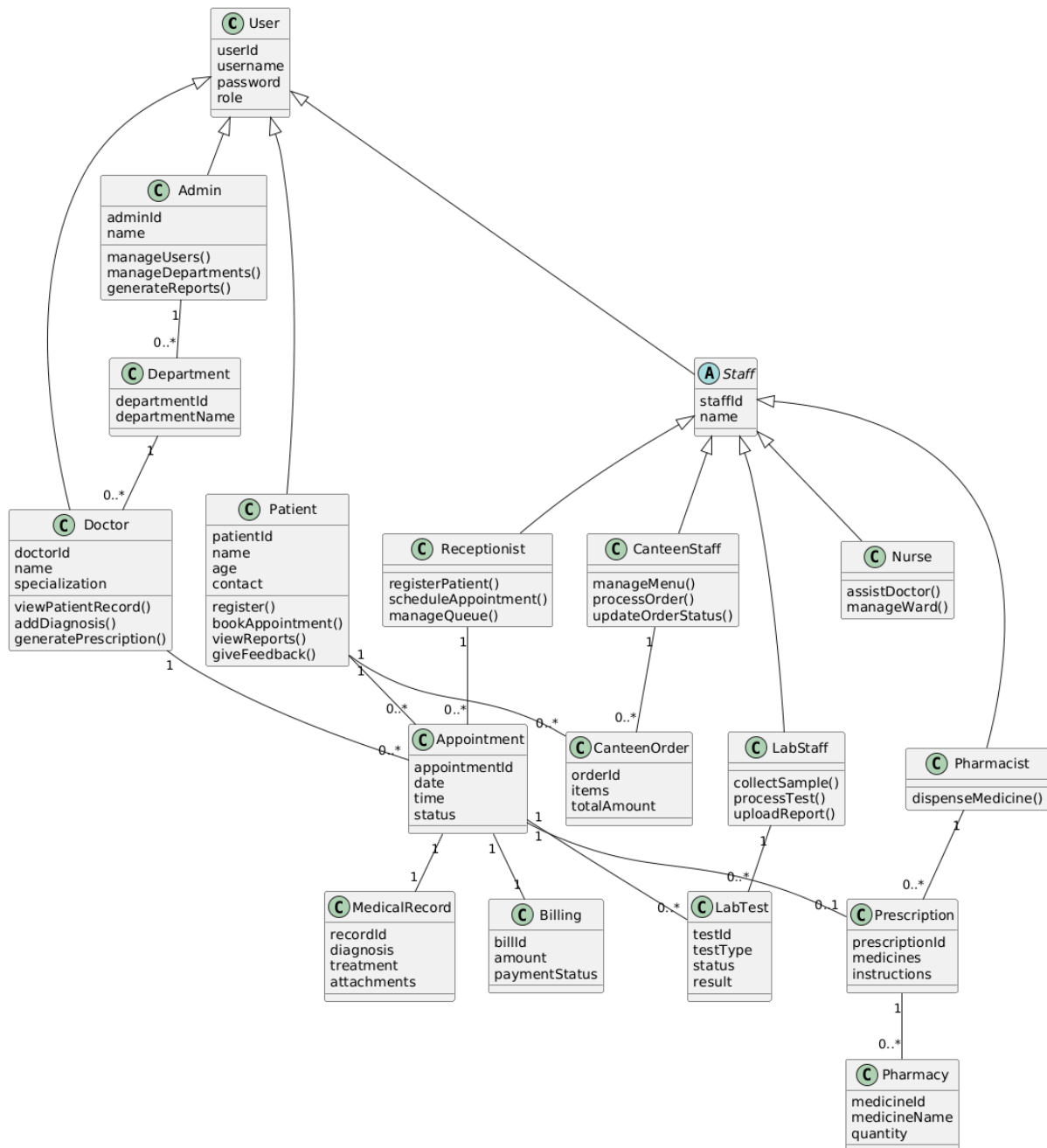


# UML DIAGRAMS

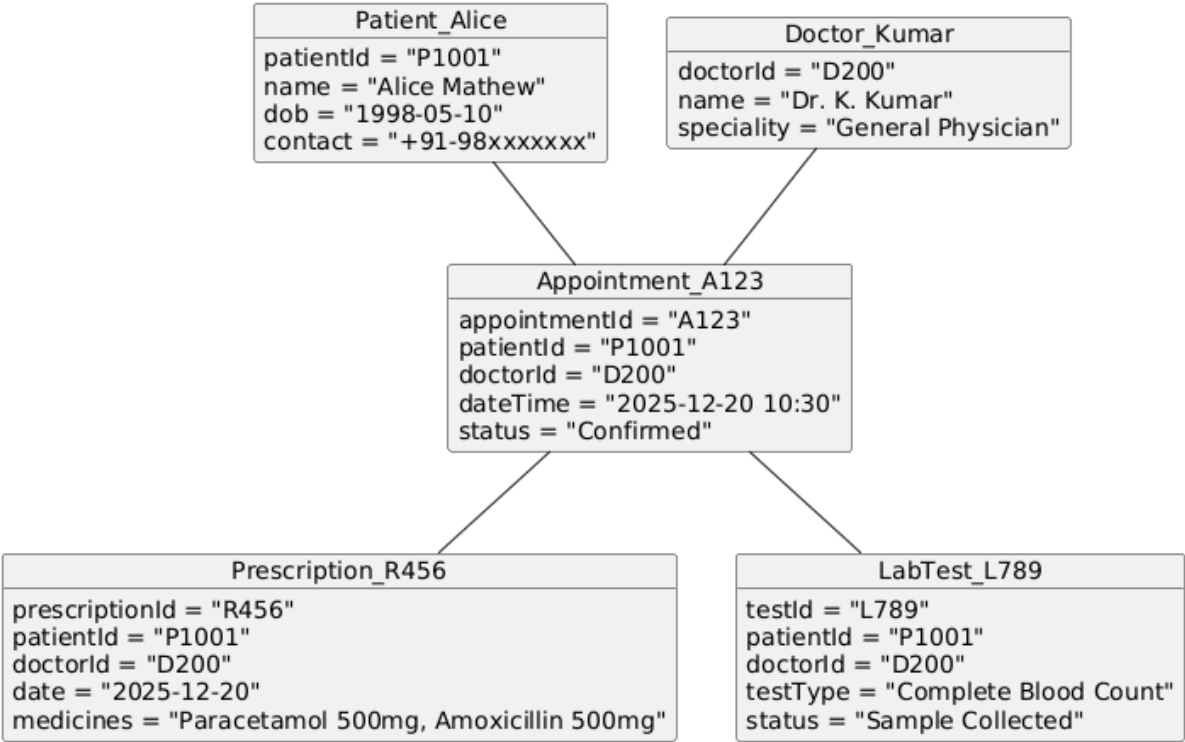
## CLASS DIAGRAM1

Shows the system's main classes such as User, Admin, Patient, Doctor, Staff, Appointment, Prescription, LabTest, Billing, Report, MedicalRecord, and CanteenOrder with their attributes and relationships. This diagram helps in understanding the overall structure of the HealCare system and forms the basis for database table design.



