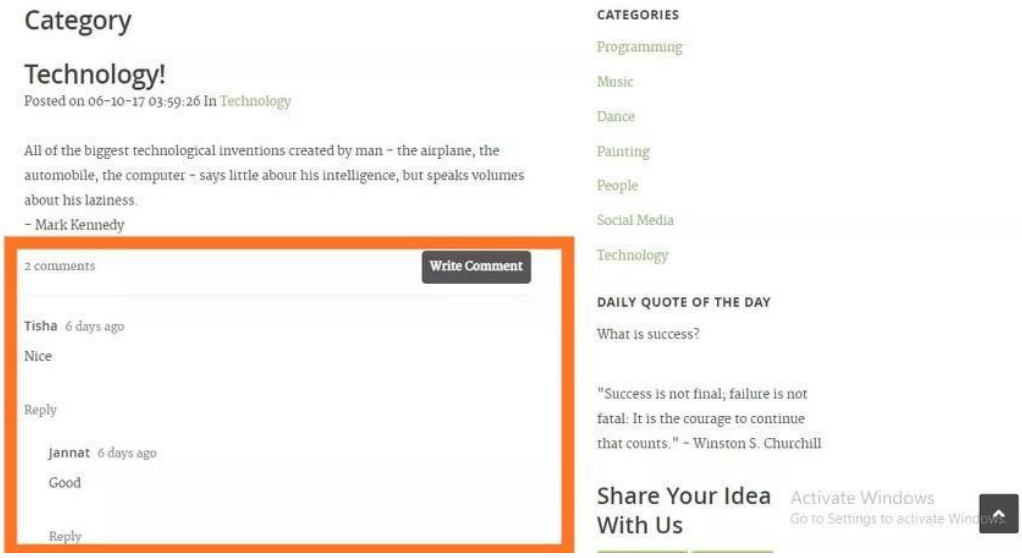

Fig 5.2.14: Put your opinion and make a reply to others

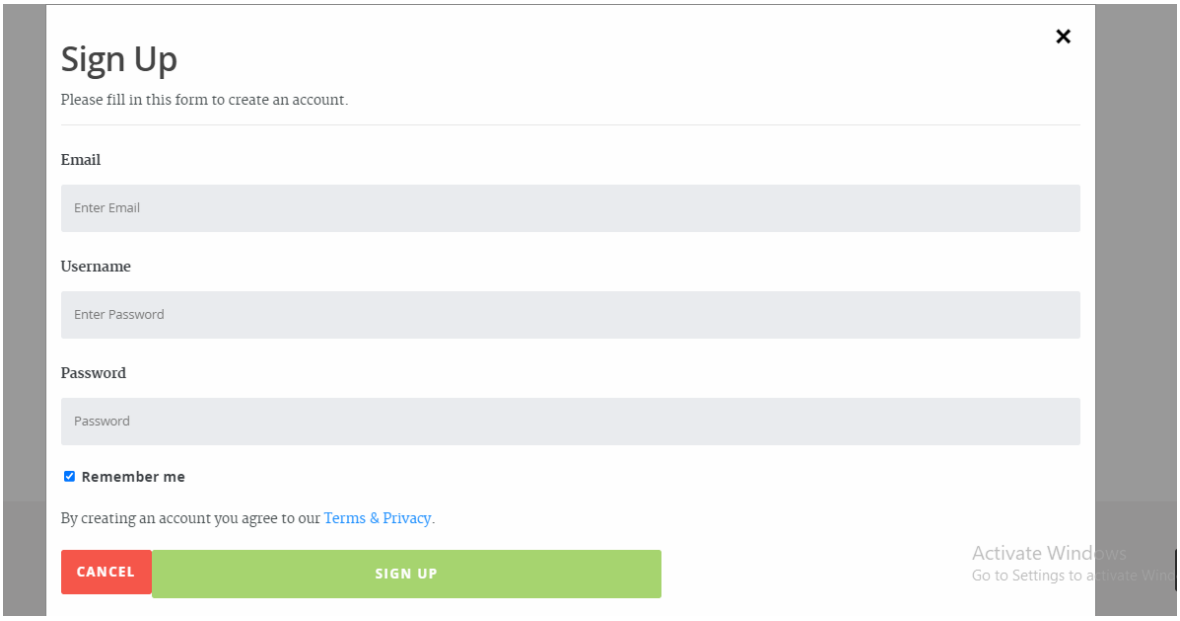

Fig 5.2.15: Sign up to create own account and put your own blog

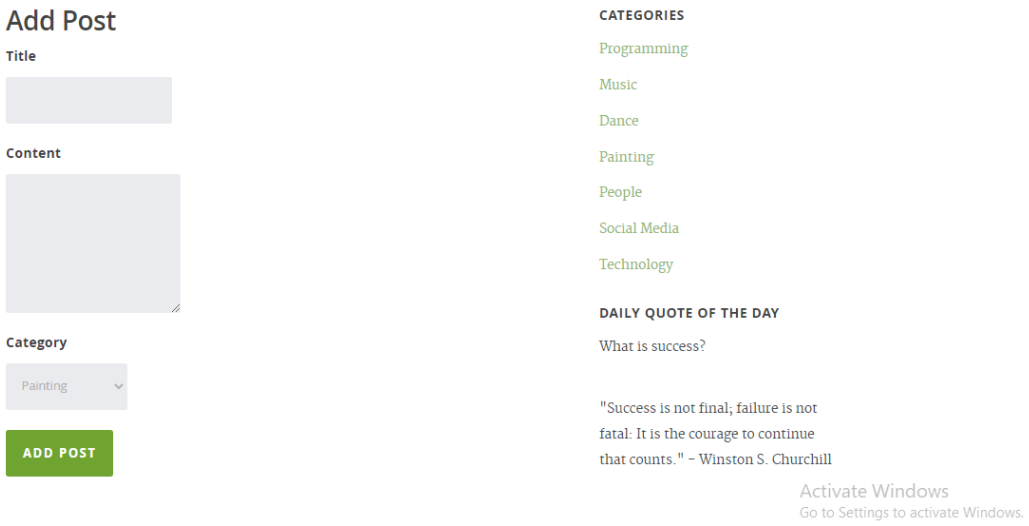

Fig 5.2.16: After creating own account adding a new blog.

