



FPT UNIVERSITY

GROUP ASSIGNMENT

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Subject: SWD392
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1. Prepare functional requirements (BRS-URS) SRS

a. Business Requirements (BR):

- Ensure compliance with privacy and data protection regulations for processing sensitive medical information.
- Restrict access to patient records and scheduling functions based on user roles.
- Appointment scheduling functionality.
- Cancellation of appointments should follow specified rules, with the possibility of requiring advance notice to avoid unnecessary cancellation fees.
- Physicians must check and update patient records upon initial contact or follow-up appointments.
- Clear documentation of test results and proposed treatments in patient records.
- New patients need to provide initial record information during the registration process.
- Patient records must be created and updated whenever there are changes to health status or personal information.
- Patients are responsible for providing accurate and continuous updates about themselves.

- Physicians and staff should have access to patient records only within the scope of their duties, adhering to healthcare security rules.

b. User Requirements (UR):

- Registration and patient information management:
 - New patients must provide initial record information during their first visit.
 - Current patients update records during follow-up visits.
 - Patient records include personal information, medical history, and contact details.
- Appointment scheduling:
 - Clinic staff can schedule appointments for patients with available physicians.
 - Patients can request, confirm, or reject appointments.
 - Confirmation and reminder notifications for scheduled appointments.
- Health examination requests:
 - Staff can receive and process health examination requests.
 - Assign physicians based on availability and expertise.

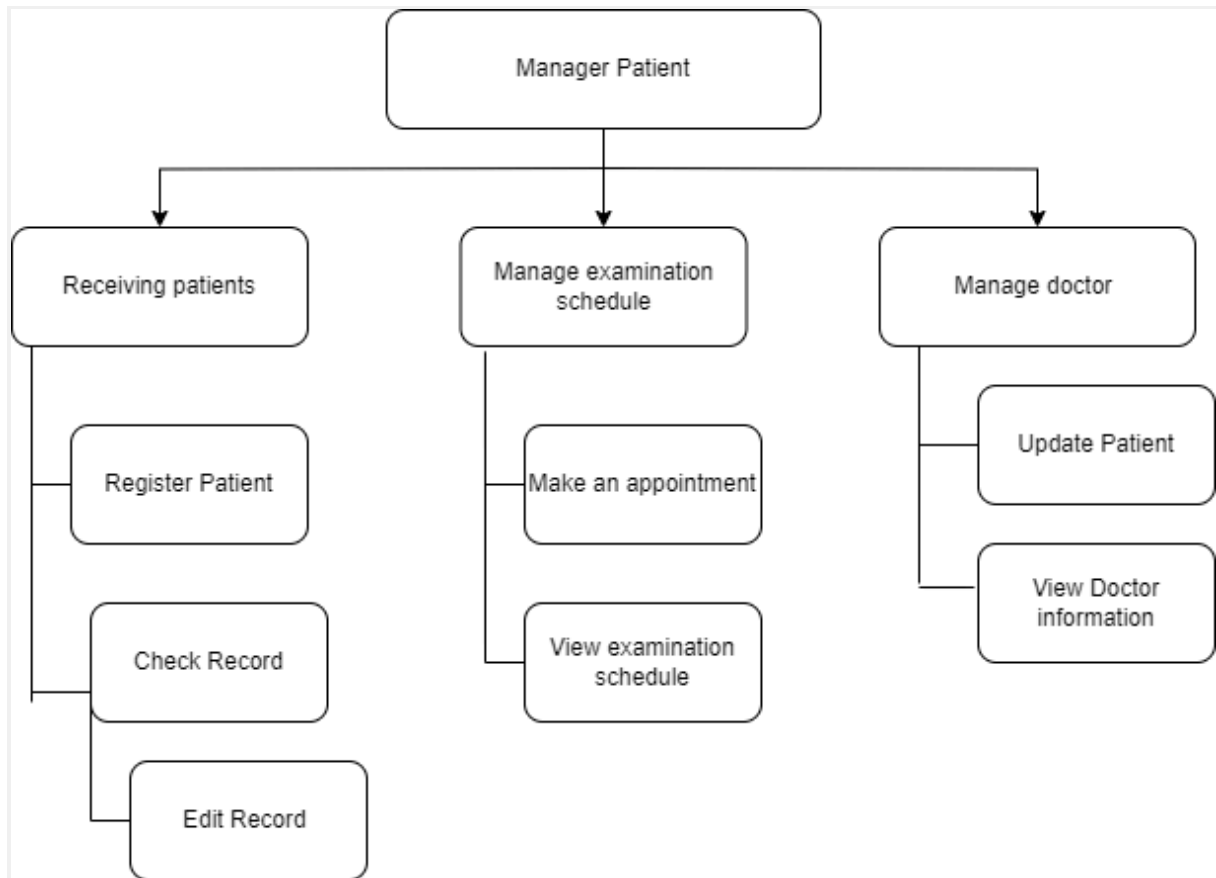
c. Software Requirement Specification (SRS):

