

Ikigai



by:

Mavra Mehak 22I-0798 Scrum Master

Maryum Tanvir 22I-0751 Developer/ Analyst

Salman Khan 22I-1285 QA/Design

**COMING
SOON**



**National University of Computer and Emerging Sciences
Islamabad Campus**

Project Report

Ikigai I-CARE

Software Design And Analysis

Submitted by: Mavra Mehak Gill, Maryum Tanvir, Salman Khan

Roll number: 22I-0798, 22I-0751, 22I-1285

Date: 27th November, 2024



National University of Computer and Emerging Sciences Islamabad Campus

Table of Contents

● Introduction	6
● Problem Statement & Description.....	6
● Functional Requirements	8
● Non-Functional Requirements.....	9
● List of Use Cases.....	10
● Use Case Diagram	12
● Extended Use Case	13
1) Use Case: Manage Doctor	13
2) Use Case: Schedule Shifts	15
3) Use Case: Request Medical Supplies.....	17
4) Use Case: Track Inventory Details	19
5) Use Case: Schedule Workshop	21
6) Use Case: Register Patient	23
7) Use Case: View Available Doctors	25
8) Use Case: Book Room	26
9) Use Case: Handle Payment	28
10) Use Case: Buy Medicine	30
11) Use Case: Schedule Appointment.....	33
12) Use Case: Cancel Appointment	35
13) Use Case: Give Feedback.....	36
14) Use Case: View Appointment	38



National University of Computer and Emerging Sciences

Islamabad Campus

15) Use Case: View Feedback.....	39
16) Use Case: Schedule Surgery.....	41
17) Use Case: View Workshop Schedule	43
18) Use Case: Manage Patient Treatment	44
● Domain Model	47
● Class Diagram	48
● Main Use Case(Book Appointment)	49
Activity Diagram.....	49
System Sequence.....	50
● Sequence Diagrams	51
Manage Doctor.....	51
Track Inventory	52
Schedule Shifts.....	53
Book Room	54
Buy Medicine.....	55
Manage Treatment	56
● Package Diagram	57
● Component Diagram	58
● Deployment Diagram	59
● Interfaces	59
● Admin Interface	60
Doctor Management	60
Handle Doctor Request (Add)	61



National University of Computer and Emerging Sciences

Islamabad Campus

Schedule Shift.....	62
Schedule Workshop	62
Schedule	63
View Inventory Details	63
View Inventory	64
● Track Inventory (Good In and Good Out).....	65
● Medical Supply Request	66
● Doctor Interface	67
Dashboard:.....	67
Appointments:	67
Patients (Includes Patient Treatment and Surgery schedule):.....	68
Workshop Schedule:	68
Shifts Viewing Schedule:.....	69
Profile Management:.....	69
Feedbacks Page:.....	70
● Patient Interface	71
Dashboard.....	71
Schedule Appointment.....	72
Book Room.....	73
See Prescription and Surgery	73
Give Feedback	74
Generate Bill.....	74
Profile Management.....	75



National University of Computer and Emerging Sciences Islamabad Campus

- Summary 75

- Introduction



National University of Computer and Emerging Sciences Islamabad Campus

Hospitals need an integrated, scalable, and efficient solution to handle their complex processes. By centralizing hospital functions, reducing manual errors, and improving communication, I-CARE significantly enhances hospital operations, leading to better patient outcomes and cost savings.

● Problem Statement & Description

Hospitals generate massive amounts of data, from patient records to medical supplies and personnel scheduling. Many hospitals still rely on traditional manual systems to handle different functions, which can lead to errors and inconsistencies. These problems affect the quality of patient care, delay treatments, and increase costs.

I-CARE addresses these challenges by offering a comprehensive, centralized platform that unifies all hospital functions under one digital solution.

This ensures:

1. Comprehensive Patient Management:

Hospitals struggle with managing multiple processes related to patient care, from registration to discharge, across different systems. This approach causes delays and confusion. I-CARE solves this by offering a single platform that tracks patient medical histories, diagnostic data, prescriptions, and billing, ensuring that patient care is consistent and seamless.

2. Shift Scheduling:



National University of Computer and Emerging Sciences Islamabad Campus

Scheduling shifts for doctors across multiple departments and shifts leads to errors. Hospitals need a system that adapts to real time changes. I-CARE's customizable scheduling tool ensures efficient staff allocation eliminating scheduling conflicts.

3. Inventory Tracking:

Many hospitals face issues with medical supplies running out unexpectedly, leading to treatment delays. Existing inventory systems may not offer detailed insights, making resource management inefficient. Our system provides proper logging of good in supplies and good out supplies.

4. Centralized Data Dashboard:

Administrators and medical staff often need to work with scattered data across departments, making it difficult to make quick, informed decisions. I-CARE offers a centralized dashboard, giving stakeholders a single point of access for all important data, enabling data driven decision-making and streamlined hospital operations.

5. Seamless Communication Channels:



National University of Computer and Emerging Sciences Islamabad Campus

Inefficient communication between departments can lead to significant delays in patient treatment, especially when it comes to test results or surgical preparations. I-CARE ensures smooth communication between all stakeholders.

● Functional Requirements

- **Patient Management**
 - i. Register and manage patient details, including medical histories and contact information.
 - ii. View and manage patient treatment records, prescriptions, and surgery details.
- **Appointment Management**
 - i. Schedule, view, and cancel appointments with doctors.
 - ii. Notify patients and doctors of appointment confirmations or changes.
- **Room Management**
 - i. View and book available hospital rooms.
 - ii. Update room availability status automatically after bookings.
- **Inventory Management**
 - i. Track the stock of medical supplies and alert administrators for restocking when levels fall below thresholds.
 - ii. Log the inflow (Goods In) and outflow (Goods Out) of medical supplies.
- **Billing System**
 - i. Generate and update bills for services such as room booking, treatments, prescriptions, and appointments.
 - ii. Process payments and update the status of related items to "Paid."
- **Shift Scheduling**



National University of Computer and Emerging Sciences Islamabad Campus

- i. Manage doctor schedules, including shift allocation and workshop participation.

- **Feedback Management**

- i. Allow patients to submit feedback on doctors, services, and the hospital environment.

- ii. Provide an interface for doctors to view and respond to feedback.

- **Surgery Scheduling**

- i. Schedule surgeries with available rooms, doctors, and equipment.

- **Reports and Dashboards**

- i. Provide a centralized dashboard for administrators, doctors, and patients.

- ii. Display reports such as billing summaries, appointment schedules, and inventory status.

● Non-Functional Requirements

- **Performance**

- i. Ensure real-time updates to schedules, inventory levels, and patient records.
 - ii. Handle simultaneous access by multiple users without noticeable delays.

- **Scalability**

- i. Support the addition of new departments, users, and functionalities as the hospital grows.

- **Reliability**



National University of Computer and Emerging Sciences Islamabad Campus

- i. Provide consistent uptime for critical functionalities like appointment scheduling and billing.
- **Security**
 - i. Encrypt sensitive patient and payment information.
 - ii. Implement role-based access control to ensure only authorized personnel access specific data.
- **User Experience**
 - i. Ensure the interface is intuitive and accessible for all stakeholders, including administrators, doctors, and patients.
- **Compliance**
 - i. Adhere to healthcare regulations for patient data security and financial transactions.
- **Maintainability**
 - i. Facilitate easy updates and debugging through modular code structure and clear documentation.

● List of Use Cases

1. Use Case: Manage Doctor
2. Use Case: Schedule Shifts
3. Use Case: Request Medical Supplies
4. Use Case: Track Inventory Details
5. Use Case: Schedule Workshop
6. Use Case: Register Patient
7. Use Case: View Available Doctors
8. Use Case: Book Room
9. Use Case: Handle Payment
10. Use Case: Buy Medicine



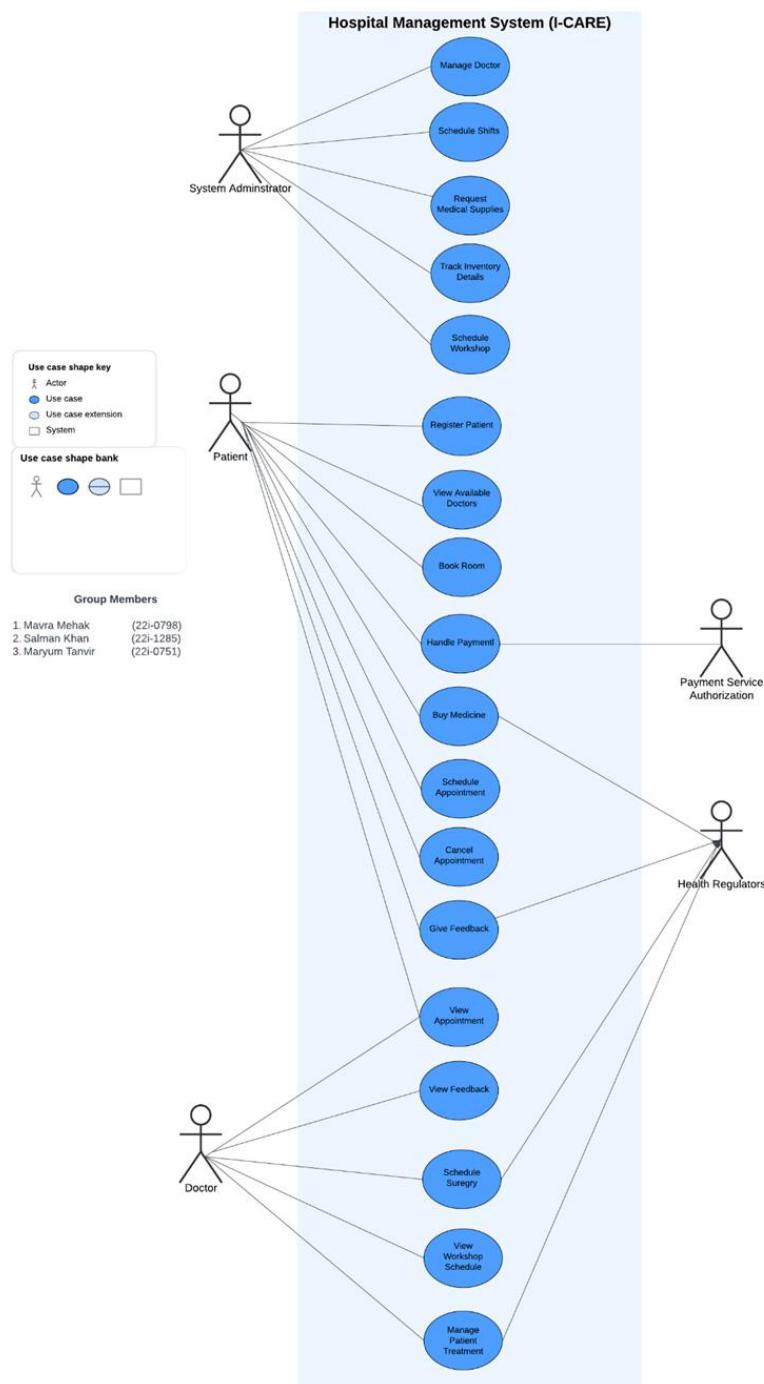
National University of Computer and Emerging Sciences Islamabad Campus

11. Use Case: Schedule Appointment
12. Use Case: Cancel Appointment
13. Use Case: Give Feedback
14. Use Case: View Appointment
15. Use Case: View Feedback
16. Use Case: Schedule Surgery
17. Use Case: View Workshop Schedule
18. Use Case: Manage Patient Treatment



National University of Computer and Emerging Sciences Islamabad Campus

● Use Case Diagram





National University of Computer and Emerging Sciences Islamabad Campus

● Extended Use Case

1) Use Case: Manage Doctor

- **Use Case By:** Maryum Tanvir
- **Scope:** Hospital Management System
- **Level:** User goal
- **Primary Actor:** System Administrator
- **Stakeholders and Interests:**
 - **System Administrator:** Manages doctor details; add, remove, view and update.
 - **Doctor:** Have their personal and professional details stored accurately
- **Preconditions:**
 - Administrator is logged into the system.
- **Postconditions:**
 - Doctors' records are updated or retrieved successfully.
 - Doctors' roles and performance are accurately managed.

Main Success Scenario:

Actor Action	System Response
1. Administrator accesses the doctor management module.	2. The system displays a list of current doctors.
3. Administrator adds, removes, or updates doctor details.	4. The system confirms the changes made to doctor records.
5. The doctor's roles and records are updated.	



National University of Computer and Emerging Sciences Islamabad Campus

Extensions:

Line	Alternative Course
3a.	If an appointment exists for the doctor that admin is trying to remove. The deletion fails and the admin is notified.
5a.	If the update is unsuccessful, the system alerts the administrator and advises them to try again.

2) Use Case: Schedule Shifts

- Use Case By: Maryum Tanvir



National University of Computer and Emerging Sciences Islamabad Campus

- **Scope:** Shift Scheduling System
- **Level:** User goal
- **Primary Actor:** System Administrator
- **Stakeholders and Interests:**
 1. **Doctor:** Need accurate shift schedules to coordinate their work hours.
 2. **System Administrator:** Oversees the scheduling process
 3. **Patients:** Benefit from well-staffed hospitals.
- **Preconditions:**
 1. Doctors must be registered and their availability status entered into the system.
 2. The hospital must have predefined shifts and schedule rules.
- **Postconditions:**
 1. The shifts are successfully scheduled.

Main Success Scenario:

Actor Action	System Response
<p>1. The administrator logs into the system and accesses the "Schedule Shifts" module.</p>	<p>2. The system retrieves available data on doctor schedules</p>



National University of Computer and Emerging Sciences Islamabad Campus

3. The administrator assigns shifts based on availability.	4. The system confirms the assignments.
	5. The system updates the shift status to 'Active'.

- **Extensions:**

Line	Alternative Course
2a.	If a staff member is unavailable for an assigned shift, the system notifies the administrator.
3a.	Admin enters the wrong detail. They are sent an alert notifying them to correct their input.



