Name : Barath Matthew J.A

Emp Id : 11951

Problem Statement : Hospital Management System							
What ? 1				How ? 2			

: 1. Admin : a.) Add,Delete,Update the Hospital details. Ans : Add hospital infrastructure,Update infrastructure ,remove equipment. b.) Details and Type of wards Ans : Normal ward , ICU,Guest Room,Canteen,Operation Theater. c.) Ambulance service. Ans : Ambulance for pregnant womens,accidents,and for other purpose d.) view hospital details, Ans : no of doctors working ,no of patients,medical facilities, condition of equipment. e.) Add/Delete/Update/view doctors Details, Ans : Add or Update doctors according to their specialization ,experience and success rate. f.) Add/Delete/update/view patient Details Ans :add and delete patients, View the details of the booked patients and update it to the database. g.) Payment. Ans : Payment is received through upi,net banking,cash and card. 2) User(patient) : a.)New Patient Ans : The patient details will be update in the database,a respected doctor will be assigned for their problem and a file will be given to the patient for their reference. b.)Existing Patient Ans : In the counter the patient give their file and get their entry c.)Book an Appointment. Ans : Appointment can be booked by visiting the hospital or by phone call .patient can also visit the hospital by the	1) Admin: a) Add the Doctors: Method 1: Implement the Add doctor based on specialization. Method 2: Implement the Add doctor using their experience. Method 3: Implement the Add doctor using experience,specialization and success rate. b) Delete / Update / View the doctor or patient: Method 1: Implement the delete / view / update by using manually entering the Patient id or name or Ph no. Method 2: Implement the delete / view / update by using the dropdown menu. Method 3: Implement the delete / view / update by listing the all the doctors details and give an individual delete button for each. c) Add the patient: Method 1: Implement using patient name. Method 2: Implement using patient Mobile no. Method 3: Implement using patient both name and mobile no. d) Delete / Update / View the patient: Method 1: Implement the delete / view / update by using email id Method 2: Implement the delete / view / update by using mobile no. Method 3: Implement the delete / view / update by using name. 2) User: a) Entry: Method 1: Implementation using the name . Method 2: Implementation using the mobile no. Method 3: Implementation using the mobile no or file. b) Book an appointment/ambulance: Method 1: Implement Booking by calling. Method 2: Implement Booking by visiting. Method 3: Implement Booking by calling or visiting. c) Cancel/change the appointment: Method 1: Implement Cancel/change the appointment Book by calling.

appointment date given by the doctor. **d.)Cancel/change the appointment date or time** **Ans : The patient can change the appointment date/time by making a call to the management** **e.)Admitting the patient** **Ans : Adminting the patients in the respective ward based on their conditions.** **f.)Payment** **Ans : Before visiting the doctor the doctor fee should be paid and before buying the medicine the medicine bill has to be paid.**	**Method 2: Implement Cancel/change the appointment Book by visiting.** **Method 3: Implement Cancel/change the appointment Book by calling or visiting.** **d) Payment:** **Method 1: Implement payment option using upi.** **Method 2: implement payment option using upi / internet banking/bank/card.** **Method 3: Implement payment option using upi / internet banking / card/ bank transfer.**

1) Admin: **a) Add the Doctors:** **Method 3: Implement the Add doctor using experience,specialization and success rate.** **Ans : Because a doctor need to have all this qualification to give the patient proper treatment** **b) Delete / Update / View the doctor or patient:** **Method 3: Implement the delete / view / update by listing the all the doctors details and give an individual delete button for each.** **Ans : Because admin can view each and every detail of the doctors and do what operations they want.** **c) Add the Patient:** **Method 3: Implement Patientusing both name and mobile no.** **Ans: by using both Ph No and name it is easy to track the details** **d) Delete / Update / View the patient:** **Method 2: Implement the delete / view / update by using mobile no.** **Ans : Because the ph no is unique.** **2) User:** **a) Entry:** **Method 3: Implementation using the mobile no or file.** **Ans : because ph no is unique and while visiting the hospital first time a file will be made on the user details and has a patient id.** **b) Book an appointment/ambulance:** **Method 3: Implement Booking by calling or visiting.** **Ans : Booking can be done in any of the way through call or visiting** **c) Cancel/change the appointment:** **Method 3: Implement Cancel/change the appointment Book by calling or visiting.**	**Admin :** **1. Adding a doctor only with their qualification is not possible we have to check their specialization and their track record.** **2.We can't delete /view or update the details manually because there is a chance of entering the wrong details.** **3.Implementing the Patient details only by their name or phone no is not possible.** **4.We can't track the patient using their name because name is not unique.** **Patient :** **1. We can't give one option for entry there should be more than one options** **2. We can't give one option for booking appointment/ambulance there should be more than one options.** **3. We can't give one option for canceling or changing appointments there should be more than one option.** **4. There Should be three to four payment options.**

Ans : Cancel/change the appointment can be done in any of the way through call or visiting **d) Payment:** **Method 3: Implement payment option using upi / internet banking / card/ bank transfer.** **Ans : because it is better to have multiple options**	
Why ? 3	**Why not ? 4**

Algorithm :

Admin point of view :

Step -1 : Start.

