CAN THO UNIVERSITY SOFTWARE CENTER

MEKONG DELTA - APTECH

SEMESTER PROJECT – III

DOCTORS WEB FORUM

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1 PROBLEM DEFINITION

The need to learn knowledge, access scientific and technical information has become popular when the internet develops strongly today. Although learning and updating knowledge is quick and convenient, it is sometimes difficult to find the necessary information in a large amount of information, especially in the field of medicine, information and opinions. For researchers, doctors' experiences are exchanged together to better understand, as well as update new knowledge, new information is essential. The need for a forum wed doctor to create a place to exchange and exchange information is necessary

2 CUSTOMER REQUIREMENT SPECIFICATION (CRS)

2.1 Client: Doctors web forum

Business/Project Objective: Our client is a doctor who is one of the famous Cardiac specialists in the country. As he is one of the famous specialists in the country, he generally used to visit some places for operating some patients with some critical cardiac conditions. Also he used to get invitations from various colleges in the country for attending and giving the seminars, also he runs a college, which is one of the famous Medical colleges in the country.

Actually, he wants an online application such as a discussion forum for the doctors in the world, so that if any one is having any queries (for the junior doctors, etc.) or to discuss some new cases in different fields. He wants this application to be developed as this can bridge the gap between the various doctors available in the world and can know each other through this portal. Also, in case of any emergencies or for some special cases one can go through the application and search for the various doctors based on the specialization and the location which ever is suitable so that so many people s lives can be saved.

2.2 Overview of processes involved in the system

2.2.1 Guest

Register account

- in: contact details, personal, role user (Doctor/Normal user). If doctor, info of professional, qualification, experience, and as well the achievement details, viewable option (public/private)
- out: direct to homepage if success, fail message popup otherwise

Search

- in: Type search (basic/advanced) Search text Advanced search: search by
- out: Posts have title, tags include search text. User if search text is surname or full name

Create Post (Doctor/Normal user)

- in: Post details, title, tags, content

- out: Message success or fail, Created post

Delete Post (Doctor/Normal user)

- in: Own post
- out: Message success or fail

Comment (Doctor/Normal user)

- in: Post, comment content
- out: Added comment

Delete comment (Doctor/Normal user)

- in: Post, comment
- out: Deleted comment

2.2.2 Account user

Login

- in: username, password
- out: direct to homepage if success, fail message popp otherwise

Change user information

- in: new contact details, personal, professional, qualification, experience, and as well the achievement details if doctor sets viewable option (public/private)
- out: Message success or fail

Search

- in: Type search (basic/advanced) Search text Advanced search: search by
- out: Posts have titles, tags include search text. User if search text is surname or full name

Create Post (Doctor/Normal user)

- in: Post details, title, tags, content
- out: Message success or fail, Created post

Delete Post (Doctor/Normal user)

- in: Own post
- out: Message success or fail

Comment (Doctor/Normal user)

- in: Post, comment content
- out: Added comment

Delete comment (Doctor/Normal user)

- in: Post, comment
- out: Deleted comment

2.2.3 Admin user

Change user information

- in: new contact details, personal, professional, qualification, experience, and as well the achievement details if doctor..., viewable option (public/private)
- out: Message success or fail

Search

- in: Type search (basic/advanced) Search text, advanced search: search by …
- out: Posts have titles, tags include search text. User if search text is surname or full name

Create Post (Doctor/Normal user)

- in: Post details, title, tags, content
- out: Message success or fail, Created post

Delete Post (Doctor/Normal user)

- in: Own post
- out: Message success or fail

Comment (Doctor/Normal user)

- in: Post, comment content
- out: Added comment

Delete comment (Doctor/Normal user)

- in: Post, comment
- out: Deleted comment

Delete User (Admin)

- in: Account
- out: Message success or fail

Delete Post (Admin)

- in: Post
- out: Message success or fail

Delete Comment (Admin)

- in: Comment
- out: Message success or fail

2.2.4 Home page

Homepage of forum)

- in: number of registered users, number of logged in users
- out: show number of registered users, number of logged in users.

Notice: logo, background (cross)

User role:

- Admin: Account of Client
- Doctor: Doctor account, include info of professional, qualification, experience, and as well the + achievement details when registering.

- Normal User

2.3 Expected Delivery Dates: 03/6/2022

2.4 List of Deliverables

- Working Application
- Source Code
- Database
- Compiled Code
- eProject Report
- Document:
- Problem Definition
- Customer Requirement Specification
- Architecture and Design of the Project
- Class Diagram
- Use-case Diagrams
- Activity DiagramsDatabase Design/StructureTask Sheet
- Checklist of Validations
- Submission Checklist
- Supporting Document
- User Guide

2.5 Hardware and Software requirements

	Server	Client
Hardware	● CPU: intel core i5 ● RAM: 4GB RAM or better ● HDD: 500GB Hard Disk space or higher	● CPU: intel core i3 ● RAM: 2GB or higher ● HDD 128 GB or higher ● Operating system: Window 8 or better
Software	● Window server 2012 ● Internet Information ● Service (IIS) or other server. ● .NET Framework 4.6 ● SQL Server 2019	● Window 7/ 8/ 8.1/ 10 (or higher) ● Browsers: IE..., Chrome…

2.6 Scope of the Work (in brief)

- Build a system that meets the following requirements:

- Build Doctors web forum based on client-server model.
- The system will be maintained and repaired if any problems occur with the system.
- The system has the functions as stated:

Guest

- View information about comments, posts, personal information of registered members (members on public profile).
- Register
- Login
- Search information about comments, posts, personal information of registered members (members on public profile).

Authenticated Customer

- Make a question.
- Write a comment
- Post a research paper, an event.
- Public profile.
- View information about comments, posts, personal information of registered members (members on public profile).
- Search information by Date.
- Search information about comments, posts, personal information of registered members (members on public profile).
- Update profile.
- Change password.

Authenticated Doctor

- Make a question.
- Write a comment
- Post a research paper, an event.
- Public profile.
- View information about comments, posts, personal information of registered members (members on public profile).
- Search information by Date.
- Search information about comments, posts, personal information of registered members (members on public profile).
- Update profile.
- Change password.

Admin

- Make a question.
- Write a comment
- Post a research paper, an event.
- Public profile.
- View information about comments, posts, personal information of registered members (members on public profile).

- Search information by Date.
- Search information about comments, posts, personal information of registered members (members on public profile).
- Update profile.
- Change password.
- Delete account customer and doctor.
- Create account customer and doctor.

On the home page

- Show the nunber of users registered(count) and the number of users logged (count) in are to be displayed at the top corner of the page.

