8. Describe major services (functionality) provided by a hospital's reception. Summary: Hospital Management System is a large system including several subsystems or modules providing variety of functions. Hospital Reception subsystem or module supports some of the many job duties of hospital receptionist. Receptionist schedules patient's appointments and admission to the hospital, collects information from patient upon patient's arrival and/or by phone.

For the patient that will stay in the hospital ("inpatient") she or he should have a bed allotted in a ward. Receptionists might also receive patient's payments, record them in a database and provide receipts, file insurance claims and medical reports.

Aim:

To understand and design the Hospital Reception Module as part of a Hospital Management System, identifying its major functionalities, interactions, and workflow.

Procedure:

- 1. Identify the Major Functionalities
 - o Patient Registration
 - o Appointment Scheduling
 - Patient Admission (Inpatient Management)
 - Billing & Payments
 - Insurance & Medical Claims Processing
 - Medical Records & Report Management
 - Reception & Help Desk Services

2. Define the Actors

- o Receptionist (Main user of the system)
- Patient (Uses hospital services)
- Doctor (Reviews patient records and appointments)
- System (Handles data processing and storage)
- o Insurance Provider (Processes claims and payments)

3. Create a Use Case Diagram

- o Show interactions between the Receptionist, Patient, and System.
- Include use cases for scheduling, payments, record management, and admission.

4. Design a Flowchart or Activity Diagram

 Show the step-by-step process of patient registration, appointment booking, and billing.

5. Implement Data Storage Considerations

 Identify required databases for patient records, payment transactions, and appointments.

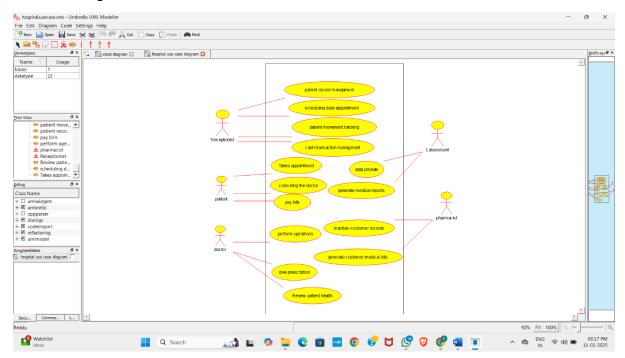
6. Validate Functionalities

 Ensure that the system correctly handles patient flow, invoicing, and record storage.

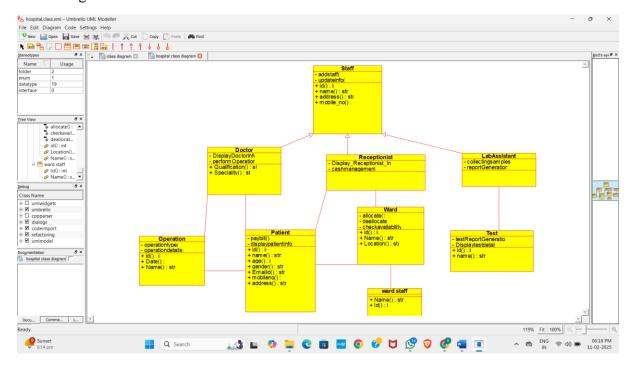
7. Document the Observations and Results

 Explain how the Hospital Reception Module improves hospital efficiency and patient experience.

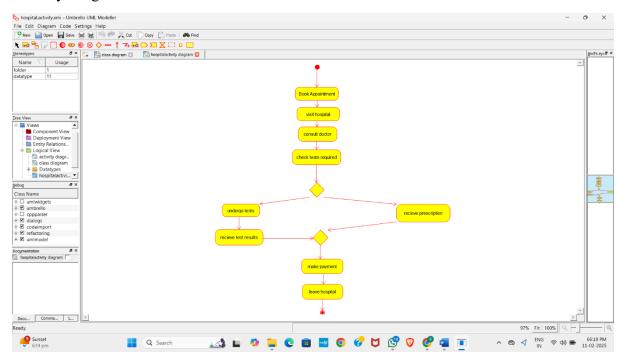
Use case Diagram:



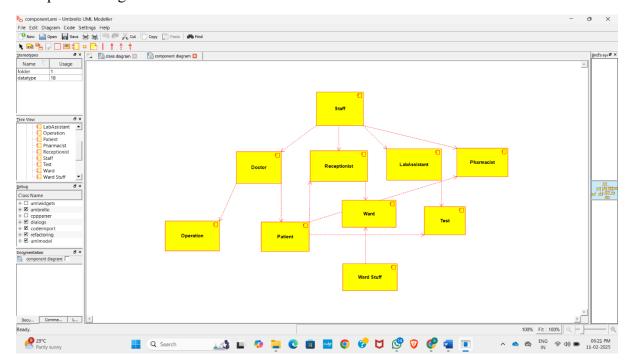
Class Diagram:



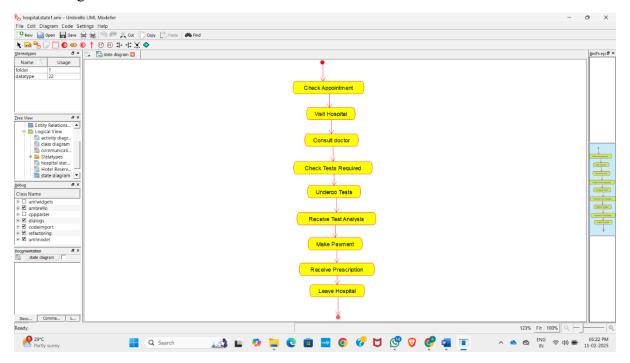
Activity Diagram:



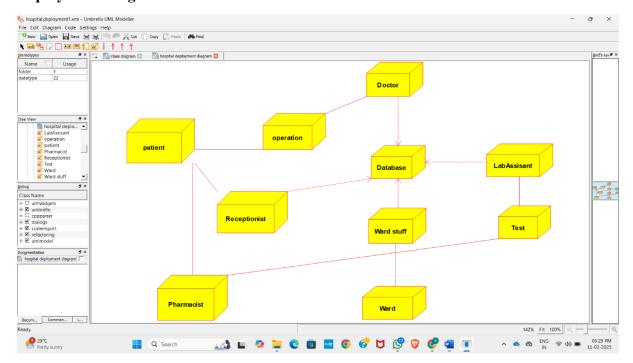
Component Diagram:



State Diagram:



Deployment Diagram:



Result:

The Hospital Reception Module was successfully analyzed and designed. It covers essential hospital functionalities, including patient registration, appointment scheduling, billing, insurance claims, and medical records management. The system ensures smooth hospital operations, reduces administrative workload, and enhances patient satisfaction.