Step - 2 : Enter into the Admin panel.

Step - 3 : Admin can add doctor/patient/wards/equipment/ambulance by clicking the add button in their necessary fields and Enter the details and a unique id will be generated for doctor/patient/wards/equipment/ambulance.

Step - 4 : Admin can update the doctor /patient /wards /equipment /ambulance details by searching the doctor/ patient/ wards /equipment using its ID in their necessary fields and it will display all the details of the doctor/patient/wards/equipment.

Step - 4.1 : Admin can edit all the fields except the ID .

Step - 4.2 : After editing click on done to save the changes.

Step - 5 : Admin can delete(cancel) the doctor/ patient/ wards/ equipment /ambulance by searing the doctor/patient/wards/equipment/ambulance using their id in their necessary fields and click on delete.

Step - 6 : Admin can view the doctor/patient/wards/equipment/ambulance details by searching the doctor/patient/wards/equipment/ambulance using their ID in their necessary fields.

Step - 7: Admin can send the ambulance after getting the request from the patient .

Step - 8 : Admin can add/update the rooms(wards),doctor for the patient.

Step - 9 : if the user requests to cancel/ change the appointment time or date , the admin can do it after consulting with the respected doctor .

Step - 9 : Stop.

User Point of view :

Step - 1 : Start

Step - 2 : Book Appointment.

Step - 3 : whether the user is an existing user or not .

Step - 3.1 : if existing user gets patient id and name /ph no and check ask the problem.

Step - 3.2 : if new users then get their details and problems and create a file for the patient and update the details in the database and book the appointment and allot a doctor based on the patient problem or preference.

Step - 4 : for consulting / checkup.

Step - 4 .1: whether the allotted doctor is free on the particular date and time.

Step - 4.1.a : if the doctor is free then book the appointment.

Step - 4.1.b : if doctor is not available change the appointment date and time.

Step - 5 :admit in the hospital.

Step - 5.1 : What is the condition and problem? And allot the respected ward for the condition.

Step - 6 :Booking Ambulance .

Step - 6.1 : Ask for the location and the status of the patient.

Step - 7 : doctor fee should be done before visiting the doctor.

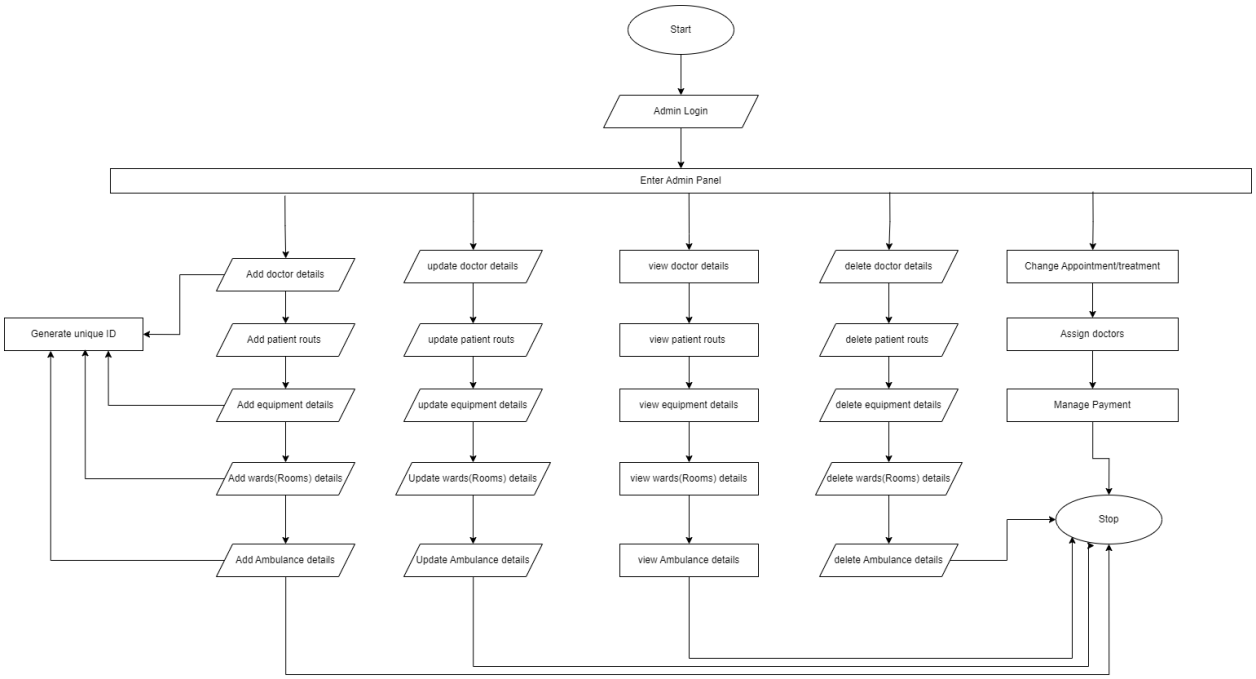
Step - 8 : After payment the patient can consult/get treated by the doctor.