3 ARCHITECTURE AND DESIGN OF THE PROJECT

3.1 ARCHITECTURE AND DESIGN OF THE PROJECT

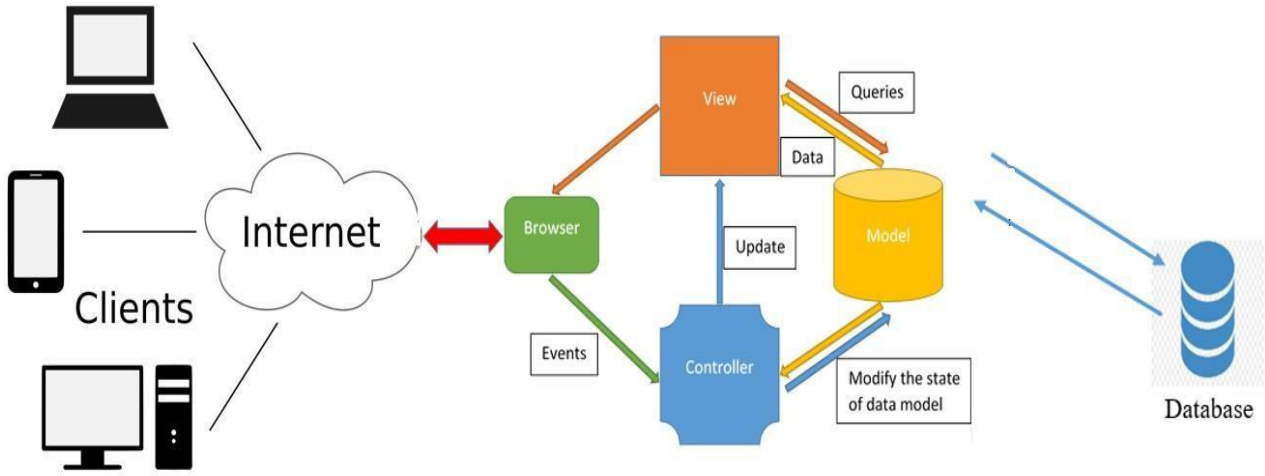

Figure 1 Architecture and Design of The Project

3.2 CLASS DIAGRAM

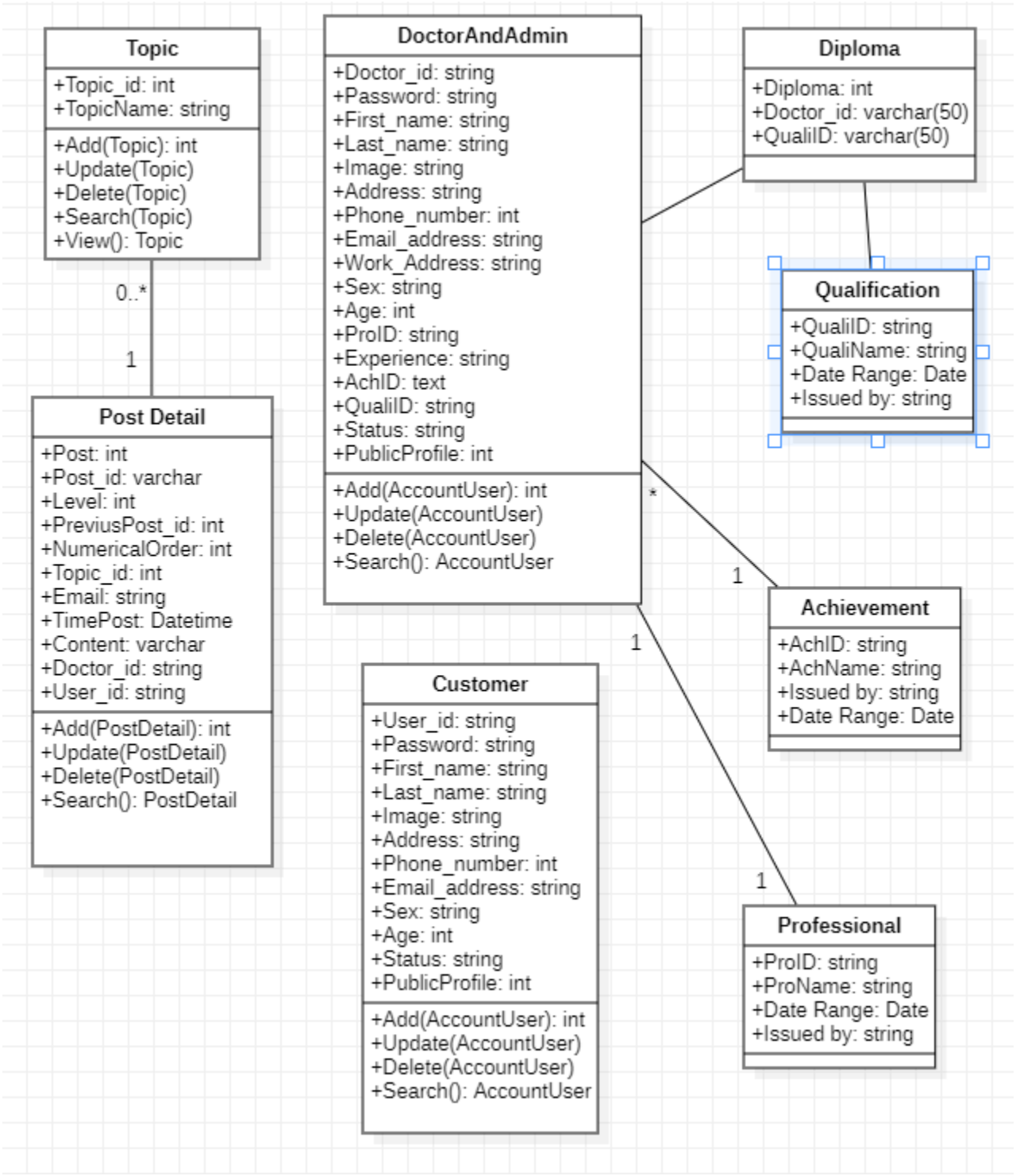

Figure 2 Class diagram

3.3 USE CASE DIAGRAM

3.3.1 USE CASE GUESS

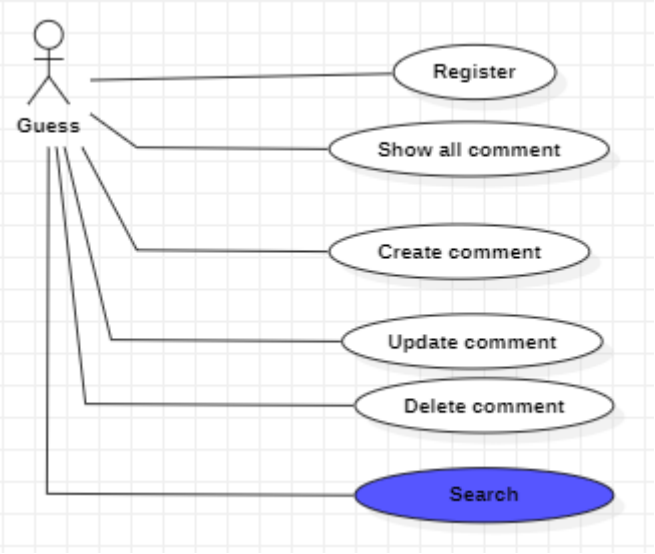

Figure 3: Use case guess

3.3.2 USE CASE CUSTOMER AND DOCTOR

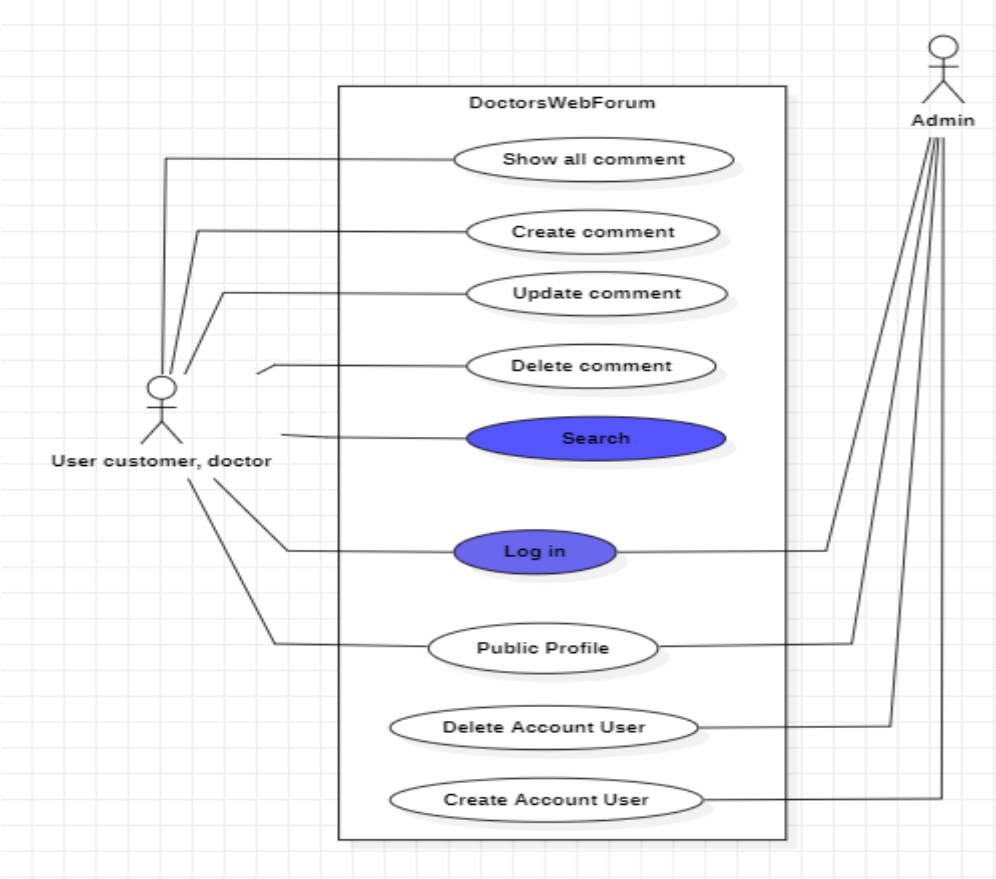

Figure 4 Use case Customer and Doctor

3.3.3 USE CASE LOGIN

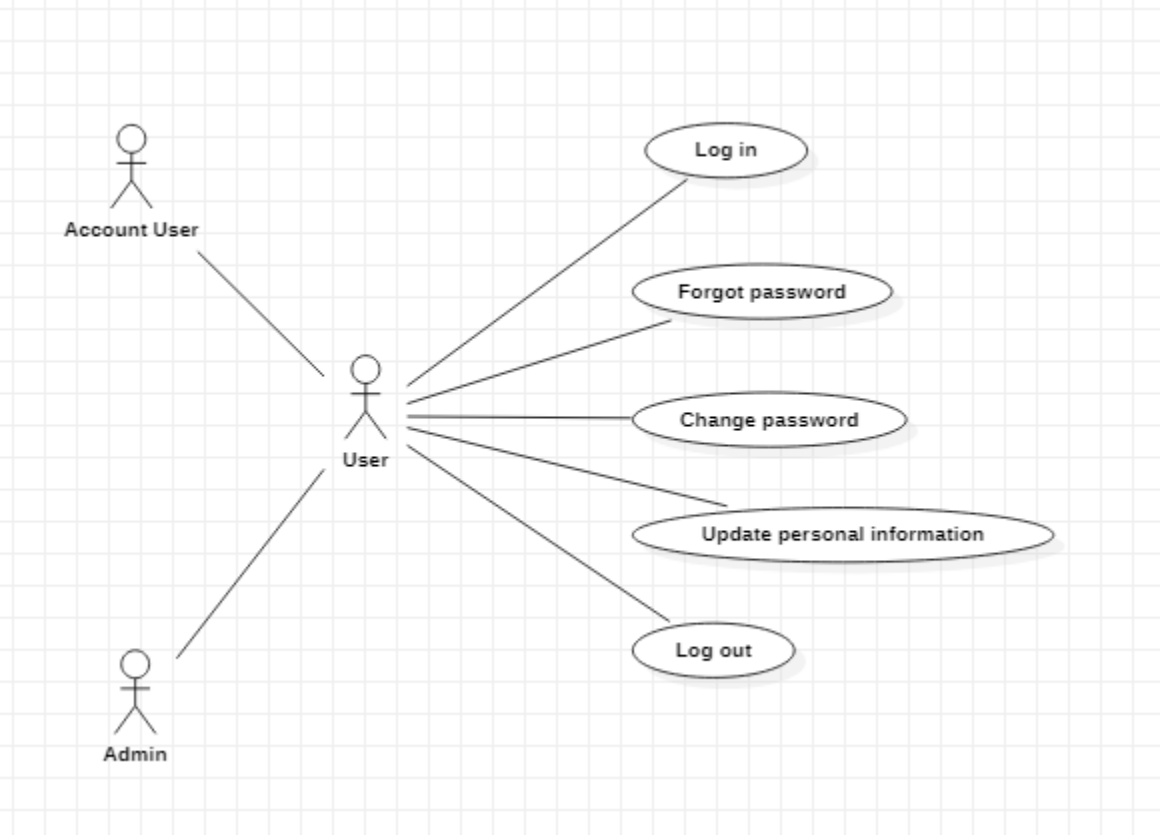

Figure 5 Use case login

3.3.4 USE CASE SEARCH

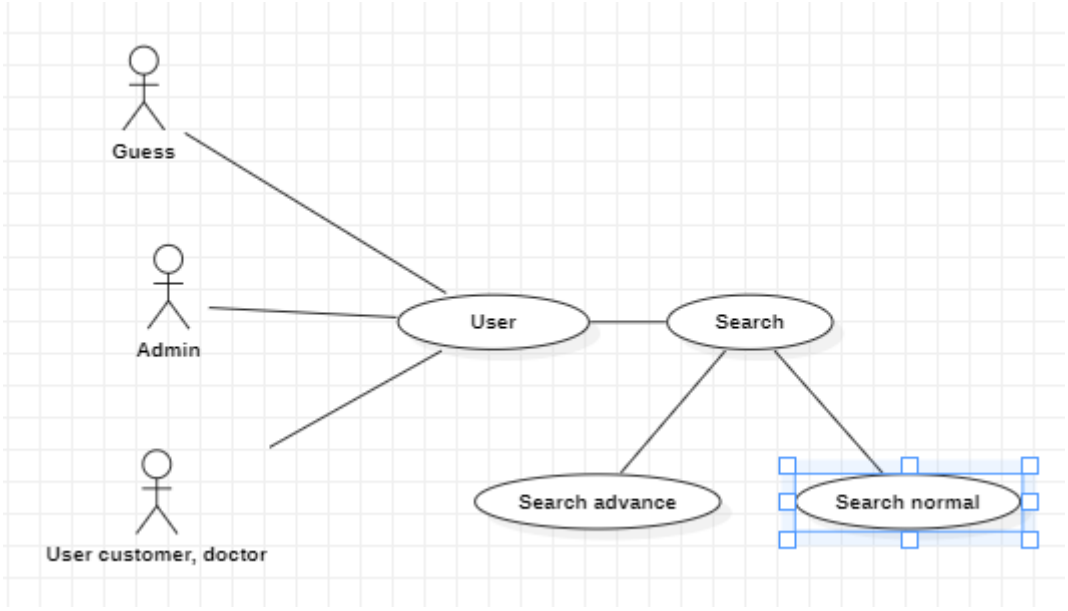

Figure 6 Use case search

3.4 ACTIVITY DIAGRAM

3.4.1 REGISTER:

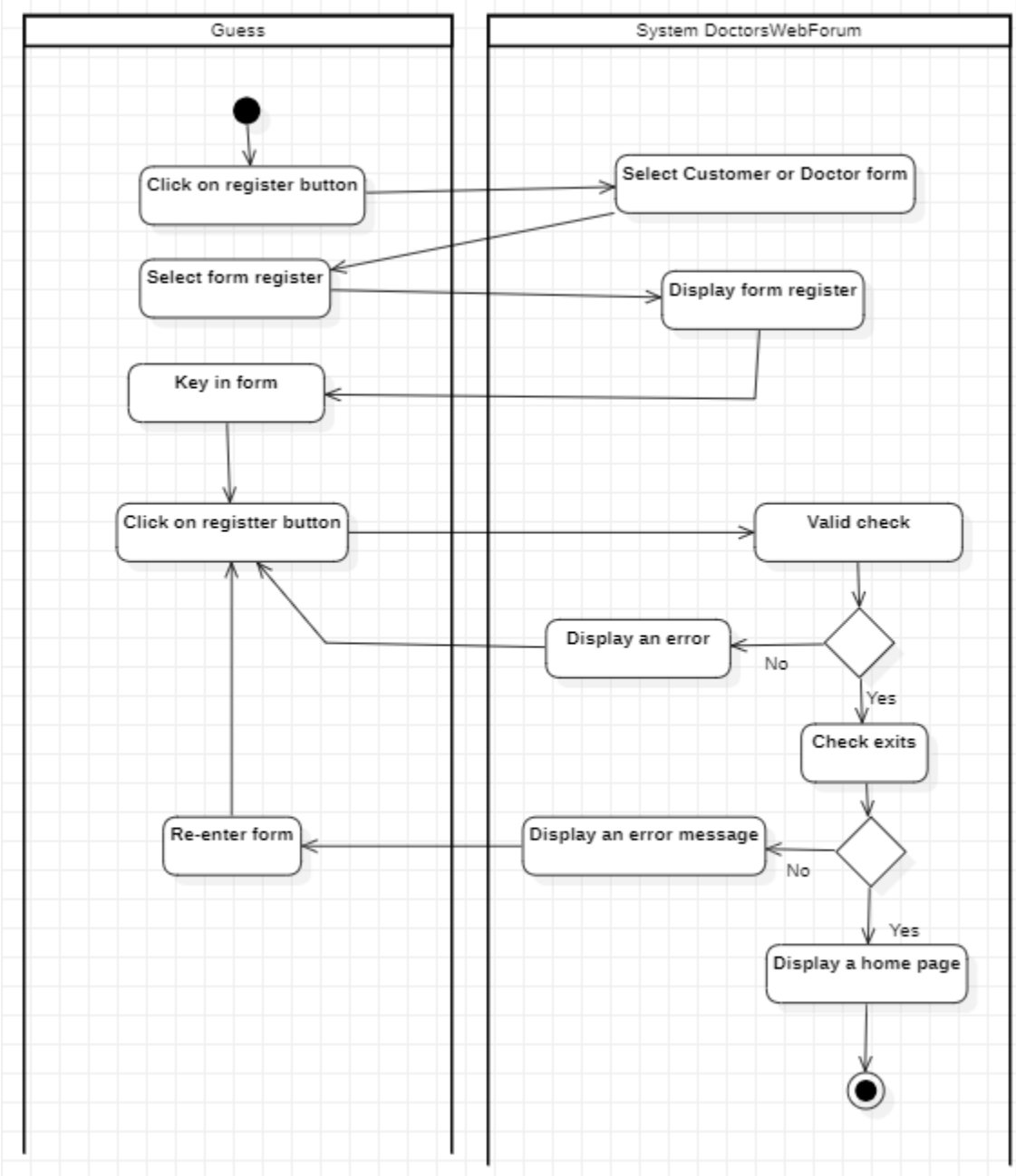

Figure 7 Activity diagram register

3.4.2 LOGIN

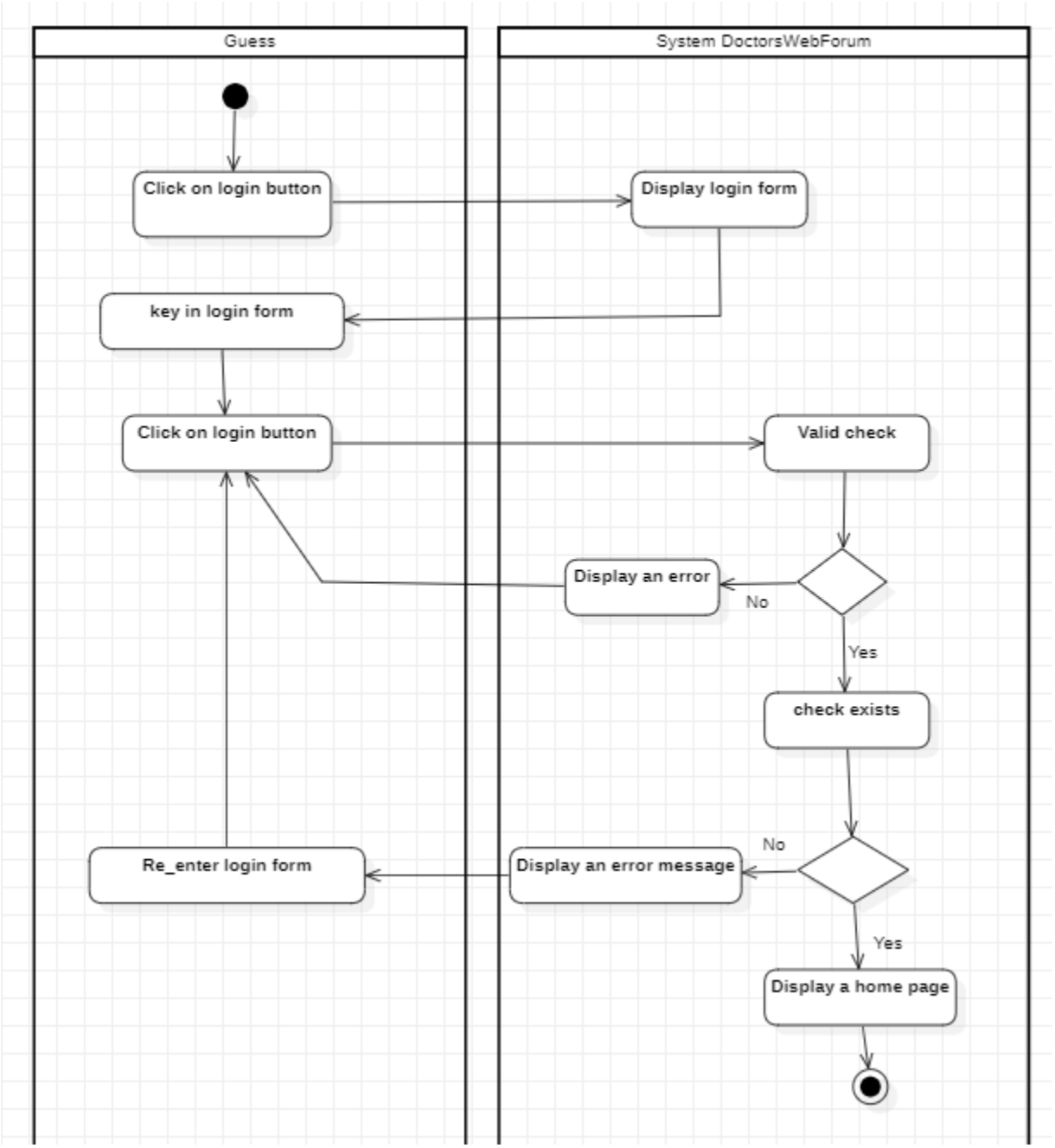

Figure 8 Activity diagram login

3.4.3 DELETE ACCOUNT USER

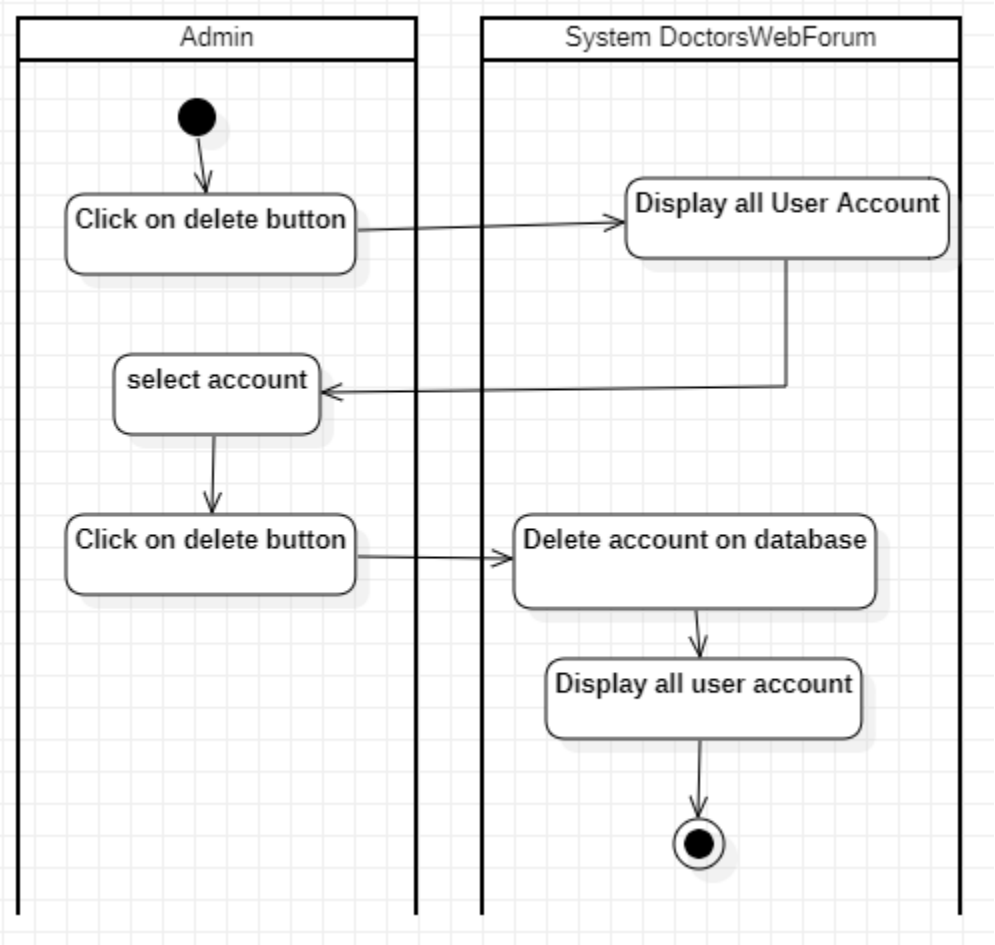

Figure 9 Activity diagram delete account user

3.4.4 CREAT COMMENT:

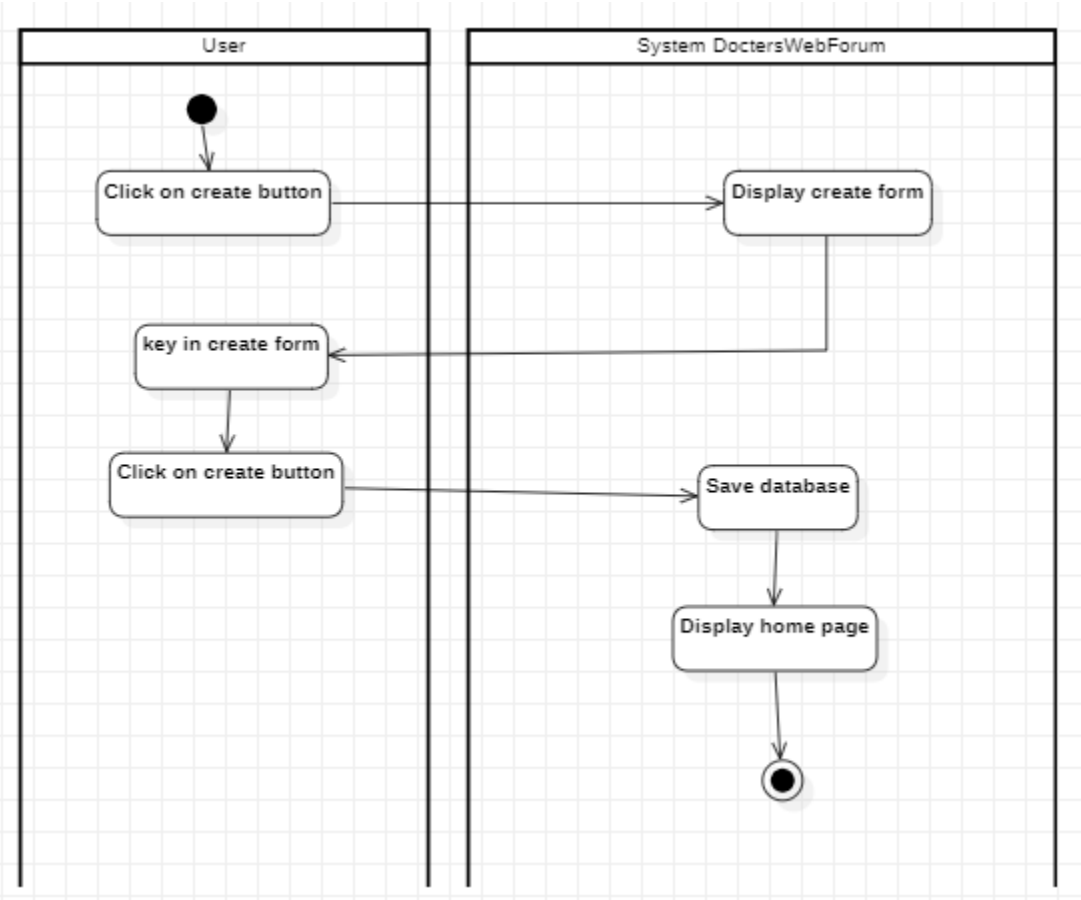

Figure 10 Activity diagram create comment

3.4.5 SEARCH

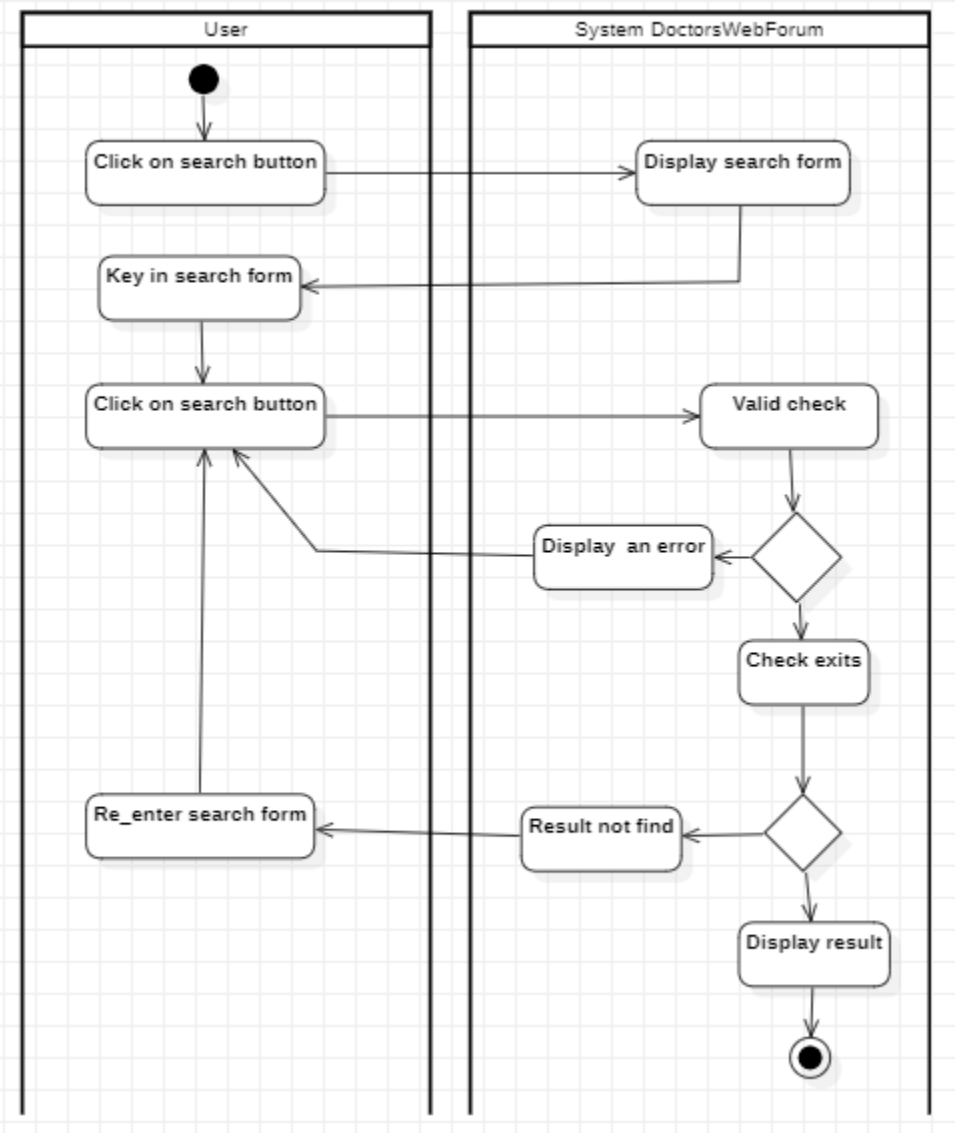

Figure 11 Activity diagram search

3.4.6 UPDATE COMMENT:

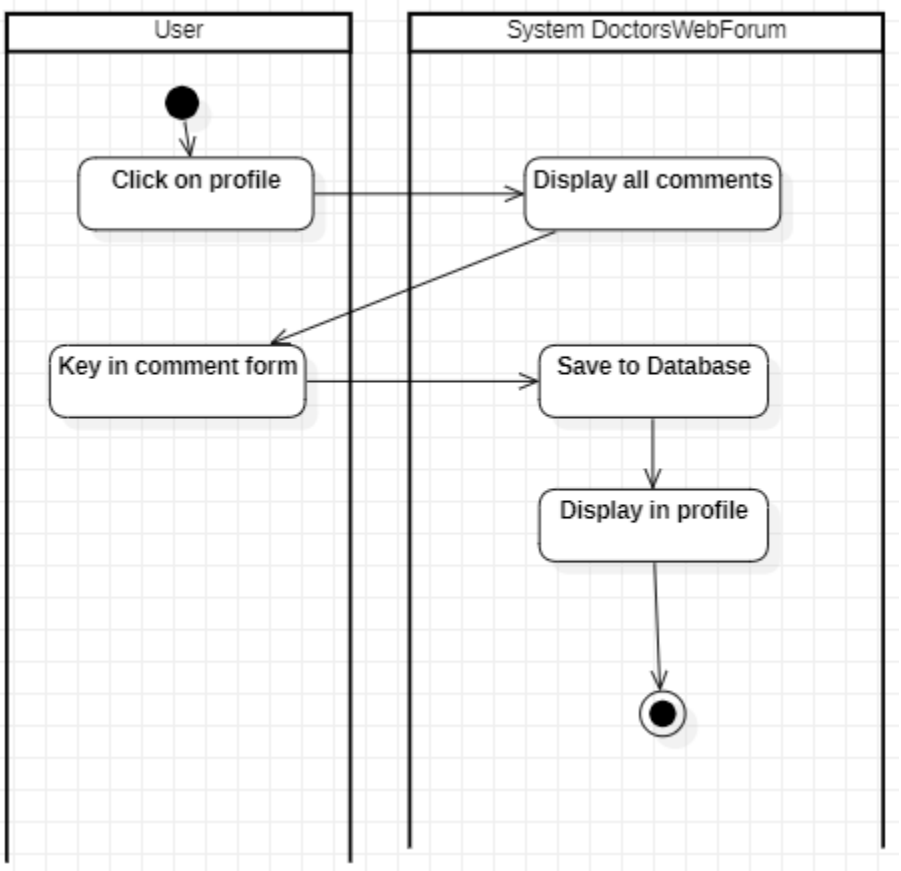

Figure 12 Activity diagram update comment

3.4.7 DELETE COMMENT

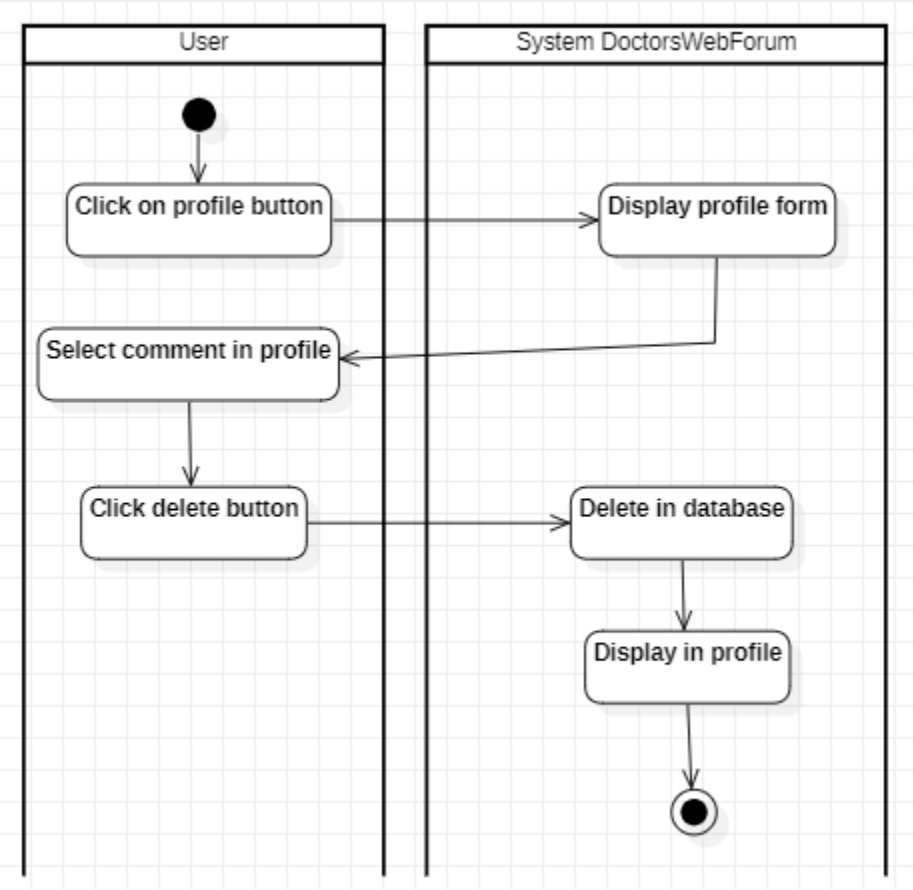

Figure 13 Activity diagram delete comment

3.4.8 USER ONLINE

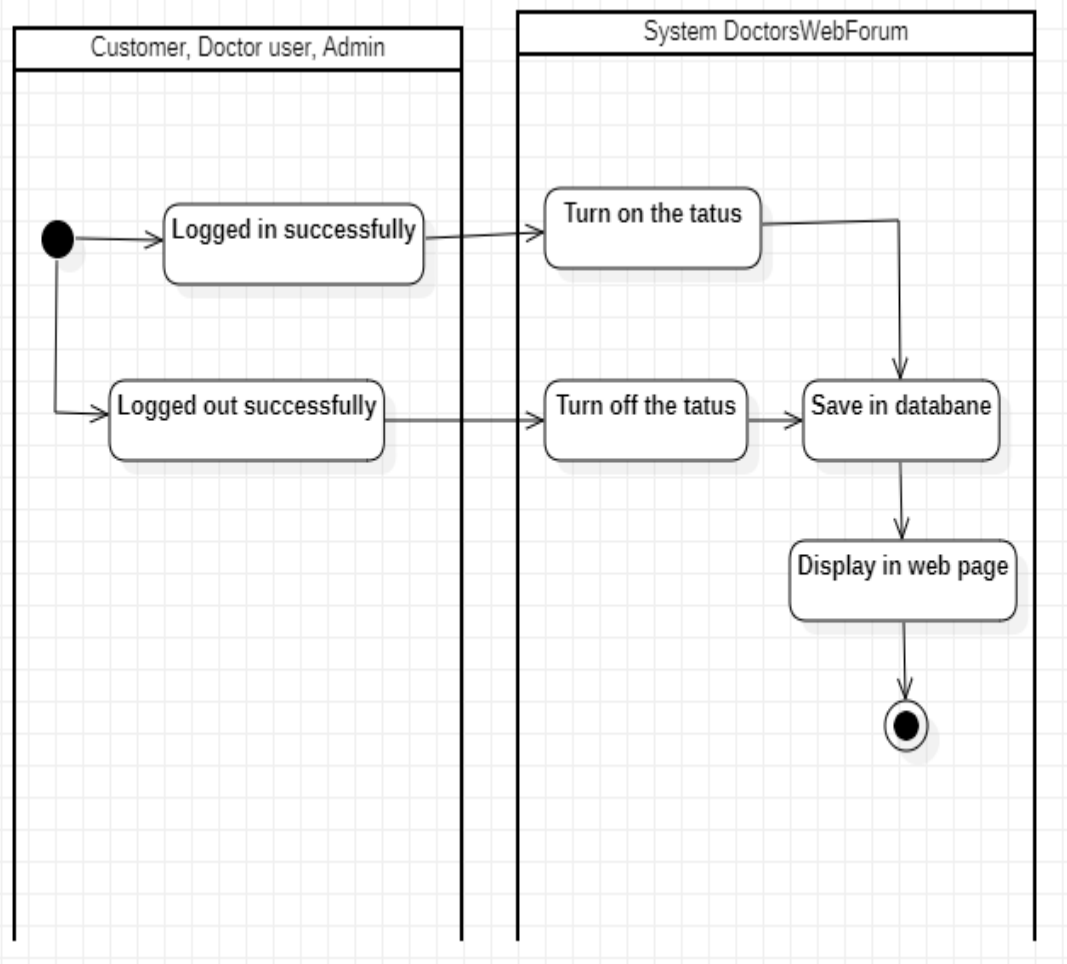

Figure 14 Activity diagram user login

3.5 DATABASE DESIGN/STRUCTURE:

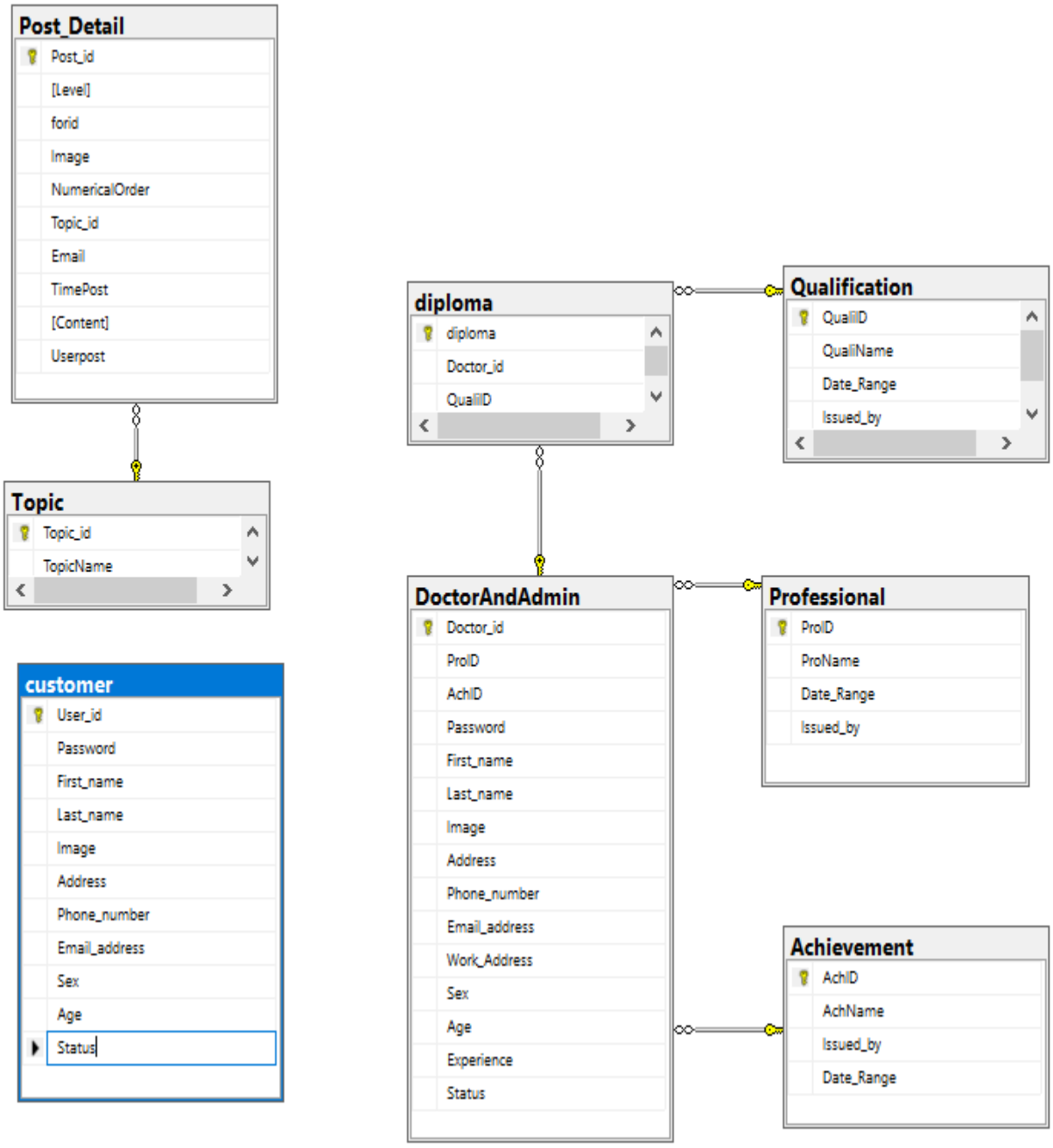

Figure 15 Database design

3.5.1 Achievement table

Achievement				
Field Name	**Data Type**	**Null**	**Key**	**Description**
AchID	varchar(50)	No	PK	
AchName	varchar(50)	Yes		
Issued_by	varchar(50)	Yes		
Date Range	date	Yes		

Table 1 Achievement table

3.5.2 Customer table

Customer				
Field Name	**Data Type**	**Null**	**Key**	**Description**
User_id	varchar(50)	No	PK	
Password	varchar(50)	Yes		
Fist_name	varchar(50)	Yes		
Last_name	varchar(50)	Yes		
Image	varchar(50)	Yes		
Address	varchar(50)	Yes		
Phone_number	varchar(50)	Yes		
Email_address	varchar(50)	Yes		
Sex	varchar(50)	Yes		

Age	Int	Yes		
Status	varchar(50)	Yes		

Table 2 Customer table

3.5.3 Doctor And Admin table

Doctor and Admin				
Field Name	**Data Type**	**Null**	**Key**	**Description**
Doctor_id	varchar(50)	No	PK	
ProID	varchar(50)	Yes		
Password	varchar(50)	Yes		
AchID	varchar(50)	Yes		
Fist_name	varchar(50)	Yes		
Last_name	varchar(50)	Yes		
Image	varchar(50)	Yes		
Address	varchar(50)	Yes		
Phone_number	varchar(50)	Yes		
Email_address	varchar(50)	Yes		
Work_Address	varchar(50)	Yes		
Sex	varchar(50)	Yes		
Age	Int	Yes		
Experience	varchar(50)	Yes		
Status	varchar(50)	Yes		

Table 3 Doctor and Admin table

3.5.4 Diploma table

Diploma				
Field Name	**Data Type**	**Null**	**Key**	**Description**
Diploma	Int	No	PK	
Doctor_id	varchar(50)	Yes		
QualiID	varchar(50)	Yes		

Table 4 Diploma table

3.5.5 Post Detail table

Post Detail				
Field Name	**Data Type**	**Null**	**Key**	**Description**
Post_id	varchar(50)	No	PK	
[Level]	int	Yes		