National University of Computer and Emerging Sciences Islamabad Campus

3) Use Case: Request Medical Supplies

- **Use Case By:** Maryum Tanvir
- **Scope:** Medical Supplies Management System
- **Level:** User goal
- **Primary Actor:** System Administrator
- **Stakeholders and Interests:**
 1. **Doctors:** Require timely access to medical supplies to provide patient care.
 2. **System Administrator:** Monitors and ensures that medical supplies are replenished and available.
 3. **Suppliers:** Provide the necessary medical supplies to the hospital.
- **Preconditions:**
 1. The system administrator is logged into the system.
 2. The current status of inventory of medical supplies must be tracked and updated in the system.
- **Postconditions:**
 1. The request for medical supplies is submitted.
 2. The inventory is updated to reflect the supply request.

Main Success Scenario:

Actor Action	System Response



National University of Computer and Emerging Sciences Islamabad Campus

1. The system administrator navigates to the supply request module.	
2. The system administrator selects the required supplies and submits the request.	3. The system confirms the request.
4. Supplies are restocked.	5. The system updates the inventory and logs the goods in.

- **Extensions:**

Line	Alternative Course
3a.	If requested supplies don't exist. The admin is notified
4a.	If there are differences between the request and available inventory (e.g., stock maxed out), the system alerts the administrator.

4) Use Case: Track Inventory Details

- **Use Case By:** Maryum Tanvir
- **Scope:** Inventory Management System



National University of Computer and Emerging Sciences Islamabad Campus

- **Level:** User goal
- **Primary Actor:** System Administrator
- **Stakeholders and Interests:**
 1. **System Administrator:** Ensures that there are no shortages of medical supplies.
 2. **Doctors:** Requires up-to-date inventory information to avoid delays in patient care.
- **Preconditions:**
 1. The system tracks and stores current inventory levels.
 2. System Administrator have access to the inventory data.
- **Postconditions:**
 1. The inventory is updated, and details are visible to System Administrator
 2. Notifications are triggered for low stock levels.

Main Success Scenario:

Actor Action	System Response
1. The system administrator accesses the inventory module.	2. The system displays the inventory dashboard with stock levels and details for all medical supplies, including quantity available, threshold, and unit price.
3. The administrator reviews the inventory data.	4. The system automatically identifies items running low (quantity less than or equal to



National University of Computer and Emerging Sciences Islamabad Campus

	threshold) and displays an alert with item details.
5. The administrator reviews the tracking of inventory	The system displays detailed information for the good in detail.

Extensions:

Line	Alternative Course
5a.	If stock is below threshold, the system notifies the administrator restocking requests.
5b	If the stock is already sufficient and a restocking attempt is made, the system prevents the restocking request and notifies the administrator

5) Use Case: Schedule Workshop

- **Use Case By:** Maryum Tanvir
- **Scope:** Workshop Scheduling System
- **Level:** User goal
- **Primary Actor:** System Administrator
- **Stakeholders and Interests:**
 1. **System Administrator:** Needs to schedule workshops efficiently and ensure they are visible to relevant doctors.



National University of Computer and Emerging Sciences Islamabad Campus

2. **Doctors:** Need to be informed of workshops to improve their skills and knowledge.

- **Preconditions:**

1. The system administrator must be logged into the system with the appropriate permissions.
2. There must be information available regarding the workshop.

- **Postconditions:**

1. The workshop is scheduled and recorded in the system.
2. Relevant doctors are notified of the workshop details.

Main Success Scenario:

Actor Action	System Response
1. The System Administrator logs into the system.	
2. The administrator navigates to the "Schedule Workshop" module.	3. The system displays a template to record the workshop details.
4. The administrator enters workshop details.	5. The system prompts for confirmation.
6. The administrator confirms the scheduling.	7. The system confirms to the administrator that the workshop has been successfully scheduled.



National University of Computer and Emerging Sciences Islamabad Campus

Extensions:

Line	Alternative Course
6a.	If the administrator enters incomplete information, the system prompts the administrator to complete all required fields before confirming the schedule.
6b.	If a clash is detected, the admin is notified and the workshop is not scheduled.

6) Use Case: Register Patient

- **Use Case By:** Maryum Tanvir
- **Scope:** Patient Management System
- **Level:** User goal
- **Primary Actor:** Patient
- **Stakeholders and Interests:**
 1. **Patient:** Registers for medical services and provides necessary details.
 2. **Doctor:** Requires patient information to provide treatment.
- **Preconditions:**
 1. The patient has personal and health information ready (name, contact, health details).



National University of Computer and Emerging Sciences Islamabad Campus

2. The system is functioning and has enough storage for new patient data.

Postconditions:

1. The patient is successfully registered in the system.
2. The patient's details are accessible for future use by authorized personnel.

Main Success Scenario:

Actor Action	System Response
1. The patient accesses the application and uses the "Register" option.	
2. The patient enters personal and medical details.	3. The system checks for duplicate records.
4. If no duplicates are found, the patient confirms their details.	5. The system stores the patient's information and generates a patient ID.
6. The patient receives confirmation with patient ID and can now access their patient account.	

Extensions:



National University of Computer and Emerging Sciences Islamabad Campus

Line	Alternative Course
2a.	If some required information is missing, the system requests the patient to complete the missing fields.
6a.	If the system fails to register the patient due to technical issues, it alerts the patient.

7) Use Case: View Available Doctors

- **Use Case By:** Mavra Mehak
- **Scope:** Appointment Management System
- **Level:** User goal
- **Primary Actor:** Patient
- **Stakeholders and Interests:**
 1. **Patient:** Needs to view doctors' availability to schedule an appointment if needed.
 2. **Doctor:** Needs the system to reflect accurate availability based on their schedules.
- **Preconditions:**
 1. Doctors' schedules are updated and synchronized in the system.
 2. The patient is logged into the system.



National University of Computer and Emerging Sciences Islamabad Campus

. Postconditions:

1. The patient can view available doctors

Main Success Scenario:

Actor Action	System Response
1. The patient logs in to the system.	
2. The patient selects the "View Available Doctors" option.	3. The system displays a list of available doctors based on their specialties.

8) Use Case: Book Room

- . **Use Case By:** Mavra Mehak
- . **Scope:** Hospital Room Management System
- . **Level:** User goal
- . **Primary Actor:** Patient
- . **Stakeholders and Interests:**
 1. **Patient:** Needs to book a hospital room for their stay.



National University of Computer and Emerging Sciences Islamabad Campus

2. **System Administrator:** Manages room allocation efficiently and avoids clashes.

- **Preconditions:**

1. The patient must already be registered in the system.
2. Available rooms must be listed in the system.

- **Postconditions:**

1. The room is successfully booked and linked to the patient's account.
2. The hospital system updates the room's status.

Main Success Scenario:

Actor Action	System Response
1. The patient requests a room through the system using the "Book Room" option.	2. The system checks the availability of rooms, along with their stay charges
	3. The system displays a list of all available rooms for patients.
4. The patient selects a desired available room.	5. The system confirms the booking and updates room availability.

Extensions:



National University of Computer and Emerging Sciences Islamabad Campus

Line	Alternative Course
4a.	If the room is double-booked, the system alerts the user to resolve the issue before proceeding.

9) Use Case: Handle Payment

- **Use Case By:** Mavra Mehak
- **Scope:** Payment Management System
- **Level:** User goal
- **Primary Actor:** Patient
- **Stakeholders and Interests:**
 1. **Patient:** Needs to make payments for medical services received.
 2. **System Administrator:** Ensure payments for medical services provided are received and up to date.
 3. **Government Agency for Tax:** Monitors financial transactions for compliance.
 4. **Payment Authorization Service:** Wants to receive digital authorization requests in the correct format and protocol. Wants to accurately account for payments to the hospital.
- **Preconditions:**
 1. The patient's updated bill is generated in the system.
 2. The payment system is operational and connected to the authorization service.
 3. The patient is identified and authenticated.
- **Postconditions:**



National University of Computer and Emerging Sciences Islamabad Campus

1. The payment is successfully processed.
2. The system updates the patient's account to reflect the successful payment status.

Main Success Scenario:

Actor Action	System Response
1. The patient navigates to the "Pay Bills" option.	2. The system checks for all the added items in the bill.
3. The patient confirms payment using a preferred method (credit card, debit card, insurance).	4. The system processes the payment through the authorization service.



National University of Computer and Emerging Sciences Islamabad Campus

	5. The system confirms the payment and updates the patient record and account.
--	--

Extensions:

Line	Alternative Course
3a.	If the payment is declined, the system prompts the patient to try another payment method.
3b.	If the patient is using insurance, the system verifies insurance coverage before processing payment.

10) Use Case: Buy Medicine

- **Use Case By:** Mavra Mehak
- **Scope:** Pharmacy Management System
- **Level:** User goal



National University of Computer and Emerging Sciences Islamabad Campus

- **Primary Actor:** Patient
- **Stakeholders and Interests:**
 1. **Patient:** Needs to purchase prescribed medicines for treatment.
 2. **Doctors:** Knowledge that prescribed medicines are available to patients.
 3. **System Administrator:** Monitors pharmaceutical inventory to ensure availability.
 4. **Health Regulators:** Ensure that available medicines are up to international health standards
- **Preconditions:**
 1. The patient has a valid prescription entered in the system.
 2. The medicines are available in the pharmacy's inventory.
- **Postconditions:**
 1. The patient successfully receives the prescribed medicine.
 2. The inventory is updated to reflect the dispensed medicines.

Main Success Scenario:

Actor Action	System Response
--------------	-----------------



National University of Computer and Emerging Sciences Islamabad Campus

1. The patient presents a valid prescription to the system.	2. The system verifies the prescription and checks for available stock.
	3. The system confirms the medicines and generates the bill.
	4. The system updates the patient billing information and prompts the patient to pay.
5. The patient pays the bill.	6. The system handles the payment
7. The patient receives the medicine.	8. The system updates the inventory.

Extensions:

Line	Alternative Course
2a.	If the prescription is invalid, the system notifies the patient.
3a.	If the prescribed medicine is out of stock, the system notifies the patient.



National University of Computer and Emerging Sciences Islamabad Campus

11) Use Case: Schedule Appointment

- **Use Case By:** Mavra Mehak
- **Scope:** Appointment Scheduling System
- **Level:** User goal
- **Primary Actor:** Patient
- **Stakeholders and Interests:**
 1. **Patient:** Needs to schedule a convenient appointment with a doctor.
 2. **Doctor:** Relies on properly scheduled appointments.
 3. **System Administrator:** Ensure no clashes occur for a smooth flow
- **Preconditions:**
 1. The patient is registered and logged into the system.
 2. The doctor's schedule is up to date and available in the system.
- **Postconditions:**
 1. The appointment is successfully scheduled
 2. Both the patient and doctor are notified.

Main Success Scenario:

Actor Action	System Response
--------------	-----------------



National University of Computer and Emerging Sciences Islamabad Campus

1. The patient selects the "Schedule Appointment" option.	2. The system displays available doctors.
3. The patient selects the desired doctor and requests an appointment time.	4. The system checks the doctor's availability.
	5. The system confirms the appointment.

Extensions:

Line	Alternative Course
4a.	If the doctor is unavailable, the system suggests alternatives .

12) Use Case: Cancel Appointment

- **Use Case By:** Mavra Mehak
- **Scope:** Appointment Management System
- **Level:** User goal
- **Primary Actor:** Patient



National University of Computer and Emerging Sciences Islamabad Campus

- **Stakeholders and Interests:**

1. **Patient:** Needs to cancel a previously scheduled appointment.
2. **Doctor:** Requires updates if the appointment is canceled to manage their schedule.
3. **System Administrator:** Updates the schedule accordingly.

- **Preconditions:**

1. The appointment must have been scheduled previously.
2. The patient must be logged into the system.

- **Postconditions:**

1. The appointment is successfully canceled.
2. The appointment slot becomes available for other patients.

- **Main Success Scenario:**

Actor Action	System Response
1. The patient logs into the system.	
2. The patient accesses their appointments and selects the one they want to cancel.	3. The system asks for confirmation.
4. The patient confirms the cancellation.	5. The system successfully cancels the appointment and updates the doctor's schedule.



National University of Computer and Emerging Sciences Islamabad Campus

13) Use Case: Give Feedback

- **Use Case By:** Salman Khan
- **Scope:** Feedback Management System
- **Level:** User goal
- **Primary Actor:** Patient
- **Stakeholders and Interests:**
 1. **Patient:** Provides feedback on hospital services and care quality.
 2. **Doctor:** Receives feedback related to patient care to make improvements.
 3. **Health Regulators:** Wants that the overall rating and feedback of the doctor is up to the standards of health regulation organization.
- **Preconditions:**
 1. The patient must have received treatment from the hospital.
- **Postconditions:**
 1. The patient's feedback is recorded securely in the system.
 2. The feedback becomes available to relevant stakeholders for review and analysis.

Main Success Scenario:

Actor Action	System Response
1. The patient logs into the system.	
2. The patient accesses the "Give Feedback" Page.	3. The system authenticates the user as a valid patient to give feedback.



National University of Computer and Emerging Sciences Islamabad Campus

4. The patient selects the service or staff they want to give feedback on.	
5. The patient enters their feedback and rating and submits it.	6. The system stores the feedback which can be viewed by the doctor.

Extensions:

Line	Alternative Course
3a.	If the patient has not received any treatment yet and tries to submit feedback, then prompt the patient with an error.
5a.	If the patient does not complete the feedback, the system prompts the patient to provide all necessary details before submitting.

14) Use Case: View Appointment

- **Use Case By:** Salman Khan
- **Scope:** Appointment Management System
- **Level:** User goal
- **Primary Actor:** Patient, Doctors
- **Stakeholders and Interests:**
 1. **Doctors:** Needs to view their appointment schedule for time management and patient care.



National University of Computer and Emerging Sciences Islamabad Campus

2. **Patient:** Needs to view upcoming and past appointments for planning and preparation.

- **Preconditions:**

1. The actor (Patient/Doctor) must have logged into the system.
2. Appointments must be scheduled and stored in the system.

- **Postconditions:**

1. The appointment schedule is successfully displayed to the actor.

Main Success Scenario:

Actor Action	System Response
1. The actor (Patient or Doctor) logs into the system.	2. The system identifies if the actor is Patient or Doctor to adjust its view later.
3. The actor navigates to the "Appointment" Page.	4. The system displays the list of upcoming and past appointments along with their relevant details.
5. The actor can view appointment details. In case of doctor, he can further process the appointment as well.	