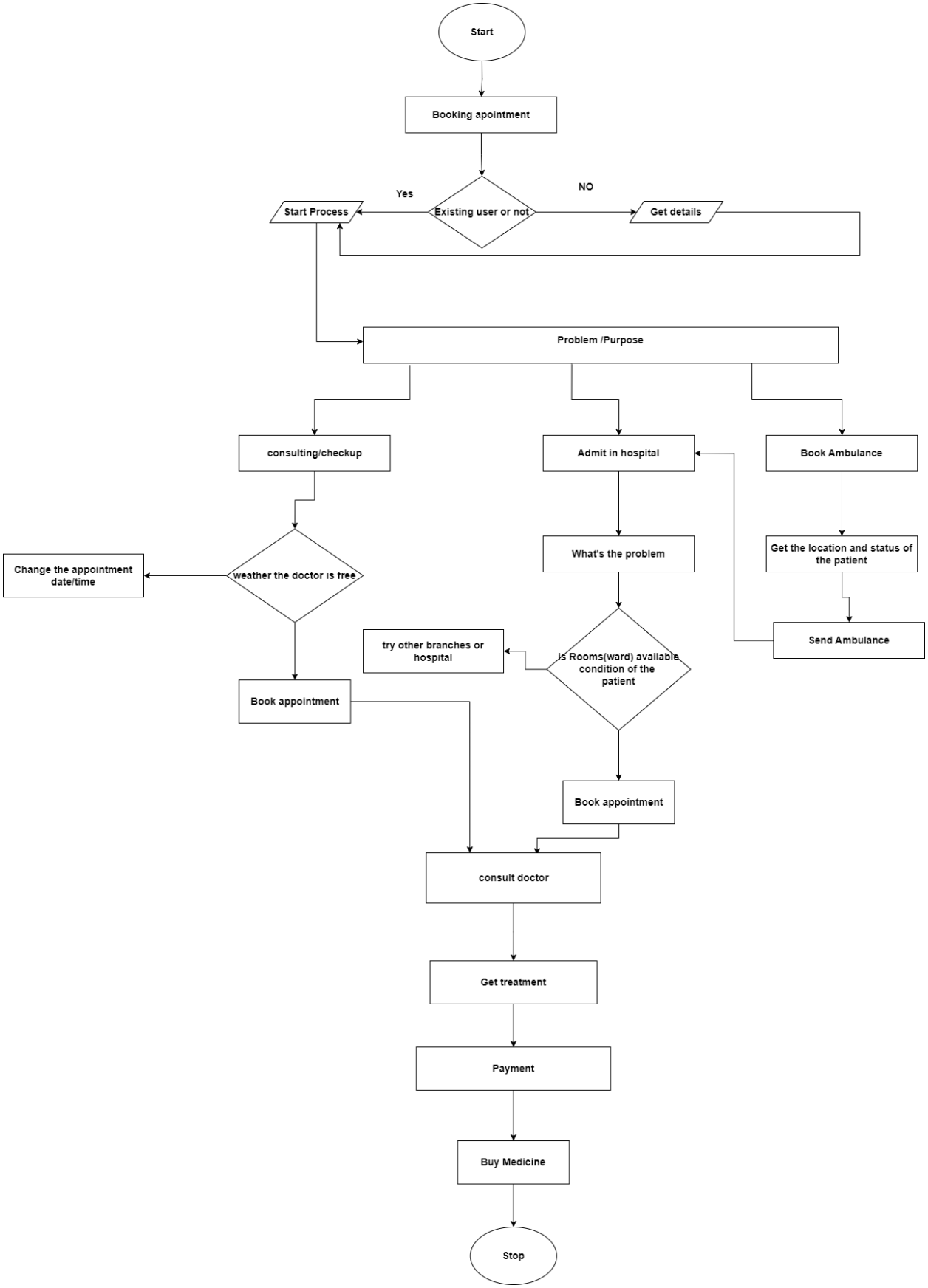
Step - 9 : medicine bill has to be paid before purchasing the medicine at the counter.