- User authentication:
 - Secure login for clinic staff and administrators.
- Patient management:
 - CRUD operations for patient records.
 - Search and retrieval of patient records.
- Appointment management:
 - View schedules for available positions.
 - Process appointment requests.
 - Notifications for staff and patients.
- Medical examinations:
 - Record and track health examination requests.
 - Assign physicians based on expertise and availability.
- Reporting:

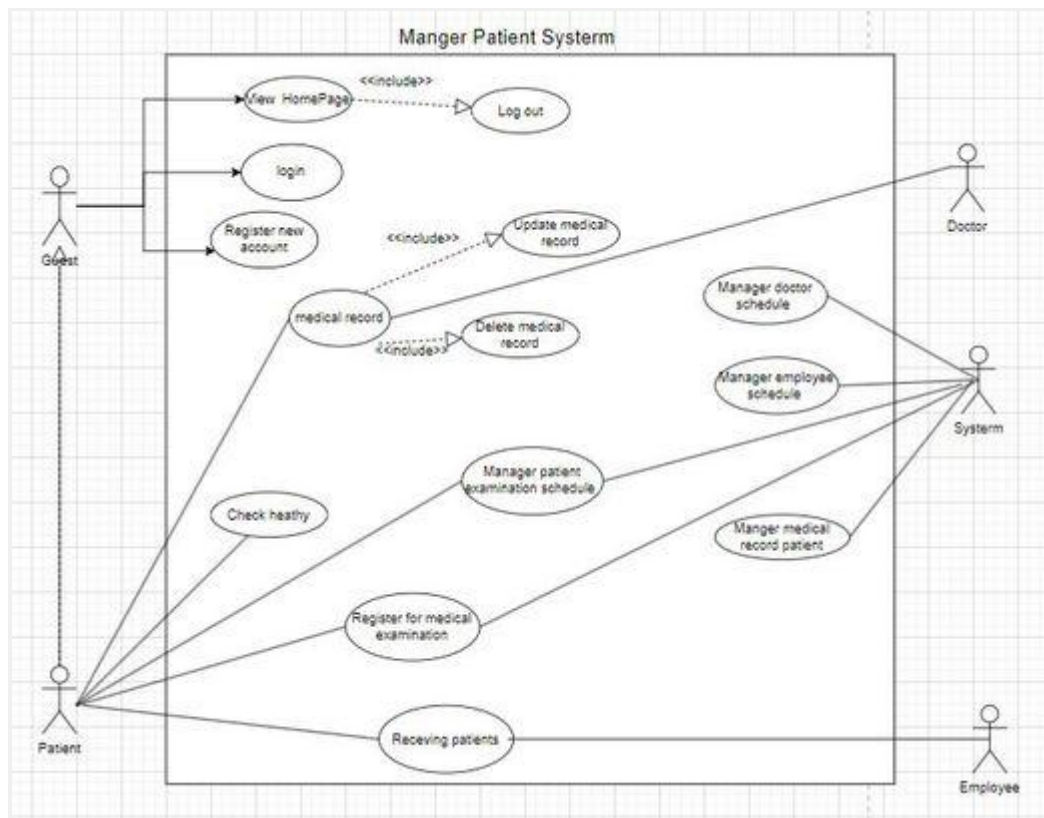
- Generate reports on patient statistics, appointment history, and physician workload.

2.Create functional diagrams through use case diagrams and use case descriptions

a.Functional diagram:



b. Use case diagram:



- **Usecase 1: Guest User Viewing Web Interface:**

Description: A guest user navigates the web interface, views the content, and explores the website without logging in. They have the ability to access information without the need for an account.