Extensions:



National University of Computer and Emerging Sciences Islamabad Campus

Line	Alternative Course
5a.	If there are no appointments scheduled, the system displays a message indicating that no appointments are scheduled.

15) Use Case: View Feedback

- **Use Case By:** Salman Khan
- **Scope:** Feedback Management System
- **Level:** User goal
- **Primary Actor:** Doctors
- **Stakeholders and Interests:**
 1. **Doctor:** Needs to view feedback provided by patients to improve their service.
 2. **System Administrator:** Needs feedback to be visible to improve hospital services and maintain quality assurance.
- **Preconditions:**
 1. The doctor must have valid login credentials.
 2. Feedback must be entered into the system.
- **Postconditions:**
 1. Feedback is successfully displayed to the doctor.

Main Success Scenario:

Actor Action	System Response
1. The doctor logs into the system.	



National University of Computer and Emerging Sciences Islamabad Campus

2. The doctor navigates to the “Profile” page and then to “View Feedback” page	3. The system displays the feedback for the logged in doctor
4. The doctor reviews the feedback for their information or quality improvement and marks it as “Reviewed”	5. The system registers the doctor and marks their feedback as “Reviewed”.

Extensions:

Line	Alternative Course
3a.	If feedback retrieval fails, the system alerts the doctor and suggests trying again later.
4a.	If no feedback is available, the system informs the doctor that no feedback is available.

16) Use Case: Schedule Surgery

- **Use Case By:** Salman Khan
- **Scope:** Surgery Scheduling System
- **Level:** User goal



National University of Computer and Emerging Sciences Islamabad Campus

- **Primary Actor:** Doctor
- **Stakeholders and Interests:**
 1. **Patient:** Receives necessary surgery at the scheduled time.
 2. **Doctor:** Schedules surgeries and ensures availability of complete medical records beforehand.
 3. **System Administrator:** Oversees the surgery schedule to ensure smooth operation.
 4. **Health Regulators:** Wants the surgery equipment and environment to be up to professional health standards.
- **Preconditions:**
 1. The patient must be registered in the system.
 2. The surgery schedule must be available, along with necessary rooms and equipment..
- **Postconditions:**
 1. Surgery is successfully scheduled, and resources are allocated.
 2. Surgery status can be further processed as completed as well.

Main Success Scenario:

Actor Action	System Response
1. The doctor logs into the system and navigates to the “Appointment” Form.	2. The system shows a list of all the registered patients awaiting treatment.



National University of Computer and Emerging Sciences Islamabad Campus

3. The doctor selects a registered patient for surgery with the appropriate date and time.	
4. The doctor updates the appointment status to surgery.	5. The system retrieves available rooms and confirms the details and schedules the surgery.

Extensions:

Line	Alternative Course
5a.	If patient diagnosis and treatment is incomplete for the surgery. then give a warning to complete it.
5b.	If no required rooms is available, the system suggests shows a warning to reselect date.

17) Use Case: View Workshop Schedule

- **Use Case By:** Salman Khan
- **Scope:** Workshop Scheduling System
- **Level:** User goal
- **Primary Actor:** Doctors



National University of Computer and Emerging Sciences Islamabad Campus

- **Stakeholders and Interests:**

1. **Doctors:** Requires access to workshop schedules for skill enhancement and knowledge updates.
2. **System Administrator:** Manages and updates the workshop schedule in the system.

- **Preconditions:**

1. The workshop schedules must be created and stored in the system.
2. Doctors must have access to view and register for workshops.

- **Postconditions:**

1. The hospital staff views scheduled workshops and can register for participation.

Main Success Scenario:

Actor Action	System Response
1. The doctor logs into the system.	
2. The doctor navigates to the “Workshop” Form.	3. The system displays details of upcoming workshops.
4. The doctor views the details and selects a workshop to attend.	5. The system registers the doctor and marks their participation.

- **Extensions:**



National University of Computer and Emerging Sciences Islamabad Campus

Line	Alternative Course
3a.	If there are no workshops scheduled, the system displays no record.

18) Use Case: Manage Patient Treatment

- **Use Case By:** Salman Khan
- **Scope:** Patient Treatment Management System
- **Level:** User goal
- **Primary Actor:** Doctor
- **Stakeholders and Interests:**
 1. **Patient:** Receives appropriate treatment according to the doctor's plan.
 2. **Doctor:** Prescribes and monitors the patient's treatment.
 3. **Health Regulator:** Monitors patient progress with respect to date of admission into the hospital.
- **Preconditions:**
 1. The patient must be registered in the system.
 2. The doctor must create and approve the patient's treatment plan.
- **Postconditions:**
 1. The treatment plan is updated, and progress is tracked in the system.

Main Success Scenario:

Actor Action	System Response
1. The doctor logs into the system.	



National University of Computer and Emerging Sciences Islamabad Campus

2. The doctor accesses the required patient's medical records and reviews the current treatment plan.	3. The system retrieves available details for the selected patient.
4. The doctor makes adjustments to the treatment based on the patient's condition.	5. The system updates the patient's treatment plan.
	6. The system records the change and displays the updated treatment.

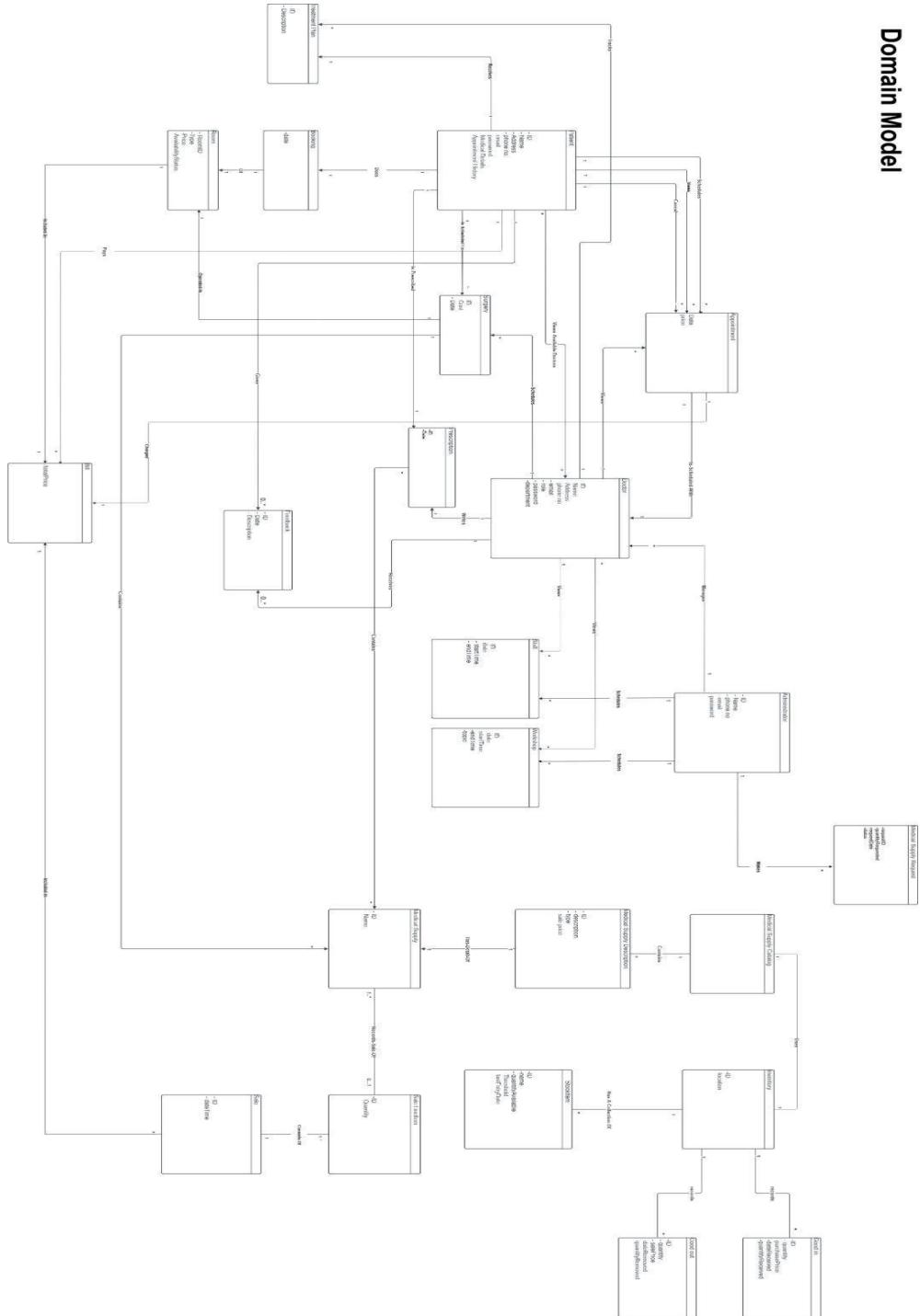
- **Extensions:**

Line	Alternative Course
3a.	If the patient's medical data is incomplete, the system prompts the doctor to gather missing data before updating the treatment.



