



Medical Examination Reservation System

Software Requirement Specification

– Hanoi, July 2021 –

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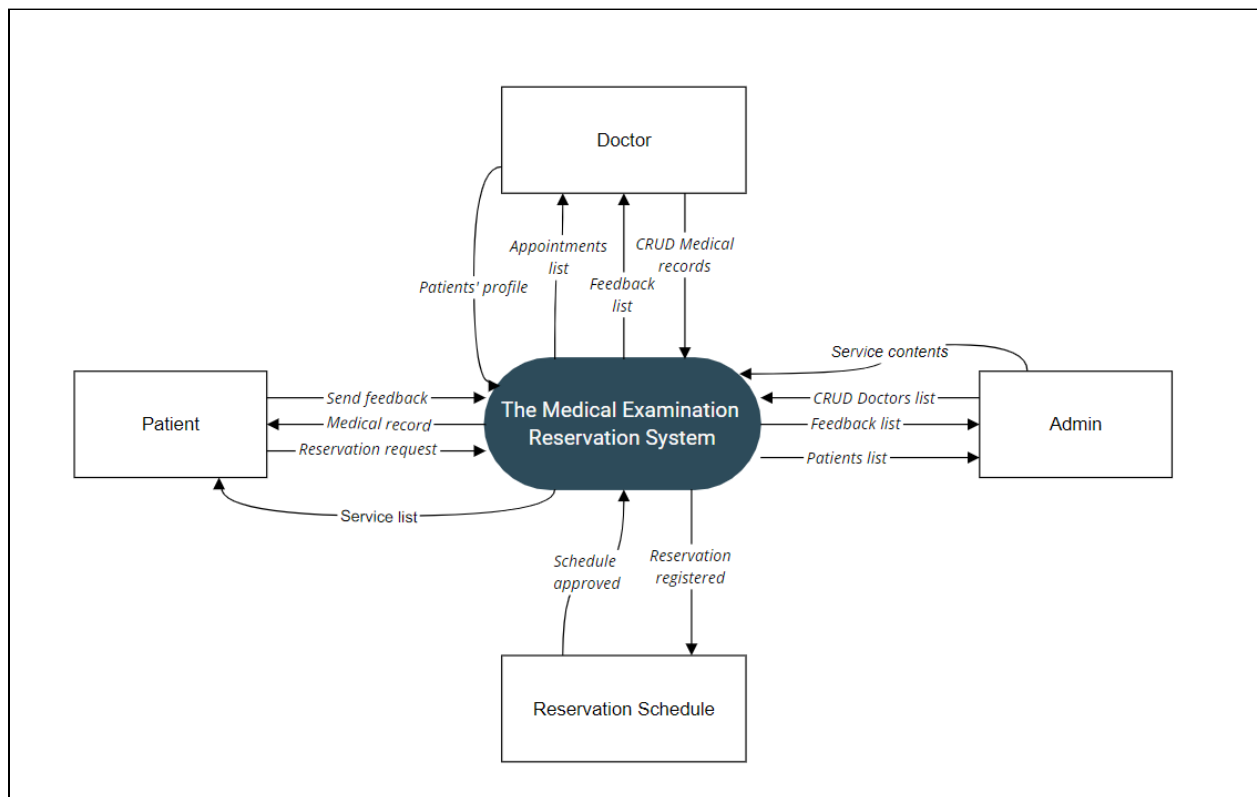
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I. Overview

1. Introduction

The Medical Examination Reservation System is a new software system that replaces the current manual and telephone processes for making an appointment with a doctor at the hospital. The system is expected to support the customers tracking and taking care of their health. In addition, the medical centers manage their services to support the customers better via the Internet.

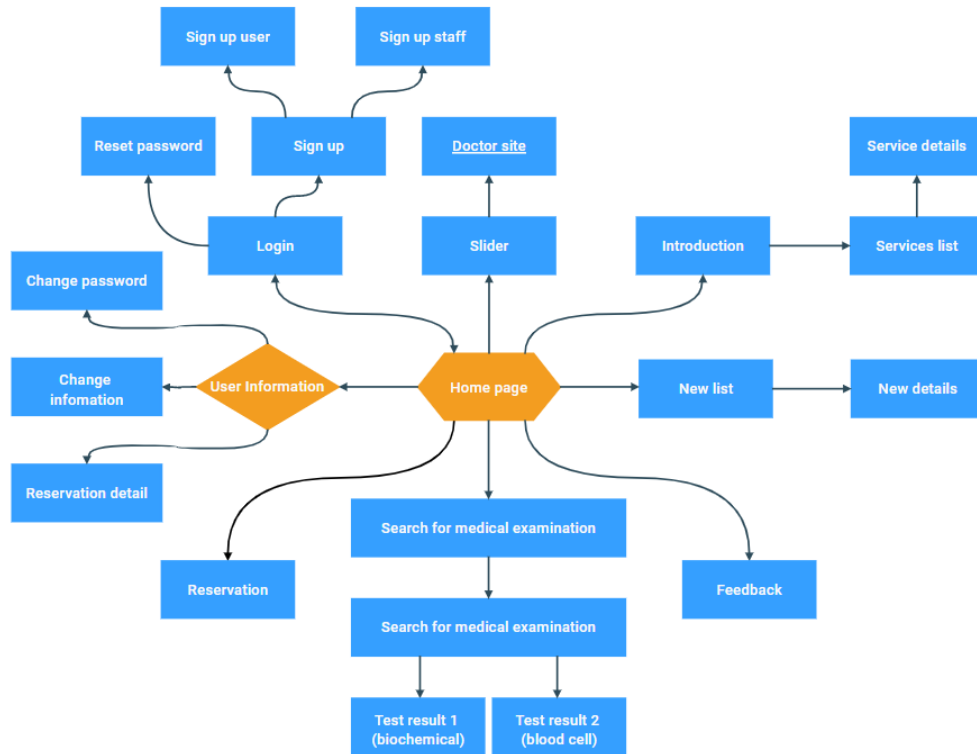


Coding conventions: [Oracle](#).