Step 10 - : If the user decides to change doctor/treatment/ they can do it.

Step - 11 : Stop.

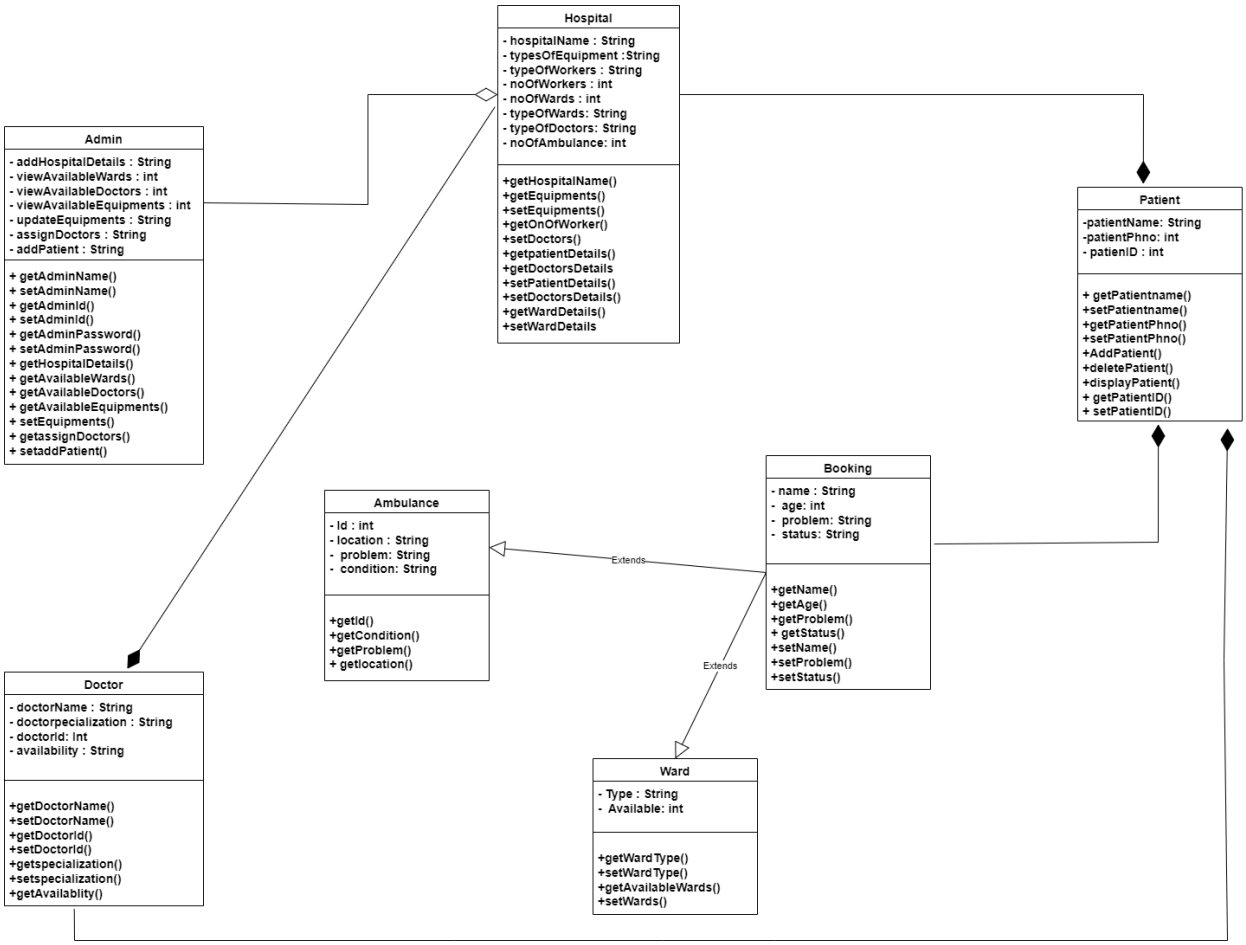
Flow Chart :


Start
Admin Login
Enter Admin Panel
Add doctor details
Generate unique ID
Add patient routs
Add equipment details
Add wards(Rooms) details
Add Ambulance details
update doctor details
update patient routs
update equipment details
Update wards(Rooms) details
Update Ambulance details
view doctor details
view patient routs
view equipment details
view wards(Rooms) details
view Ambulance details
delete doctor details
delete patient routs
delete equipment details
delete wards(Rooms) details
delete Ambulance details
Change Appointment/treatment
Assign doctors
Manage Payment
Stop