National University of Computer and Emerging Sciences Islamabad Campus

● Domain Model

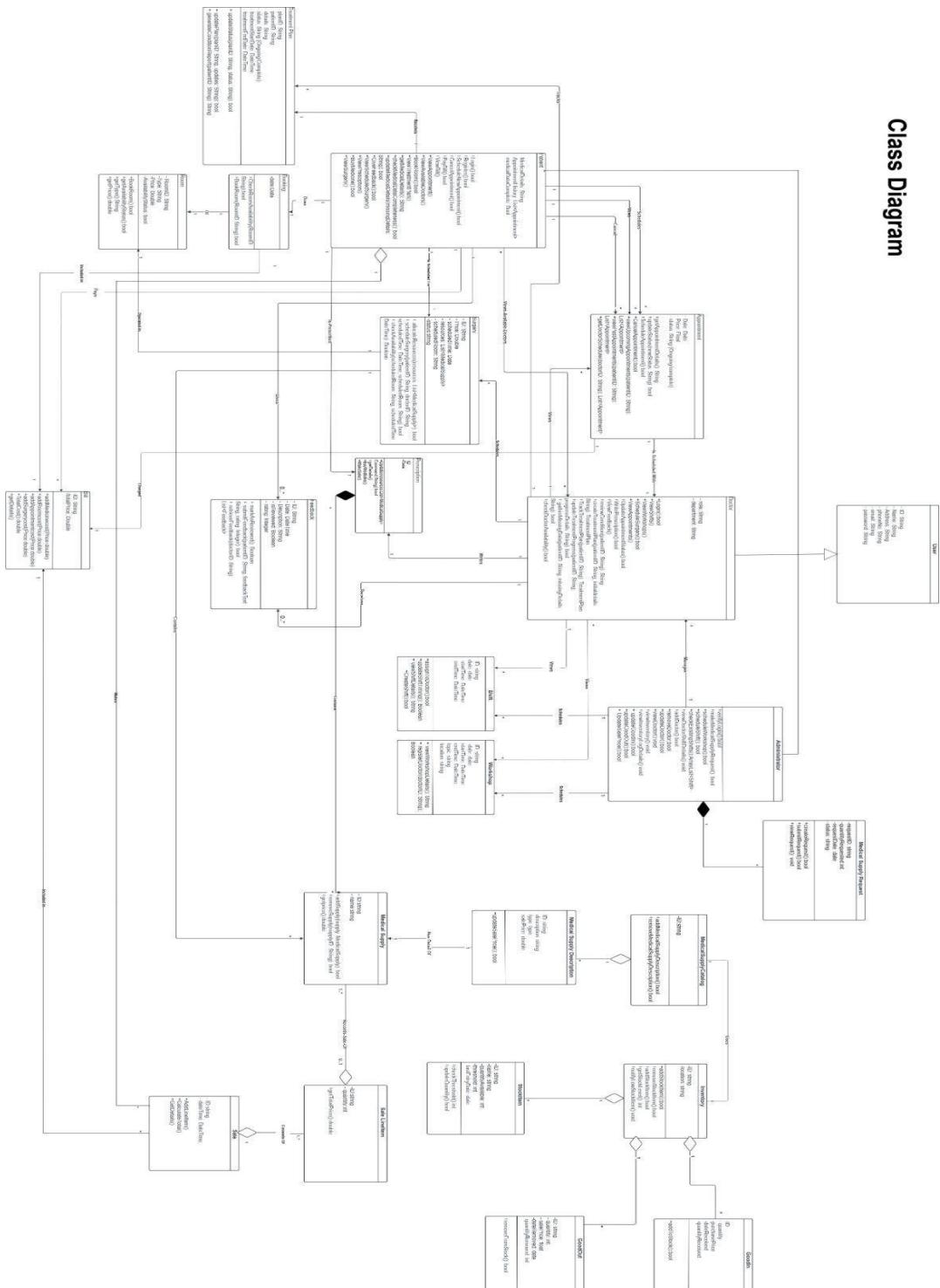




National University of Computer and Emerging Sciences Islamabad Campus

Class Diagram

● Class Diagram

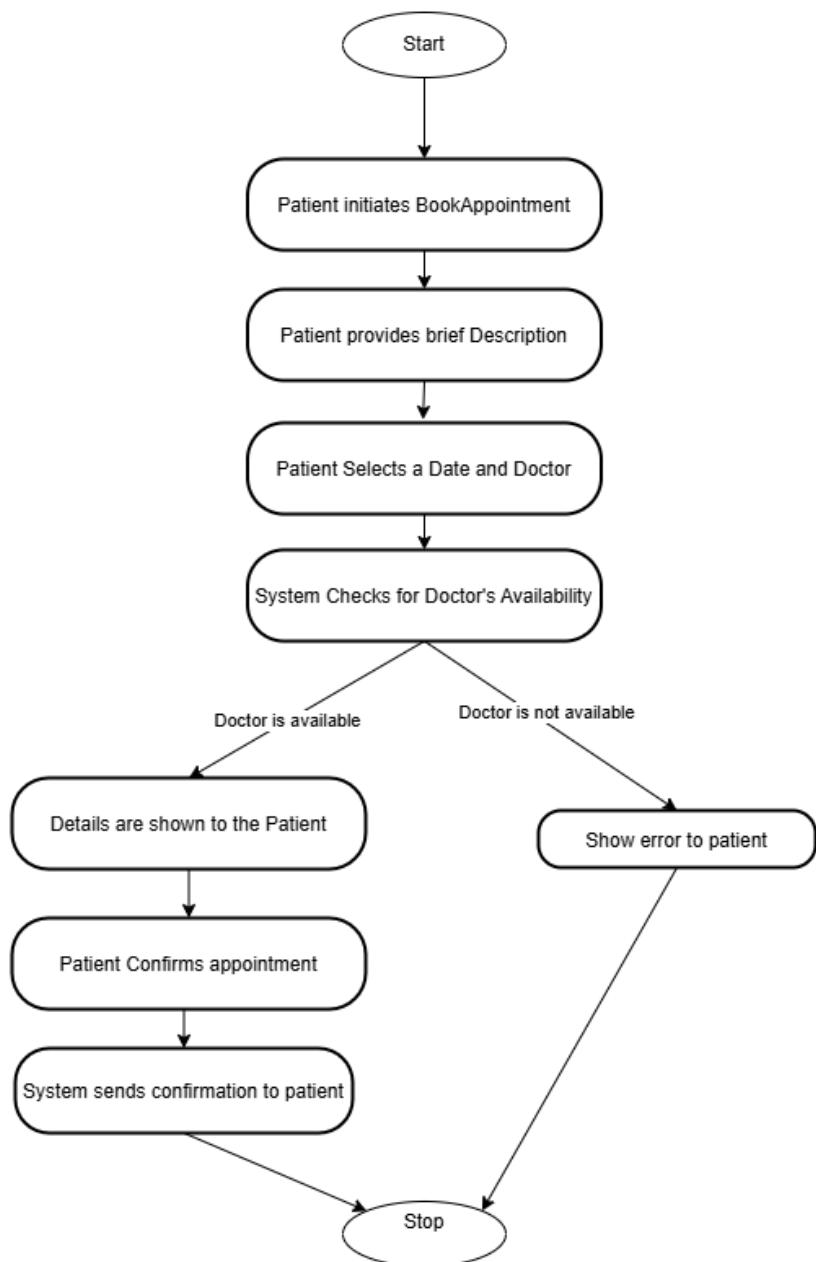




National University of Computer and Emerging Sciences Islamabad Campus

• Main Use Case(Book Appointment)