In Fig 5.2.13, Fig 5.2.14, and Fig 5.2.15 Blog page are shown. Users can read blogs and make comments and reply also. If users create an account they could create their own blog and modify their previous blog.

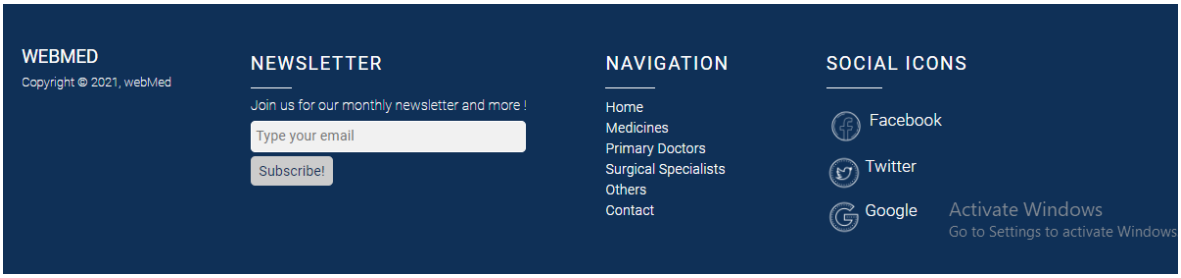

Fig 5.2.17: Press the Subscribe button to get the latest update

In Fig 5.2.17, Contact process is given, put email and get updated about WebMed.