forid	varchar(50)	Yes		
Image	varchar(50)	Yes		
NumericalOrder	int	Yes		
Topic_id	int	Yes		
Email	varchar(50)	Yes		
TimePost	datetime	Yes		
[Content]	varchar(250)	Yes		
Useport	varchar(250)	Yes		

Table 5 Post detail table

3.5.6 Professional table

Professional				
Field Name	**Data Type**	**Null**	**Key**	**Description**
ProID	varchar(50)	No	PK	
ProName	varchar(50)	Yes		
Date_Range	date	Yes		
Issued_by	varchar(50)	Yes		

Table 6 Profesional table

3.5.7 Quanlification table

Quanlification				
Field Name	**Data Type**	**Null**	**Key**	**Description**
QualiID	varchar(50)	No	PK	
QuanliName	varchar(50)	Yes		
Date_Range	date	Yes		
Issued_by	varchar(50)	Yes		

Table 7 Quanlification table

3.5.8 Topic table

Topic				
Field Name	**Data Type**	**Null**	**Key**	**Description**
Topic_id	int	No	PK	
TopicName	varchar(50)	Yes		

Table 8 Topic table

4 TASK SHEET

Project Ref. No.:		Project Title:	Activity Plan Prepared By:	Date of Preparation of Activity Plan:			
Sr.No.	**Task**			**Actual Start Date**	**Actual Day**	**Team Mate Names**	**Status**
1	Form No.1	Problem Definition	Thanh Le Hoang Tri	Jun - 03 - 2022	2	Thuan Dao Minh Trung	Done
2	Form No.2	CRS	Thanh Le Hoang Tri	Jun - 04 - 2022	2	Hoang Le Thien	Done
3	Form No.3	Architecture and Design	Thanh Le Hoang Tri	Jun - 13 - 2022	3	All member	Done
4	Form No.4	Database Design/ Structure	Thanh Le Hoang Tri	Jun - 16 - 2022	3	All member	Done
5	Form No.5	Task Sheet	Thanh Le Hoang Tri	Jun - 06 - 2022	1	Thanh Le Hoang Tri	Done
6		Design template	Thanh Le Hoang Tri	Jun - 04 - 2022	6	Thuan Dao Minh Trung	Done
7		Login(Admin)	Thanh Le Hoang Tri	Jun -05 - 2022	2	Hoang Le Thien	Done
8		Admin user: Show all comment in user	Thanh Le Hoang Tri	Jun - 07 - 2022	3	Hoang Le Thien	Done
9		Admin user: Create account (customer and doctor)	Thanh Le Hoang Tri	Jun - 07 - 2022	3	Thanh Le Hoang Tri	Done
10		Admin user: Update account (customer and doctor)	Thanh Le Hoang Tri	Jun - 10 - 2022	3	Thanh Le Hoang Tri	Done
11		Admin user: Delete account (customer and doctor)	Thanh Le Hoang Tri	Jun - 13 - 2022	3	Thanh Le Hoang Tri	Done

12		Admin user: Search	Thanh Le Hoang Tri	Jun - 16 - 2022	3	Thanh Le Hoang Tri	Done
13		Show all comment (Client)	Thanh Le Hoang Tri	Jun - 10 - 2021	3	Thuan Dao Minh Trung	Done
14		Public profile	Thanh Le Hoang Tri	Jun - 13 - 2022	2	Hoang Le Thien	Done
15		Update comment	Thanh Le Hoang Tri	Jun - 15 - 2022	2	Hoang Le Thien	Done
16		Delete comment	Thanh Le Hoang Tri	Jun - 17 - 2022	2	Hoang Le Thien	Done
17		Search	Thanh Le Hoang Tri	Jun - 11 - 2021	3	Thuan Dao Minh Trung	Done
18		Show the number of members	Thanh Le Hoang Tri	Jun - 14 - 2021	1	Thuan Dao Minh Trung	Done
19		Create comment (client)	Thanh Le Hoang Tri	Jun - 15 - 2021	2	Thuan Dao Minh Trung	Done
20		Create account user (client)	Thanh Le Hoang Tri	Jun - 17 - 2021	2	Thuan Dao Minh Trung	Done
21		User online	Thanh Le Hoang Tri	Jun - 19 - 2021	3	Thuan Dao Minh Trung	Done
22	Form No.6	Checklist of Validations	Thanh Le Hoang Tri	Jun - 25 - 2022	1	All member	Done
23	Form No.7	Submission Checklist	Thanh Le Hoang Tri	July - 02 - 2022	1	All member	Done