**OBJECT DIAGRAM**

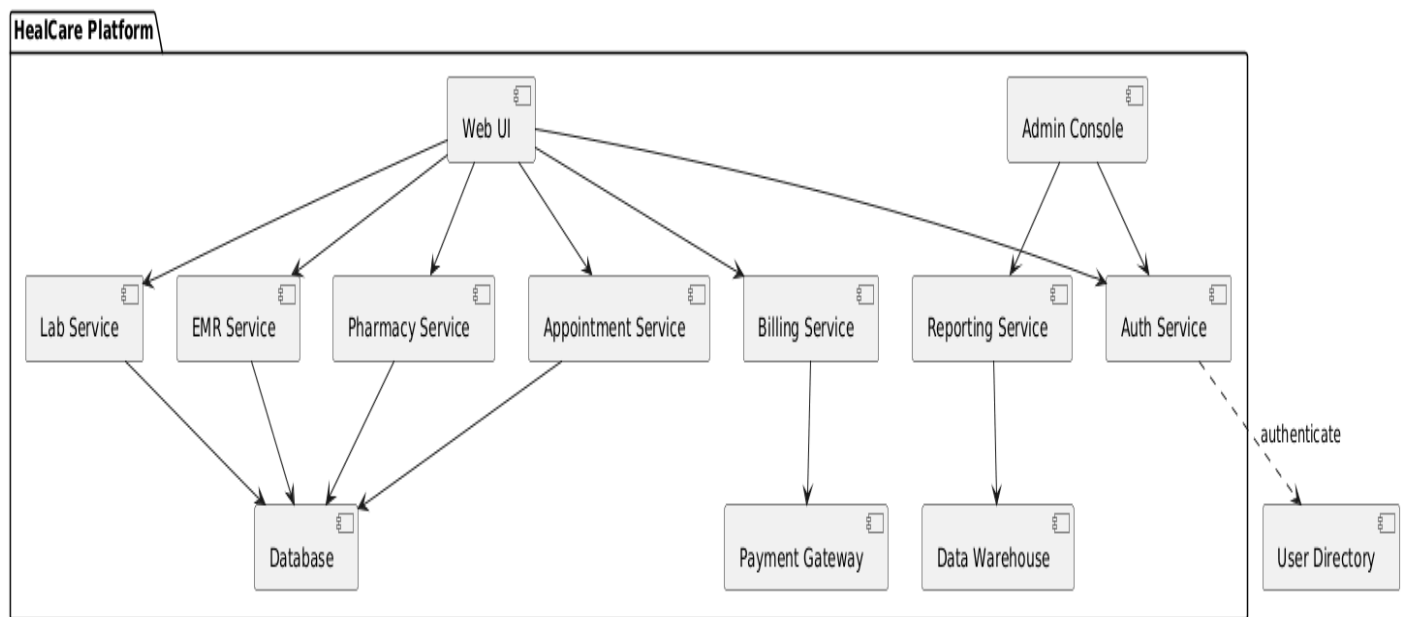
Represents a snapshot of the system at a particular time. Example objects include a Patient object booking an Appointment with a Doctor, a generated Prescription, and a LabTest report, showing how real-time instances interact in HealCare.