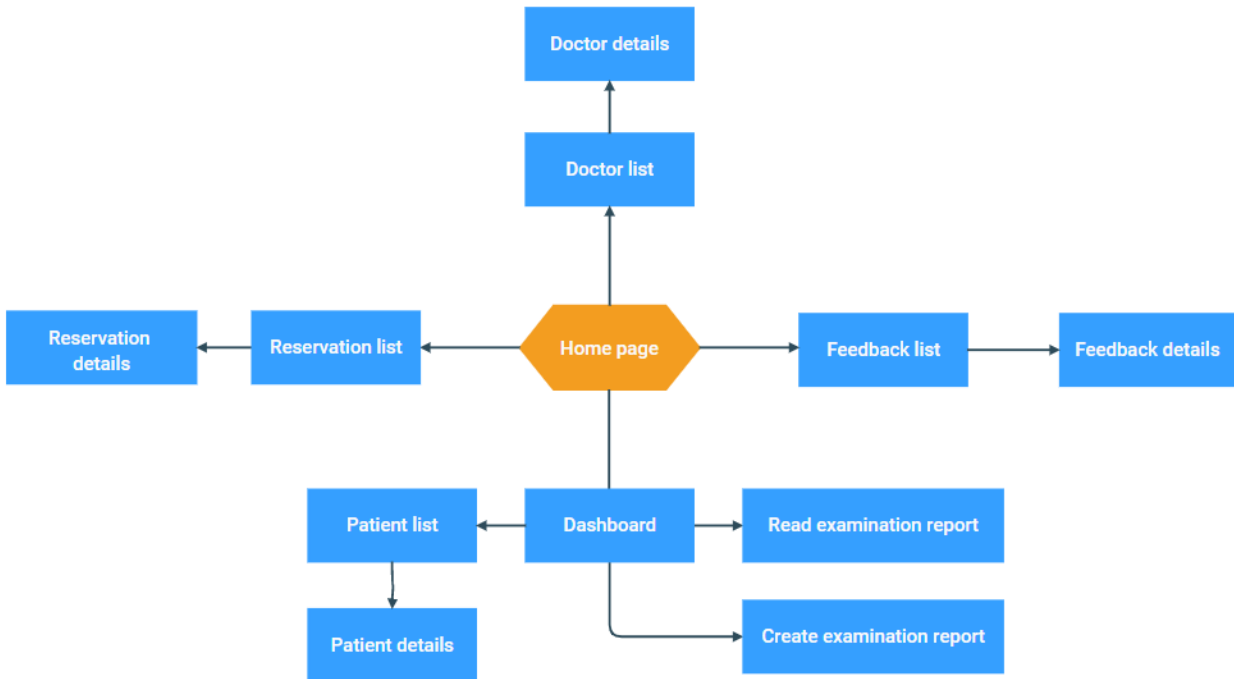
2. System Functions

a. Screen Flow

User site screenflow



Admin site screenflow



b. Screen Details

#	Feature	Screen	Description
1	Login	Register to the system	A customer accessing the Medical test Website must register for an account to approach the resources of the system. When registering successfully, the customer can log into the system by the username and password.
2	Login	Login	A customer accessing the Medical test Website must register for an account to approach the resources of the system. When registering successfully, the customer can log into the system by the username and password.
3	Login	Forgot password	

4	Login	Change password	Customers change password when they consider it is not suited or they forget the last password.
5	Home page	Patients list	The website shall provide a list of patients that allow doctors to see a bit information of that patient
6	Home page	Patient's information	When a doctor clicks on a field of the list, the website will show you detailed information of that patient.
7	Home page	Feedback list	The website shall provide a list of feedback which is feedback by patient or user.
8	History	Reservation information	The website shall provide a list of reservations which are booked by patient or user
9	History	Examination result	The Website Manager shall be able to view all Medical examination reports
10	History	Examination report	The website shall provide a list of examination records containing some information.
11	Reservation	Reservation form	Patients can book a meeting with every doctor they wish for.
12	Reservation	Reservation schedule	The Website Manager shall be able to edit the information of the medical report.
13	Reservation	Reservation detail	The Website Manager shall be able to view a list of all of the information of a patient's reservation form.

c. User Authorization

Screen	Patient	Doctor	Admin
Login	X	X	X
Account Registration	X	X	X
Account log in	X	X	X
Reset password	X	X	X
Change password	X	X	X
Home page	X	X	X
Patients list		X	X
Patient detail	X	X	X
Feedback list			X

Patient feedback	X	X	X
History			X
Reservation information			X
Examination result	X	X	X
Examination report		X	X
Reservation	X	X	X
Reservation form	X		X
Reservation schedule		X	X
Reservation detail		X	X
Reservation list			X

In which:

- Patient: Make reservation, see examination result, user information, send feedback.
- Doctor: Make examination report, see reservation schedule, see patient detail, respond feedback
- Admin: CRUD doctors, check doctors, see patients list

d. Non-Screen Functions

#	Feature	System Function	Description
1	Security	Patients list	All the data of patients must be private and only used for medical purposes.
2	Security	User information	All the personal information of patients must be private and only used for medical purposes.
3	Security	Examination report	All the reported information of patients must be private and only used for medical purposes.
3	Security	Reservation schedule	All the data of the reservation schedule must be private and only used for medical purposes.
4	Performance	Reservation form	The system could support a large number of users at the same time.

2. User Login

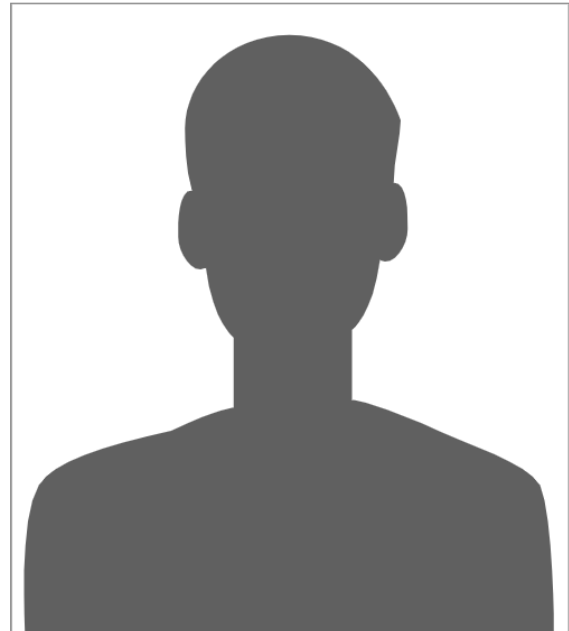
- Function Trigger: A customer indicates that he/ she wants to log into the website.
 - Function Description: When registering successfully, the customer can log into the system by the username and password.
-

Login

☒ Remember me [Forgot password ?](#)

Login

[Don't have an account ? Create one now !](#)



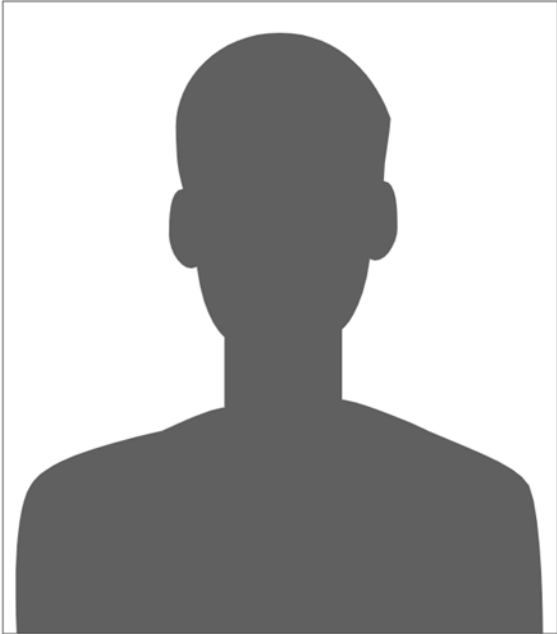
- Function Details: The System prompts the user for a username and password. The user enters his/her username and password. The system verifies the entered username and password to check if data already existed or not.

3. User Register

- Function Trigger: A customer indicates that he/ she wants to register for an account of the website.
- Function Description: A customer accessing the Medical test Website must register for an account to approach the resources of the system. When registering successfully, the customer can log into the system by the username and password.

Signup

[Already have an account ? Login now !](#)



- **Function Details:** The System prompts users for registration information, Username, password, ID card, eMail Address. System verifies information and creates an account.

4. Reset password

- **Function Trigger:** A customer indicates that he/ she wants to get back the account's password.
- **Function Description:** Customers change password when they consider it is not reasonable for them or they forget the last password.

Forgot password

Please enter username that you used to register.

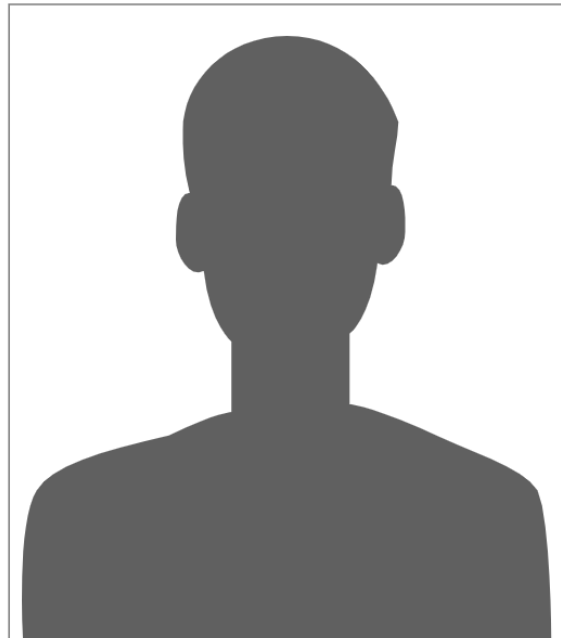
Captcha:



New password will be sent to the email, which has registered with the username. Please check your email.