Table 9 Task sheet

5 REVIEW

5.1 IMPLEMENTATION CHECKLIST

Option	Validated
Do all numeric variables have a default value of zero?	Yes
Does the administrator have all the rights to create and delete the records?	Yes
Are all the records properly fed into the appropriate database?	Yes
Have all the modules been properly integrated and are completely functional?	Yes
Have all the design and coding standards been followed and implemented?	Yes
Is the design consistent all over?	Yes
Is the navigation sequence correct through all the screens in the application?	Yes
Is exception handling mechanism implemented in all the screens?	Yes
Are all the program codes working?	Yes

Table 10 Implementation checklist

5.2 SUBMISSION CHECKLIST

Sr. No.	Particulars	Yes	No	NA	Comments
1.	Have all the modules been properly integrated and are they completely functional?	Yes			
2.	Does each unit meet its objective and purpose? Are all the validations happening as specified in Process Design?	Yes			
3.	Have all Design and Coding standards been followed and implemented?	Yes			
4.	Is the GUI design consistent all over?	Yes			
5.	Are the codes working as per the specification?	Yes			All the modules are properly tested.
6.	Does the application's functionality resolve the client problem, and satisfy his needs completely?	Yes			
7.	Have the hardware and software been correctly chosen?	Yes			
8.	Additional features and utilities that give value addition to the entire project.	Yes			

Table 11 Submission checklist

6 INSTALLATION GUIDE

6.1 REQUIREMENT

- Microsoft SQL Server 2019
- .NET Framework 4.7.2
- ISS Server

6.2 STARTUP

1. Run SQL Database in file Database.sql
2. Deploy and run web app on ISS Server
3. User below accounts to access forum

No.	User ID	Password	Description
1	admin	123456	Admin of Forum
2	customer1	123456	Customer
3	customer2	123456	Customer
4	doctor1	123456	Doctor
5	doctor2	123456	Doctor
6	doctor3	123456	Doctor
7	hoang	123456	Customer
8	thanh	123456	Customer
9	thuan	123456	Customer