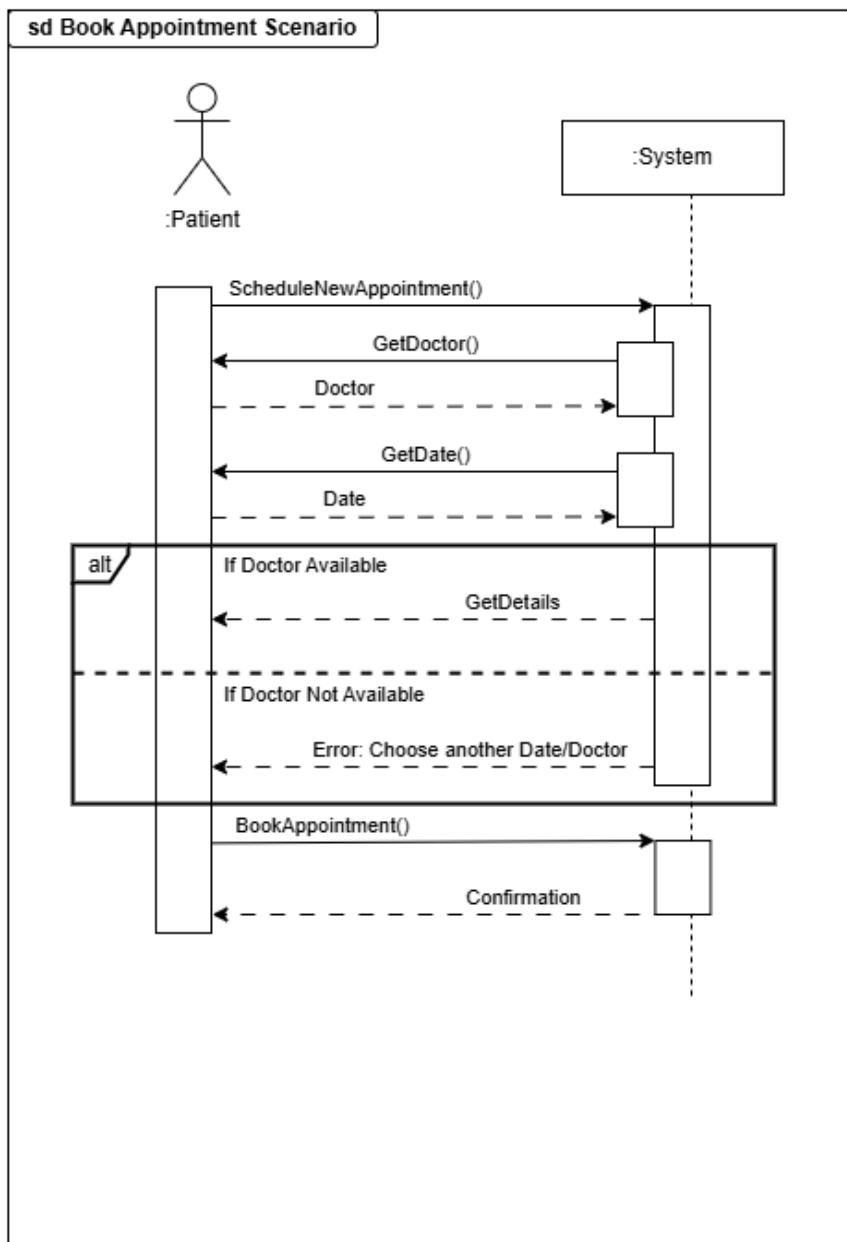
Activity Diagram





National University of Computer and Emerging Sciences Islamabad Campus

System Sequence



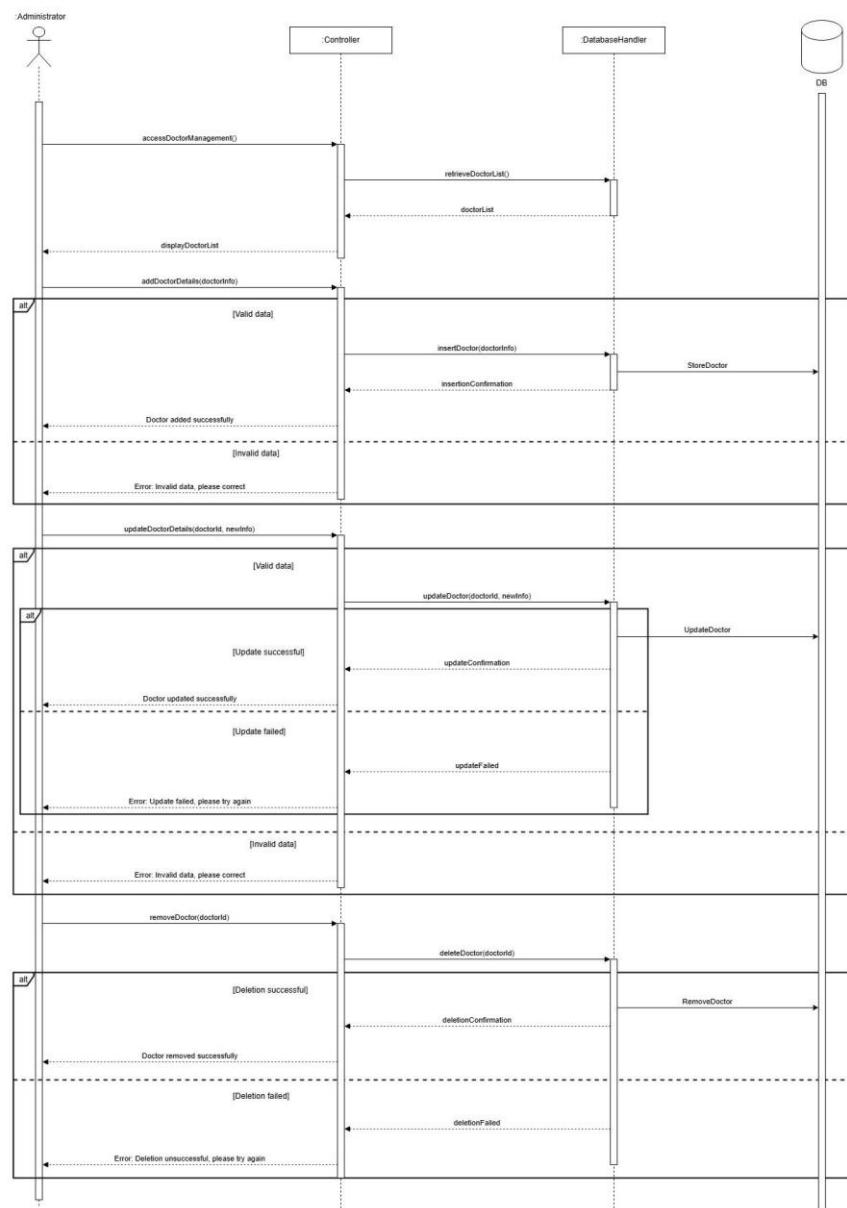


National University of Computer and Emerging Sciences Islamabad Campus

● Sequence Diagrams

Manage Doctor

Use Case: Manage Doctor

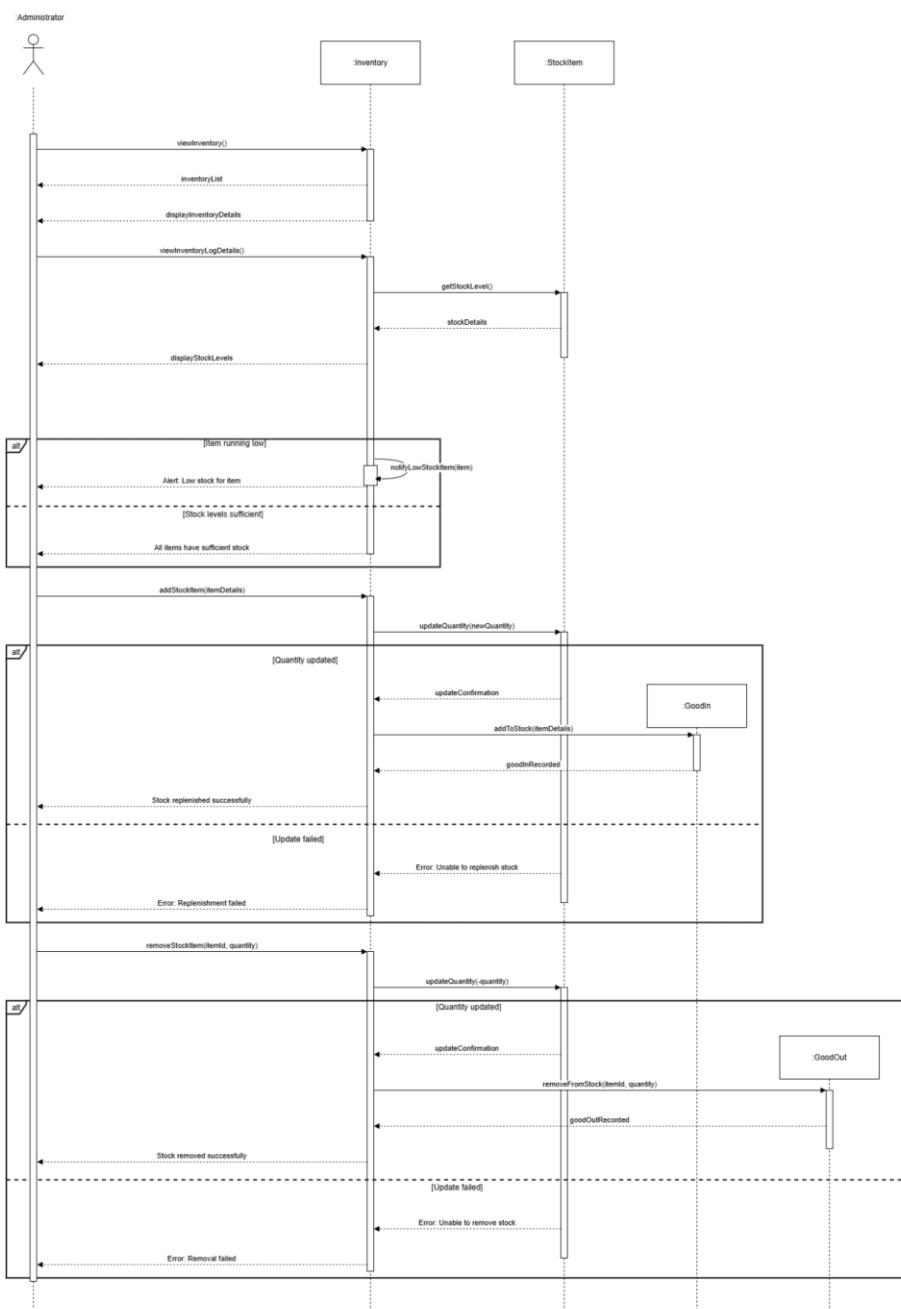




National University of Computer and Emerging Sciences Islamabad Campus

Track Inventory

Use Case: Track Inventory

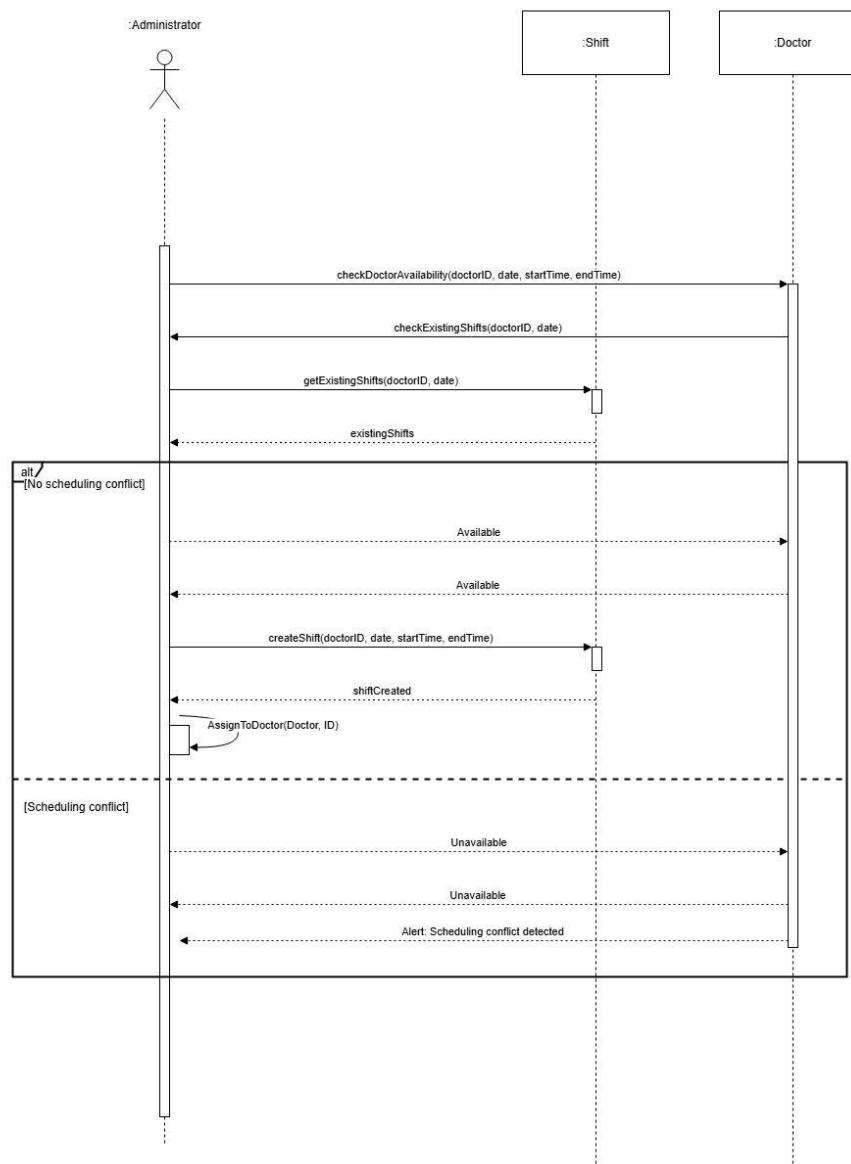




National University of Computer and Emerging Sciences Islamabad Campus

Schedule Shifts

Use Case: Schedule Shifts

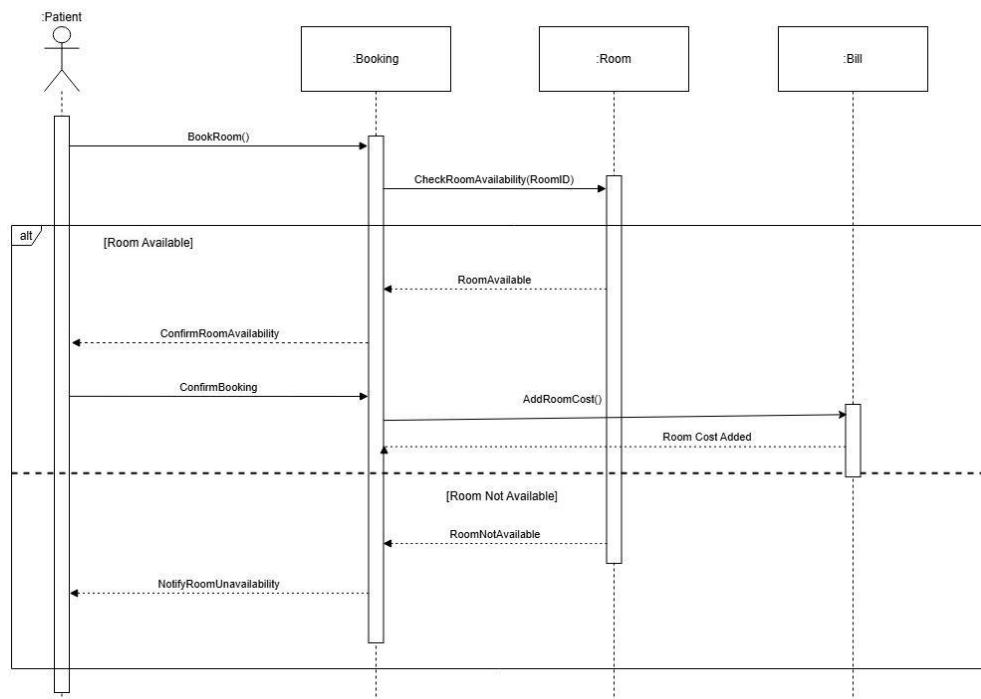




National University of Computer and Emerging Sciences Islamabad Campus

Book Room

Use Case: Book Room

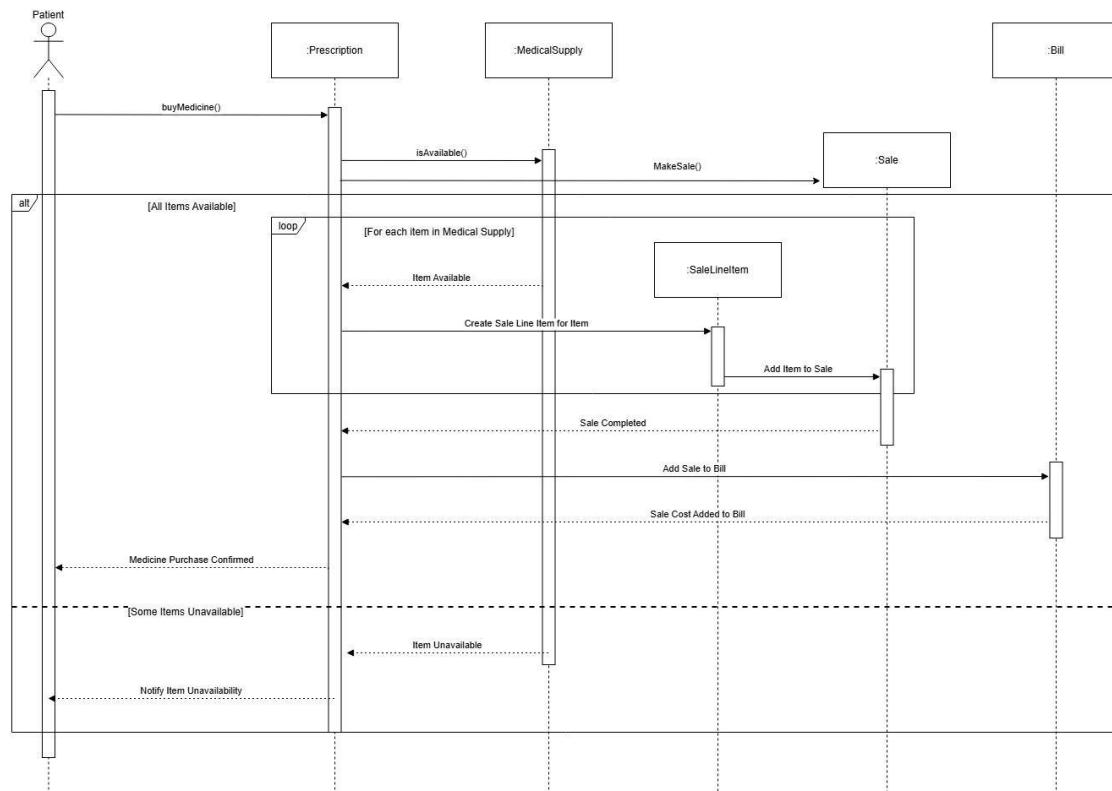




National University of Computer and Emerging Sciences Islamabad Campus

Buy Medicine

Use Case: Buy Medicine

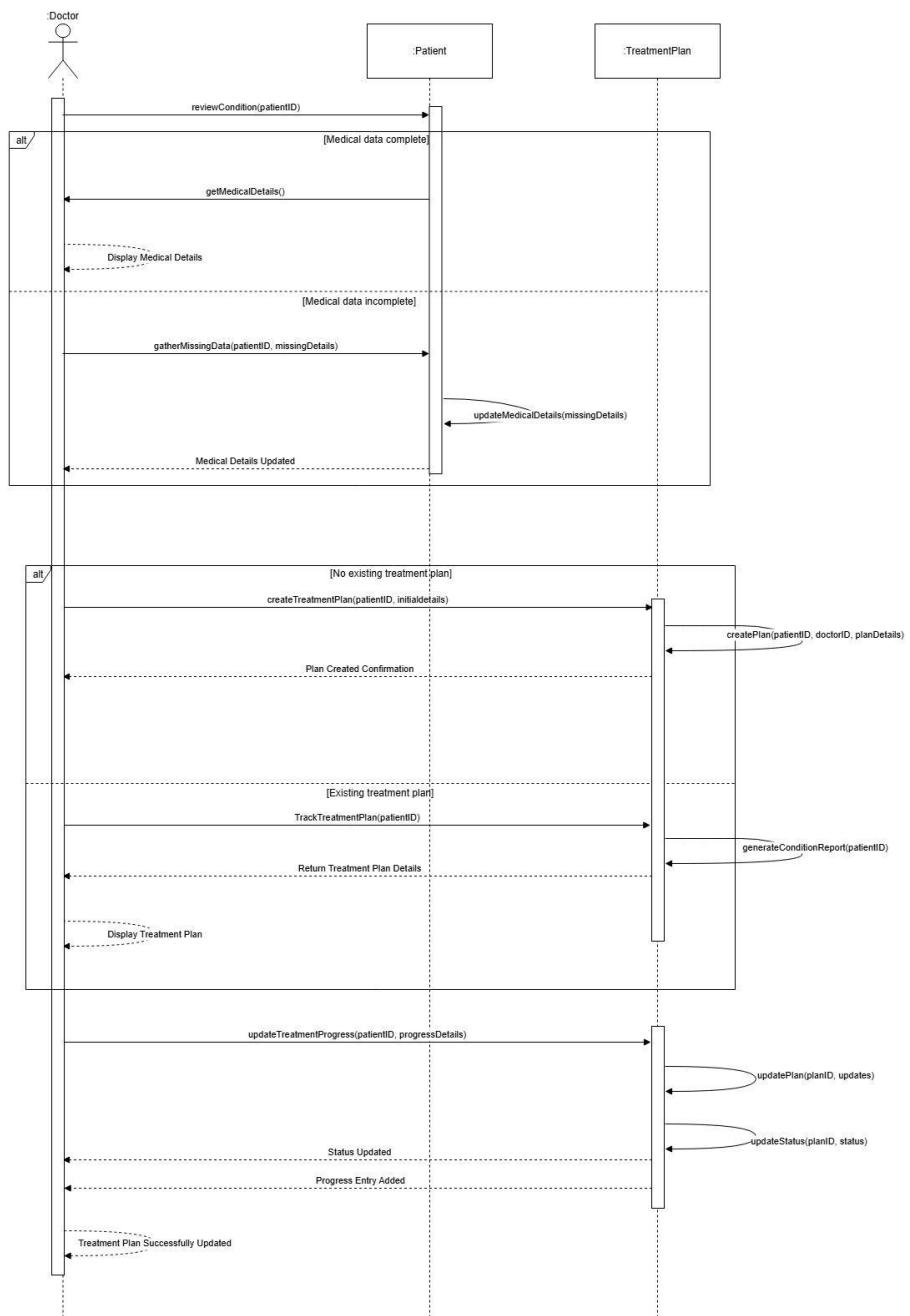




National University of Computer and Emerging Sciences Islamabad Campus

Manage Treatment

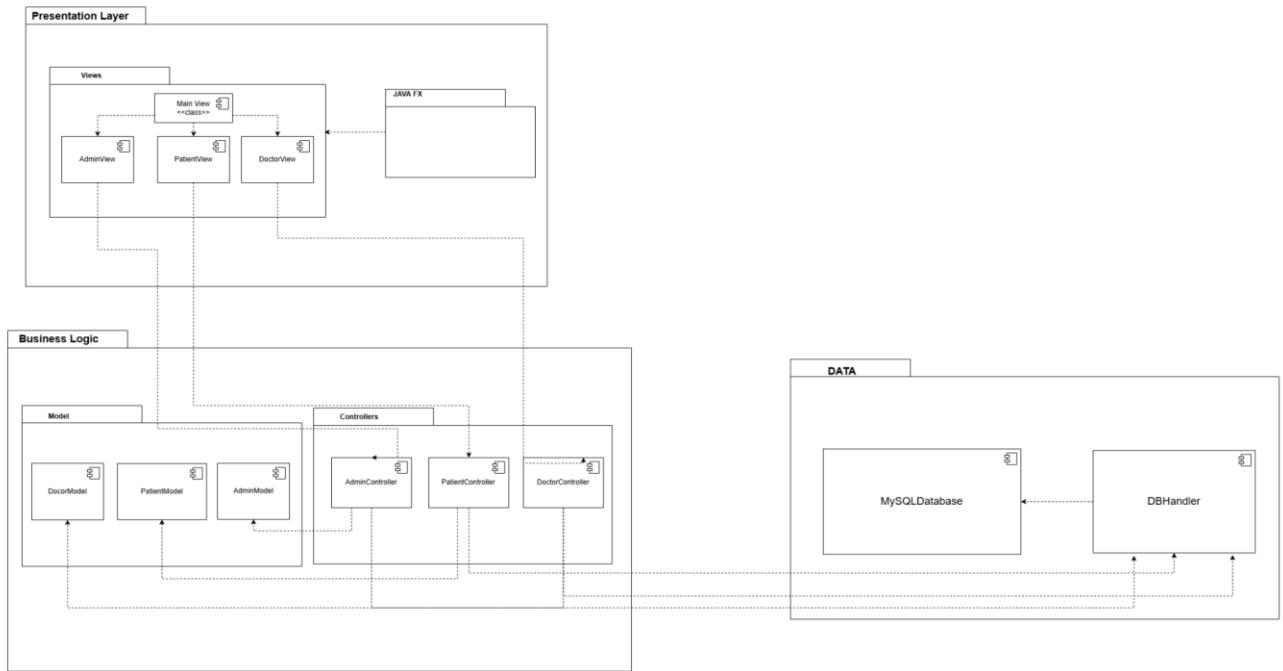
Use Case: Manage Treatment



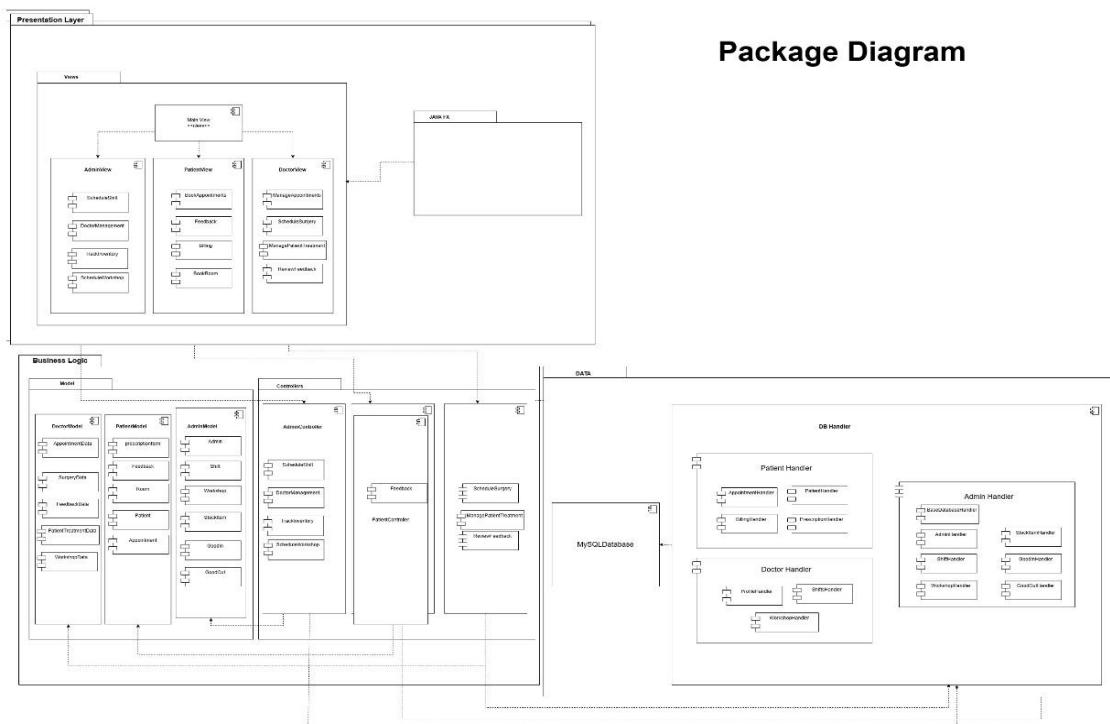


National University of Computer and Emerging Sciences Islamabad Campus

● Package Diagram



Updated:

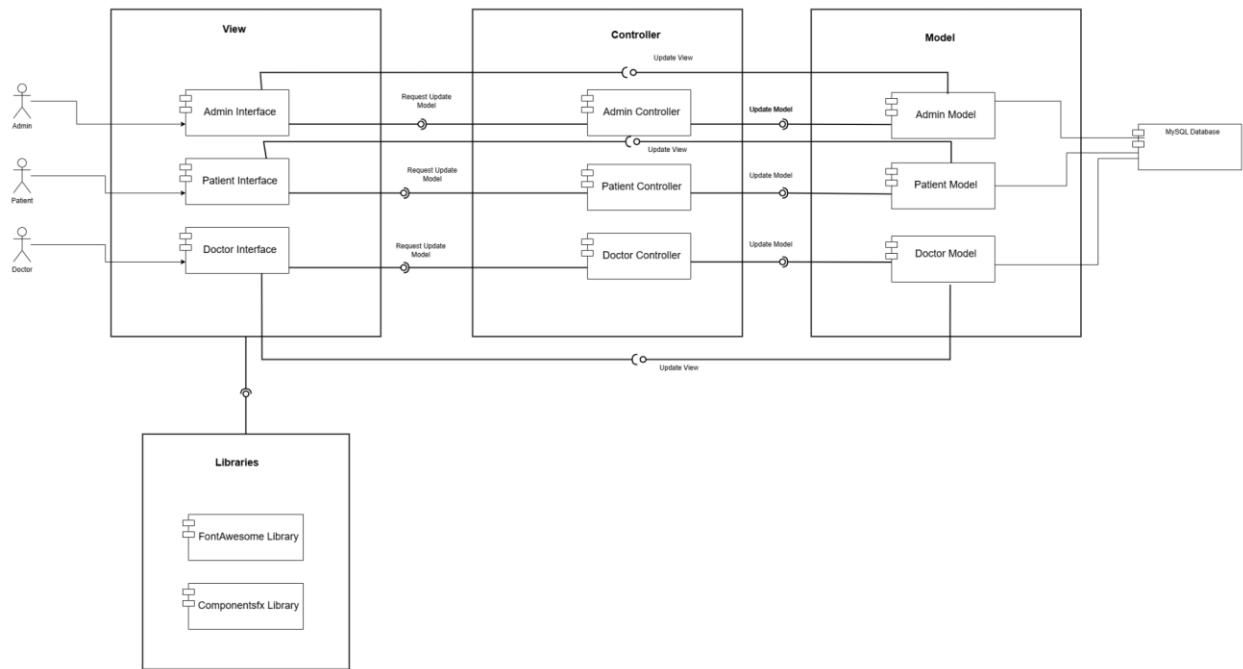


Package Diagram

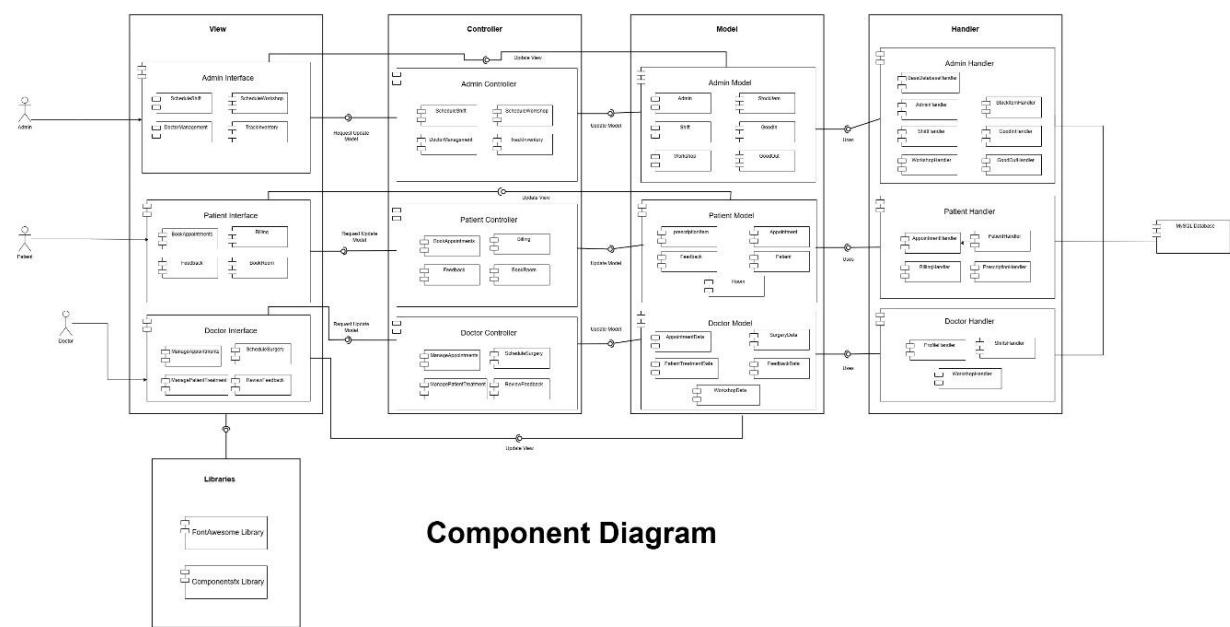


National University of Computer and Emerging Sciences Islamabad Campus

● Component Diagram



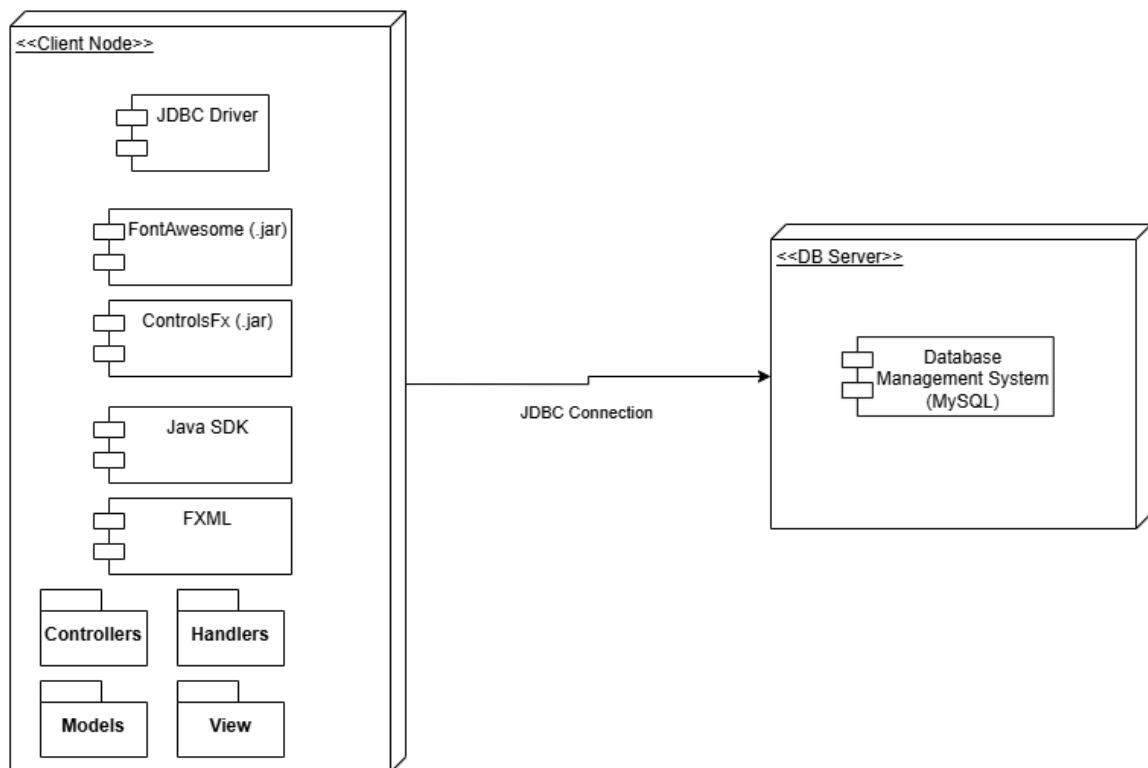
Updated:





National University of Computer and Emerging Sciences Islamabad Campus

● Deployment Diagram





National University of Computer and Emerging Sciences Islamabad Campus

● Interfaces

● Admin Interface

Doctor Management

Doctor ID	First Name	Last Name	Email	Specialization	Gender	Phone
2	Emily	Brown	emily.brown@hospital.com	Neurologist	Female	03011234568
3	Michael	Davis	michael.davis@hospital.com	Orthopedic	Male	03011234569
4	Sophia	Johnson	sophia.johnson@hospital.com	Pediatrician	Female	03011234570
5	James	Williams	james.williams@hospital.com	General	Male	03011234571