Submit

[Already have an account ? Login now !](#)



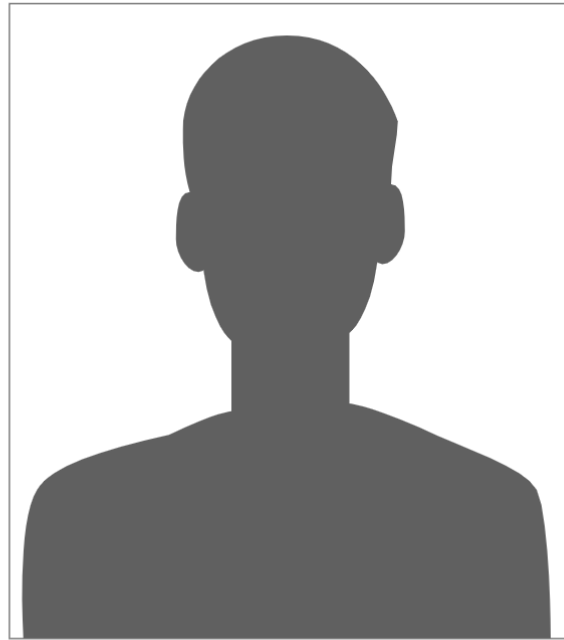
- **Function Details:** User input the username and email to get a new password. The system will check if the input information is duplicate with the data existing in the database. The system provides a new password for users to modify their account.

5. Change password

- **Function Trigger:** A customer indicates that he/ she wants to change the account's password.
- **Function Description:** Customers change password when they consider it is not reasonable for them or they forget the last password.

Change password

[Already have an account ? Login now !](#)



- **Function Details:** User input the old password to get a new password. The system will check if the input information is duplicate with the data existing in the database. The system provides new passwords for people to modify their account.

6. User Authorization

- **Function Trigger:** An user tries to access a function that he/she is not authorized to.
- **Function Description:** The system provides an error message to the screen to notify that the user cannot access this function.

404

Oops! This Page Could Not Be Found

SORRY BUT THE PAGE YOU ARE LOOKING FOR DOES NOT EXIST, HAVE BEEN REMOVED. NAME CHANGED OR IS TEMPORARILY UNAVAILABLE

[GO TO HOMEPAGE](#)

- **Function Details:** The system indicates that a role has no rights to access to some specific functions.

7. View medical examination

- **Function Trigger:** A customer indicates that he/ she wants to view a medical record.
- **Function Description:** Customers get access to a website to receive their medical record by code.

Welcom to Department of Subclinical

Home Doctors News Contact Make an appointment Logout

Enter the Medical code which doctor gave you !

Enter your code here Search

- Function Details: Users enter their private code given by the doctor to gain access to their personal medical record.

8. Setup medical examination

- Function Trigger: A Doctor or admin wants to create a new medical examination record.
- Function Description: A doctor accesses the Medical Testing Website (admin site) to create new medical examinations. The doctor can only create the examination which is an exam by him/her. Admin can create all the medical examinations.

Doctor website
Department of Subclinical

Final Result

Results code
175TACXZ
Generate

Patient name
Phone number

hung
0921189960

Age
Gender:
Male
Female

18

Address

Quang Ninh

Medical Option

Non - Insurance

Insurance code

XX - 13 digits code

Diagnostic

abc

Conclusion

hihi

Doctor in charge
Date of examination

Nguyen Quang Hieu
2021-07-22

Create

- Function Details: Doctor logged in to MTW with the doctor role. Doctor fills the form with patient information. A medical examination will be created.

9. Control medical examination

- Function Trigger: Staff wants to approve reservation from patients and assigns to appropriate doctors.
- Function Description: Patients' reservation will be approved by staff and assigned to the appropriate doctor with appropriate schedule and department.

ADMIN WEBSITE
ACCOUNT
Account Settings


DASH BOARD
Give me some text

Create Record
Send code
Update record
Remove record

- Function Details: Patients' reservation will be approved by staff and assigned to the appropriate doctor with the appropriate schedule and department.

10. Patient List

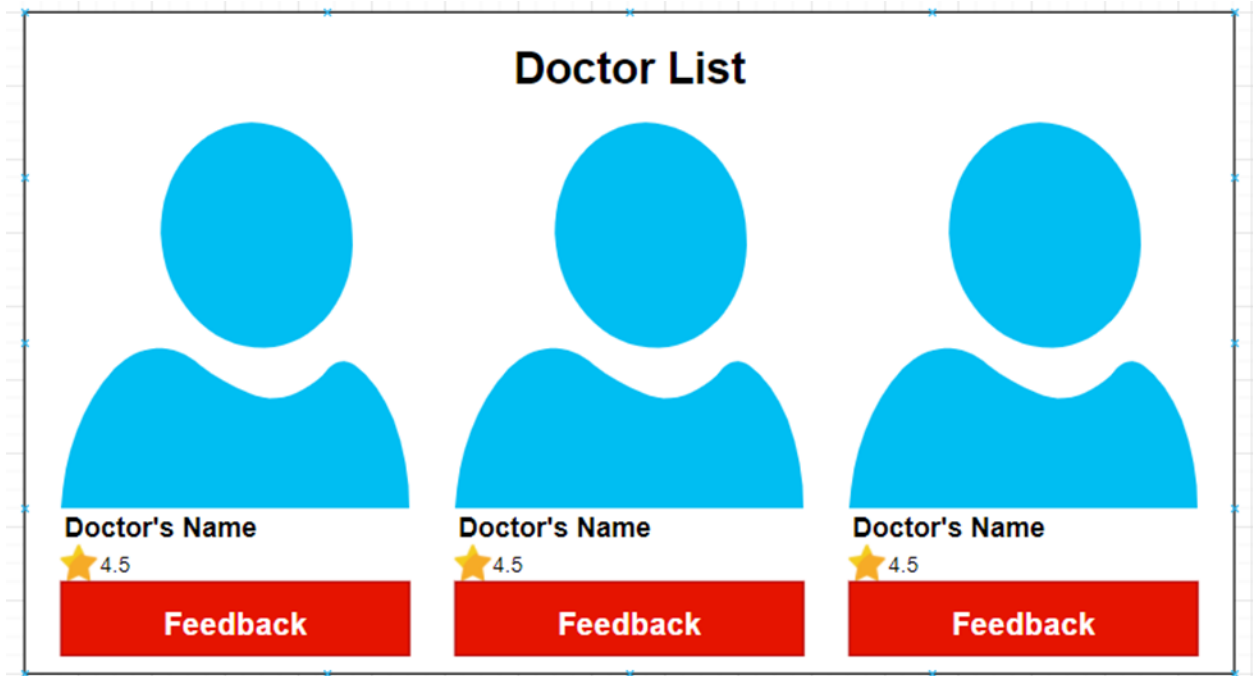
- Function Trigger: Admin wants to see the whole list of patients for personal information or medical records.
- Function Description: The Admin shall be able to view a list of all of the Overview information of patients.