Start
Booking apointment
Existing user or not
Yes
NO
Start Process
Get details
Problem /Purpose
consulting/checkup
Admit in hospital
Book Ambulance
Change the appointment date/time
weather the doctor is free
What's the problem
Get the location and status of the patient
try other branches or hospital
is Rooms(ward) available condition of the patient
Send Ambulance
Book appointment
Book appointment
consult doctor
Get treatment
Payment
Buy Medicine
Stop

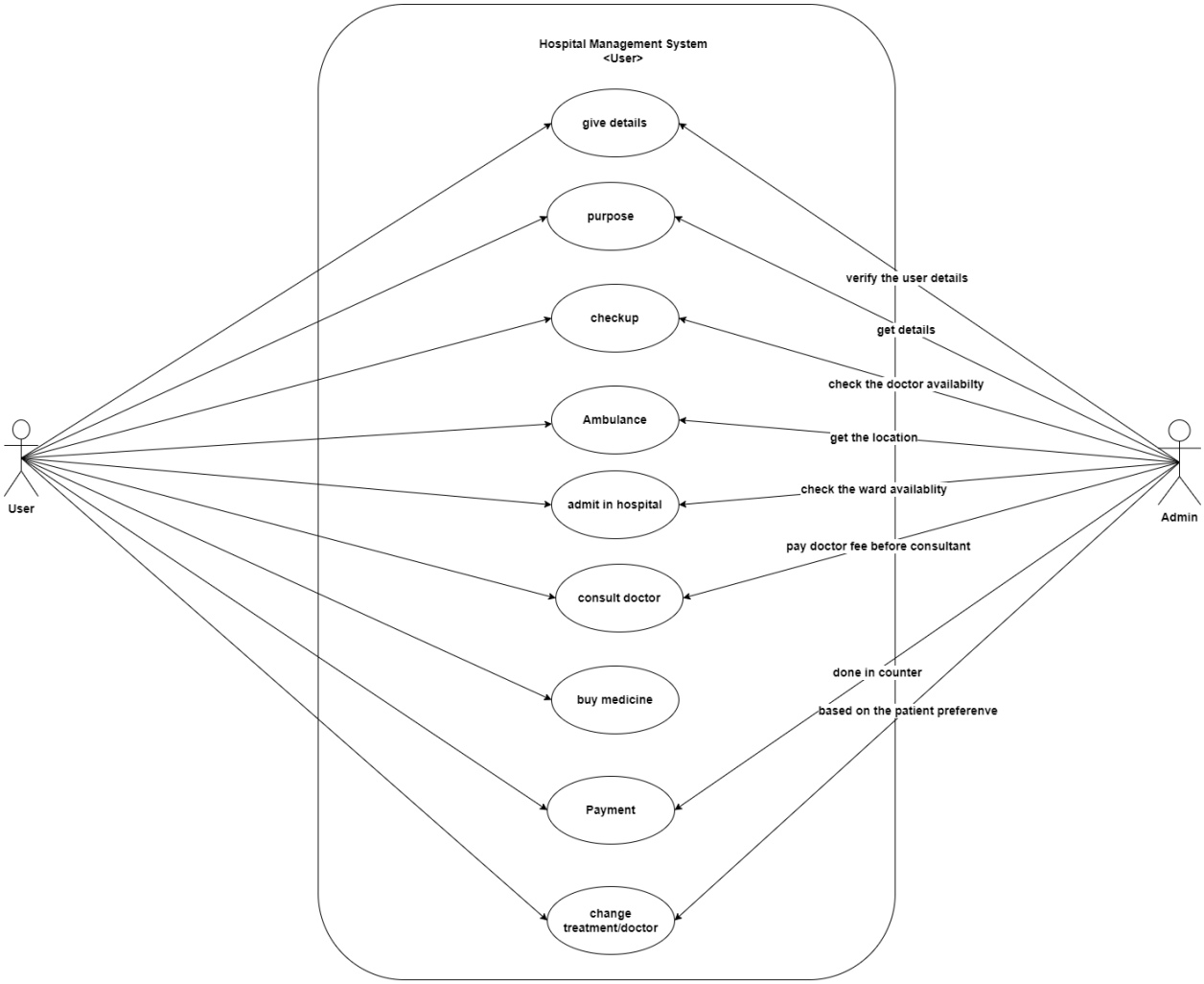
UML :

Class Diagram :