6	Olivia	Miller	olivia.miller@hospital.com	Cardiologist	Female	03011234572
7	William	Taylor	william.taylor@hospital.com	Neurologist	Male	03011234573
8	Isabella	Anderson	isabella.anderson@hospital.com	Orthopedic	Female	03011234574
9	David	Thomas	david.thomas@hospital.com	Pediatrician	Male	03011234575
10	Emma	Jackson	emma.jackson@hospital.com	General	Female	03011234576
12	Charlotte	Harris	charlotte.harris@hospital.com	Neurologist	Female	03011234578
13	Joseph	Martin	joseph.martin@hospital.com	Orthopedic	Male	03011234579
14	Amelia	Thompson	amelia.thompson@hospital.com	Pediatrician	Female	03011234580
15	Henry	Garcia	henry.garcia@hospital.com	General	Male	03011234581
16	Mia	Martinez	mia.martinez@hospital.com	Cardiologist	Female	03011234582
17	Alexander	Robinson	alexander.robinson@hospital.com	Neurologist	Male	03011234583

Enter ID | Remove | Update

Select field to update

Enter ID for remove/update

Click to Remove

Enter New Value

Click to Update



National University of Computer and Emerging Sciences Islamabad Campus

Handle Doctor Request (Add)

Screenshot of the IKIGAI application interface showing the "Handle Doctor Request (Add)" screen.

The interface includes a sidebar with the following menu items:

- Home Page
- Doctor Management
- Schedule Shift
- Schedule Workshops
- Inventory
- Supply Request
- Add Doctor Request

The main content area shows a table of doctor requests:

Request ID	First Name	Last Name	Email	Specialization	Gender	Phone
4	Fatima	Sheikh	fatima.sheikh@example.com	Pediatrician	Female	03321234567
5	Hassan	Ali	hassan.ali@example.com	Orthopedic	Male	03451234567
6	Rabia	Saeed	rabia.saeed@example.com	Gynecologist	Female	03031234567
7	Usman	Zafar	usman.zafar@example.com	Oncologist	Male	03151234567
8	Nida	Rashid	nida.rashid@example.com	Psychiatrist	Female	03241234567
9	Zain	Qureshi	zain.qureshi@example.com	Surgeon	Male	03361234567
10	Sana	Hameed	sana.hameed@example.com	Radiologist	Female	03471234567

Below the table, there is a search bar and a "Search By" dropdown. A text input field labeled "Enter ID to Approve/Reject New Doctor Request" is present, along with two buttons: "Approve Request" and "Reject Request".