Patient table					
RECENT CUSTOMERS					
Jerry Mattedi	13 aug 2018 Joined	251-661-5362 Phone Number	New York Location	Options	Details
ElianoraVasilov	13 aug 2018 Joined	351-661-3252 Phone Number	Ontario Location	Options	Details
Marcos Anguiano	13 aug 2018 Joined	251-661-5362 Phone Number	Milan Location	Options	Details
Alvis Daen	13 aug 2018 Joined	351-661-3252 Phone Number	Las Vegas Location	Options	Details
Lissa Shipsey	13 aug 2018 Joined	251-661-5362 Phone Number	San Francisco Location	Options	Details

- Function Details: When an Admin clicks on a field of the list, the website will show you detailed information of that patient.

11. Doctor List

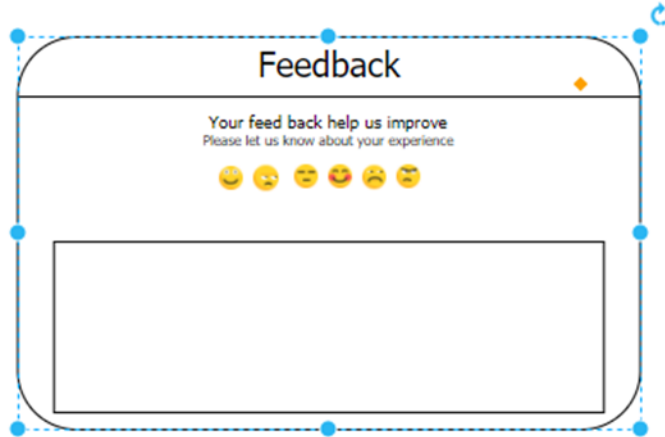
- Function Trigger: Admin indicates that he wants to check or edit the information of the doctors.
- Function Description: Admin shall be able to view a list of all of the information of a Doctor.



- Function Details: The Admin login as Admin role. Admin click on the “View doctors list” button in the dashboard. The website displays all the detailed information of doctors.

12. Patient feedback

- Function Trigger: A customer indicates that he/ she wants to feedback the service.
- Function Description: Customers get access to a website to feedback the quality of service (doctor, infrastructure, treatment).



-
- Function Details: Patients could only give feedback on the doctors that they had booked and could give personal opinions about that doctor. This information will be public for all users to see.

13. View feedback list

- Function Trigger: Admin wants to see the whole list of feedback which is feedback by patient.
- Function Description: The website shall provide a list of feedback which is feedback by patients.

- **Function Details:** When a staff clicks on a field of feedback list, the website shall provide a page containing the feedback and score they give.

14. Feedback detail

- **Function Trigger:** Doctors want to see the whole list of feedback which is feedback by patients.
- **Function Description:** The website shall provide a list of feedback which is feedback by patients.

- **Function Details:** When a doctor clicks on a field of feedback list, the website shall provide a page containing the feedback and score they give.

15. Reservation List

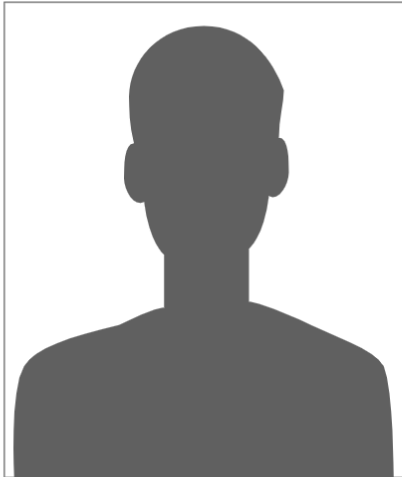
- **Function Trigger:** Staff want to see the whole list of reservations which is booked by patient.
- **Function Description:** The website shall provide a list of reservations which are booked by patient or user.

- **Function Details:** When a staff clicks on a field of reservations list, the website shall provide a page containing full information of that reservation.

16. Reservations

- **Function Trigger:** Patient request to reserve for the meeting with doctor, or Patient say yes when MTW asks if he wants to reserve.
- **Function Description:** The patient after login successfully can use their account to reserve a meeting with the doctor on doctor's schedule.

Welcome to Department of Sublinical
Home
Doctors
News
Medical reports
Login



Make an appointment

Name
Full Name

Email
Your Email

Select Date
05/15/2021

Select Department
General Health

Phone Number
Phone

Additional Message
Message

Submit

Contact Info
General Hospital of Agriculture

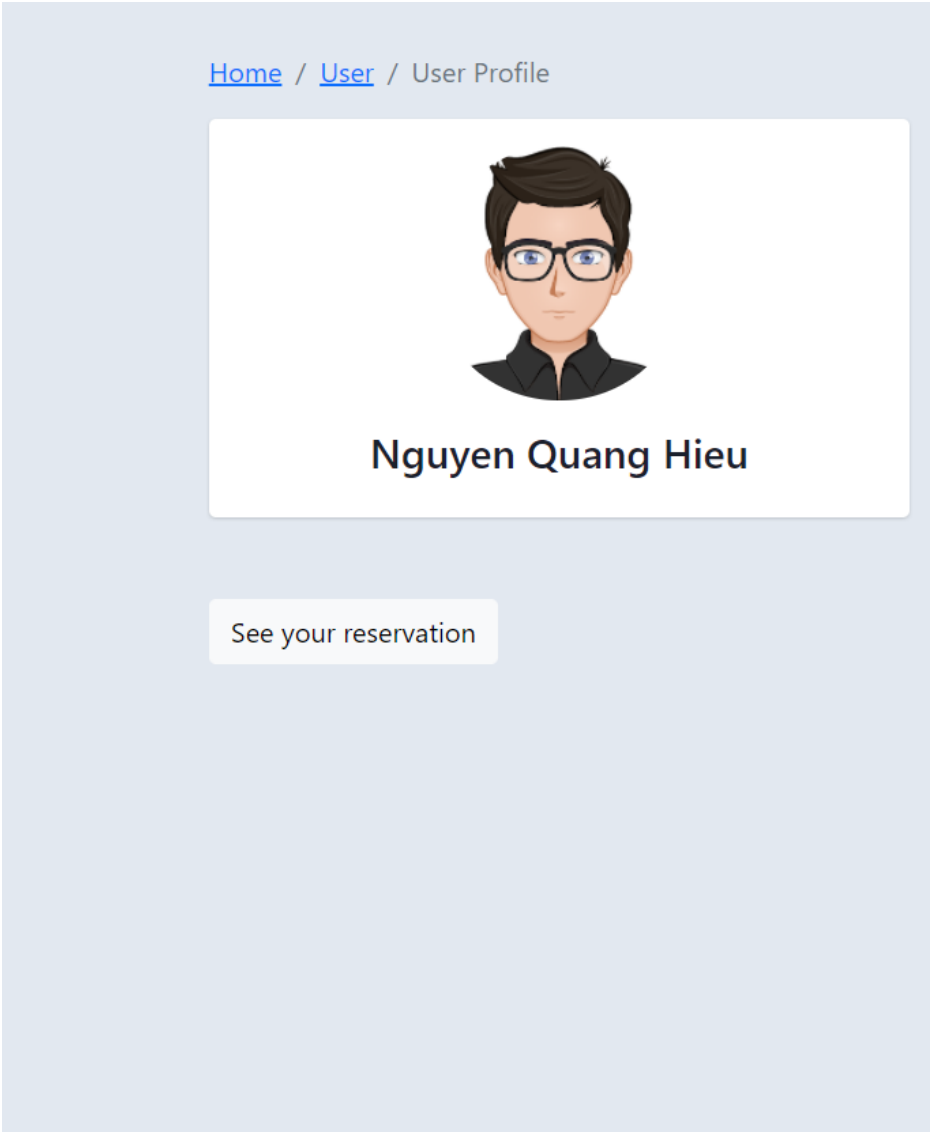
Latest New
Amazing technology

Opening Hours
Open all the time

- **Function Details:** Patient asks to reserve the meeting on a specified date. MTW displays a menu showing the date and doctors are available. Patient selects the date and doctor. MTW shows the reservation that the patient selected. Patient specifies payment method. MTW confirms acceptance of the reservation. MTW sends a message to the patient's phone number confirming reservation details and price. MTW stores reservations, sends information to the database and updates the doctor's schedule.