- **Usecase 2: Doctor Handling Appointment Schedule and Updating Patient Records:**

Description: A doctor interacts with the system to manage appointment schedules, review patient records, and update relevant patient information. This use case involves the doctor's administrative tasks related to appointments and patient data.

- **Usecase 3: System Managing Doctor's Work Schedule, Staff Schedule, and Patient Records:**

Description: The system is responsible for managing the work schedules of doctors and staff. Additionally, it oversees the organization and

maintenance of patient records. This use case provides a comprehensive overview of the system's administrative functions.

- Usecase 4: Patient Reception Allowing Staff to Accept Patients When Registered for Appointments:

Description: Staff members use the system to accept patients who have registered for medical appointments. This involves the reception of patients and ensures a streamlined process for managing scheduled appointments.

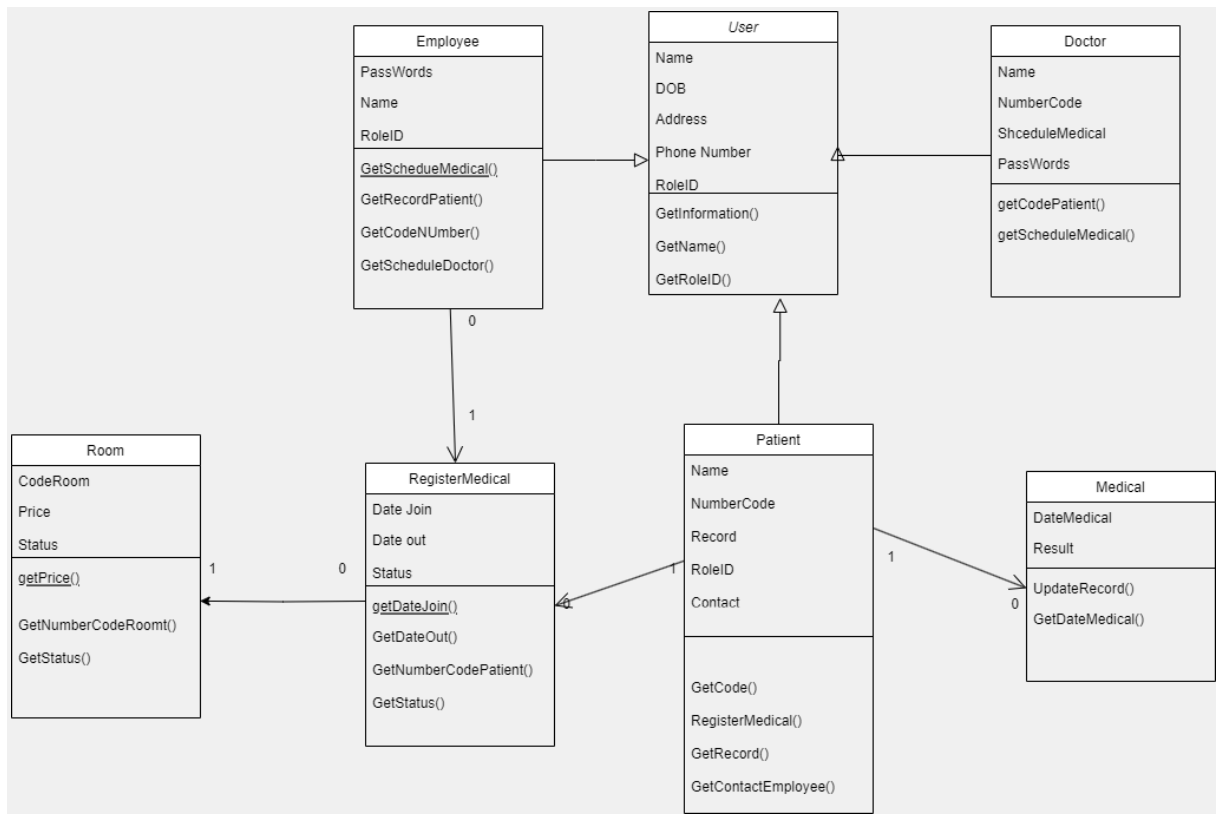
- Usecase 5: Registering Patient Records to Document Patient Information and Medical History:

Description: The system allows for the registration of patient records, capturing and storing essential information, including medical history. This use case is focused on recording and maintaining accurate patient data.