National University of Computer and Emerging Sciences Islamabad Campus

Schedule Shift

IKIGAI

Shift Scheduling

Log Out

Home Page

Doctor Management

Schedule Shift

Schedule Workshops

Inventory

Supply Request

Current Shift Schedule

Doc ID	Doctor Name	Admin ID	Assigned by Admin	Start Time	End Ti...	Date	Department	Description	Shift Status
2	Emily Brown	1	Alice Johnson	17:00:00	01:00:00	2024-11-29	Neurologist	Evening shift	Active
3	Michael Davis	7	Sophia Anderson	23:00:00	07:00:00	2024-11-03	Orthopedic	Night shift	Active
4	Sophia Johnson	8	James Garcia	09:00:00	17:00:00	2024-11-04	Pediatrician	Morning shift	Active
5	James Williams	1	Alice Johnson	09:00:00	17:00:00	2024-11-24	General	Morning shift	Active
6	Olivia Miller	10	Benjamin Hall	23:00:00	07:00:00	2024-11-06	Cardiologist	Night shift	Active
7	William Taylor	11	Charlotte Clark	09:00:00	17:00:00	2024-11-07	Neurologist	Morning shift	Active
8	Isabella Ander...	1	Alice Johnson	09:00:00	17:00:00	2024-11-24	Orthopedic	Morning shift	Active

Available Doctors For Shifts

Doctor ID	Doctor Name	Email	Specialization	Gender	Shift Status
29	Jackson Hill	jackson.hill@hospital.com	Pediatrician	Male	Available
32	Hannah Perez	hannah.perez@hospital.com	Neurologist	Female	Available
35	Lucas Carter	lucas.carter@hospital.com	General	Male	Available
38	Layla Mitchell	layla.mitchell@hospital.com	Orthopedic	Female	Available
41	Matthew Allen	matthew.allen@hospital.com	Cardiologist	Male	Available
44	Chloe Hughes	chloe.hughes@hospital.com	Pediatrician	Female	Available
47	Jacob Sanders	jacob.sanders@hospital.com	Neurologist	Male	Available
50	Abigail Cooper	abigail.cooper@hospital.com	General	Female	Available

Update Shift Details

Enter ID from Shift Schedule

Doctor ID from Shift Schedule

Select Shift Type

Select Shift Type

Select Date

Click to Update Shift

Enter Details to Assign Shift

Enter ID from Available Doctors

Available Doctor ID

Select Shift Type

Select Shift Type

Select Date

Click to Assign Shift



National University of Computer and Emerging Sciences

Islamabad Campus

Schedule

 IKIGAI

Schedule Workshop

Log Out

Workshop Schedule

Search

Workshop Name

Arraged by Admin	Workshop Name	Speaker	Description	Date	Start Time	End Time	Venue
Alice Johnson	Heart Health	Dr. John	Insights on heart health	2024-12-01	09:00:00	12:00:00	Auditorium
John Smith	Brain Awareness	Dr. Jane	Understanding neurology	2024-12-02	10:00:00	13:00:00	Conference Hall
Emma Davis	Bone Care	Dr. Robert	Advances in orthopedics	2024-12-03	14:00:00	17:00:00	Room A
Michael Brown	Skin Safety	Dr. Emily	Dermatology tips	2024-12-04	15:00:00	18:00:00	Room B
Olivia Wilson	Pediatrics Today	Dr. Michael	Focus on child health	2024-12-05	16:00:00	19:00:00	Main Hall
Alice Johnson	Throat Care	Dr. Hanna	Tips for throat care	2024-11-24	08:30:00	09:30:00	Auditorium
Alice Johnson	Understanding Eye Health	Dr. Elena	New research on eye health	2024-12-01	09:30:00	10:30:00	Conference Hall
Alice Johnson	eye care	Dr.Aqsa	eye health tip	2024-12-01	09:30:00	10:30:00	Conference Hall
Alice Johnson	eye care	Dr.Aqsa	eye health tip	2024-12-01	10:00:00	10:30:00	Conference Hall
Alice Johnson	nose care	Dr.Ali	care for nose	2024-12-01	09:30:00	10:00:00	Conference Hall
Alice Johnson	dd	edewd	dwd	2024-12-01	09:30:00	10:30:00	Conference Hall
Alice Johnson	jdnd	edwew	dwf	2024-12-01	14:30:00	18:00:00	Room A
Alice Johnson	dfewd	dwd	dewd	2024-12-01	11:00:00	12:00:00	Conference Hall
Alice Johnson	cs	csd	dsd	2024-12-02	08:30:00	10:30:00	Auditorium
Alice Johnson	Heart Health	kdpck	jcpodo	2024-12-01	10:00:00	11:00:00	Auditorium B
Alice Johnson	Stomach Care	Dr. James	Discussion on new research	2024-11-26	00:00:00	00:30:00	Auditorium
Alice Johnson	fnvdj	gtrgb	greg	2024-11-27	13:30:00	14:30:00	Auditorium

Schedule Workshop
Enter Details to
Enter Workshop Name

Enter Workshop Description

Enter Workshop Speaker

Select Date

Start Time

Shift Start Time

End Time

Shift End Time

Venue

Select Venue

Confirm Schedule



National University of Computer and Emerging Sciences Islamabad Campus

View Inventory

Screenshot of the IKIGAI application interface showing the inventory management system.

The sidebar on the left includes links for Home Page, Doctor Management, Schedule Shift, Schedule Workshops, Inventory (which is selected), Supply Request, and Track Inventory.

The main content area shows the "Inventory" page with a "Stock Details" section. A search bar and a dropdown menu for "Item Name" are visible. The table below lists 23 items with columns for Item ID, Item Name, Item Description, Item Type, Quantity Available, Threshold, and Unit Price.

Item ID	Item Name	Item Description	Item Type	Quantity Available	Threshold	Unit Price
1	Paracetamol Tablets	Analgesic and antipyretic tablet	Medication	830	100	0.5
2	Ibuprofen Tablets	Non-steroidal anti-inflammatory drug (NSAID)	Medication	400	100	0.75
3	Disposable Syringes	Disposable syringe for injections	Equipment	1000	200	0.25
4	Elastic Bandages	Elastic bandage for wound dressing	First Aid	300	50	1.2
5	Medical Adhesive Tape	Adhesive medical tape for dressings	First Aid	200	30	0.6
6	Sterile Gauze Pads	Sterile gauze for wound care	First Aid	500	100	1.5
7	Antiseptic Wipes	Disposable antiseptic wipes	Hygiene	1000	200	0.1
8	Digital Thermometer	Digital thermometer for temperature readings	Diagnostic	40	10	15.0
9	Stethoscope	Acoustic device for listening to internal sounds	Diagnostic	30	5	30.0
10	Blood Pressure Monitor	Electronic blood pressure monitor	Diagnostic	25	5	45.0
11	Face Mask	Disposable face mask for protection	Protective Gear	2000	500	0.2
12	Examination Gloves	Sterile examination gloves	Protective Gear	1500	300	0.5
13	Sterile Scalpel	Sterile scalpel for surgical use	Surgical Instrument	100	20	2.0
14	Surgical Mask	High-filtration surgical mask	Protective Gear	1800	400	0.3
15	IV Fluid Bags	Intravenous fluid for patient hydration	Medication	100	10	5.0
16	Injection Needles	Disposable needle for injections	Equipment	2000	500	0.15
17	Cotton Balls	Sterile cotton balls for cleaning	Hygiene	1200	300	0.05
18	Oxygen Mask	Oxygen mask for patient ventilation	Equipment	150	20	1.5
19	Alcohol Swabs	Sterile alcohol swabs for disinfection	Hygiene	2500	500	0.1
20	Disposable Gowns	Disposable surgical gown	Protective Gear	300	50	3.5
21	Tongue Depressors	Wooden tongue depressor	Equipment	1000	200	0.1
22	Adjustable Splint	Adjustable splint for fractures	First Aid	80	10	5.0
23	Respiratory Inhaler	Inhaler for respiratory relief	Medication	60	15	10.0



National University of Computer and Emerging Sciences Islamabad Campus

● Track Inventory (Good In and Good Out)

Screenshot of the IKIGAI application interface showing the Inventory module.

The sidebar on the left includes links: Home Page, Doctor Management, Schedule Shift, Schedule Workshops, Inventory (selected), Supply Request, and Track Inventory.

The main content area shows two tables:

Good In

Item ID	Item Name	Item Type	Quantity Purchased	Unit Purchase Price	Requested Date	Good In Date
1	Paracetamol Tablets	Medication	50	10.0	2024-11-01	2024-11-01
2	Ibuprofen Tablets	Medication	40	15.0	2024-11-02	2024-11-02
3	Disposable Syringes	Equipment	60	5.0	2024-11-03	2024-11-03
4	Elastic Bandages	First Aid	30	20.0	2024-11-04	2024-11-04
5	Medical Adhesive Tape	First Aid	45	8.0	2024-11-05	2024-11-05
6	Sterile Gauze Pads	First Aid	25	18.0	2024-11-06	2024-11-06
7	Antiseptic Wipes	Hygiene	55	12.0	2024-11-07	2024-11-07
8	Digital Thermometer	Diagnostic	50	9.0	2024-11-08	2024-11-08

Good Out

Item ID	Item Name	Item Type	Quantity Removed	Unit Purchase Price	Unit Sales Price	Good Out Date
1	Paracetamol Tablets	Medication	30	10.0	15.0	2024-11-02
1	Paracetamol Tablets	Medication	30	10.0	15.0	2024-11-02
2	Ibuprofen Tablets	Medication	25	15.0	18.0	2024-11-03
3	Disposable Syringes	Equipment	40	5.0	8.0	2024-11-04
4	Elastic Bandages	First Aid	35	20.0	22.0	2024-11-05
5	Medical Adhesive Tape	First Aid	50	8.0	12.0	2024-11-06
6	Sterile Gauze Pads	First Aid	30	18.0	20.0	2024-11-07
7	Antiseptic Wipes	Hygiene	45	12.0	16.0	2024-11-08
8	Digital Thermometer	Diagnostic	50	9.0	10.0	2024-11-09
9	Stethoscope	Diagnostic	40	16.0	19.0	2024-11-10
10	Blood Pressure Monitor	Diagnostic	60	7.0	7.0	2024-11-11
11	First-Aid Kit	Diagnostic	20	22.0	22.0	2024-11-12



National University of Computer and Emerging Sciences Islamabad Campus

● Medical Supply Request

IKIGAI

Medical Supply Request

Log Out

Stock Details

Item ID	Item Name	Item Description	Item Type	Quantity Available	Threshold	Unit Price
1	Paracetamol Tablets	Analgesic and antipyretic tablet	Medication	830	100	0.5
2	Ibuprofen Tablets	Non-steroidal anti-inflammatory drug (NSAID)	Medication	400	100	0.75
3	Disposable Syringes	Disposable syringe for injections	Equipment	1000	200	0.25
4	Elastic Bandages	Elastic bandage for wound dressing	First Aid	300	50	1.2
5	Medical Adhesive Tape	Adhesive medical tape for dressings	First Aid	200	30	0.6
6	Sterile Gauze Pads	Sterile gauze for wound care	First Aid	500	100	1.5
7	Antiseptic Wipes	Disposable antiseptic wipes	Hygiene	1000	200	0.1
8	Digital Thermometer	Digital thermometer for temperature readings	Diagnostic	40	10	15.0

Enter Details to Request Supply

Enter Item ID to Restock

Enter Quantity to Request

Click to Confirm Order

Medical Supply Requests details

Request ID	Requested By Admin	Item Name	Item Type	Quantity Requested	Unit Price	Total Price	Request Date
1	Alice Johnson	Paracetamol Tablets	Medication	50	0.5	25.0	2024-11-01
2	John Smith	Ibuprofen Tablets	Medication	30	0.75	22.5	2024-11-02
3	Emma Davis	Disposable Syringes	Equipment	100	0.25	25.0	2024-11-03
4	Michael Brown	Elastic Bandages	First Aid	75	1.2	90.0	2024-11-04
5	Olivia Wilson	Medical Adhesive Tape	First Aid	200	0.6	120.0	2024-11-05
6	William Martinez	Sterile Gauze Pads	First Aid	150	1.5	225.0	2024-11-06
7	Sophia Anderson	Antiseptic Wipes	Hygiene	200	0.1	20.0	2024-11-07
8	James Garcia	Digital Thermometer	Diagnostic	20	15.0	300.0	2024-11-08
9	Mia Lee	Stethoscope	Diagnostic	15	30.0	450.0	2024-11-09
10	Benjamin Hall	Blood Pressure Monitor	Diagnostic	10	45.0	450.0	2024-11-10
11	Charlotte Clark	Face Mask	Protective Gear	500	0.2	100.0	2024-11-11



National University of Computer and Emerging Sciences Islamabad Campus

● Doctor Interface

Dashboard:

IKIGAI

Doctor ID: 2
Full Name: Emily Brown

Feature

- Dashboard
- Patients
- Appointments
- Workshops
- Shifts Schedule
- Profile
- Profile Setting

Number of Patients

App. ID	Name	Description	Date	Status
9	Benjamin Jackson	Prescription for asthma relief	2024-11-09	Prescribed
19	Liam King	Hernia repair surgery consulta...	2024-11-19	Surgery
29	Ethan Murphy	Prescription for high blood...	2024-11-29	Prescribed
39	Caleb Cox	Fracture surgery and rehabil...	2024-12-09	Surgery
49	Elijah Griffin	Prescription for chronic pain...	2024-12-19	Prescribed
53	Alice Johnson	General health check-up	2024-12-09	On Treatment
54	Bob Brown	Initial evaluation for asthma...	2024-11-09	Pending

Number of Appointments

Date	Count
2024-11-09	2
2024-11-19	1
2024-11-29	1
2024-12-09	2
2024-12-19	1

Appointments:

IKIGAI

Doctor ID: 2
Full Name: Emily Brown

Feature

- Dashboard
- Patients
- Appointments
- Workshops
- Shifts Schedule
- Profile
- Profile Setting

Appointments

Apt. ID	Name	Gender	Contact	Description	Date	Date Modified	Status
9	Benjamin Jackson	Male	03211234575	Prescription for asthma relief	2024-11-09	2024-11-09	Prescribed
19	Liam King	Male	03211234585	Hernia repair surgery consultation	2024-11-19	2024-11-19	Surgery
29	Ethan Murphy	Male	03211234595	Prescription for high blood pressure...	2024-11-29	2024-11-29	Prescribed
39	Caleb Cox	Male	03211234605	Fracture surgery and rehabilitation...	2024-12-09	2024-12-09	Surgery
49	Elijah Griffin	Male	03211234615	Prescription for chronic pain relief	2024-12-19	2024-12-19	Prescribed
53	Alice Johnson	Female	03211234569	General health check-up	2024-12-09	2024-12-09	On Treatment
54	Bob Brown	Male	03211234570	Initial evaluation for asthma symptoms	2024-11-09	2024-11-09	Pending

Appointment ID:
Status:
Diagnosis:
Treatment:
Start Date:
End Date:
Time:



National University of Computer and Emerging Sciences Islamabad Campus

Patients (Includes Patient Treatment and Surgery schedule):

IKIGAI

Doctor ID: 2
Full Name: Emily Brown

Feature

Dashboard

Patients

Appointments

Workshops

Shifts Schedule

Profile

Profile Setting

Hospital Building Icon

Dashboard Form

11/27/2024 12:41:16 am Welcome, Emily Brown Logout Active

Patient Treatment

T. ID	Patient	Treatment	S. Date	Exp. End	Status
16	Alice	Peach Malt	2024-11-28	2024-11-30	Good

Surgery List

S. ID	Patient	Diagnosis	Room	Date	Time	Status
5	Liam	Hernia	Single	2024-11-	09:00...	Pending
10	Caleb	Fracture	Single	2024-12-	09:00...	Pending

Treatment ID:
New Treatment:
Save Changes?