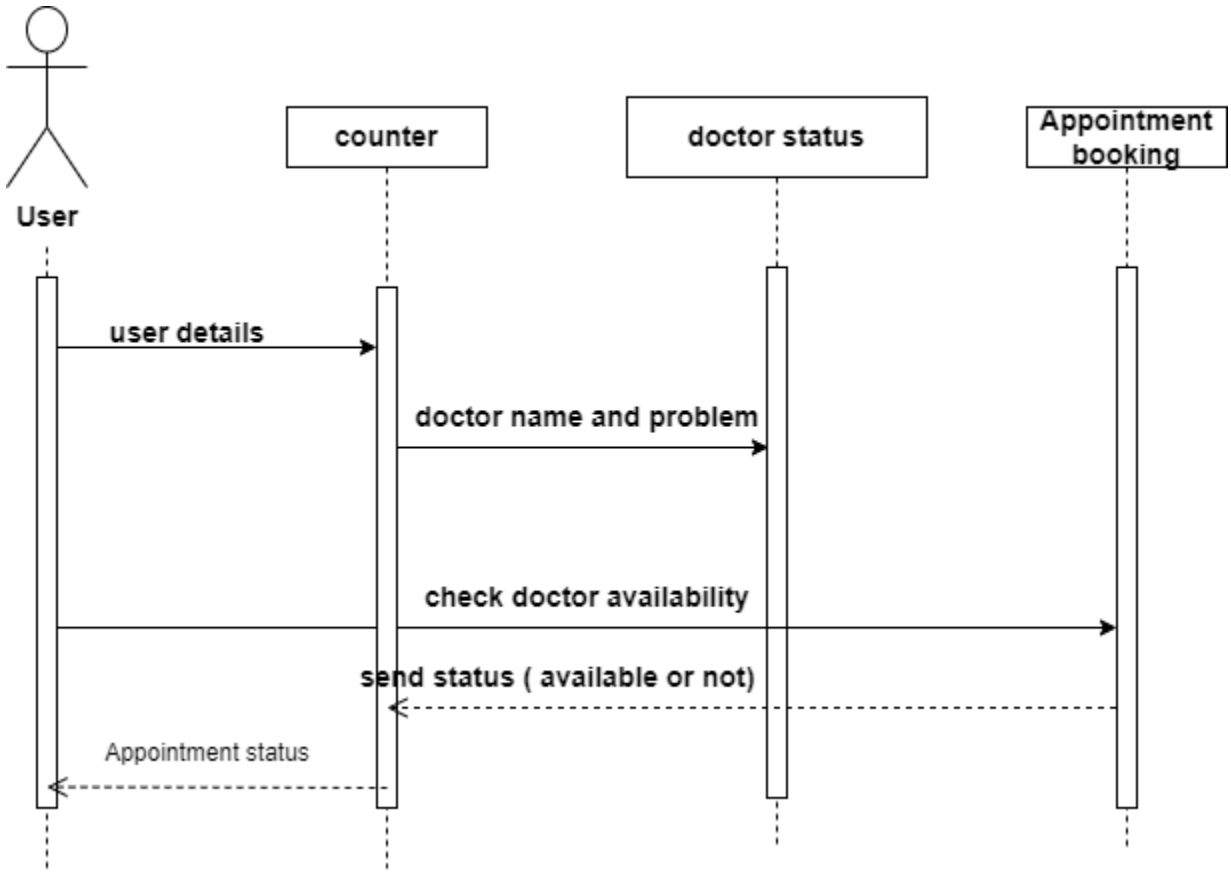
Use Case Diagram :