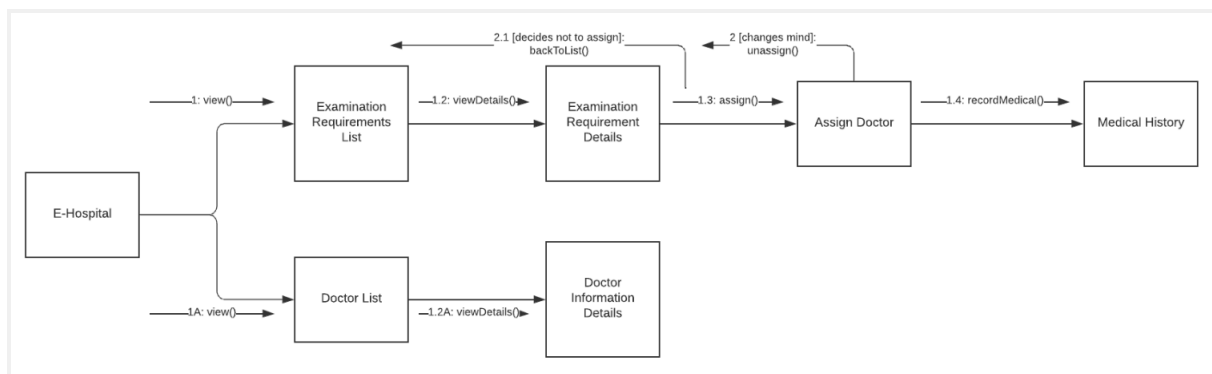
- Usecase 6: Health Check to Verify Patient Eligibility for Examination and Record in Medical History:

Description: The system performs health checks to determine if a patient meets the necessary conditions for a medical examination. The results are recorded in the patient's medical history, providing crucial information for the examination process.

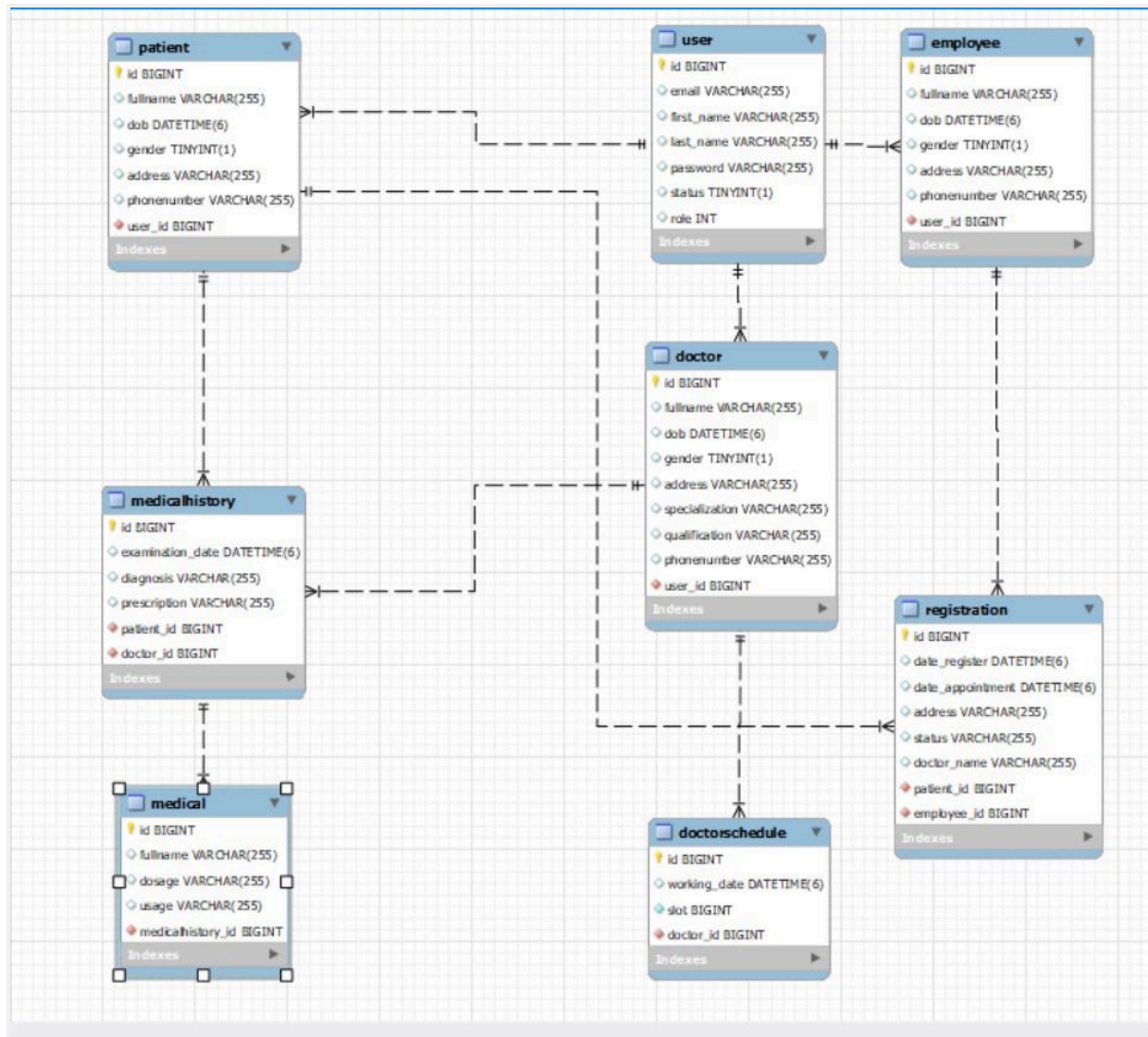
3.Create a class diagram - class diagram at the level of analysis, classifying stereotypes.



