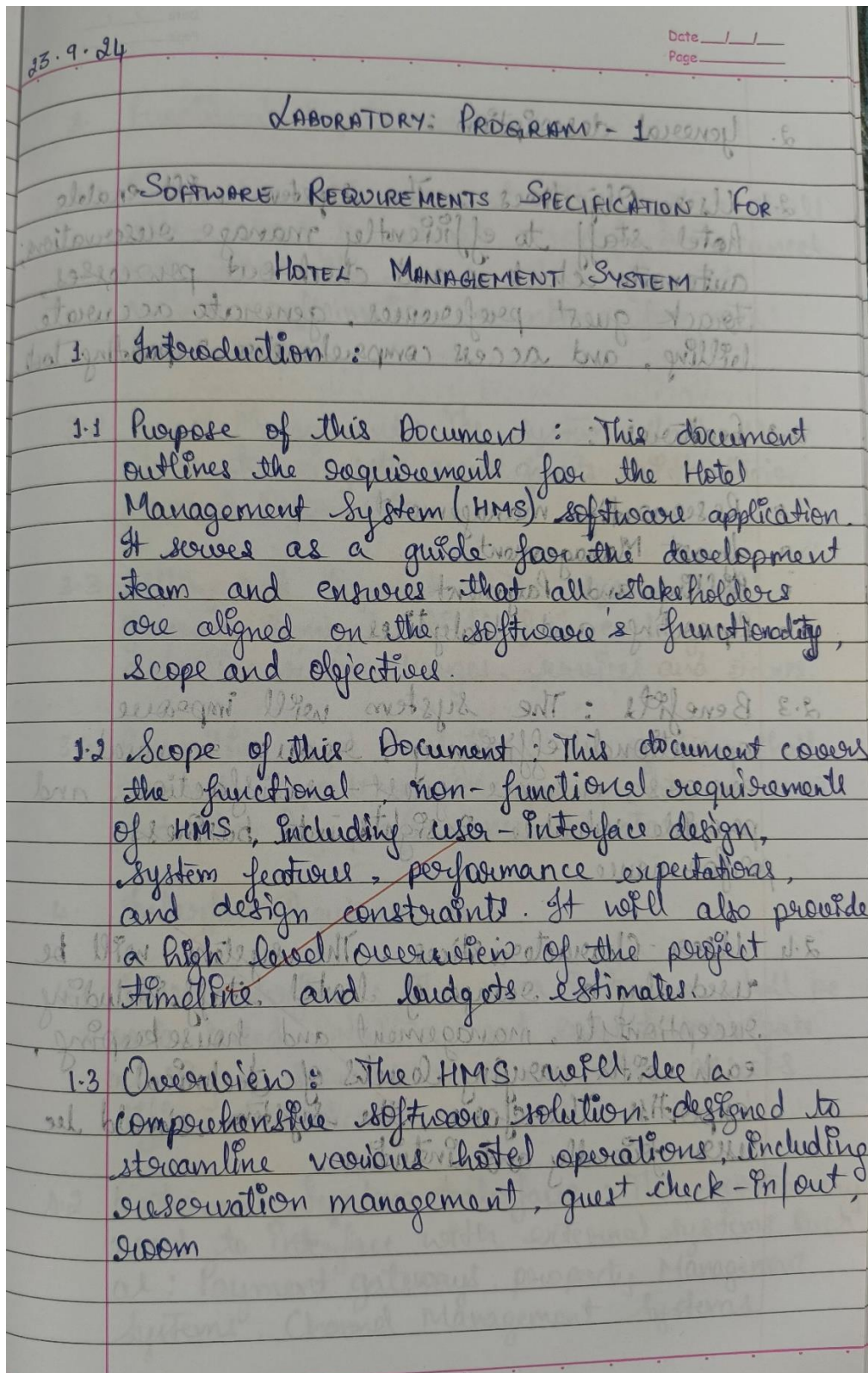


HOTEL MANAGEMENT SYSTEM

SOFTWARE REQUIREMENTS SPECIFICATION



2. General description :

2.1 User Objectives : The system will enable hotel staff to efficiently manage reservations, automate check-in and check-out processes, track guest preferences, generate accurate billing, and access comprehensive reporting tools.