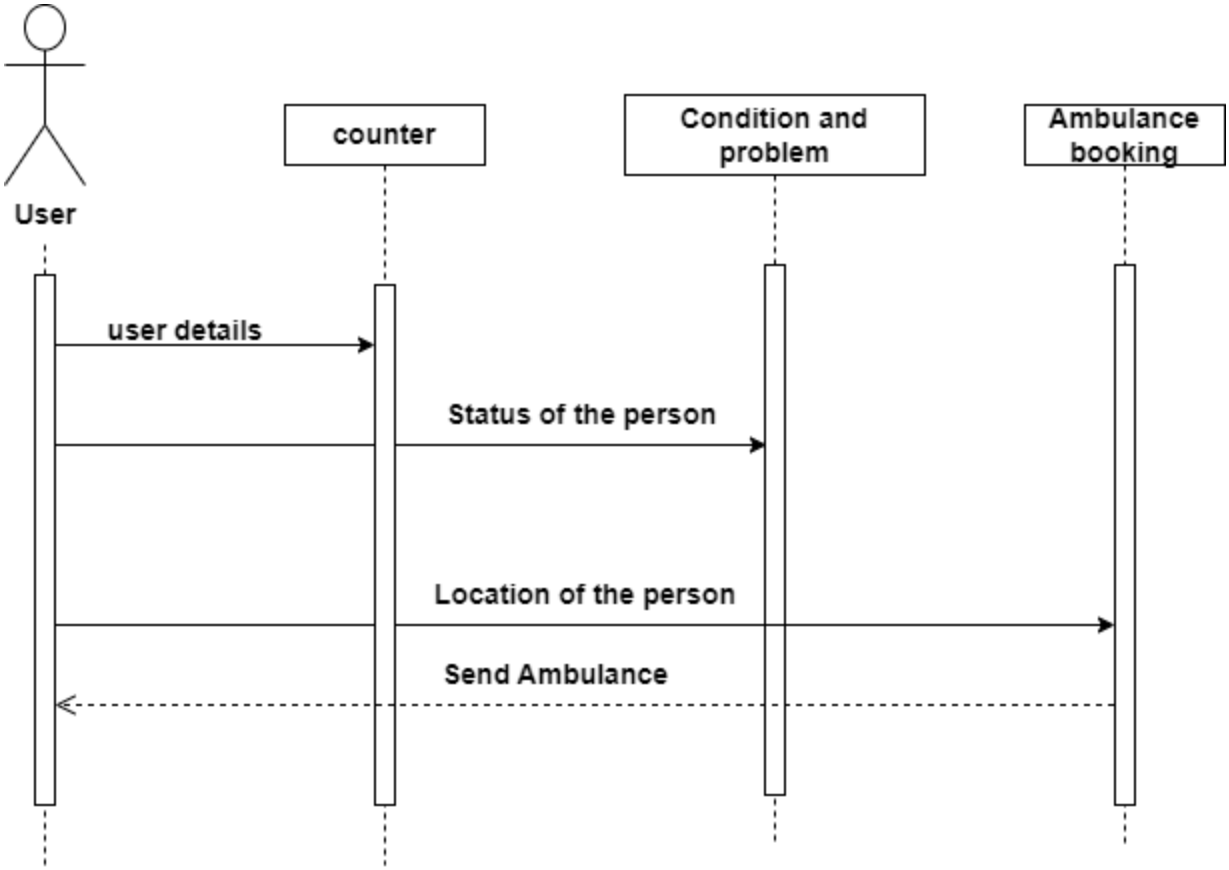
User :