4. Communication diagram.



5. Entity diagram.



6.Interface design (including basic interface objects for operations).

a.Login

Welcome to
E-Hospital

Account Information invalid, try again

Email address

Password

☒ Remember me [Forgot password?](#)

SIGN IN


OR

Don't have an account?

REGISTER AS A ▾

b.Doctor Register

CREATE AN ACCOUNT

First Name	Last Name
<input type="text"/>	<input type="text"/>
Email	Full Name
<input type="text" value="hung.mvptq@gmail.com"/>	<input type="text"/>
Password	Date Of Birth
<input type="password" value="....."/>	<input type="text" value="mm/dd/yyyy"/> 
Address	Phone number
<input type="text"/>	<input type="text"/>
Specialization	Qualification
<input type="text"/>	<input type="text"/>
Your gender is	
<input type="text" value="Male"/> ▾	

SUBMIT

Have already an account? [Login here](#)

c.Employee Register - Patient Register

CREATE AN ACCOUNT

First Name

Last Name

Email

hung.mvptq@gmail.com

Full Name

Password

.....

Date Of Birth

mm/dd/yyyy

Address

Phone number

Your gender is

Male

SUBMIT

Have already an account? [Login here](#)

d.Employee List

E-Hospital

Patient

Doctor

Employee

Registration

Add Employee

Profile

Login

Logout

500

Patient

500

Doctor

500

Employee

500

Registrati

Full name	Gender	Dob	Address	Phone number	Email	
Paradon		1/1/2000	số 15, phường Mai Động, Hoàng Mai	012345678		<div></div> <div></div>

e.Doctor List

E-Hospital

Patient

Doctor

Employee

Registration

500
Patient

500
Doctor

500
Employee

500
Registration

Full name	Dob	Address	Phone number	Email	Specialization	Qualification	Working Date	Slot		
Paradon	1/1//2000		012345678		abc	abc	14/3/2024	2		

f.Patient List

E-Hospital

Patient

Doctor

Employee

Registration

500
Patient

500
Doctor

500
Employee

500
Registration

Full name	Dob	Address	Phone number	Email	Examination Date	Diagnosis	Prescription	Assigned Doctor		
Paradon	1/1//2000		012345678	012345678	abc	abc	14/3/2024	Nguyễn Văn A		

g.Requirement List

E-Hospital

Patient

Doctor

Employee

Registration

500
Patient

500
Doctor

500
Employee

500
Registration

Patient name	Appointment Date	Date Register	Address	Doctor name	Status		
Nguyễn Văn A	1/1/2025	1/2/2025	Phòng nội soi	Nguyễn Văn B			