17. Reservation details

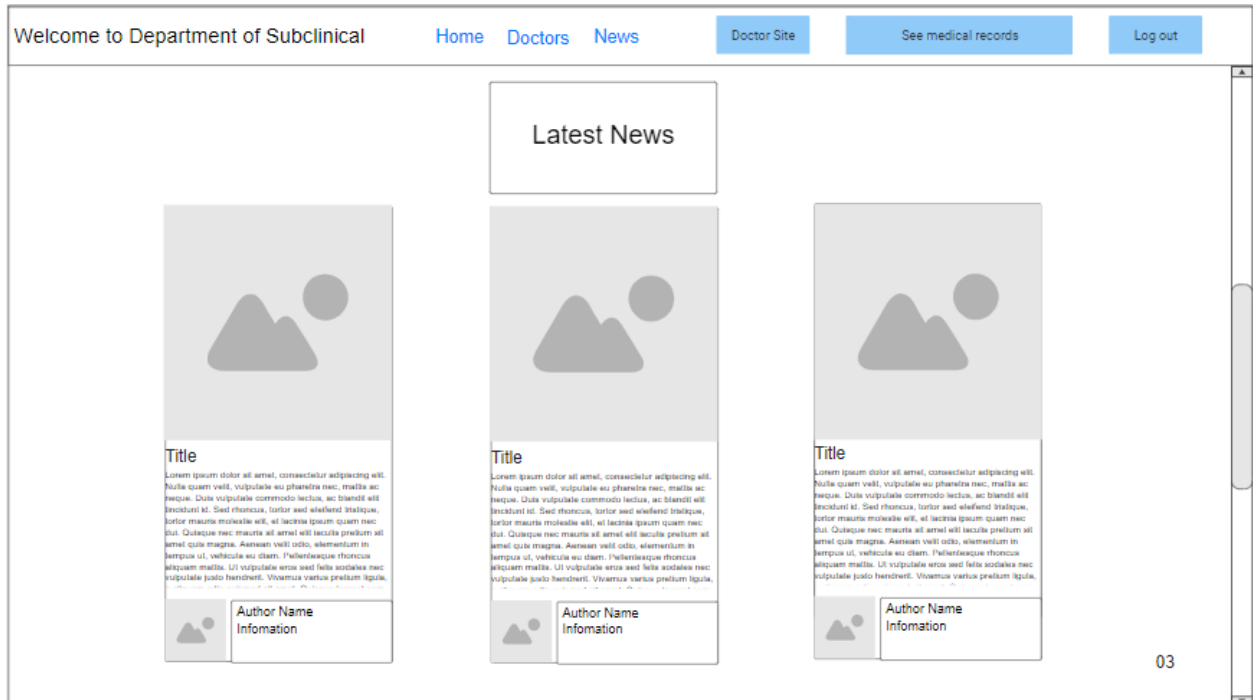
- **Function Trigger:** Patient request to see their personal reservation when they click button "See your reservation" in the profile page.
- **Function Description:** The patient after login successfully can use their account to See their reservation detail status and their action with it.



Home / [User](#) / User Profile

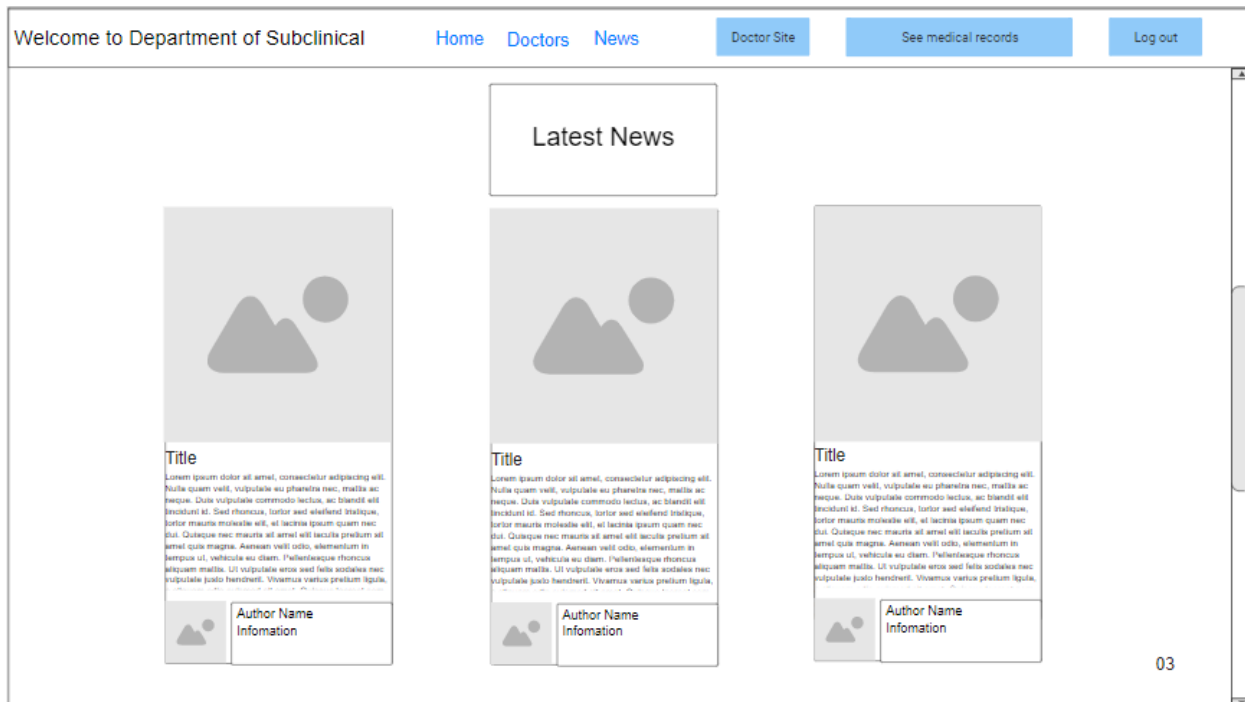
ID	Name	Phone	Insurance_code	Date	email	Status	Action
7	nguyen van a	123456	hihihi	2021-07-09	halongpro102@gmail.com	Pending	Cancel
8	hungxyz	0921189960	SE1502	2021-07-23	hungnmhe153613@fpt.edu.vn	Pending	Cancel

- Function Details: Patient asks to see their booked examination. MTW displays a table containing all their reservation details. Patient can cancel the reservation which is pending status. MTW will show many status of their reservation