Table 12 Accounts list

7 DEMO

1. Admin Page

1.1. User management

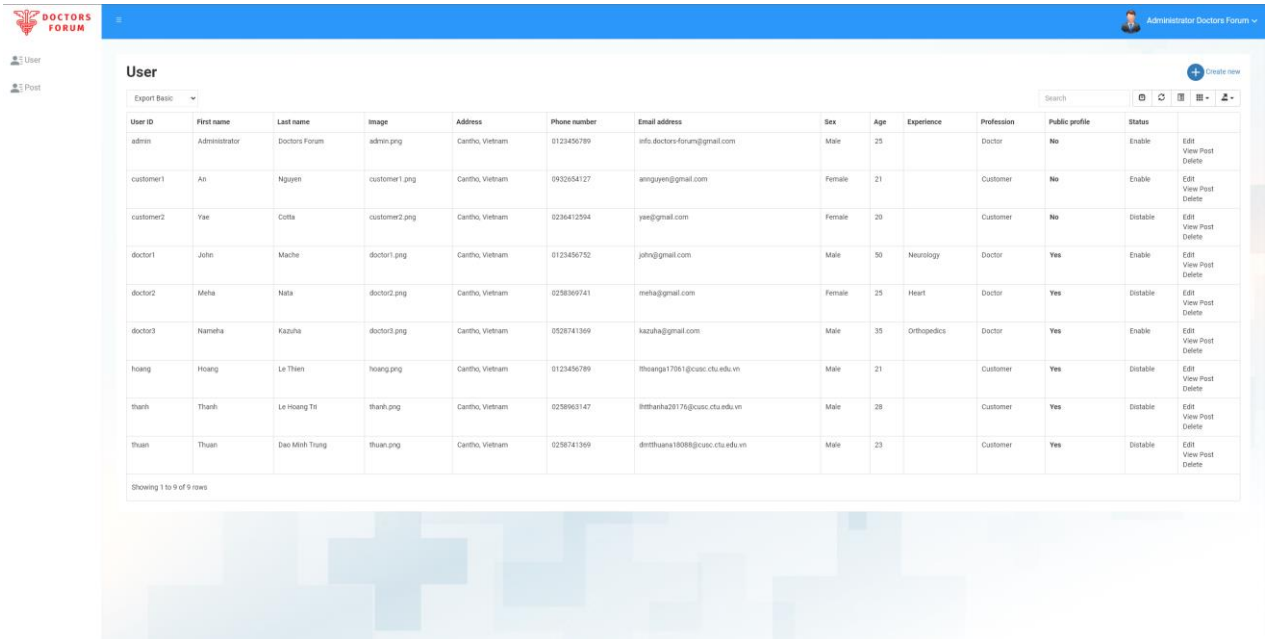

Figure 16 User management

1.2. View post of user

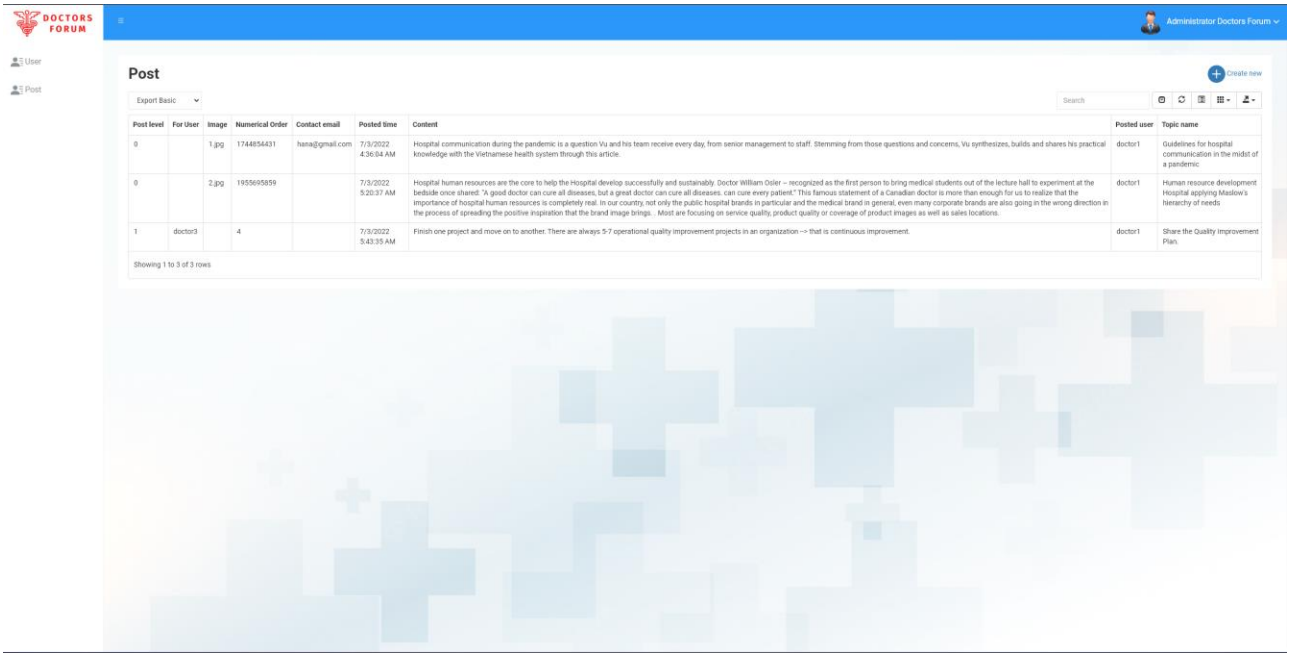

Figure 17 View post of user

1.3.Create user

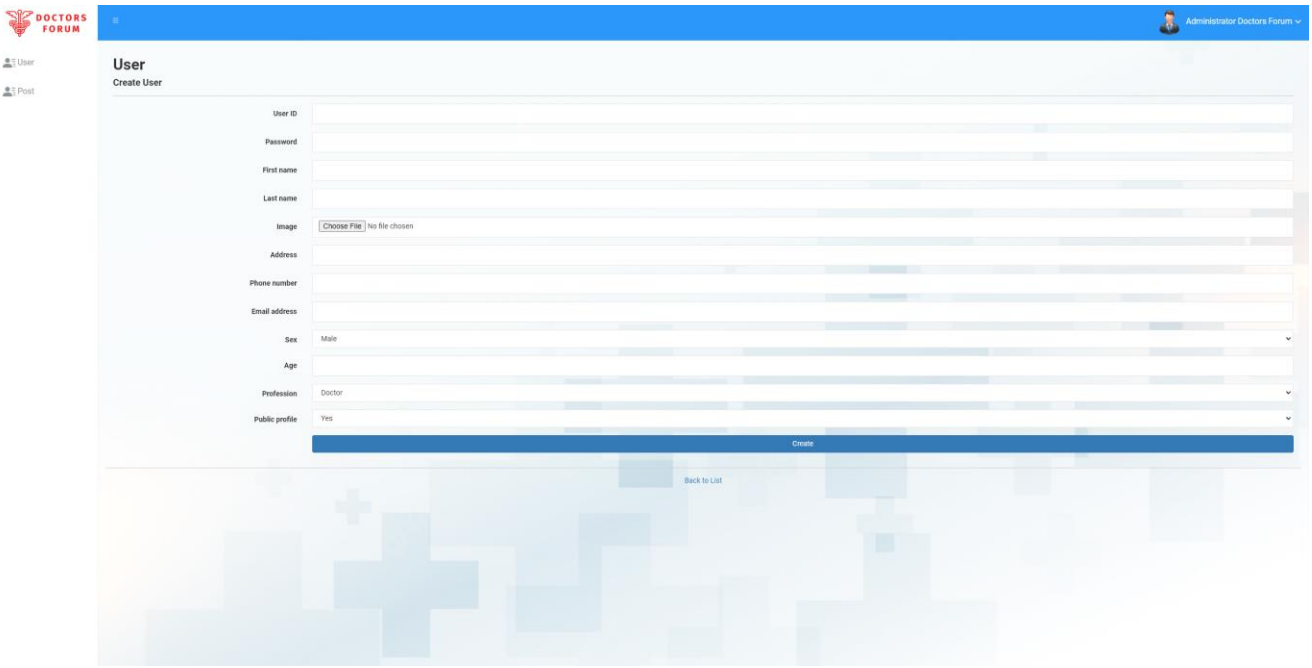

Figure 18 Create user

1.4.Edit user

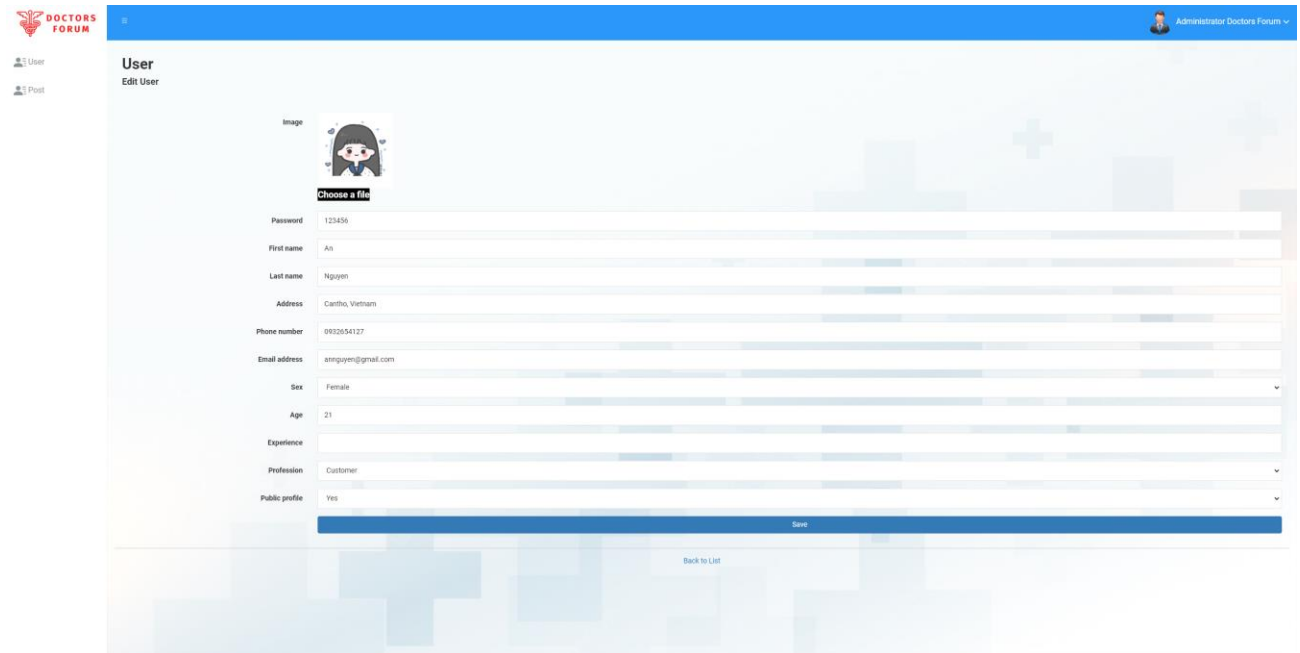

Figure 19 Edit user

1.5.Delete user

Figure 20 Delete user

1.6.Post management

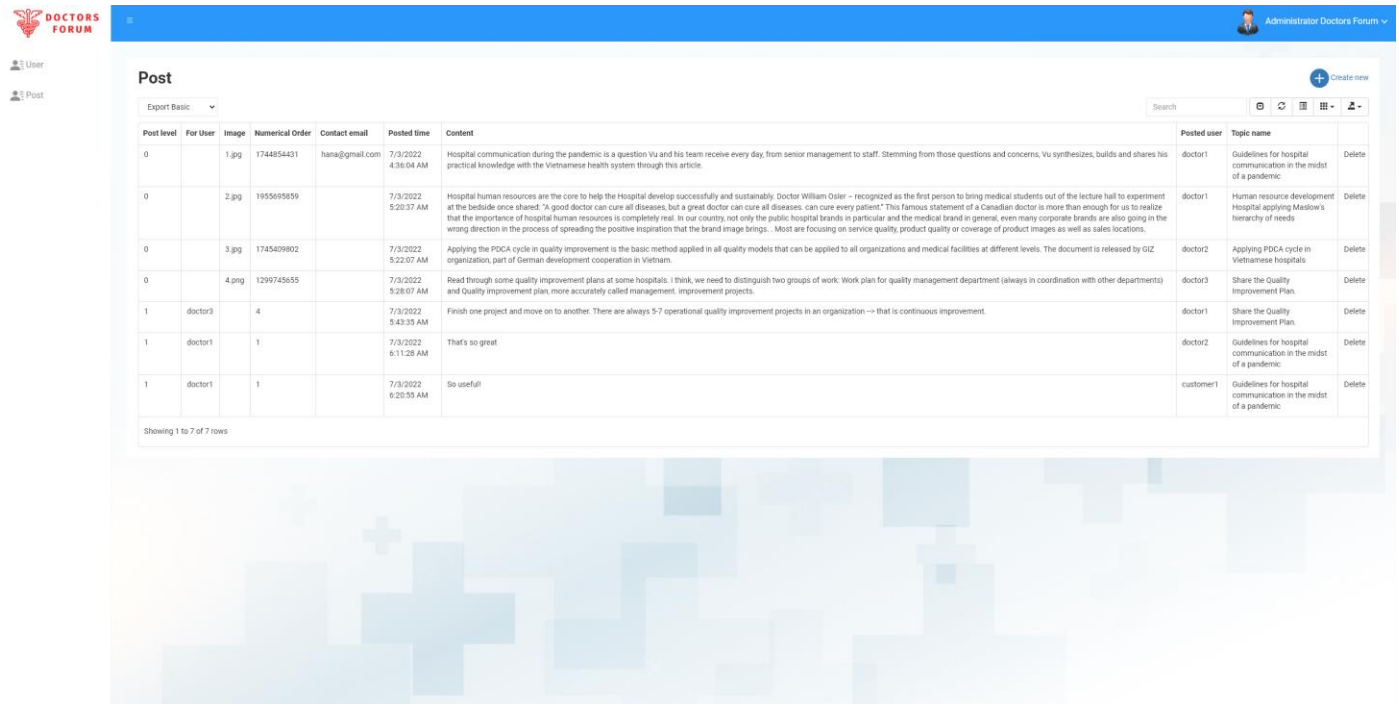

Figure 21 Post management

1.7.Create Post

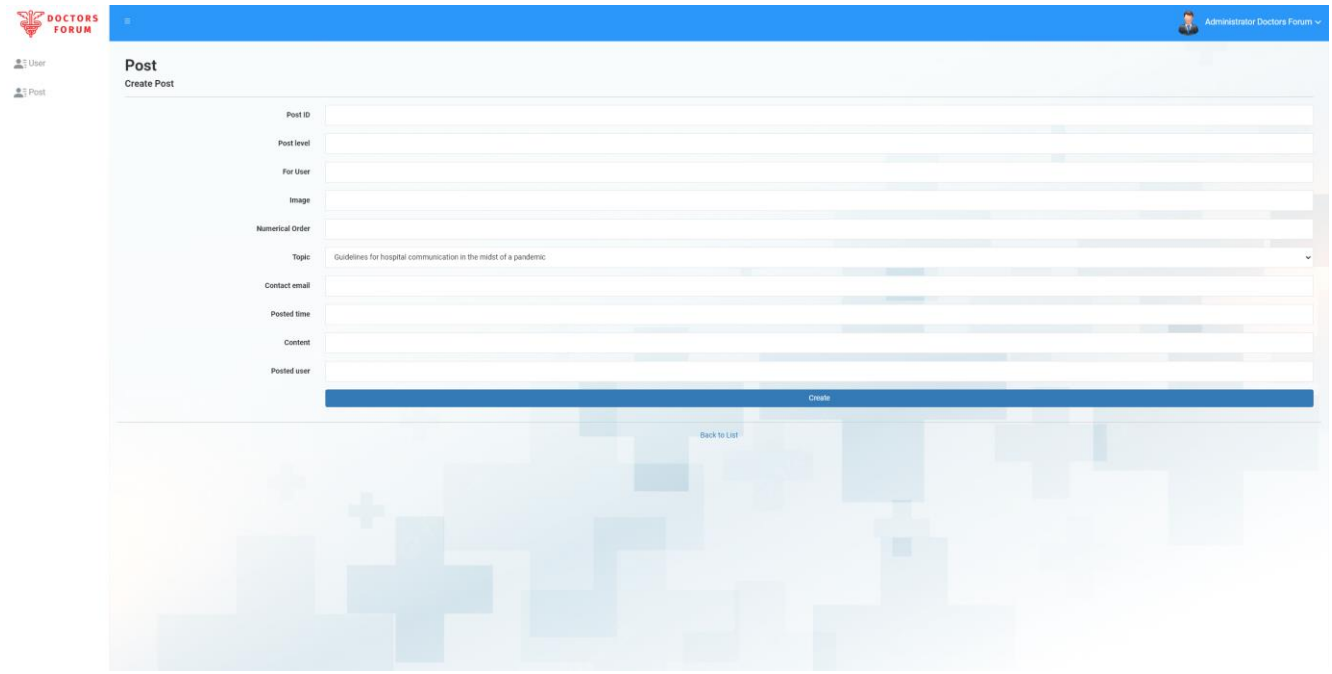

Figure 22 Create Post

1.1.Delete Post

Figure 23 Delete Post

1.2.View and edit profile

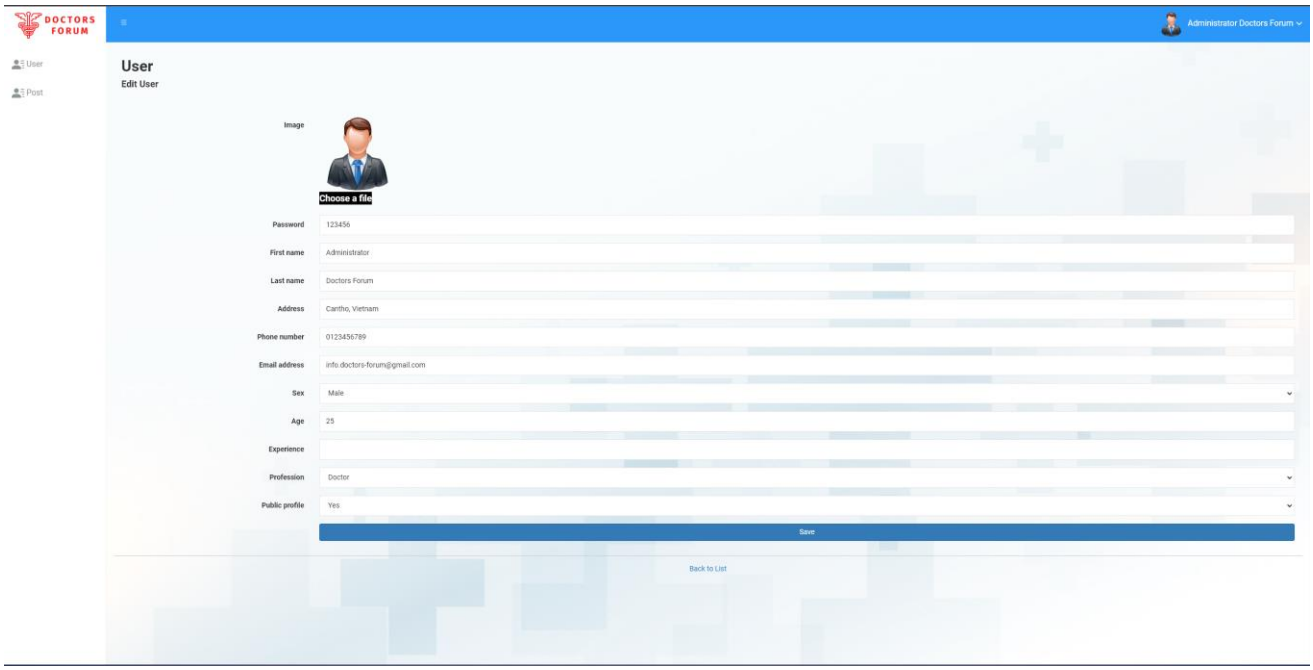

Figure 24 View and edit profile

1.3.Logout

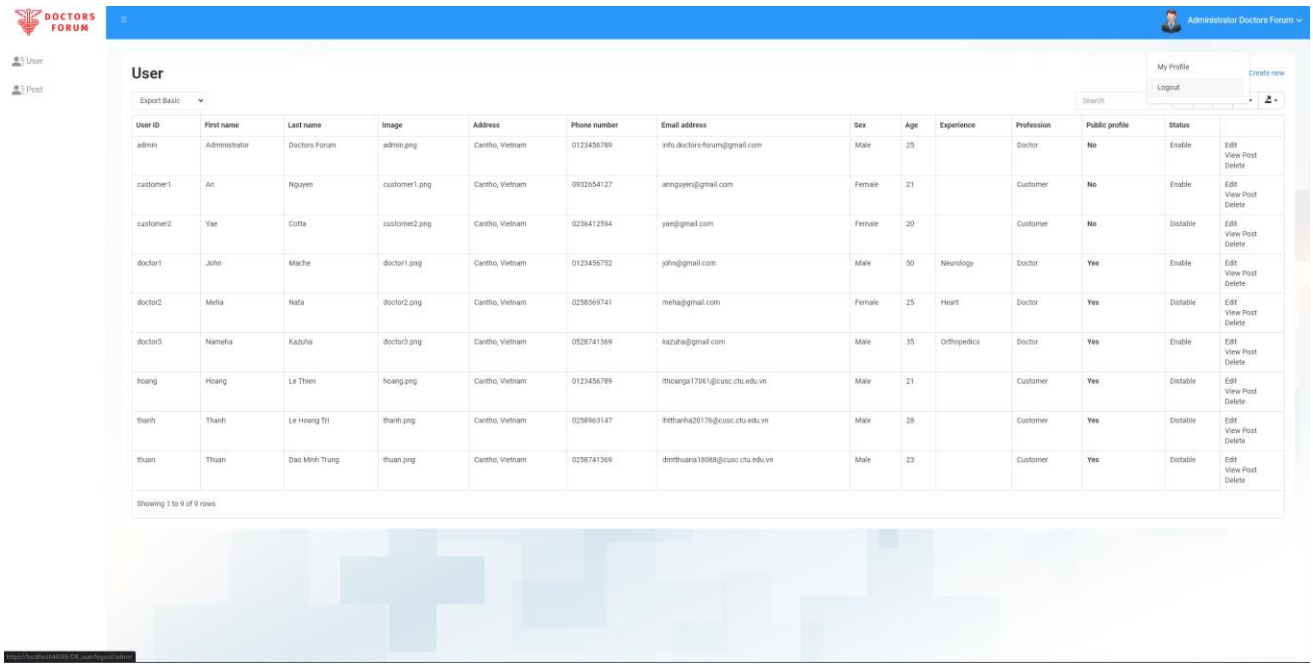

Figure 25 Logout