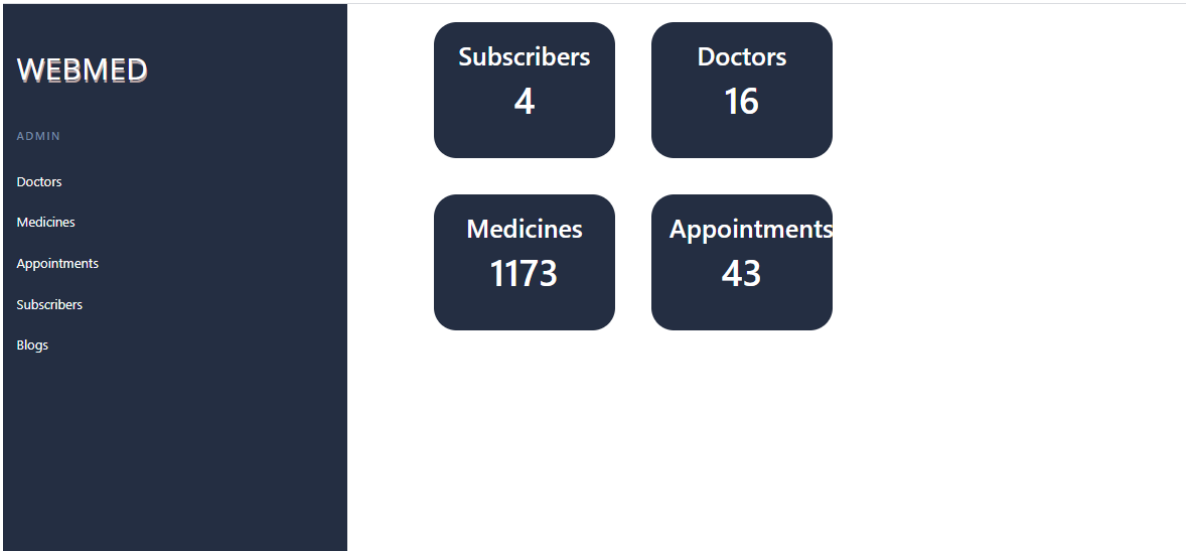

Fig 5.2.18: Dashboard

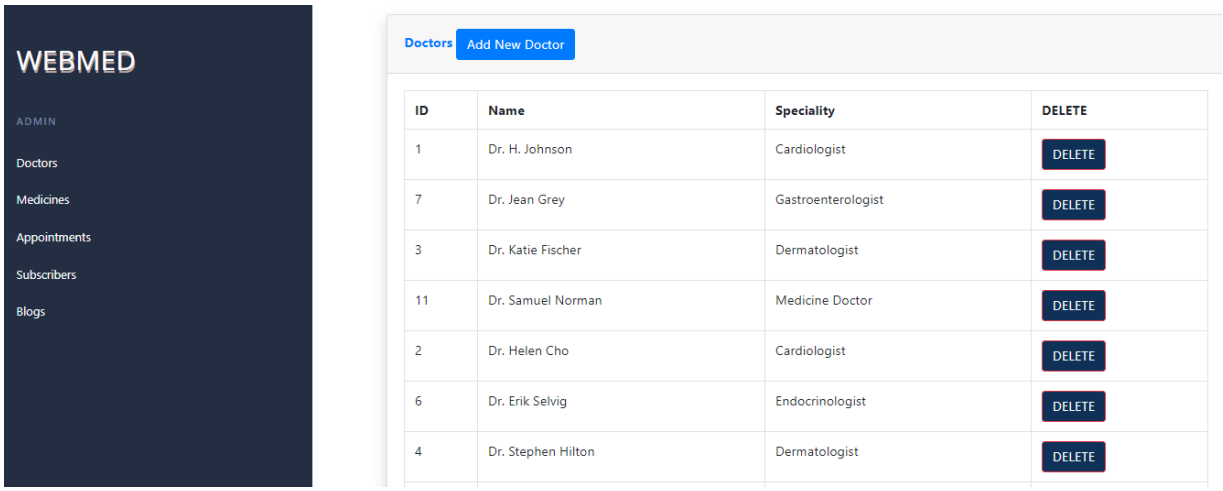

Fig 5.2.19: View doctors list and add new doctors(Dashboard)

In Fig 5.2.18 and Fig 5.2.19 Dashboard are shown. Doctors, Subscribers, and all Appointments can be managed from this dashboard.