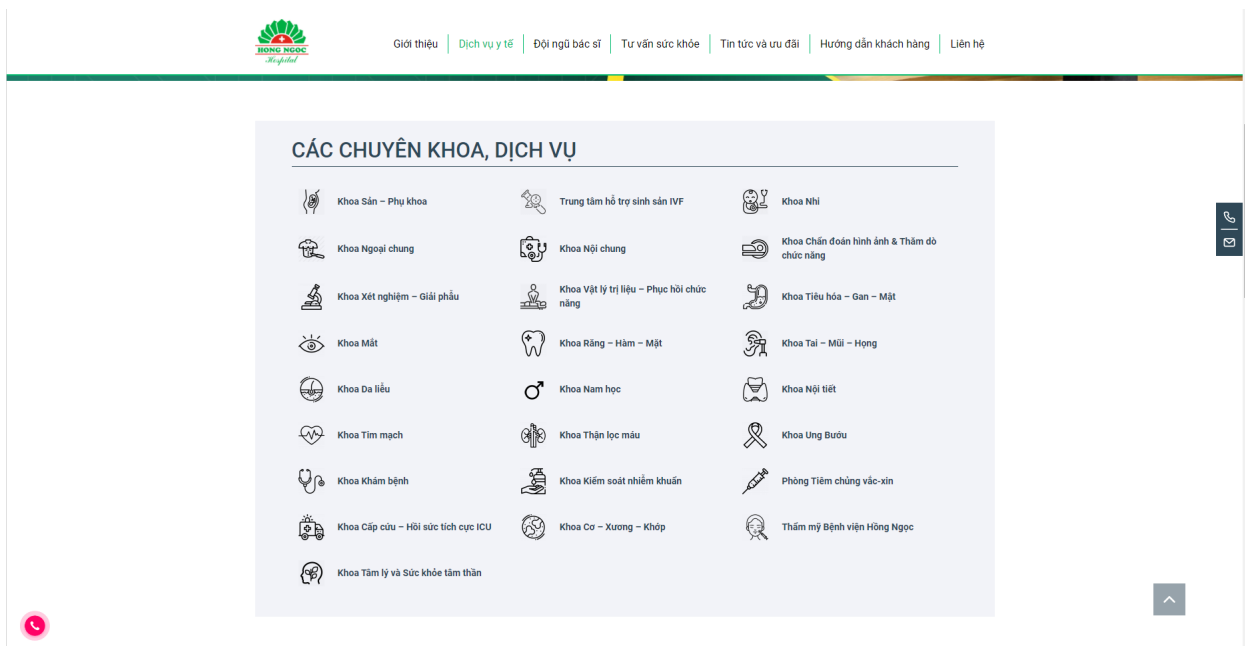


18. News details

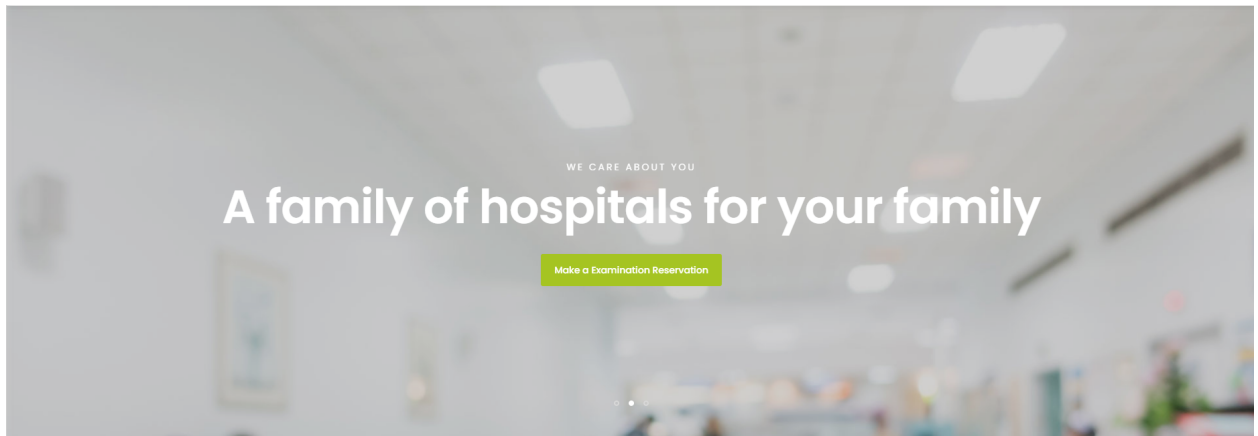
- Function Trigger: User requests to see detail of the news and click. Page will redirect the user to the website that contains the url.
- Function Description: This function will allow any user(including user hasn't login) to see and access the news website.