## COMPONENT DIAGRAM

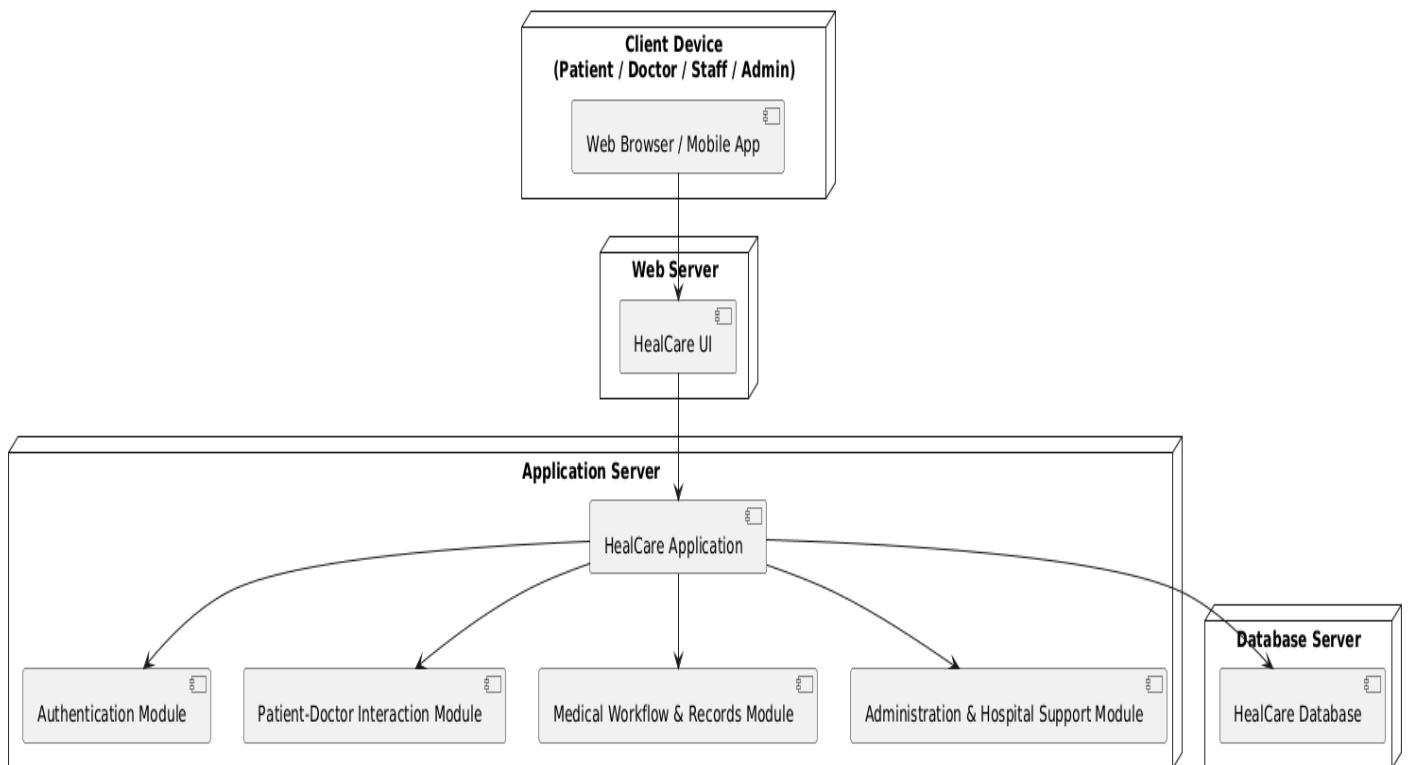
The component diagram displays the **high-level modules** of the HealCare system.

Displays high-level components such as Web Application, Authentication Service, Appointment Module, Medical Records Module, and Database. It provides a clear view of the system's modular architecture.