5.3 Implementation of Interactions

Interactions are well known in our communication system now. It always occurs, because our communication system is very easy and fast now. It helps us to do a lot of work at the same time. If we are on a page to work on a task, but this time we can do a lot of other work with its help. It should be done in such a way that attracts the users.

5.4 Testing Implementation

5.4.1 Testing

Testing is the most important thing in every project. It helps us to judge the quality of the website. If there are any problems, we have to solve this problem for better performance. In this project, we will implement a website for the E-Medicine service.

5.4.2 Unit Test

For better performance, we should test every single part of the website. It will confirm our site's performance.

5.4.3 Unit Test Case

There are two points in the Unit test case. One is the database handler and another one is the interface handler. There are some functions used in the site which will add, edit and delete the information data.

5.4.4 Implementation Test

If there is any important thing, then this is the one. It will help to make users expert, testing the system for giving better performance.

5.5 Test Result and Reports

It helps to ensure any faults of the website. If there is any error when it is being tested, the problem can be found and solved for better performance. It will confirm the website's accuracy. The report will give all the information about this.

CHAPTER 6
Conclusion and Future Scope

6.1 Discussion and Conclusion

E-Medicine service is a very exciting topic to work on. After going through the work, we faced many challenging tasks that are surprisingly related to our educational system.

We researched so many medicine store tools that showed us the direction how to develop our system. We interact with the patients about what type of problems they are facing. They were very happy to use this website as it will give them some relief in the modern online era.

We talked with several teachers, took some guidelines that helped us a lot to develop this website. They encouraged us a lot to do this project.

Despite everything we achieved, we faced many challenges to finish this project. After all it's an online-based system so in real life people need to follow the rules otherwise it's goal will be failed.

It's an innovative idea. The opportunities that are provided through this website are huge. We interact with too many regular patients, listen to their problems, try to understand the communication gap and come up with this website. Hope it will help them a lot.

6.2 Scope of Further Development

E-Medicine service is always a changeable system. It develops day by day, getting better and better. Today, what looks good tomorrow becomes old. So, we have to update this system from time to time. It can be useful not only for only one city but also for our entire country. To fulfill that goal, we have several ideas to do.

1. We want to develop it for all the patients.

2. We want to make this website more suitable, flexible, user friendly, and keep updating the users from time to time.
3. Now it has only medicine and medicine information. But we will add an online medicine purchasing system in the future.

APPENDIX

Appendix A: Project Reflection

The appendix introduces us to the project's reflection. Any kind of group research project is very challenging. We had a little chance for group work in University. But we have the opportunity to do many types of work with the group. It helps us to increase our live working activities which will help to shine in future. Time management is more important for any project or work. We had a chance to make a website which will help to ease online appointments and medicine store facilities.

For every project planning, timing and hard work are very important. Proper plans will help to go to the highest stage of success. Everyone should give much effort for getting better success.