after click in random news

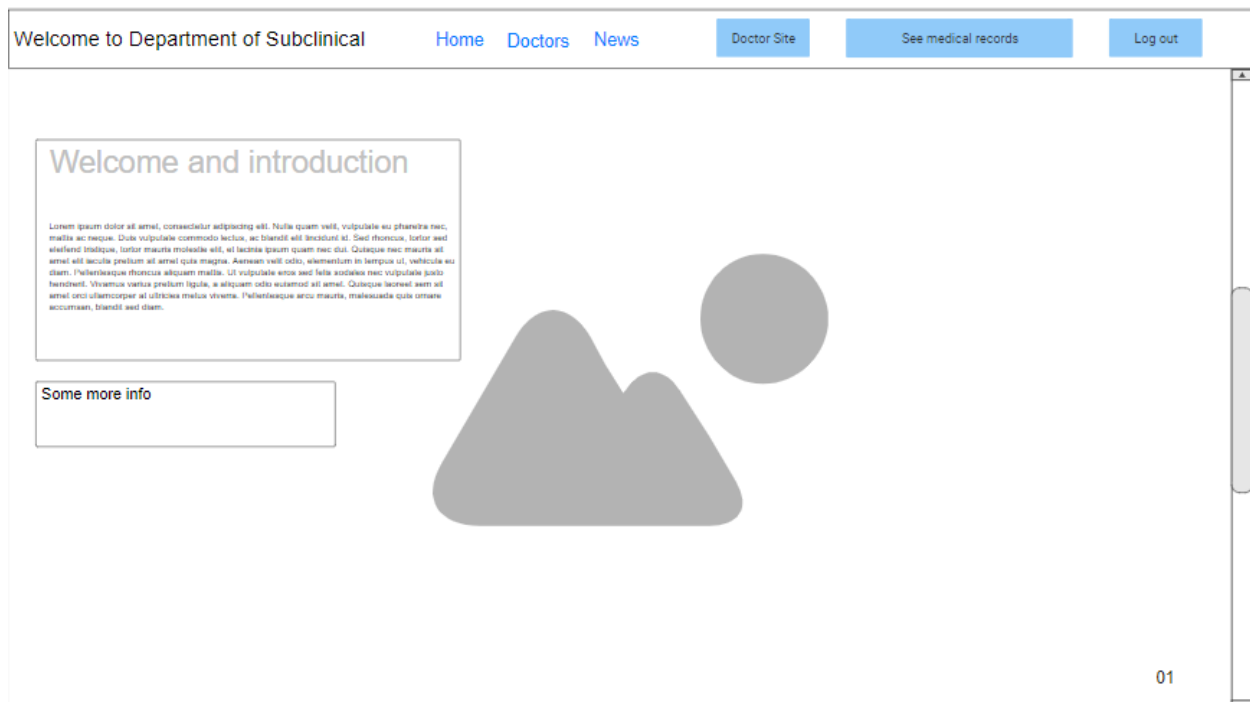


19. Sliders (Full font-end)



20. Introduction

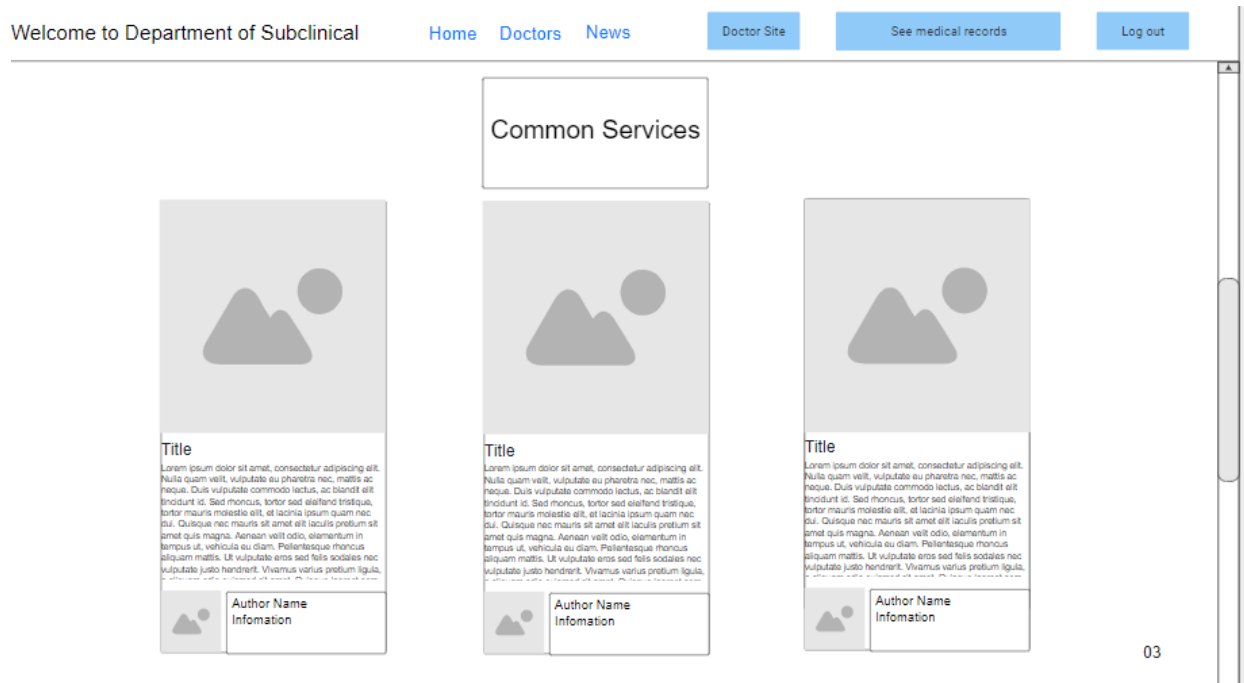
- Function Trigger: User access to home page.
- Function Description: User after access to the Hospital page can read the introduction of the hospital.



- Function Details: When users access the Home Page, they can read the general information about the hospital.

21. Services list

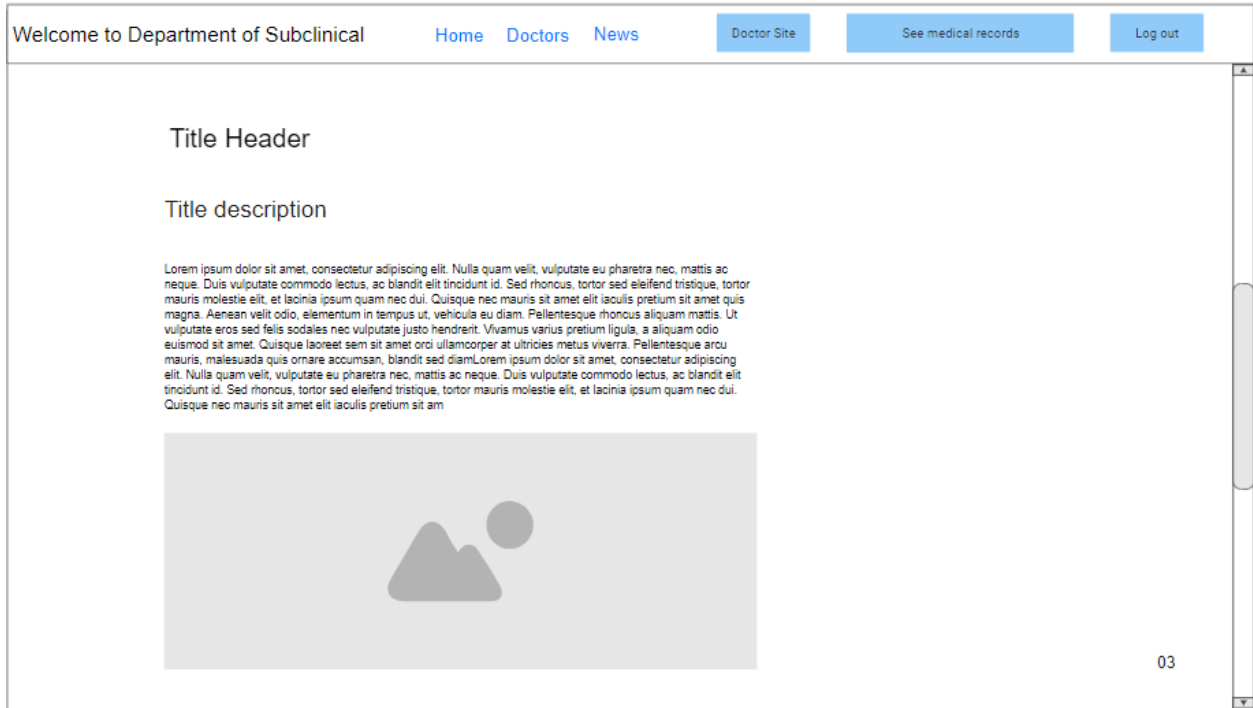
- Function Trigger: User wants to see the whole list of services of the hospital.
- Function Description: The website shall provide a list of services of the hospital.



- Function Details: When a user clicks on Common Service on Home Page, the website shall provide a page containing the service list.

22. Services details

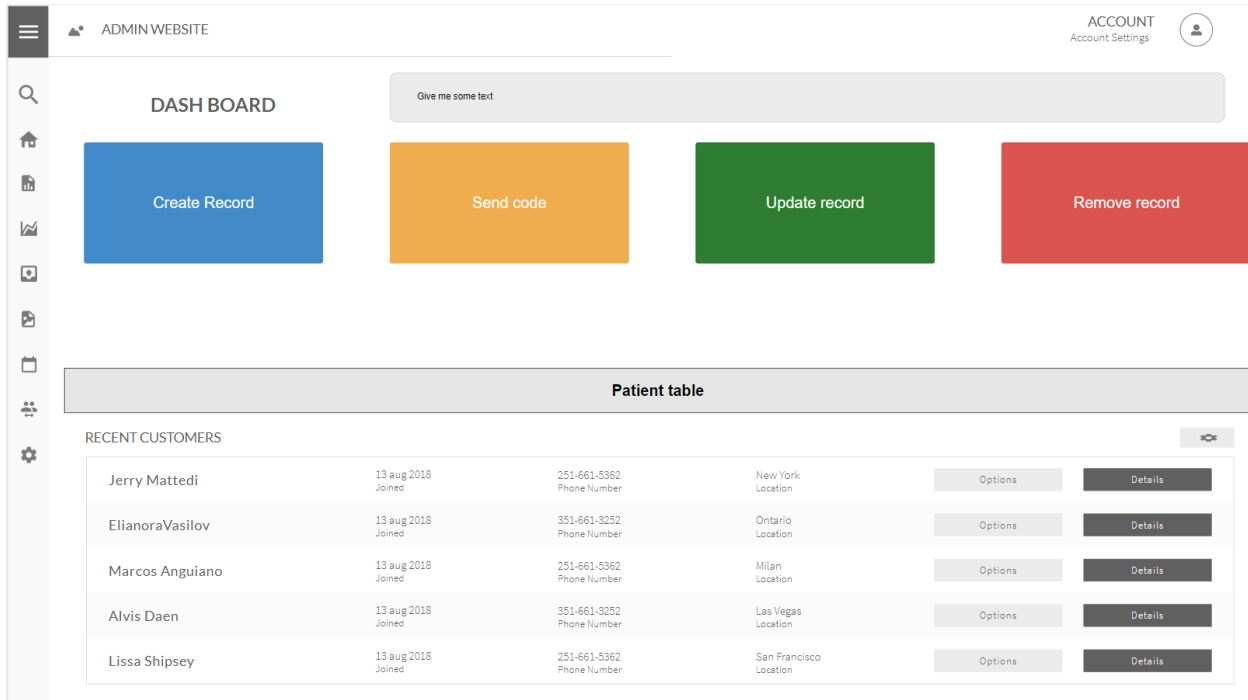
- Function Trigger: Users want to see the service details of the hospital.
- Function Description: The website shall provide detailed information of each service of the hospital.