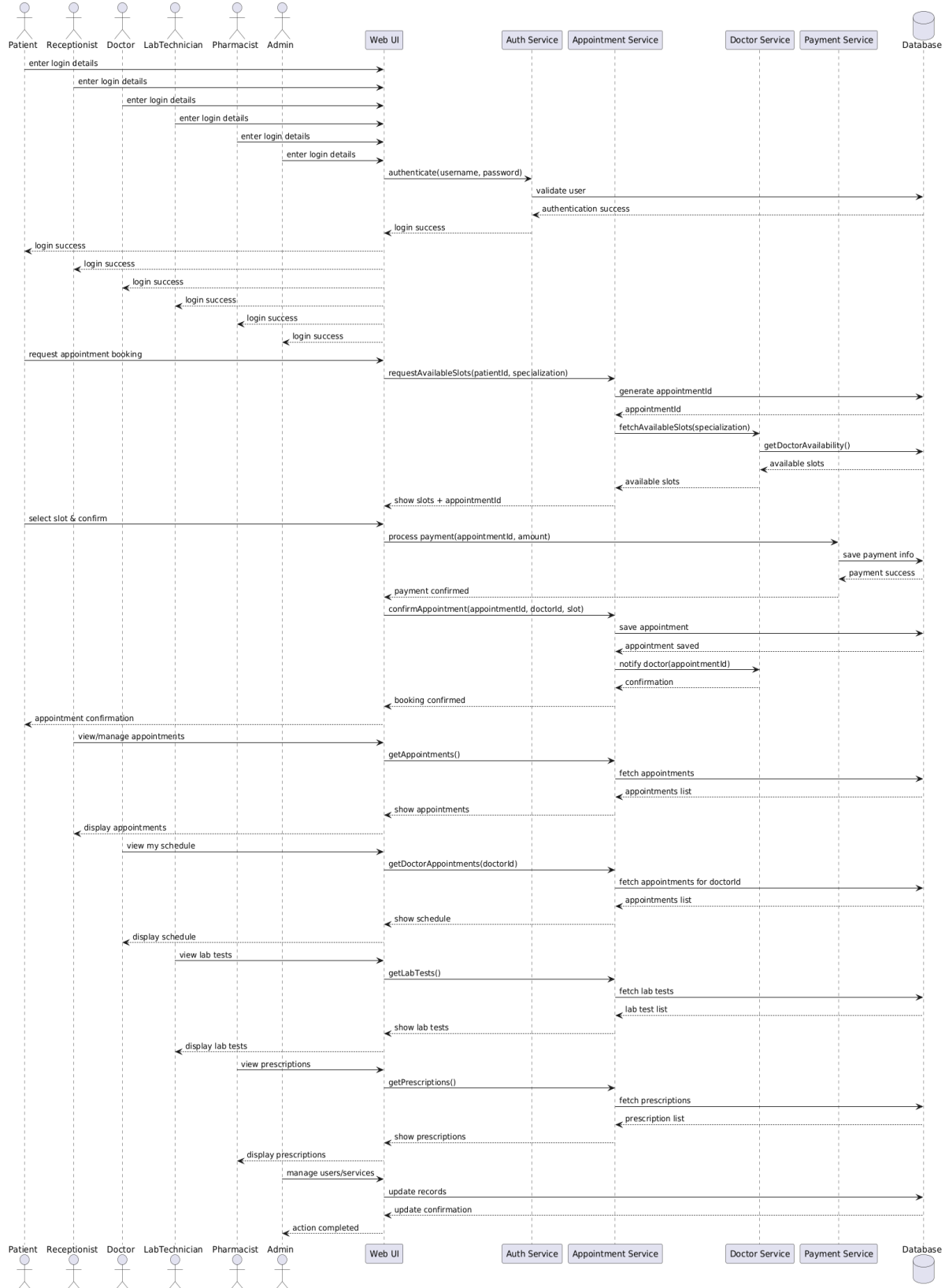
## DEPOLYMENT DIAGRAM

Deployment diagram shows the **physical architecture** of the system, how the HealCare system is physically installed and accessed. Users (patients, doctors, staff, and admins) use a web or mobile interface connected to a web server, which forwards requests to the application server containing all healthcare modules.