Appendix B: Related Diagrams

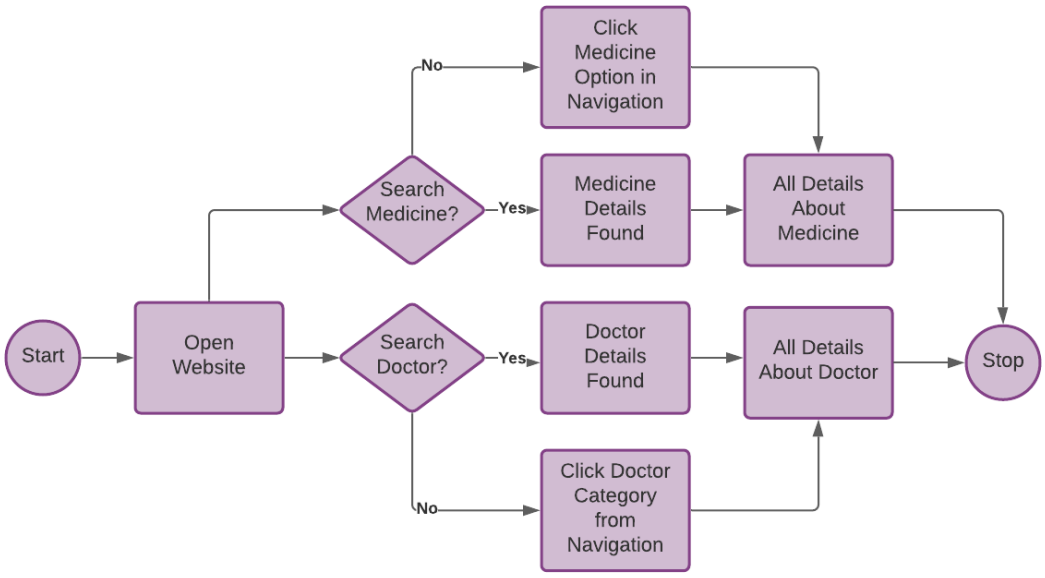

Fig 3.1: Business Process Modeling of E-Medicine Service

Fig 3.2: Use Case Modeling of E-Medicine Service

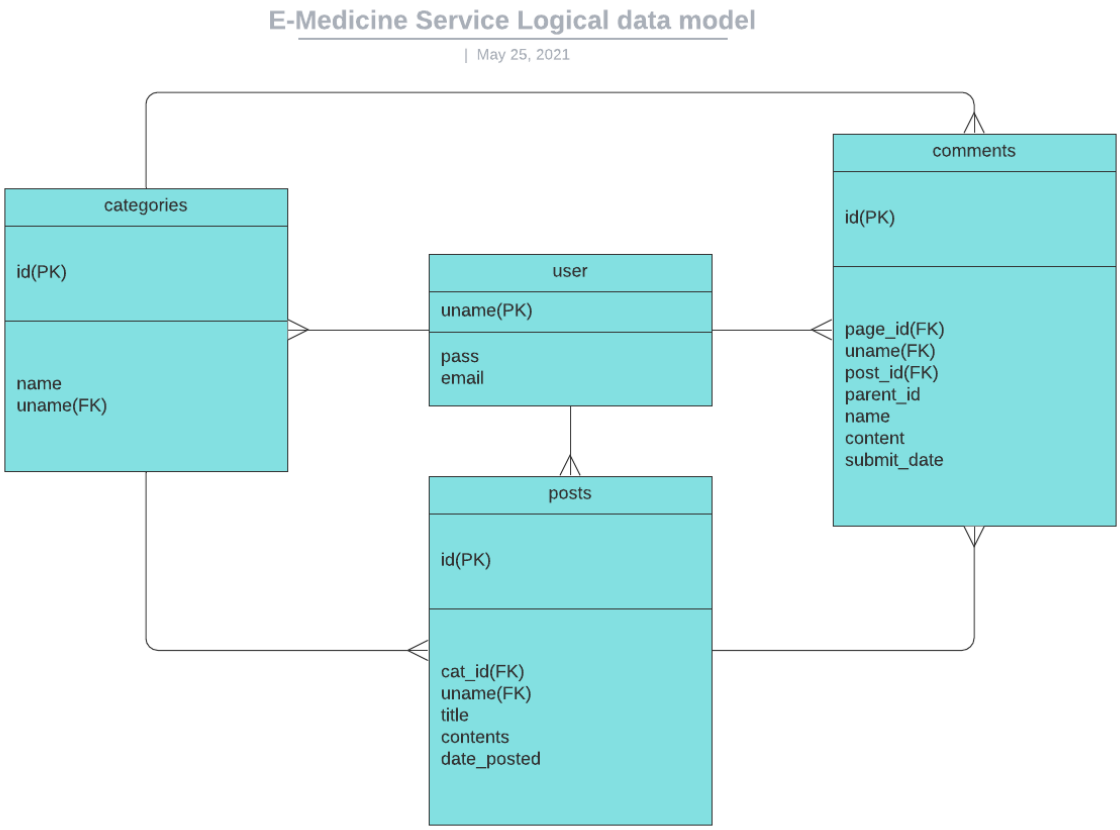

Fig 3.3: Logical Data Model of E-Medicine Service

REFERENCES

[1]