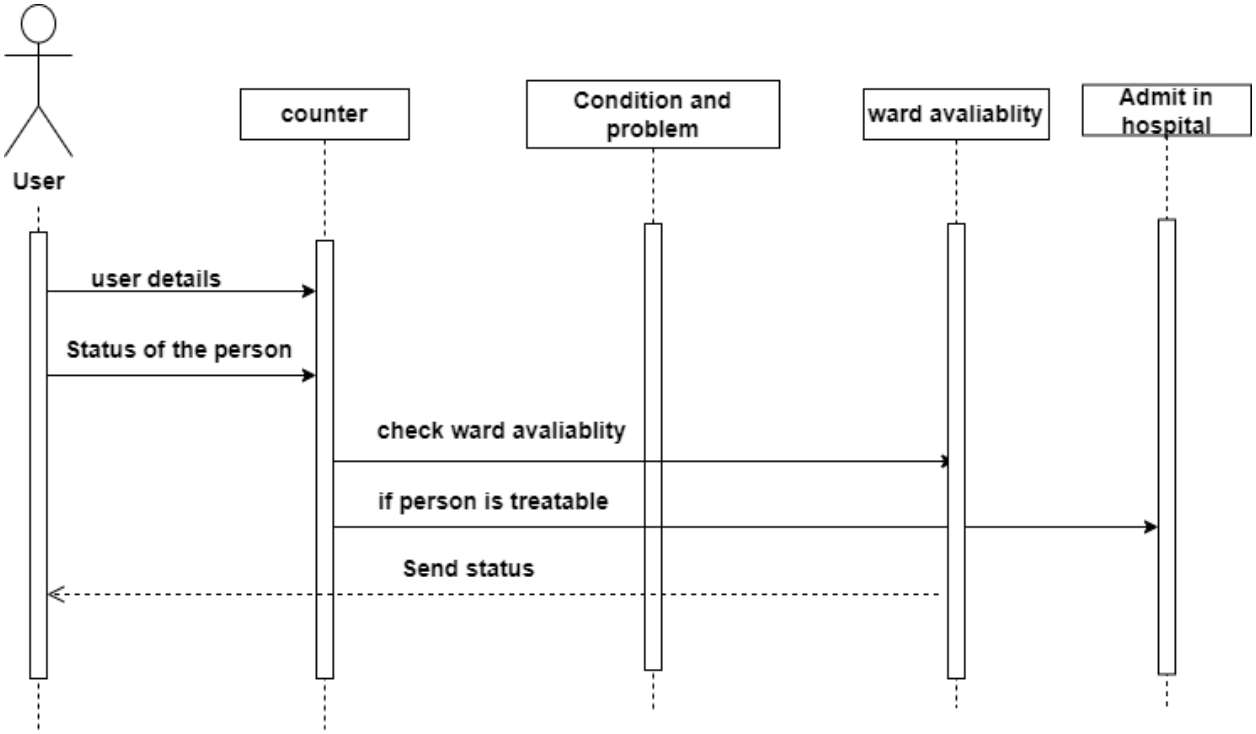


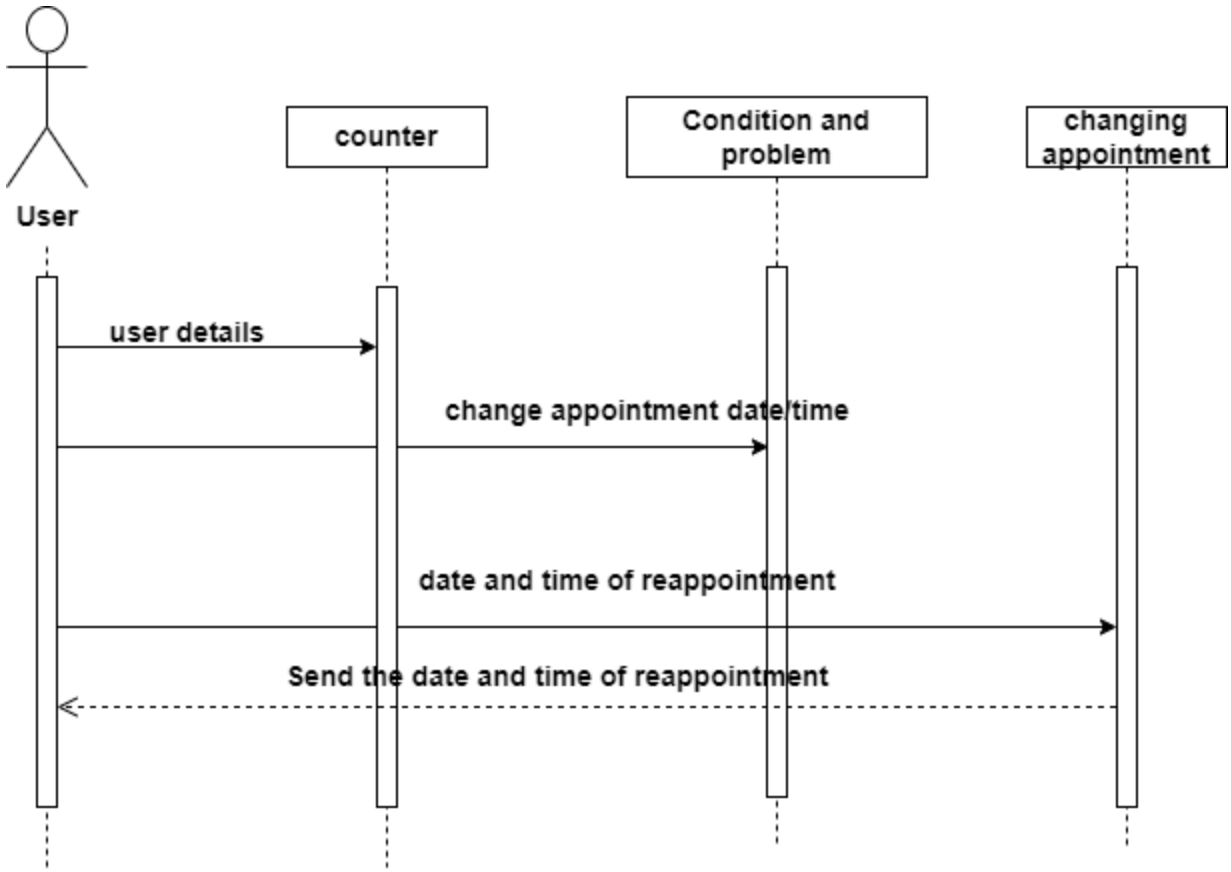
Hospital Management System
<Admin>
Admin login
doctor Details
patient details
equipment details
Ward details
Ambulance details
Assign doctor
manage database
Admin
Hospital
ManagementSystem
Aprove or deny
manage details
manage details
manage details
manage details
manage details
manage details
manage details

Sequential Diagram :




User
counter
Condition and problem
Ambulance booking
user details
Status of the person
Location of the person
Send Ambulance


User
counter
Condition and problem
ward avaliablity
Admit in hospital
user details
Status of the person
check ward avaliablity
if person is treatable
Send status


User
counter
Condition and problem
changing appointment
user details
change appointment date/time
date and time of reappointment
Send the date and time of reappointment