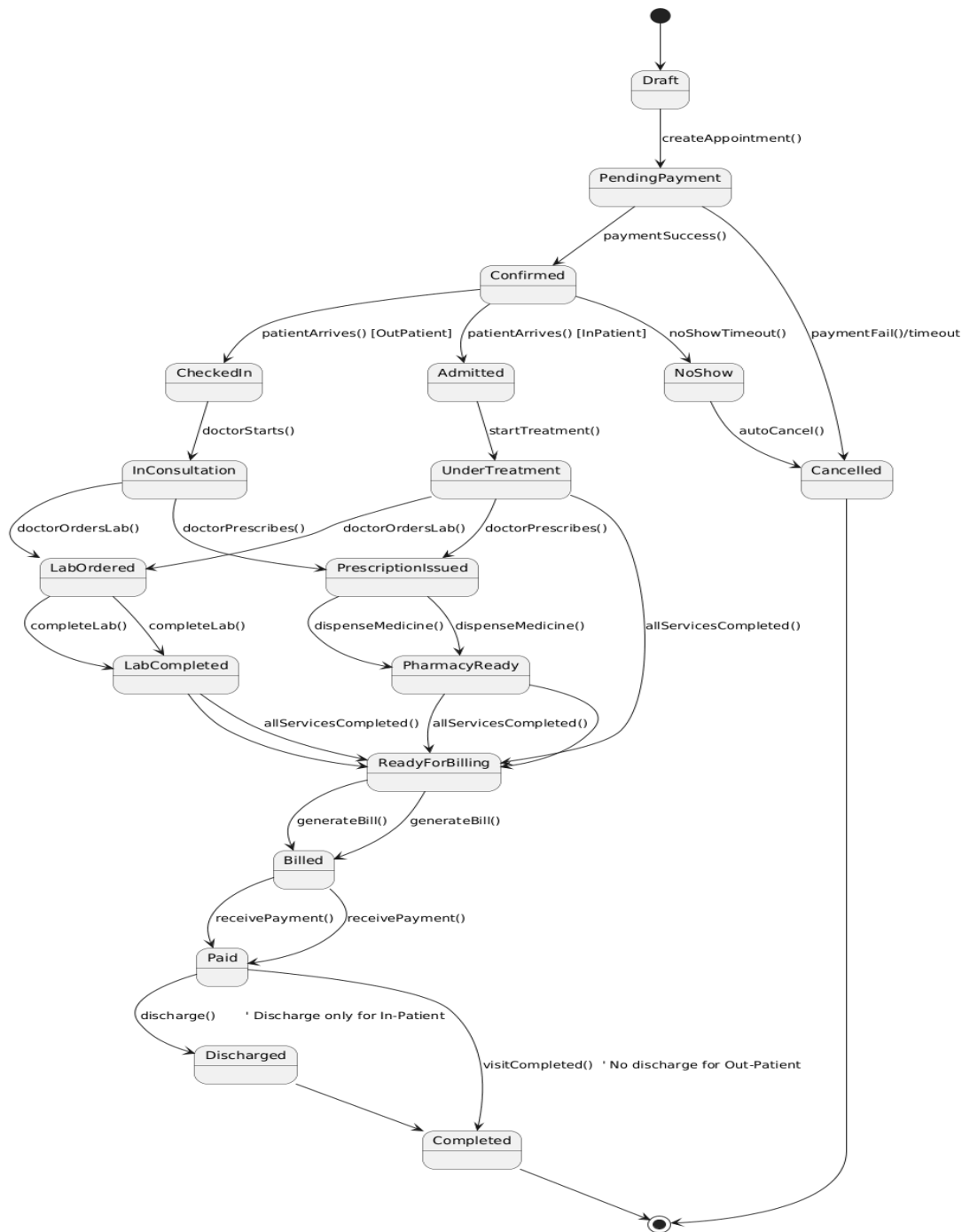
## SEQUENCE DIAGRAM

The sequence diagram shows the **order of interactions over time**. Shows the interaction flow for processes like appointment booking .It explains how requests move between the patient, system, doctor, and database in a time sequence.