- **Function Details:** When a user clicks on a field of service list, the website shall provide a page containing the detailed information of service.

23. Admin dashboard

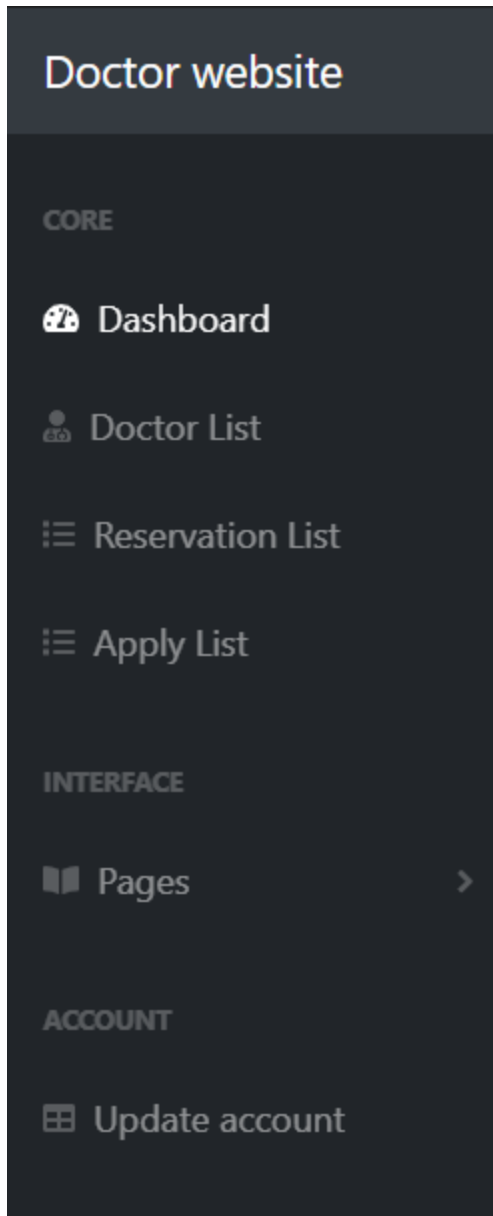
- **Function Trigger:** Admin access to the main dashboard of the website.
- **Function Description:** Admin shall be able to view all the live statistics and diagrams of MTW.



- **Function Details:** A doctor or admin of the MTW system accesses the doctor site, the dashboard will automatically display into the screen. Doctors or admin can view, update, delete, create medical examinations from this page.

24. Setting list

- **Function Trigger:** A Doctor or admin wants to view all the action they can do in the doctor role..
- **Function Description:** Doctors or admin can view, update, delete, create medical examinations from this page. They can also change the password, update doctor information,... This is an overview of the MTW system setting site.




- Function Details: Doctors or admin can view, update, delete, create medical examinations from this page. They can also change the password, update doctor information,... .

25. Setting details

- Function Trigger: A Doctor or admin wants to view all the action they can do in the doctor role..
- Function Description: Doctors or admin can view, update, delete, create medical examinations from this page. They can also change the password, update doctor information,... This is an overview of the MTW system setting site.
- Function Details: Doctors or admin can view, update, delete, create medical examinations from this page. They can also change the password, update doctor information,... .

26. User profile

- Function trigger: User access profile page.
- Function description: User shall be able to view all profile information.



The screenshot shows a user profile form. On the left, there is a placeholder for a profile picture, represented by a blue circular icon with a person silhouette, and the label 'Name' below it. To the right of the profile picture, there are several input fields for user information, each with a label and a text box containing the word 'Example':

- Username: Example
- Password: Example
- Fullname: Example
- Date of birth: Tue Jul 20 2021 00:06:01
- Email: Example
- Phone: Example
- Gender: Example

At the bottom right of the form, there is a dark grey button labeled 'Edit'.

- Function details: User access profile page, a form with all user information will be loaded from the database.

27. Update user profile

- Function trigger: User request to edit profile information.
- Function description: User shall be able to view and edit all profile information.

The form is titled 'Name' and features a profile picture placeholder. It includes the following fields:

- Username:** Example input placeholder
- Password:** Another input placeholder
- Fullname:** Another input placeholder
- Date of birth:** Another input placeholder
- Email:** Another input placeholder
- Phone:** Another input placeholder
- Gender:** ☐ Female ☐ Male

A blue **Submit** button is located at the bottom of the form.

- Function details: User access profile page, a form with all user information will be loaded from the database. After that, users are allowed to edit and submit information on that form to be saved on the database.

28. Jobs application

- Function Trigger: A user wants to be a doctor of the hospital.
- Function Description: User register to be a doctor of the hospital.

Doctor Registration Form

User Name

Pasword

Full Name

Date of birth



Address

Email

Gender



Phone Number

Department



Room

Year

Register

Cancel

- Function Details: Users enter their personal information into the form and submit.

29. Laboratory results

- Function Trigger: A patient indicates that he/ she wants to view laboratory results.
- Function Description: Customers get access to the website to receive their medical reports.

Blood cells analysis

Type	Result	Normal	Conclusion
Number of HC	mmol/l	4.0 - 5.2 mmol/l	
Hemoglobin	g/l	125 - 160 g/l	
Hematocrit	l/l	0.37 - 0.47 l/l	
Reticulocyte	%	0.1 - 0.5 %	
Settled blood	mm / 1h	< 10 mm / 1h	
Flow blood	mm / 3m	810 - 1100 mm / 3m	
Platelet	unit/ μ l	200k - 400k unit/ μ l	
Blood type			

- Function Details: System displays the symptom the patient provided, the diagnosis the doctor supplied and the method to solve the problem.

30. Clear the reservation

- Function Trigger: When admin wants to remove or manage the reservation by entering Dashboard.
- Function Description: The system allows Admin to delete the reservation in the reservation list in the database.

Medical Record List

ID	Full Name	Diagnostic	Conclusion	Code	Action
1	Binh	Hand dislocation	Hand dislocation due to compete in AOE2	QS40BVF0	<button>Delete</button>
2	Erling Haaland	Shoulder dislocaion	Shoulder dislocation due to Sergio Ramos's tackle, must surgery now	4ZWNPSAI	<button>Delete</button>
3	Nguyen Van Ba	Hand dislocation	High due to smoke too much weed	9748IGPW	<button>Delete</button>
4	Nguyen Van Ba	Too handsome	Too handsome due to win Copa America :v	PW18D2G7	<button>Delete</button>
5	Nguyen Quang Hieu	Broken heart	High due to smoke too much weed	ROL6VVP0	<button>Delete</button>
6	Le Thi Hoa	Broken heart	Stone KT 4mm in reins, kidney follicles 20mm in left reins	1N5JU076	<button>Delete</button>
7	Nguyen Quang Hieu	Broken heart	High due to smoke too much weed	OXF127E7	<button>Delete</button>
9	Erling Haaland	High	Too handsome due to win Copa America :v	RFX3YWZD	<button>Delete</button>

- Function Details: Admin remove the reservation that has been done or canceled from the reservation list, change will be saved into the database.