2. Client Page

2.1.Home Page

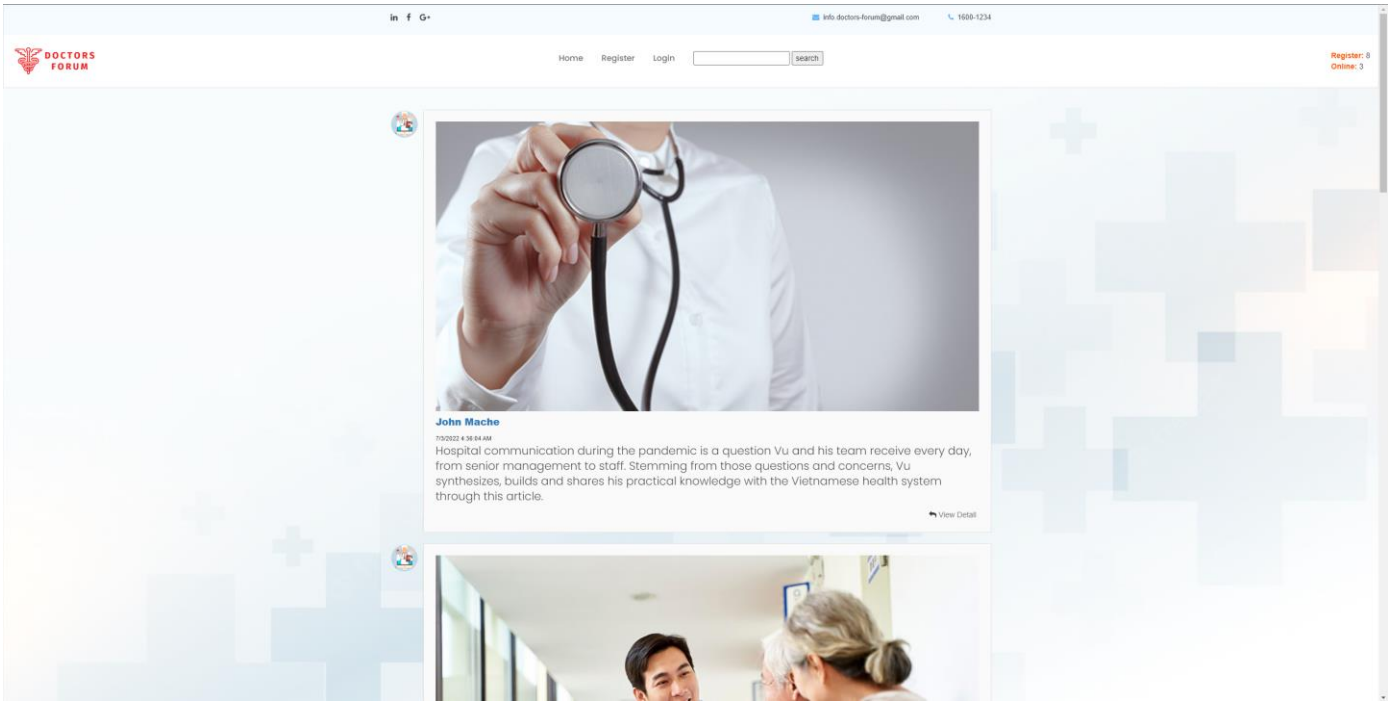

Figure 26 Home page

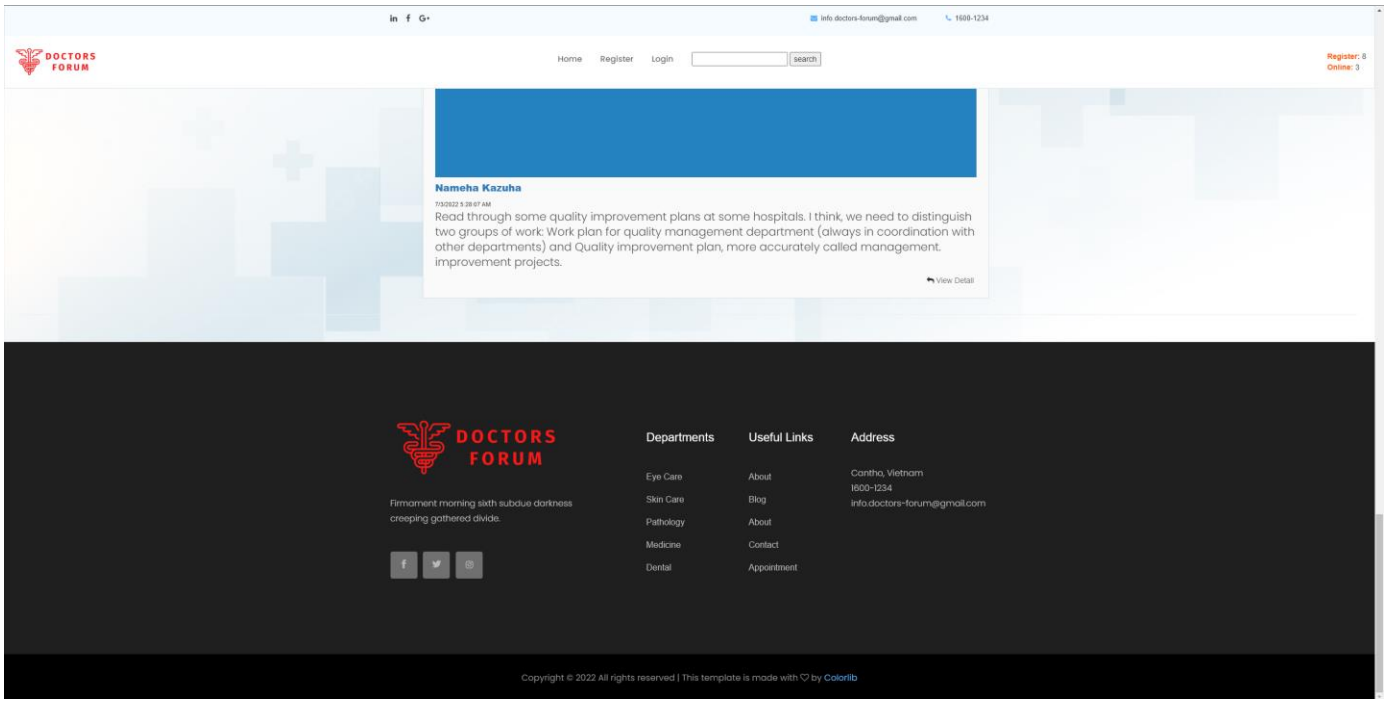

Figure 27 End of home page

2.2.View post

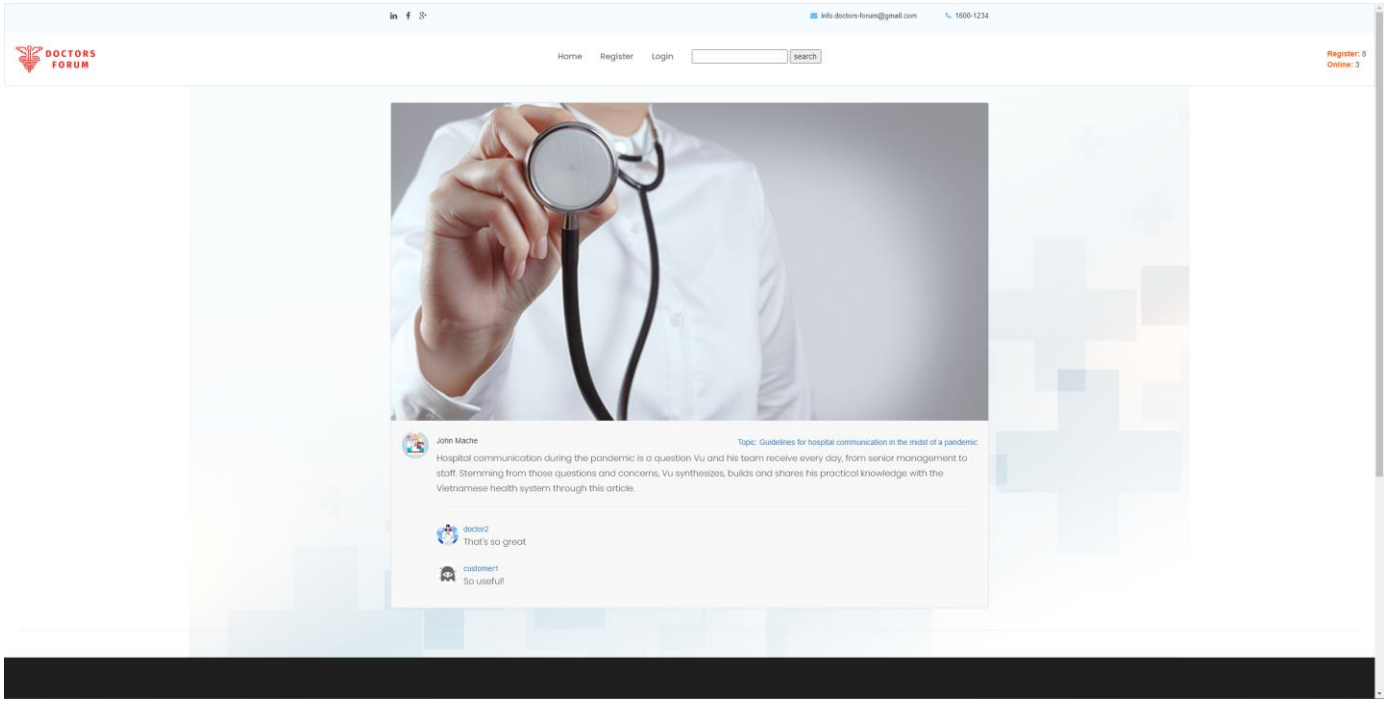

Figure 28 View post

2.3.Register User

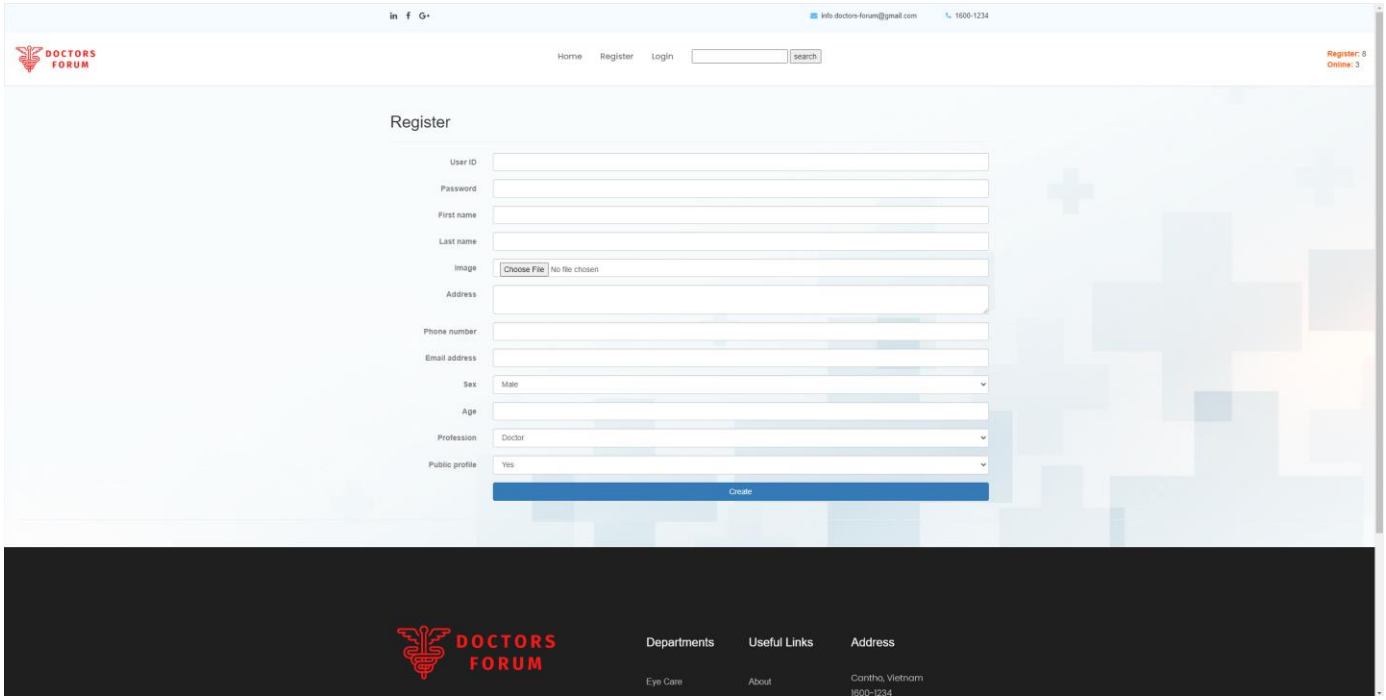

Figure 29 Register User

2.4.Login

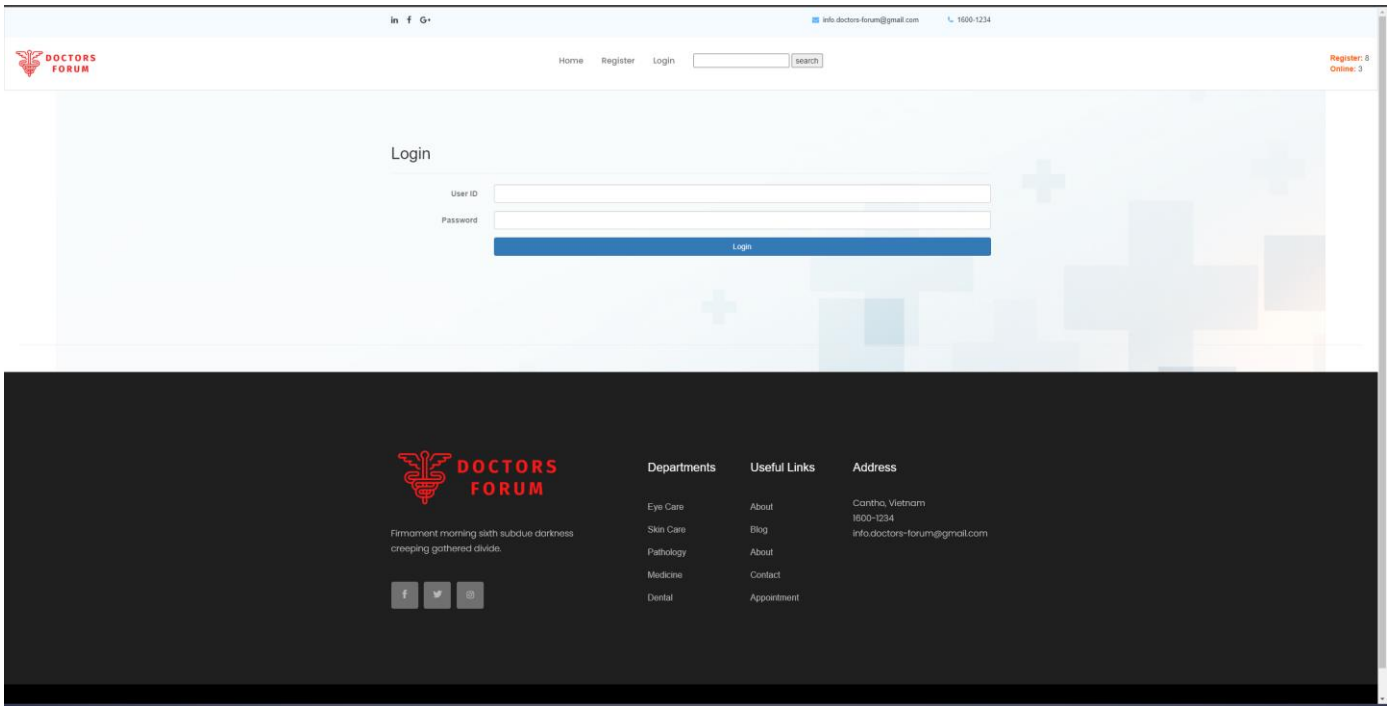

Figure 30 Login

2.5.Customer profile

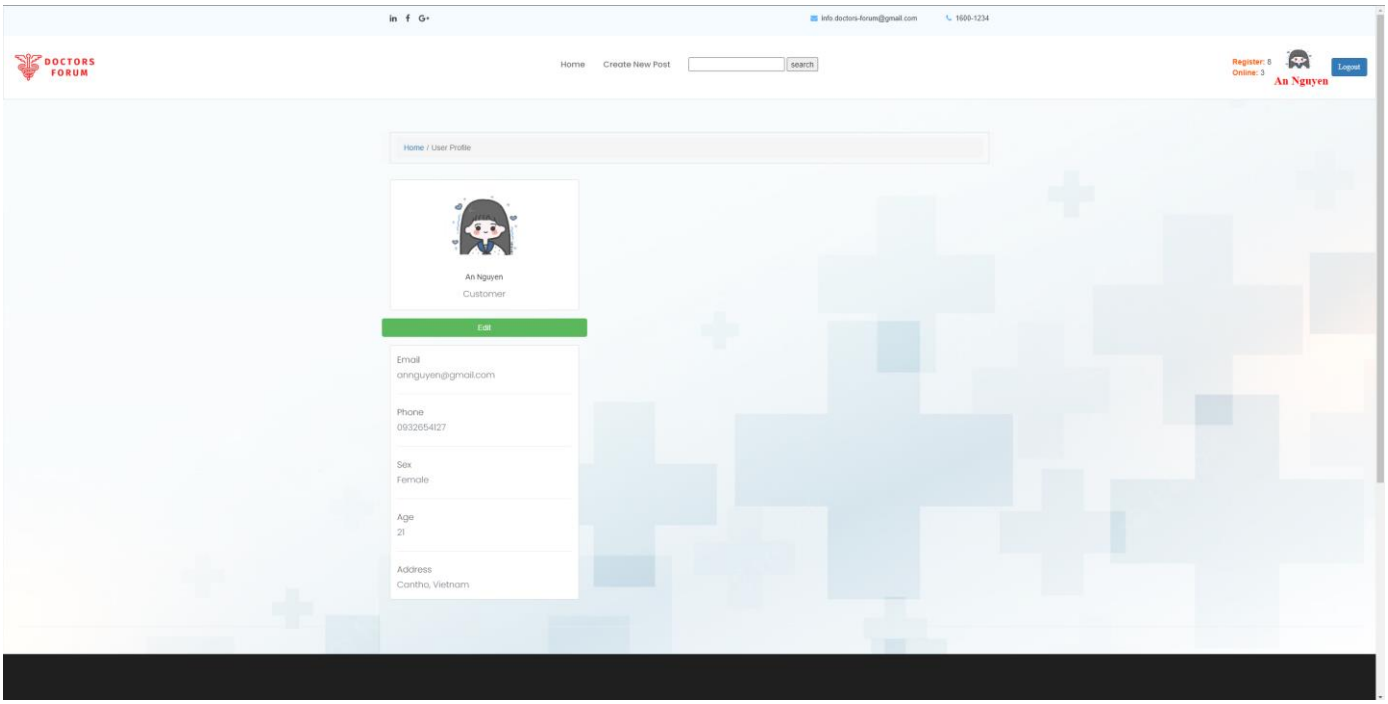

Figure 31 Customer profile

2.6.Edit profile customer

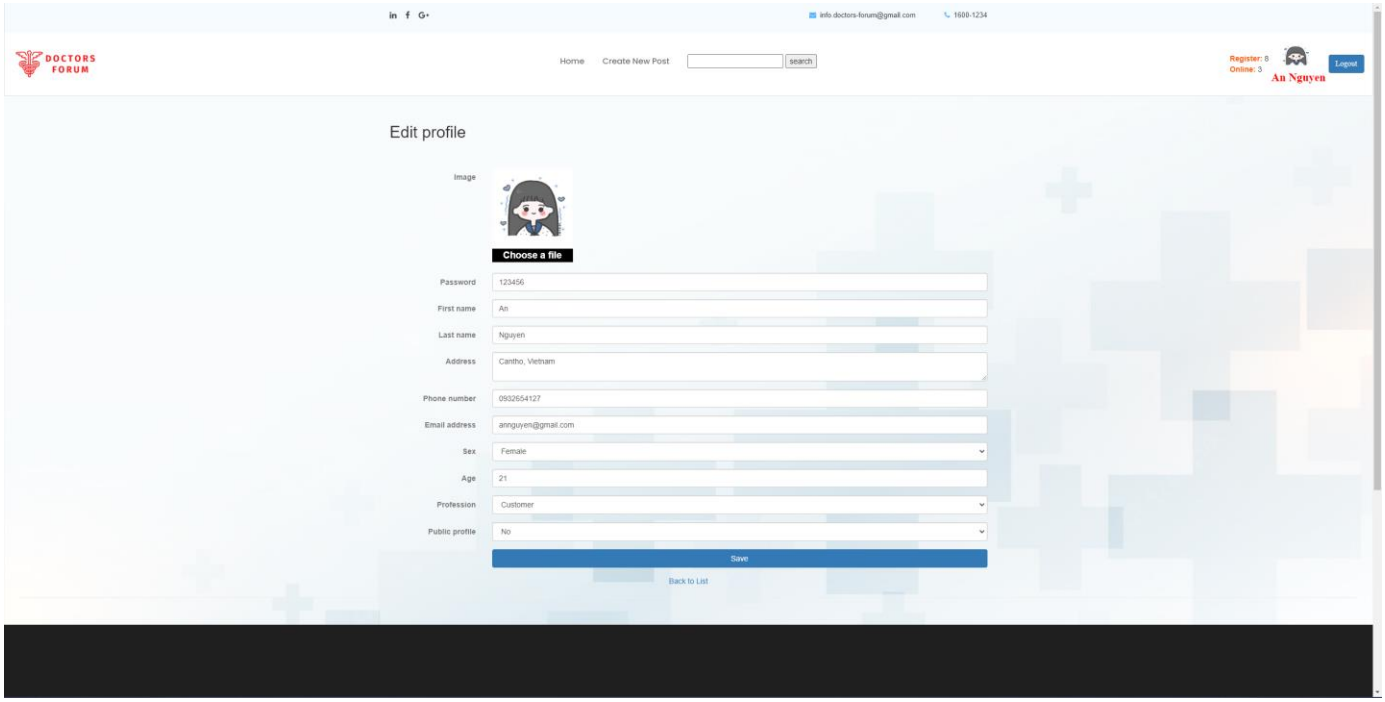

Figure 32 Edit profile customer

2.7.Doctor profile

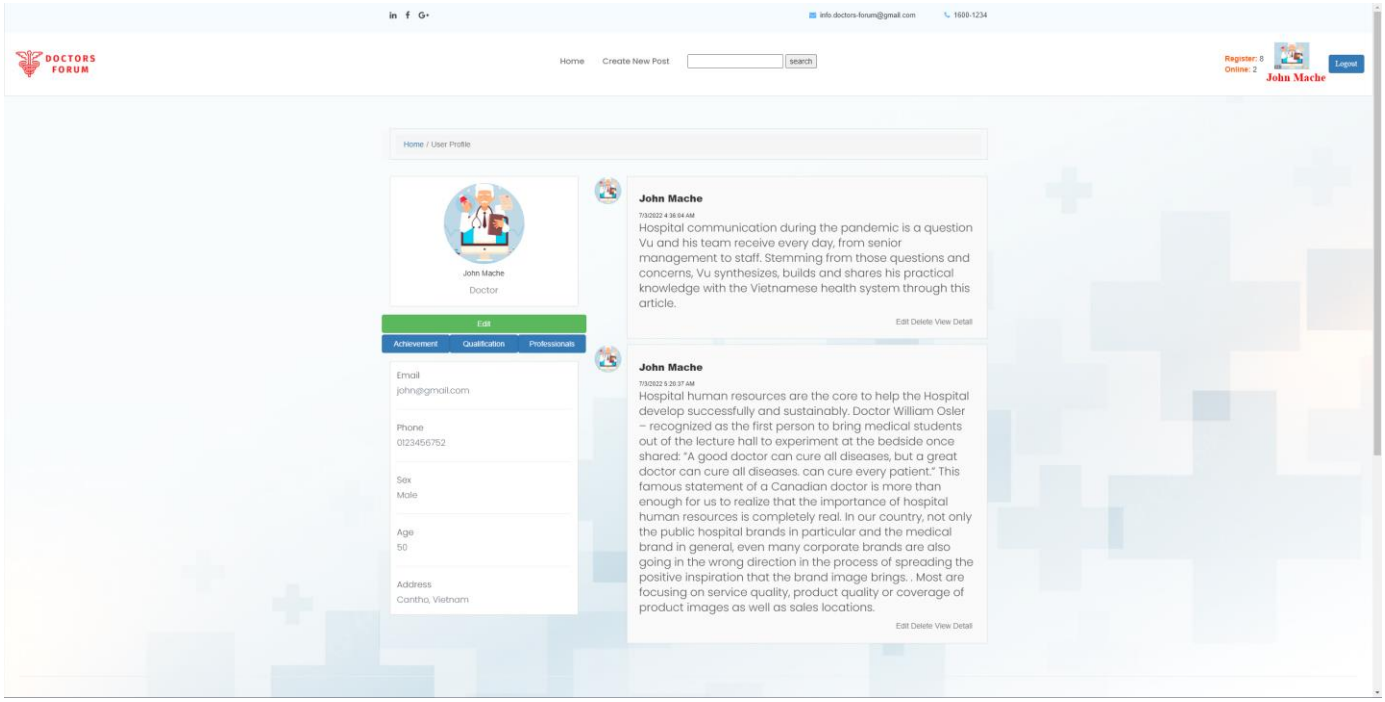

Figure 33 Doctor profile

2.8.Edit doctor profile

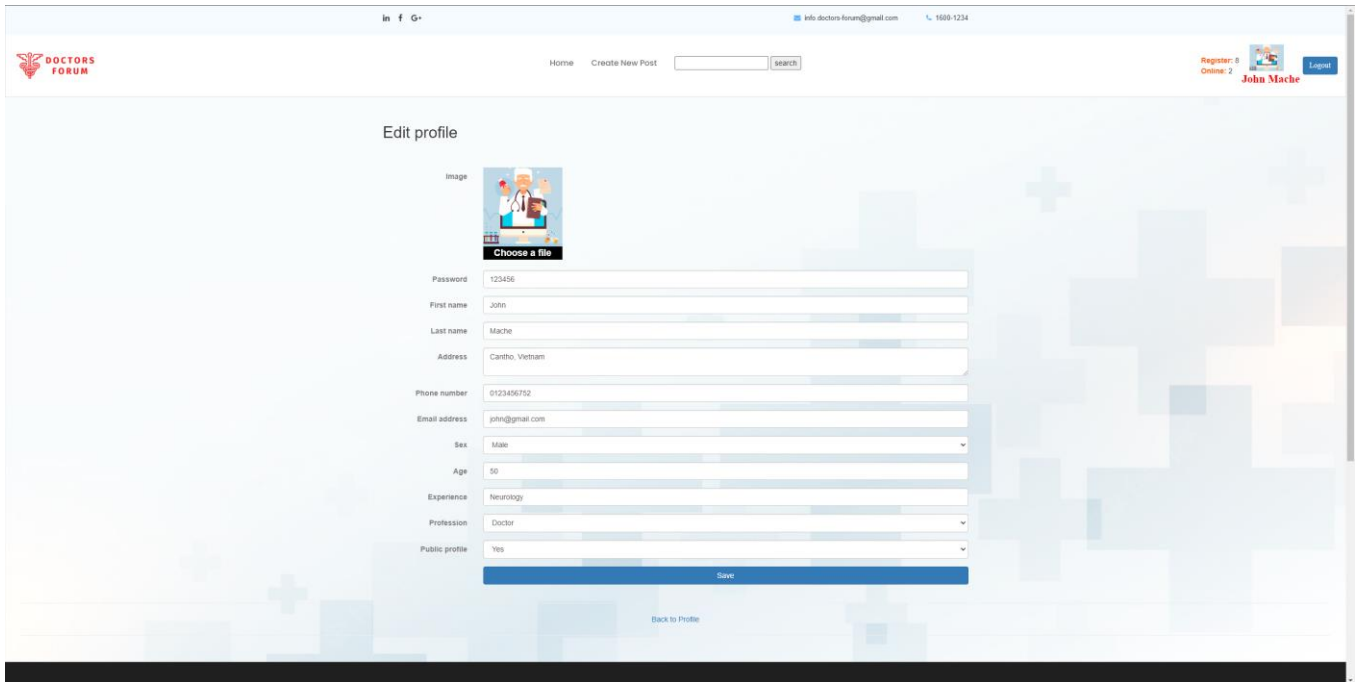

Figure 34 Edit doctor profile

2.9.Doctor Achievement:

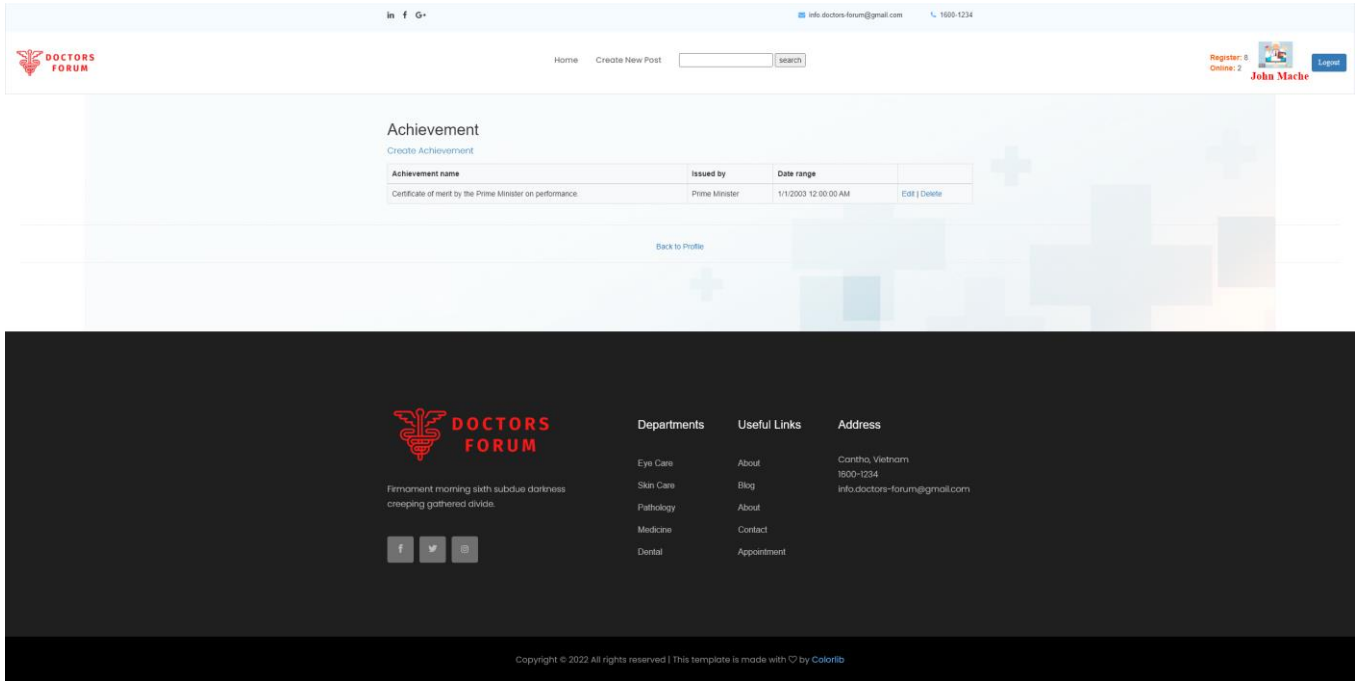

Figure 35 Doctor Achievement

2.10. Create Achievement:

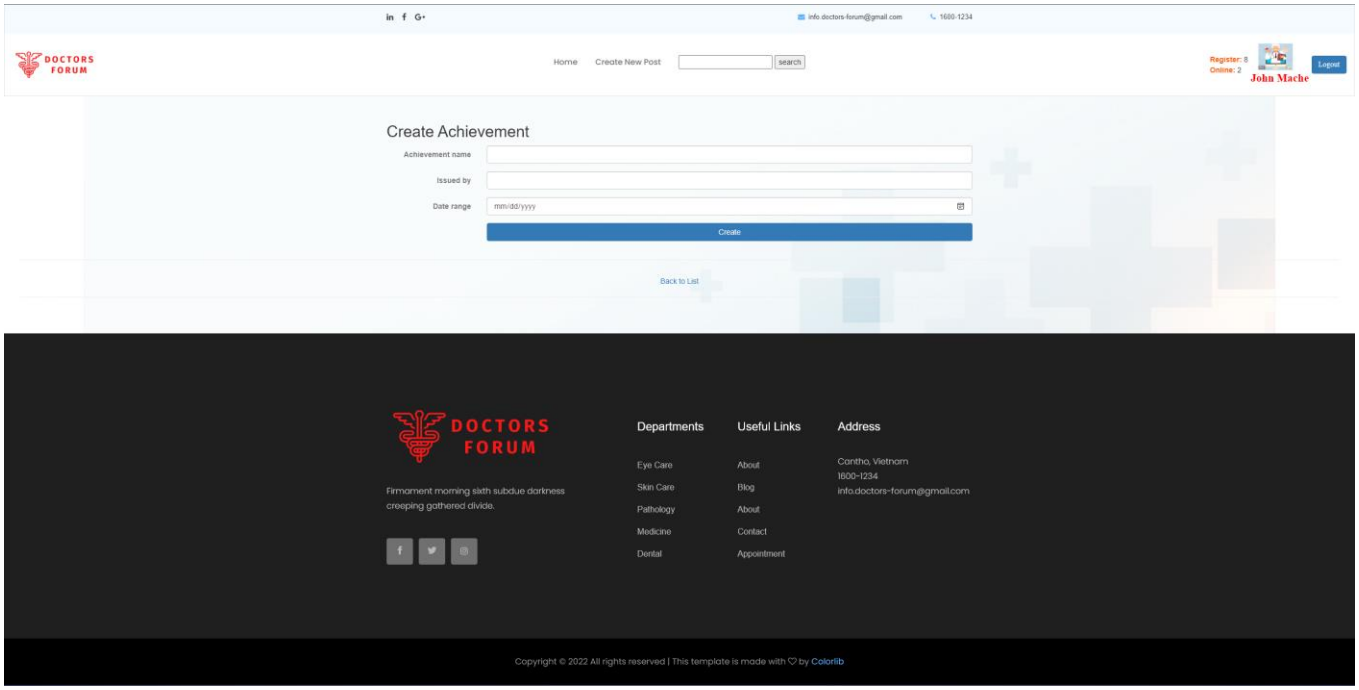

Figure 36 Create Achievement

2.11. Edit Achievement:

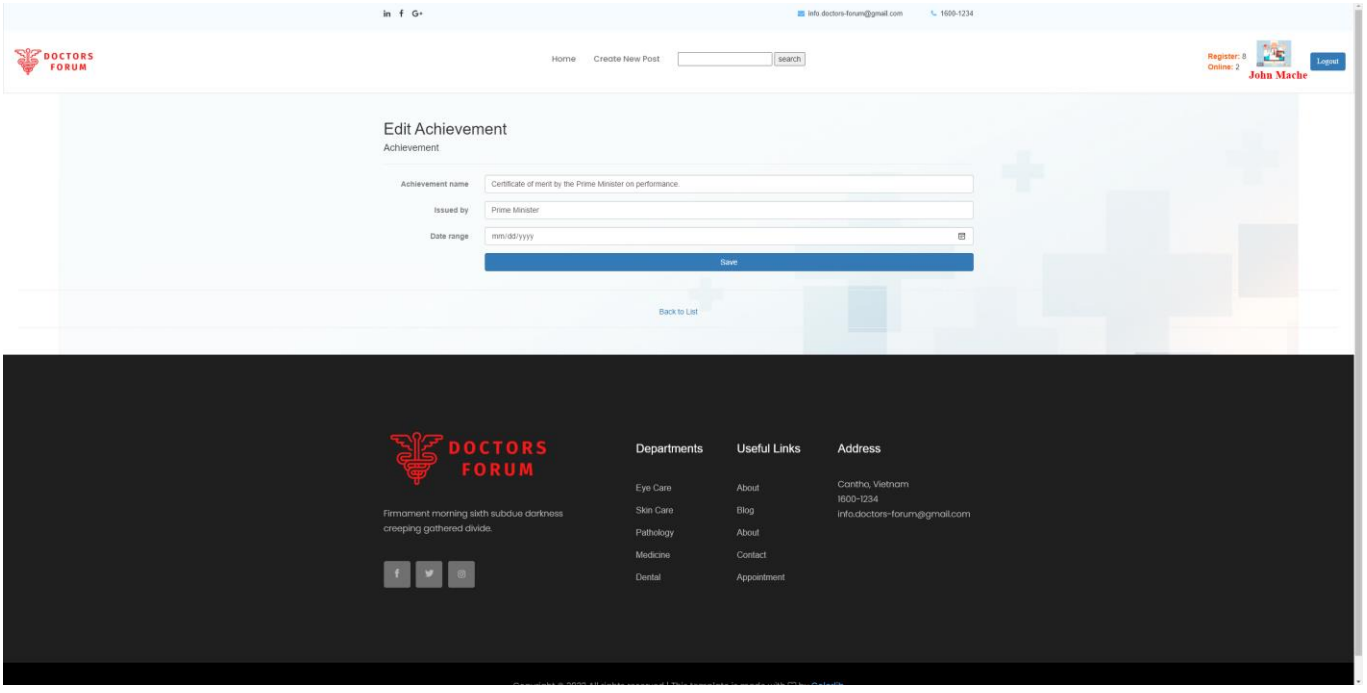

Figure 37 Edit Achievement

2.12. Delete Achievement:

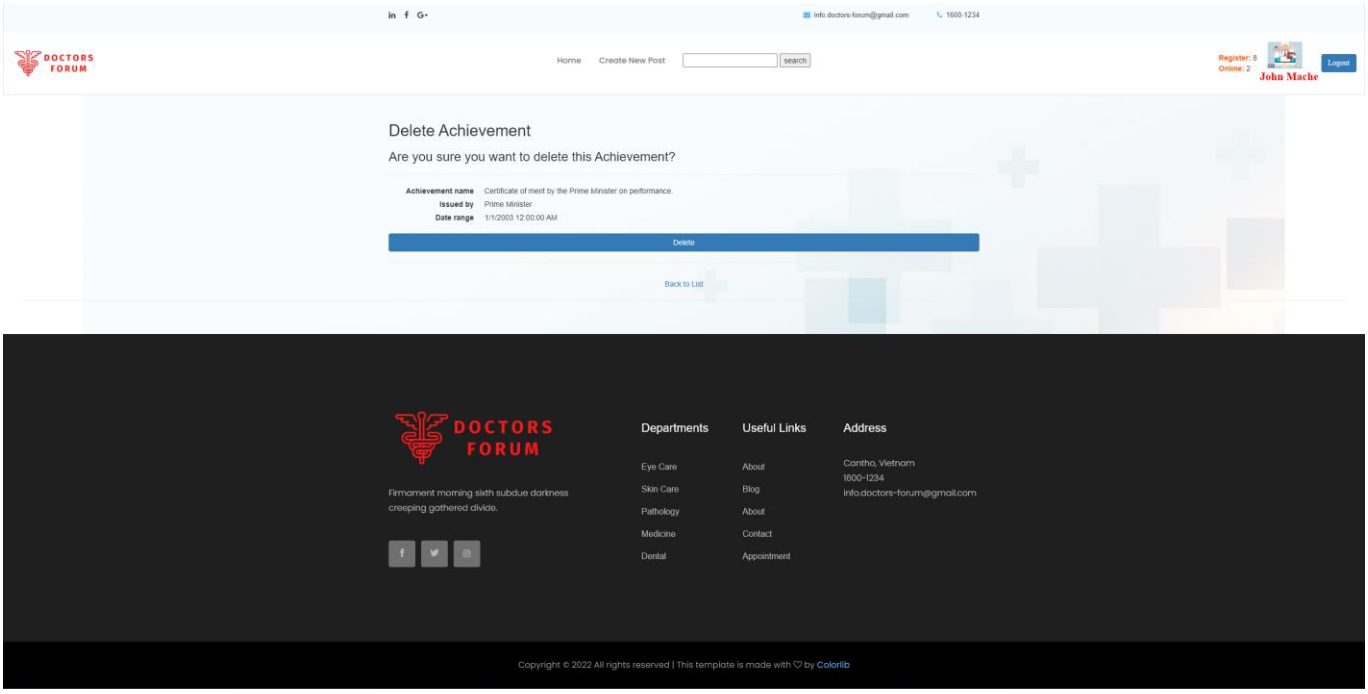

Figure 38 Delete Achievement

2.13. Doctor Qualification

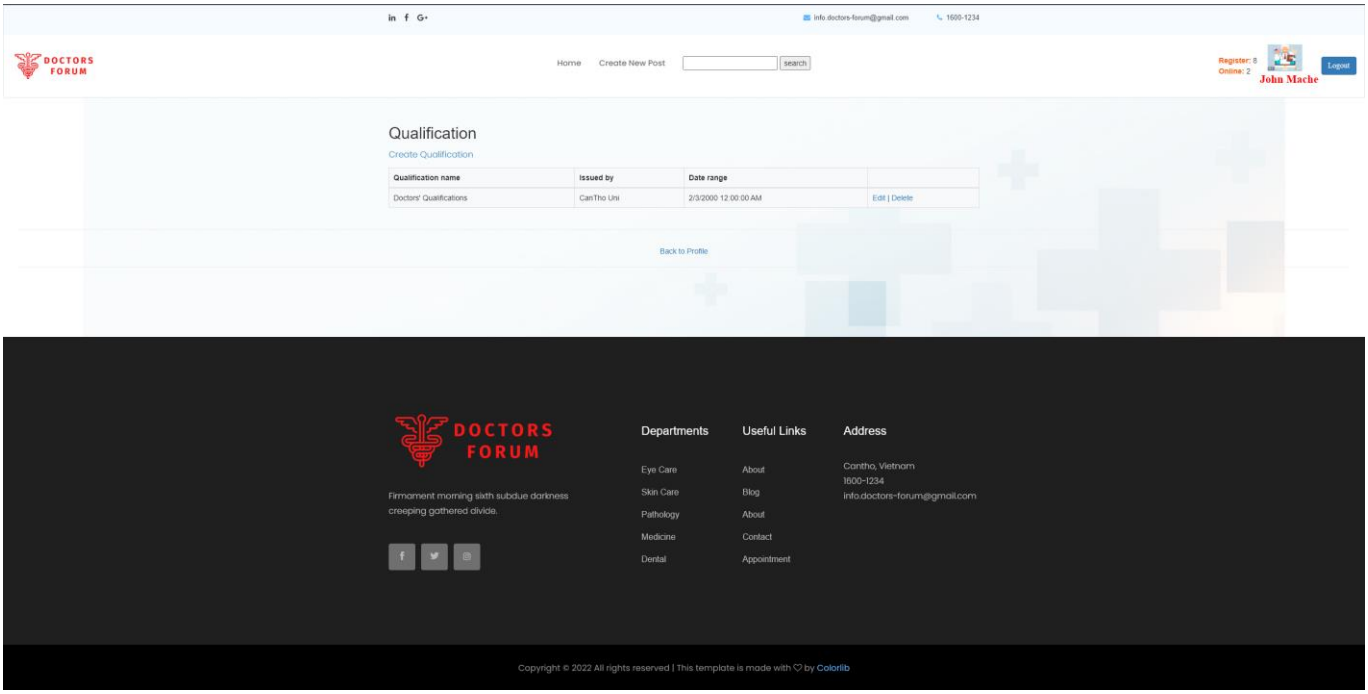

Figure 39 Doctor Qualification

2.14. Edit Qualification:

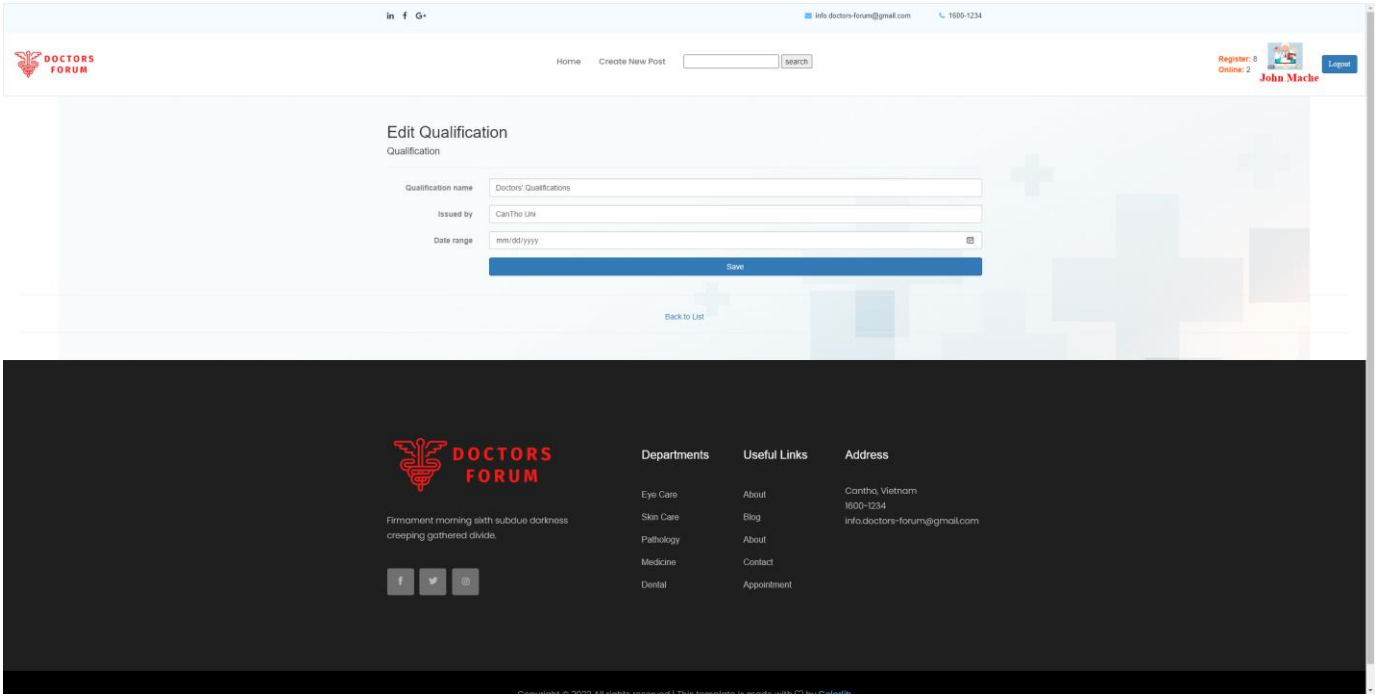

Figure 40 Edit Qualification

2.15. Delete Qualification:

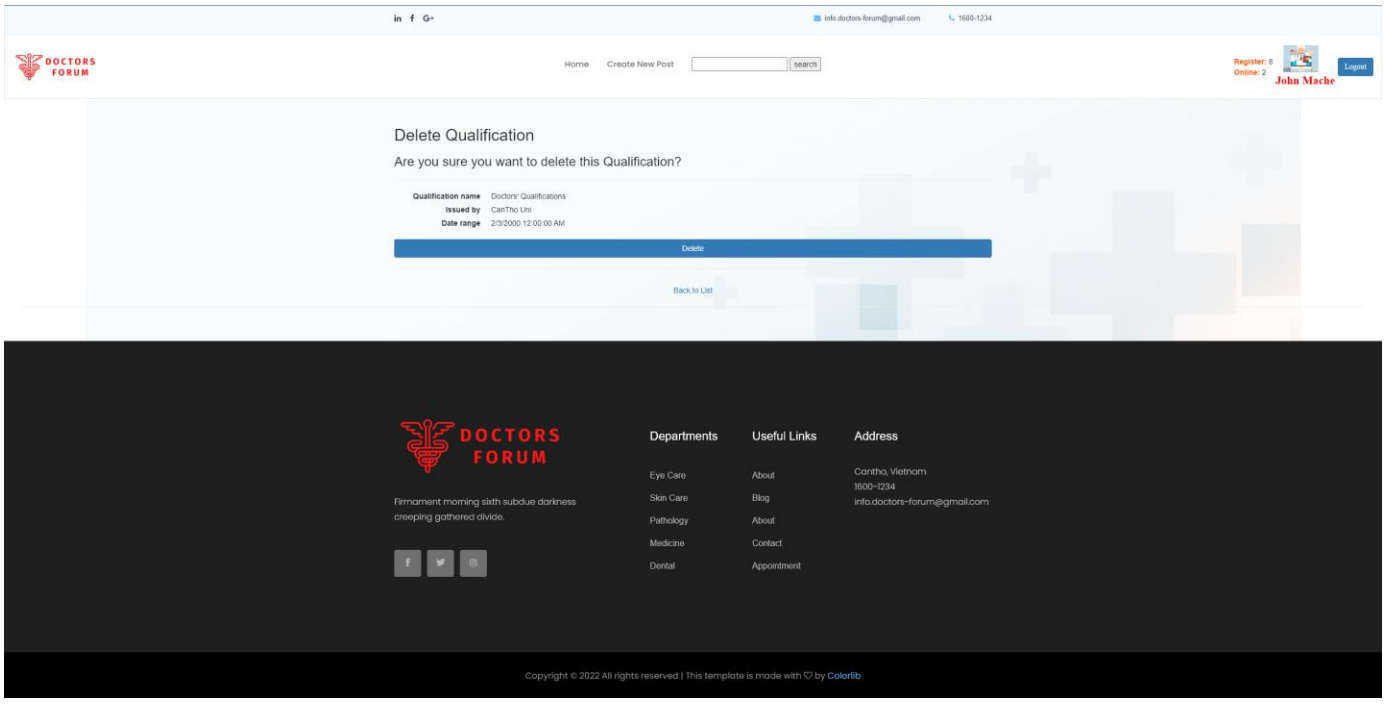

Figure 41 Delete Qualification