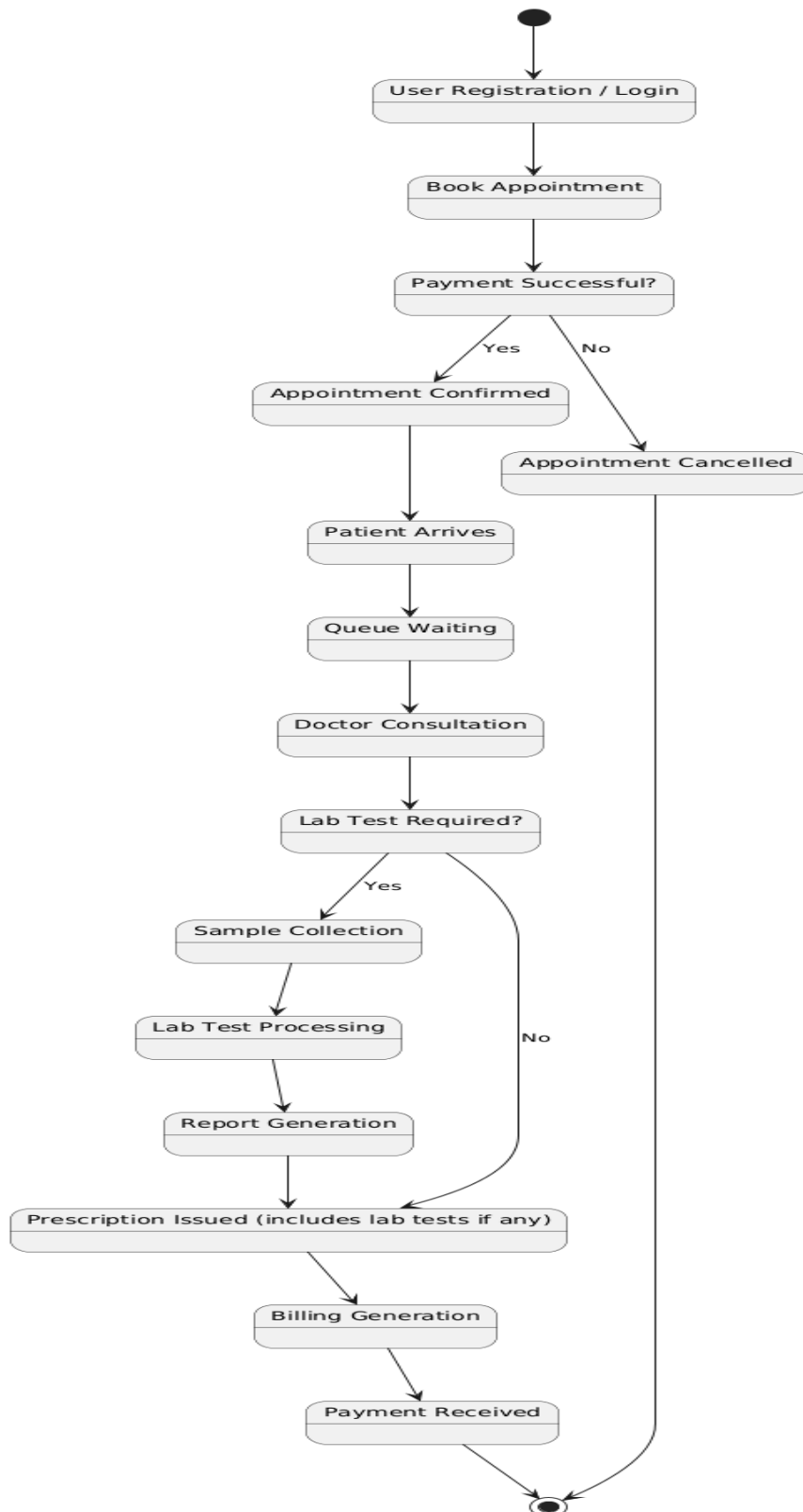
## STATE CHART DIAGRAM

Shows the various states of an appointment or patient visit such as Requested, Confirmed, In Consultation, LabOrdered, Prescription Issued, Billed, Paid, Completed, and Closed, along with transitions between these states.