Surgery ID:
Perform Surgery?

Workshop Schedule:

IKIGAI

Doctor ID: 2
Full Name: Emily Brown

Feature

Dashboard

Patients

Appointments

Workshops

Shifts Schedule

Profile

Profile Setting

Hospital Building Icon

Dashboard Form

11/27/2024 12:42:09 am Welcome, Emily Brown Logout Active

Workshops

WS. ID	Topic	Speaker	Description	Date	Location	Start Time	End Time	Status	Confirmation
1	Heart Health	Dr. John	Insights on heart health	2024-12-01	Auditorium	09:00:00	12:00:00	Upcoming	Unregistered
2	Brain Awareness	Dr. Jane	Understanding neurology	2024-12-02	Conference Hall	10:00:00	13:00:00	Upcoming	Unregistered
3	Bone Care	Dr. Robert	Advances in orthopedics	2024-12-03	Room A	14:00:00	17:00:00	Upcoming	Unregistered
4	Skin Safety	Dr. Emily	Dermatology tips	2024-12-04	Room B	15:00:00	18:00:00	Upcoming	Unregistered
5	Pediatrics Today	Dr. Michael	Focus on child health	2024-12-05	Main Hall	16:00:00	19:00:00	Upcoming	Unregistered

Workshop ID: Confirmation:



National University of Computer and Emerging Sciences Islamabad Campus

Shifts Viewing Schedule:

IKIGAI

Doctor ID: 2
Full Name: Emily Brown

Feature

Dashboard

Patients

Appointments

Workshops

Shifts Schedule

Profile

Profile Setting

Hospital Building Icon

Dashboard Form

11/27/2024 12:43:02 am Welcome, Emily Brown Logout Active

Shifts Schedule

Shift ID	Doctor Assigned	Description	Date	Department	Start Time	End Time	Status
1	John Smith	Morning shift	2024-11-01	Cardiologist	09:00:00	17:00:00	Active
2	Emily Brown	Evening shift	-	Neurologist	17:00:00	01:00:00	Available
3	Michael Davis	Night shift	2024-11-03	Orthopedic	23:00:00	07:00:00	Active
4	Sophia Johnson	Morning shift	2024-11-04	Pediatrician	09:00:00	17:00:00	Active
5	James Williams	Evening shift	-	General	17:00:00	01:00:00	Available
6	Olivia Miller	Night shift	2024-11-06	Cardiologist	23:00:00	07:00:00	Active
7	William Taylor	Morning shift	2024-11-07	Neurologist	09:00:00	17:00:00	Active
8	Isabella Anderson	Evening shift	-	Orthopedic	17:00:00	01:00:00	Available
9	David Thomas	Night shift	2024-11-09	Pediatrician	23:00:00	07:00:00	Active
10	Emma Jackson	Morning shift	2024-11-10	General	09:00:00	17:00:00	Active
11	Daniel White	Evening shift	-	Cardiologist	17:00:00	01:00:00	Available
12	Charlotte Harris	Night shift	2024-11-12	Neurologist	23:00:00	07:00:00	Active
13	Joseph Martin	Morning shift	2024-11-13	Orthopedic	09:00:00	17:00:00	Active
14	Amelia Thompson	Evening shift	-	Pediatrician	17:00:00	01:00:00	Available
15	Henry Garcia	Night shift	2024-11-15	General	23:00:00	07:00:00	Active
16	Mia Martinez	Morning shift	2024-11-16	Cardiologist	09:00:00	17:00:00	Active
17	Alexander Robinson	Evening shift	-	Neurologist	17:00:00	01:00:00	Available
18	Evelyn Clark	Night shift	2024-11-18	Orthopedic	23:00:00	07:00:00	Active
19	Benjamin Rodriguez	Morning shift	2024-11-19	Pediatrician	09:00:00	17:00:00	Active
20	Harmer Lewis	Evening shift	-	General	17:00:00	01:00:00	Available

Shift ID: Shift Completed?

Profile Management:

IKIGAI

Doctor ID: 2
Full Name: Emily Brown

Feature

Dashboard

Patients

Appointments

Workshops

Shifts Schedule

Profile

Profile Setting

Hospital Building Icon

Dashboard Form

11/27/2024 12:46:34 am Welcome, Emily Brown Logout Active

Edit Profile

Doctor ID:
Name:
Email Address:
Gender:
Mobile Number:
Password:
New Password:
Specialization:

Doctor ID: 2
Name: Emily Brown
Email Address: emily.brown@hospital.com
Total Rating: No Ratings Yet

Show Feedbacks

Update

Gears Icon



National University of Computer and Emerging Sciences Islamabad Campus

Feedbacks Page:

IKIGAI

Doctor ID: 9
Full Name: David Thomas

Feature

- Dashboard
- Patients
- Appointments
- Workshops
- Shifts Schedule
- Profile
- Profile Setting

Hospital

Dashboard Form

11/27/2024 12:48:57 am Welcome, David Thomas Logout Active

Feedbacks

F. ID	Patient	Treatment Received	Rating	Description	Date	Status
3	Charlotte	Post-Procedure Care	5	Outstanding service during the appointment on 20...	2024-11-27	Pending
8	Grace	Spinal Recovery Program	2	Outstanding service during the appointment on 20...	2024-11-27	Reviewed

Feedback ID: Reviewed:



National University of Computer and Emerging Sciences Islamabad Campus

● Patient Interface

Dashboard

Patient ID: 1

Feature

- Home
- Doctors
- Appointments
- Book Room
- Prescription
- Feedback
- Bill
- Profile
- Profile Setting

IKIGAI

Dashboard Form

11/26/2024 07:55:48 PM Welcome, Ethan Robert Logout Active

Patient Treatment Plan

	Diagnosis		Status
	Diabetes Type 2 headache		Good
	Start Date		End Date
	2024-11-10		2024-11-20
	Price	\$	500.0

Appointment

Appointment ID	Description	Doctor	Date	Price
1	Routine check-up and medication...	Emma Jackson	2024-11-01	300.0
51	Headache	Emily Brown	2024-10-29	518.71

Enter ID... Cancel Appointment

About your Doctor

Doctor Name: Emma Jackson
Specialization: General
Email Address: emma.jackson@hospital.com
Mobile Number: 03011234576



National University of Computer and Emerging Sciences Islamabad Campus

View Doctors

IKIGAI

Patient ID: 1

Feature

- Home
- Doctors
- Appointments
- Book Room
- Prescription
- Feedback
- Bill
- Profile
- Profile Setting

Dashboard Form

11/27/2024 12:37:17 AM Welcome, Ethan Robert Logout Active

All Doctors

ID	Name	Gender	Specialization	Email	Phone
1	John Smith	Male	Cardiologist	john.smith@hospital.com	03011234567
2	Emily Brown	Female	Neurologist	emily.brown@hospital.com	03011234568
3	Michael Davis	Male	Orthopedic	michael.davis@hospital.com	03011234569
4	Sophia Johnson	Female	Pediatrician	sophia.johnson@hospital.com	03011234570
5	James Williams	Male	General	james.williams@hospital.com	03011234571
6	Olivia Miller	Female	Cardiologist	olivia.miller@hospital.com	03011234572
7	William Taylor	Male	Neurologist	william.taylor@hospital.com	03011234573
8	Isabella Anderson	Female	Orthopedic	isabella.anderson@hospital.com	03011234574
9	David Thomas	Male	Pediatrician	david.thomas@hospital.com	03011234575
10	Emma Jackson	Female	General	emma.jackson@hospital.com	03011234576
11	Daniel White	Male	Cardiologist	daniel.white@hospital.com	03011234577
12	Charlotte Harris	Female	Neurologist	charlotte.harris@hospital.com	03011234578
13	Joseph Martin	Male	Orthopedic	joseph.martin@hospital.com	03011234579
14	Amelia Thompson	Female	Pediatrician	amelia.thompson@hospital.com	03011234580
15	Henry Garcia	Male	General	henry.garcia@hospital.com	03011234581
16	Mia Martinez	Female	Cardiologist	mia.martinez@hospital.com	03011234582
17	Alexander Robinson	Male	Neurologist	alexander.robinson@hospital.com	03011234583
18	Evelyn Clark	Female	Orthopedic	evelyn.clark@hospital.com	03011234584
19	Benjamin Rodriguez	Male	Pediatrician	benjamin.rodriguez@hospital.com	03011234585

Search By: Search

Schedule Appointment

IKIGAI

Patient ID: 1

Feature

- Home
- Doctors
- Appointments
- Book Room
- Prescription
- Feedback
- Bill
- Profile
- Profile Setting

Dashboard Form

11/27/2024 12:38:23 AM Welcome, Ethan Robert Logout Active

Appointments Details

Name: Ethan Robert #: 03211234567
Gender: Male
Address: 123 Maple Street Opposite Highway

Description: I have a severe Headache
Doctor's Name: James Williams
Specialization: General
Schedule: 2024-11-16

Book

Details

Description: I have a severe Headache

Doctor: James Williams

Schedule: 11/16/2024

Confirm Clear



National University of Computer and Emerging Sciences Islamabad Campus

Book Room

IKIGAI

Patient ID: 1

Feature

- Home
- Doctors
- Appointments
- Book Room
- Prescription
- Feedback
- Bill
- Profile
- Profile Setting

Dashboard Form

Available Rooms

ID	TYPE	PRICE
1	Single	3000.0
2	Double	4000.0
3	ICU	5000.0
4	Single	3200.0
5	Double	4500.0
6	ICU	5200.0
7	Single	3100.0
8	Double	4300.0
9	ICU	5100.0
10	Single	3400.0
11	Double	4100.0
12	ICU	5300.0
13	Single	3050.0
14	Double	4050.0
15	ICU	5050.0
16	Single	3250.0
17	Double	4150.0
18	ICU	5250.0
19	Single	3150.0
20	Double	4350.0
21	ICU	5150.0
22	Single	3350.0
23	Double	4200.0
24	ICU	5400.0
25	Single	3075.0
26	Double	4075.0

Details

Room: 21

Schedule: 11/5/2024

Confirm

Logout Active

See Prescription and Surgery

IKIGAI

Patient ID: 1

Feature

- Home
- Doctors
- Appointments
- Book Room
- Prescription
- Feedback
- Bill
- Profile
- Profile Setting

Dashboard Form

Prescription Details

No	Supply Name	Type	Quantity	U.Price	T.Price
1	Paracetamol	Medication	2	0.5	1.0
2	Ibuprofen	Medication	1	0.75	0.75

Scheduled Surgery

ID	Doctor	Room	Date	Time
1	John Smith	1	2024-11-30	08:00:00

Logout Active



National University of Computer and Emerging Sciences Islamabad Campus

Give Feedback

IKIGAI

Patient ID: 1

Feature

- Home
- Doctors
- Appointments
- Book Room
- Prescription
- Feedback
- Bill
- Profile
- Profile Setting

Dashboard Form

11/27/2024 12:39:40 AM Welcome, Ethan Robert Logout Active

FeedBack

Feedback:

Very nice.

Your well-being is our top priority. Let us know how we did—we're always listening.

Choose your Doctor

Search By

★★★★★

Give Rating

Generate Bill

IKIGAI

Patient ID: 1

Feature

- Home
- Doctors
- Appointments
- Book Room
- Prescription
- Feedback
- Bill
- Profile
- Profile Setting

Dashboard Form

11/27/2024 12:40:06 AM Welcome, Ethan Robert Logout Active

Bill Details

Room: ICU - \$5050.0
Room: Single - \$3050.0
Room: ICU - \$5150.0

Add Prescription Cost to Bill

Add Treatment Cost to Bill

Add Appointment Cost to Bill

Add Room Cost to Bill

Total Bill Amount: \$13250.0

Pay Bill



National University of Computer and Emerging Sciences Islamabad Campus

Profile Management

The screenshot shows the 'Edit Profile' section of the 'Dashboard Form'. On the left, there's a sidebar with a patient profile icon and a list of features: Home, Doctors, Appointments, Book Room, Prescription, Feedback, Bill, Profile, and Profile Setting. Below this is a hospital building icon. The main area has a header 'Dashboard Form' with the date '11/27/2024 12:40:26 AM' and a welcome message 'Welcome, Ethan Robert'. A 'Logout' button and an 'Active' status indicator are also present. The 'Edit Profile' form contains fields for First Name, Last Name, Mobile Number, Gender (with a dropdown menu), Password, and Address. Below the form is a large 'Update' button. To the right of the form, there are three interlocking gear icons. On the left side of the main content area, there's a placeholder for an imported profile picture with a 'Import' button below it. Below the import button, the patient's details are listed: Patient ID: 1, Name: Ethan Robert, Mobile Number: 03211234567, Gender: Male, and Address: 123 Maple Street Opposite Highway.

● Summary

Ikigai I-CARE is an advanced hospital management system designed to centralize and streamline various processes within a hospital. By integrating modules such as patient management, doctor scheduling, inventory tracking, appointment management, room booking, payment processing, and feedback systems, I-CARE ensures efficiency, reduced errors, and improved communication across departments. The platform allows for seamless patient care, enhanced operational management, and better data accessibility for stakeholders, improving the overall quality of hospital services.