2.16. Doctor Professional:

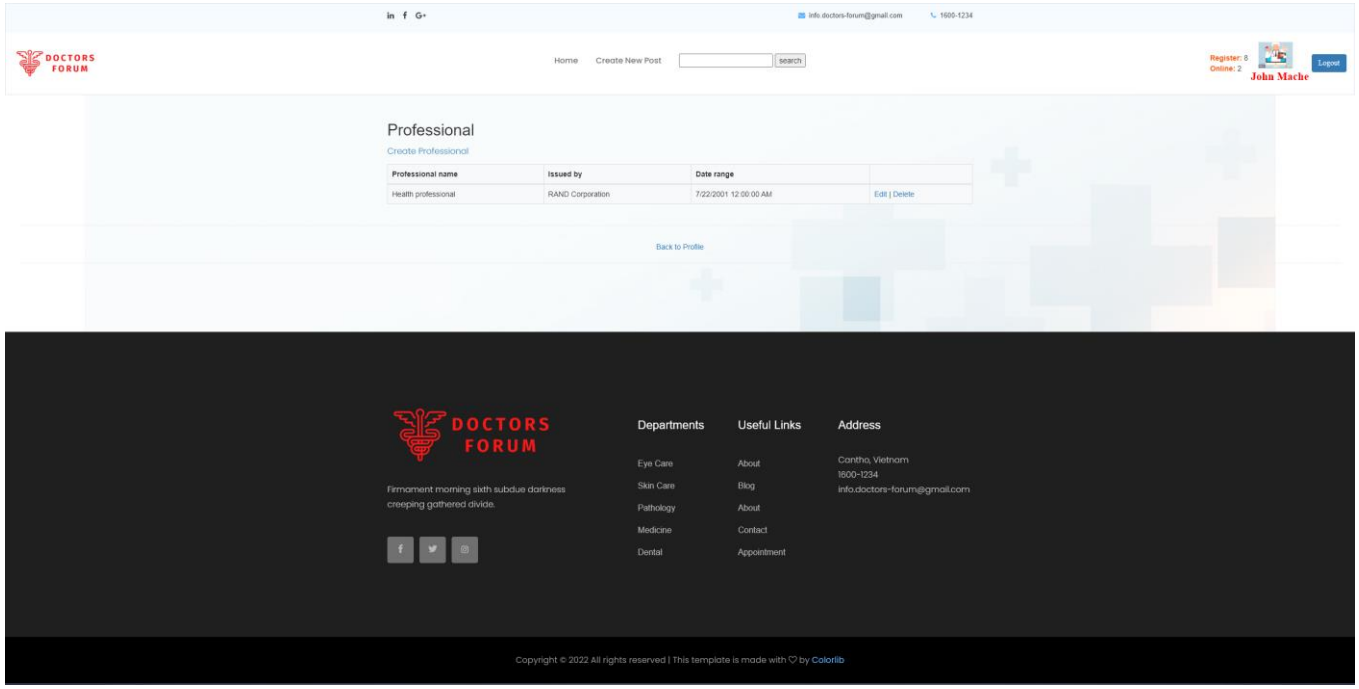

Figure 42 Doctor Professional

2.17. Create Professional:

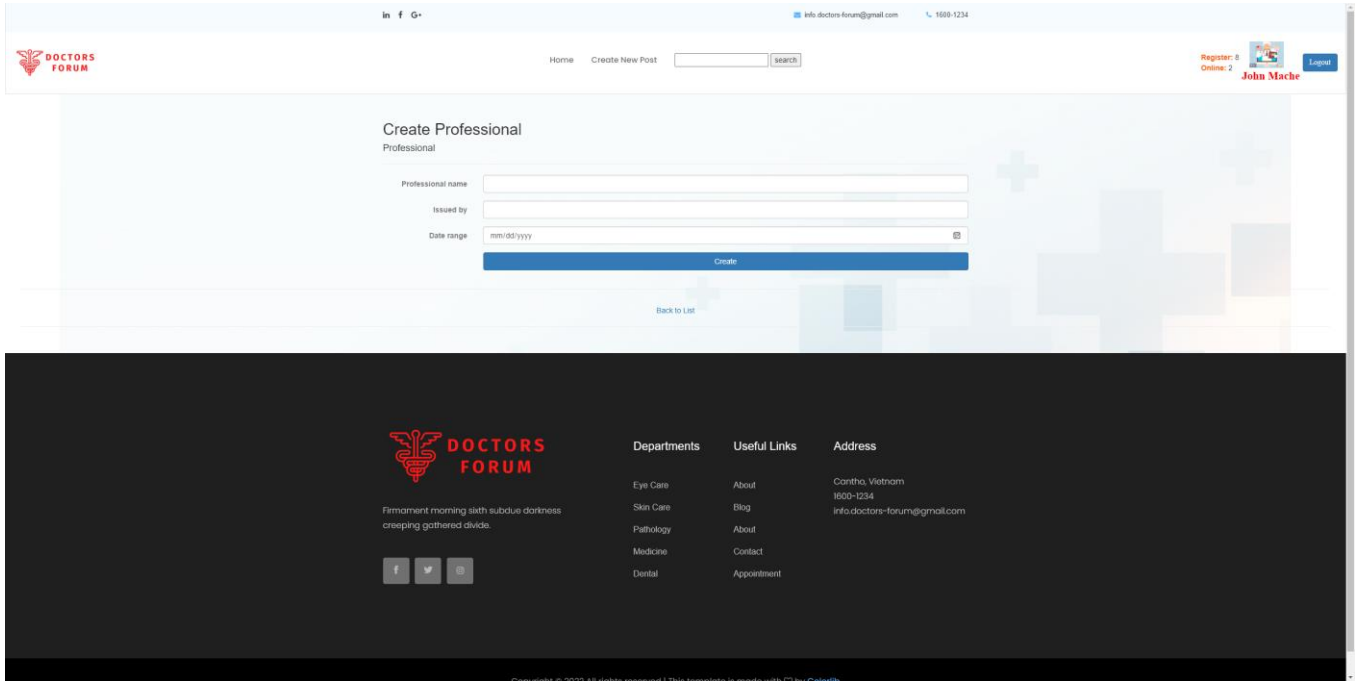

Figure 43 Create Professional

2.18. Edit Professional:

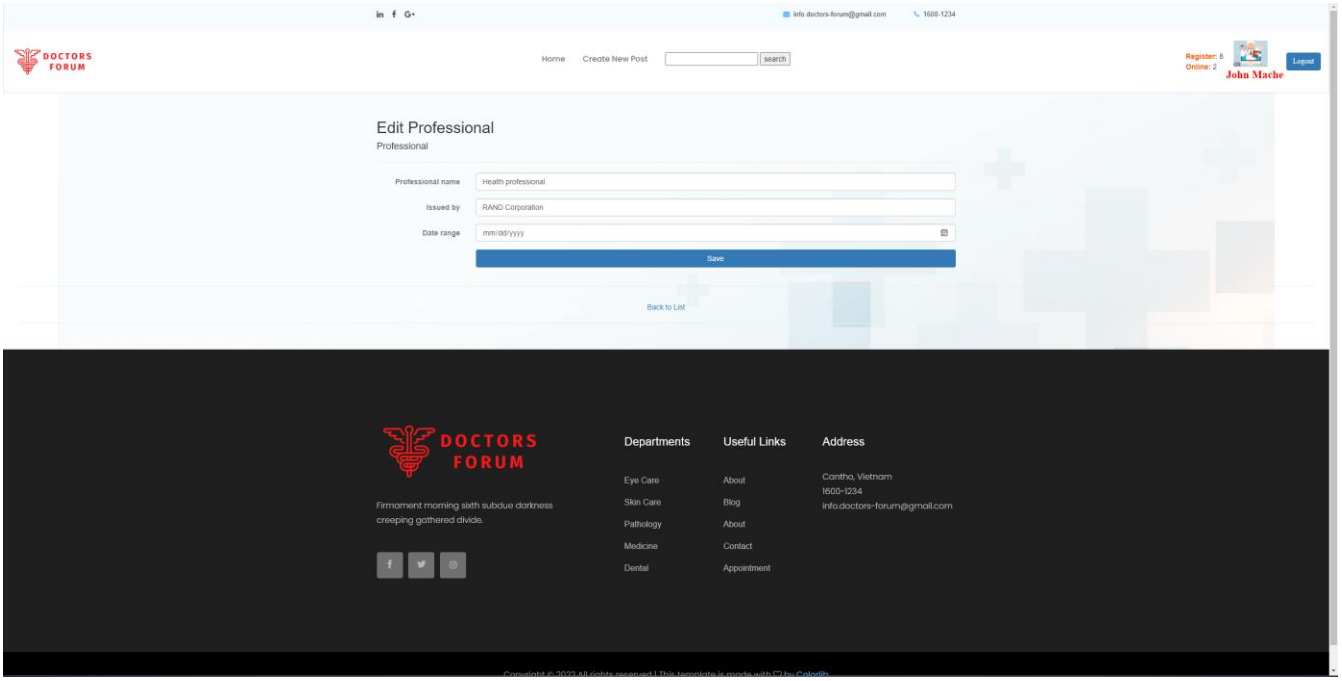

Figure 44 Edit Professional

2.19. Delete Professional:

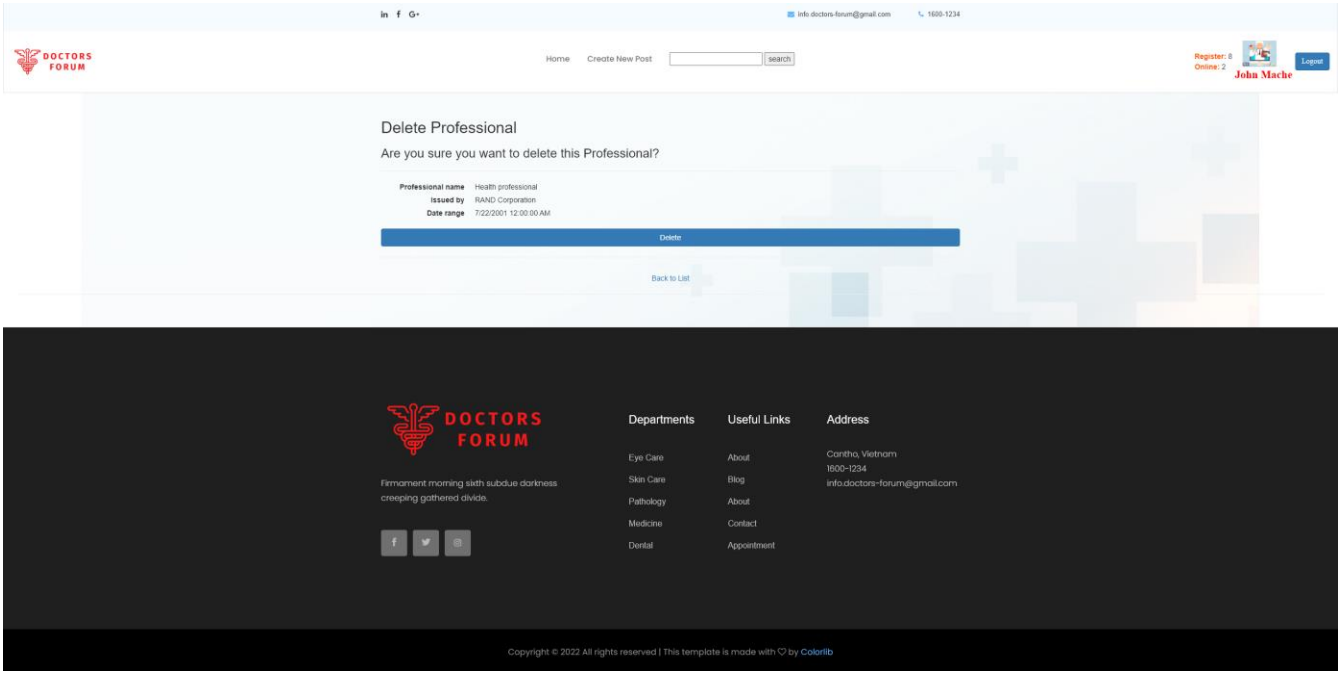

Figure 45 Delete Professional

2.20. Create new post

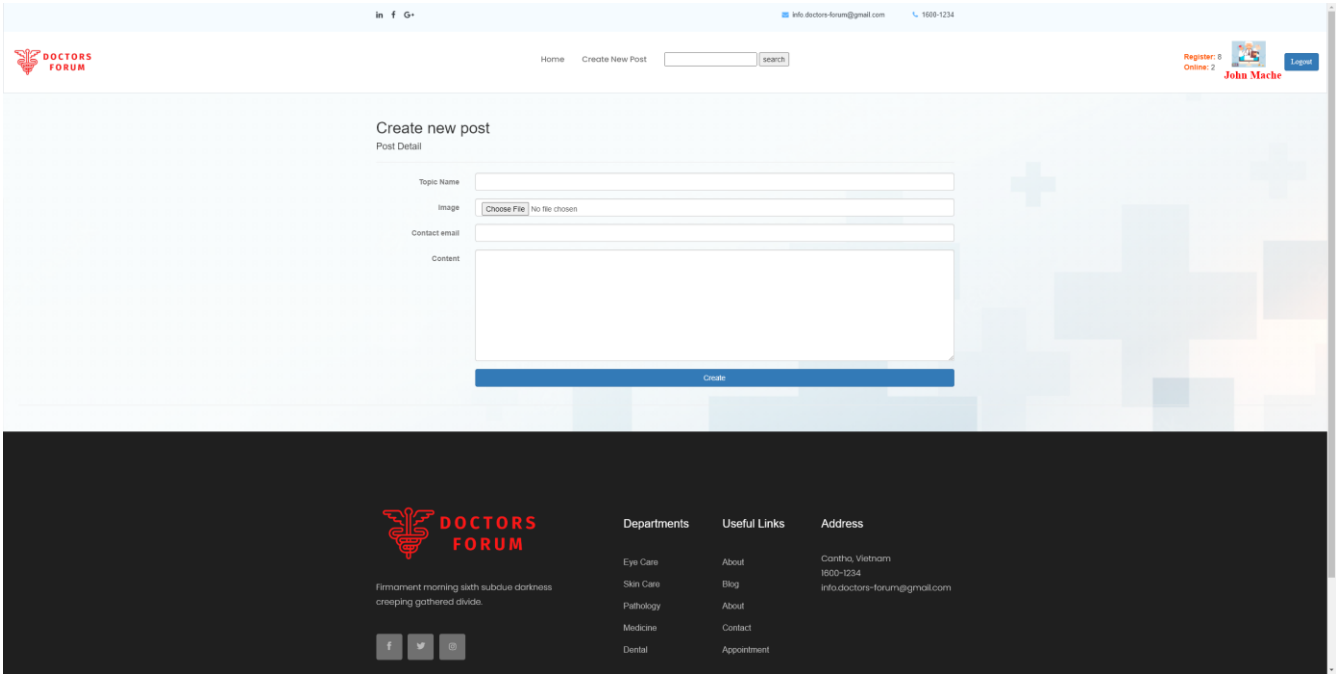

Figure 46 Create new post

2.21. Comment on Post

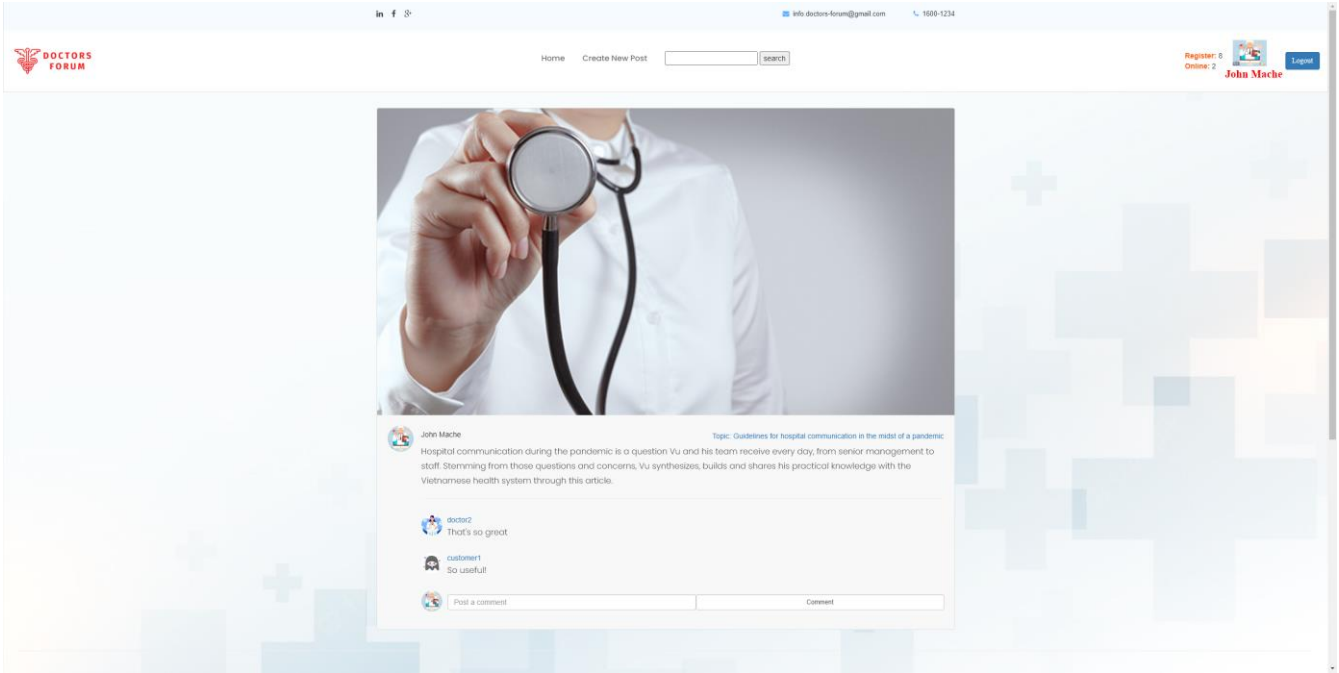

Figure 47 Comment on Post

2.22. Search:

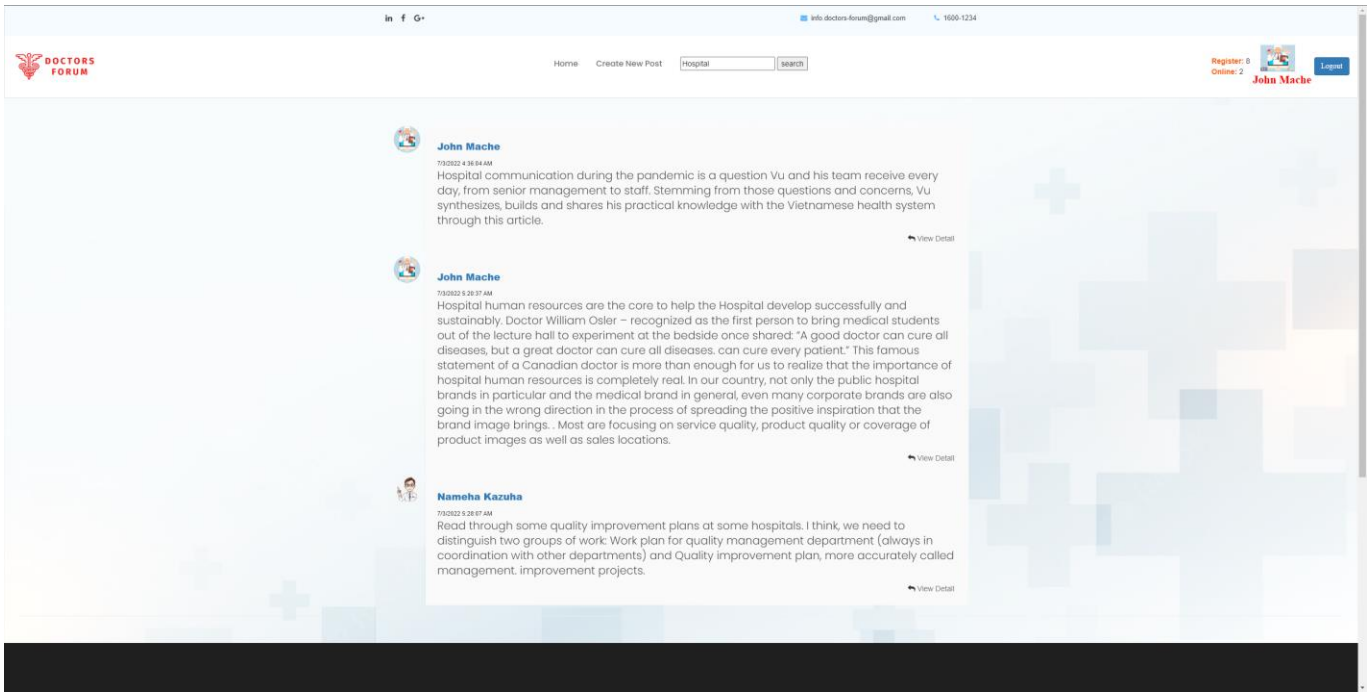

Figure 48 Search