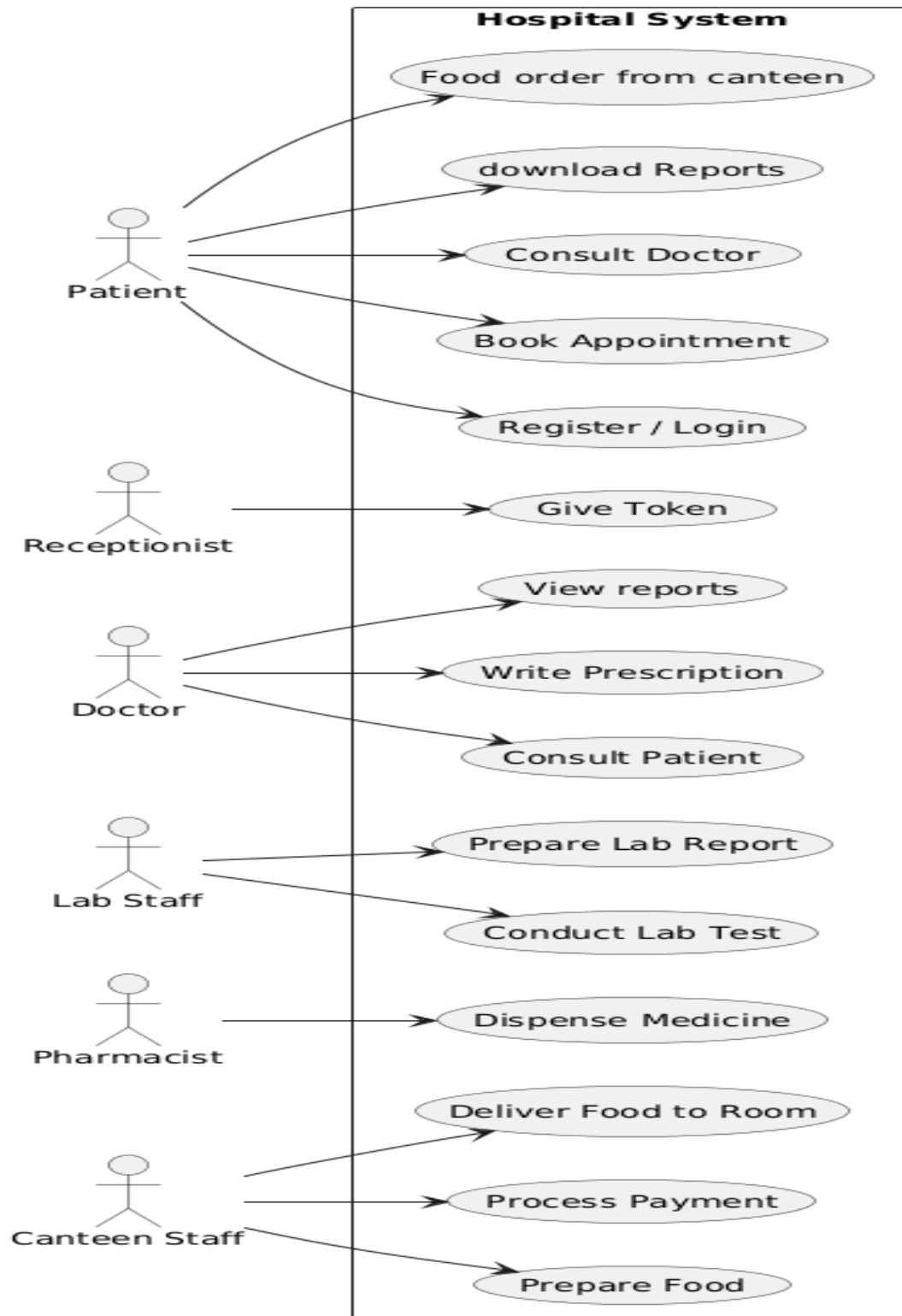
## ACTIVITY DIAGRAM

Represents the workflow of patient care in HealCare. Activities include registration, appointment booking, Queue waiting, doctor consultation, lab testing or prescription, billing, and report generation.



## USE CASE DIAGRAM

Illustrates the interactions between actors (Patient, Doctor, Staff, Admin) and system functionalities such as registration, appointment booking, diagnosis entry, lab test requests, billing, report generation, and system administration.





## COLLABORATION DIAGRAM

Illustrates how system components collaborate to complete healthcare operations such as patient consultation. It focuses on message exchange between modules like Appointment Service, Lab Service, Medical Records, and Billing.