2.2 Features :

- Reservation Management
- Guest Management
- Billing and Payment
- Reporting and Analytics

2.3 Benefits : The system will improve operational efficiency, reduce manual errors, enhance guest satisfaction, and provide valuable insights into business performance.

2.4 User Characteristics : The system will be used by a range of hotel staff, including receptionists, management and housekeeping, each with varying levels of technical expertise. Therefore, the system should be user-friendly and intuitive.

3. Functional Requirements :

3.1 Reservation Management : The system shall allow users to create, modify and cancel reservations. The system shall generate unique confirmation numbers for each reservation.

3.2 Guest Management : The system shall allow users to register new guests with their personal information.

3.3 Billing and Payment : The system shall generate itemized bills for each guest, detailing room charges, services and taxes.

3.4 Reporting and Analytics : The system shall generate reports on occupancy rates, revenue, and other key performance indicators.

4. Interface Requirements :

4.1 User-Interface : The user-interface shall be web-based, intuitive, and easy to navigate, ensuring a seamless user experience across different devices.

4.2 External System Interfaces : The system may need to interface with external systems such as : Payment gateways, property Management systems, Channel Management systems.

5. Performance Requirements :

5.1 Response Time : Should respond to user requests within a reasonable time frame.

5.2 Capacity : Should handle a large number of concurrent reservations.

5.3 Availability : Should be highly available.

6. Design Constraints :

6.1 Technology Stack : The dev team may be restricted to using specific tech or frameworks.

6.2 Hardware Limitations : Deployable on the existing hardware infrastructure.

6.3 Security Compliance : Must comply with relevant data security and privacy regulations.

7. Non-Functional Attributes

7.1 Security

7.2 Reliability

7.3 Usability

7.4 Maintainability

8. Preliminary Schedule and Budget

8.1 Schedule : The project is estimated to take 6 months, broken into key phases :

8.2 Budget

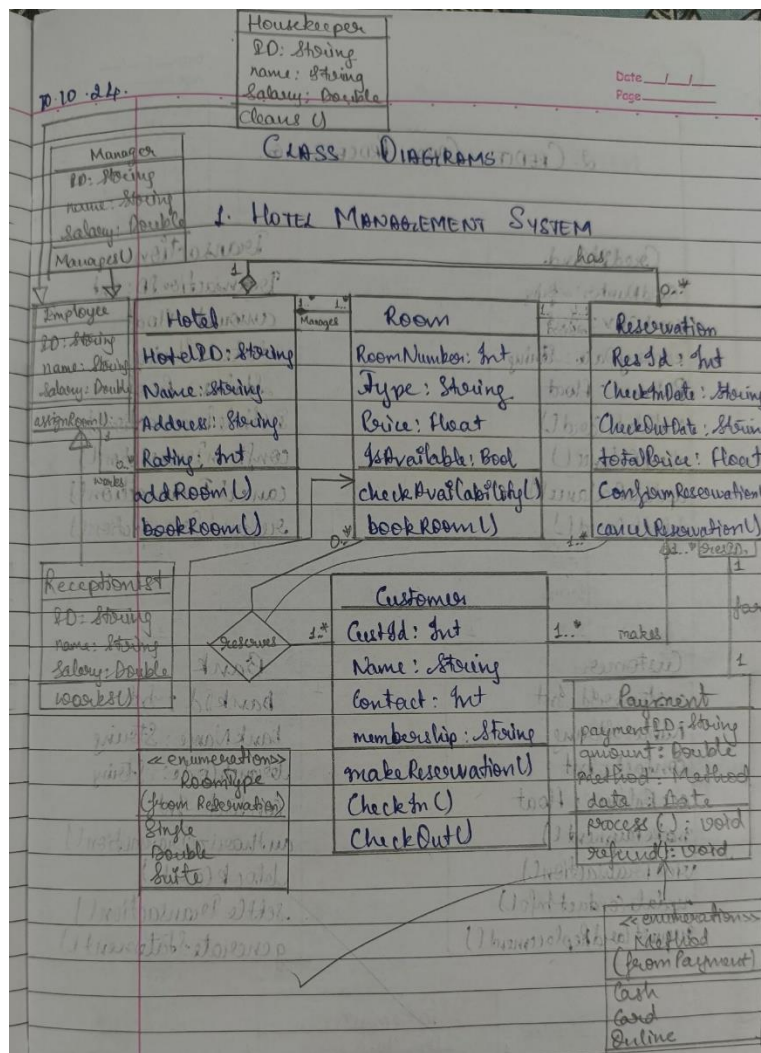
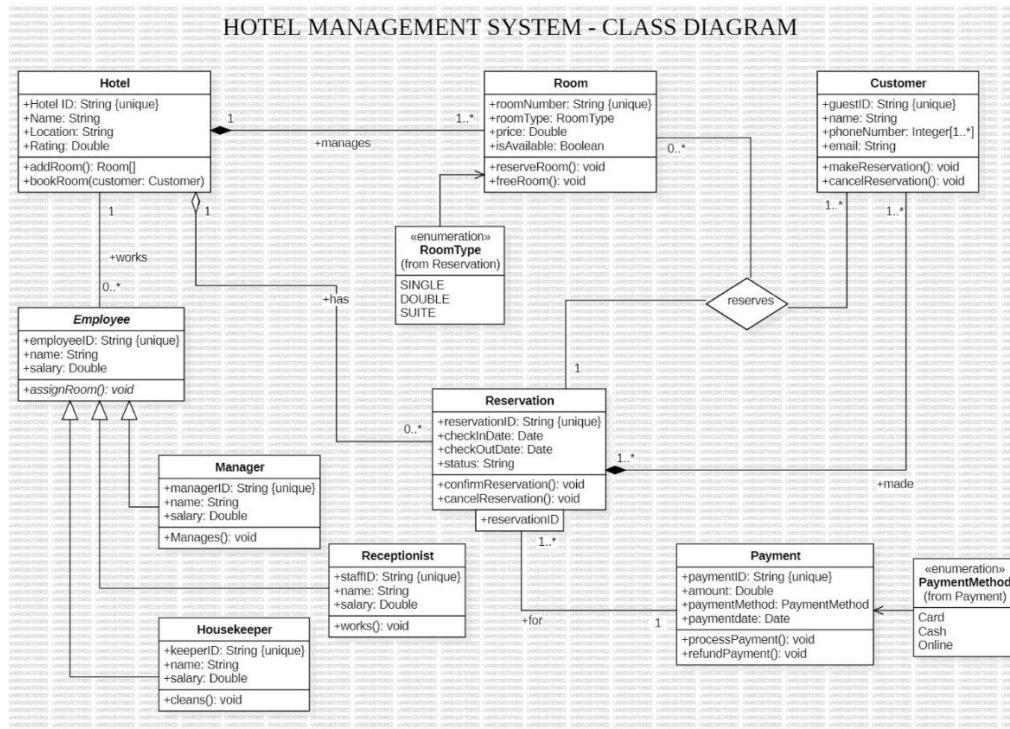
- Requirements Gathering (2 weeks)
- Design Phase (1 month)
- Development Phase (3 months)
- Testing Phase (1 month)
- Deployment and Training (2 weeks)
- Post-deployment Support (2 weeks)

8.2 Budget : The total estimated budget is \$120,000, allocated as follows :

- Requirements gathering : \$10,000
- Design Phase : \$20,000
- Development Phase : \$50,000
- Testing Phase : \$15,000
- Deployment and training : \$10,000
- Post-deployment support : \$5,000

UML DIAGRAMS

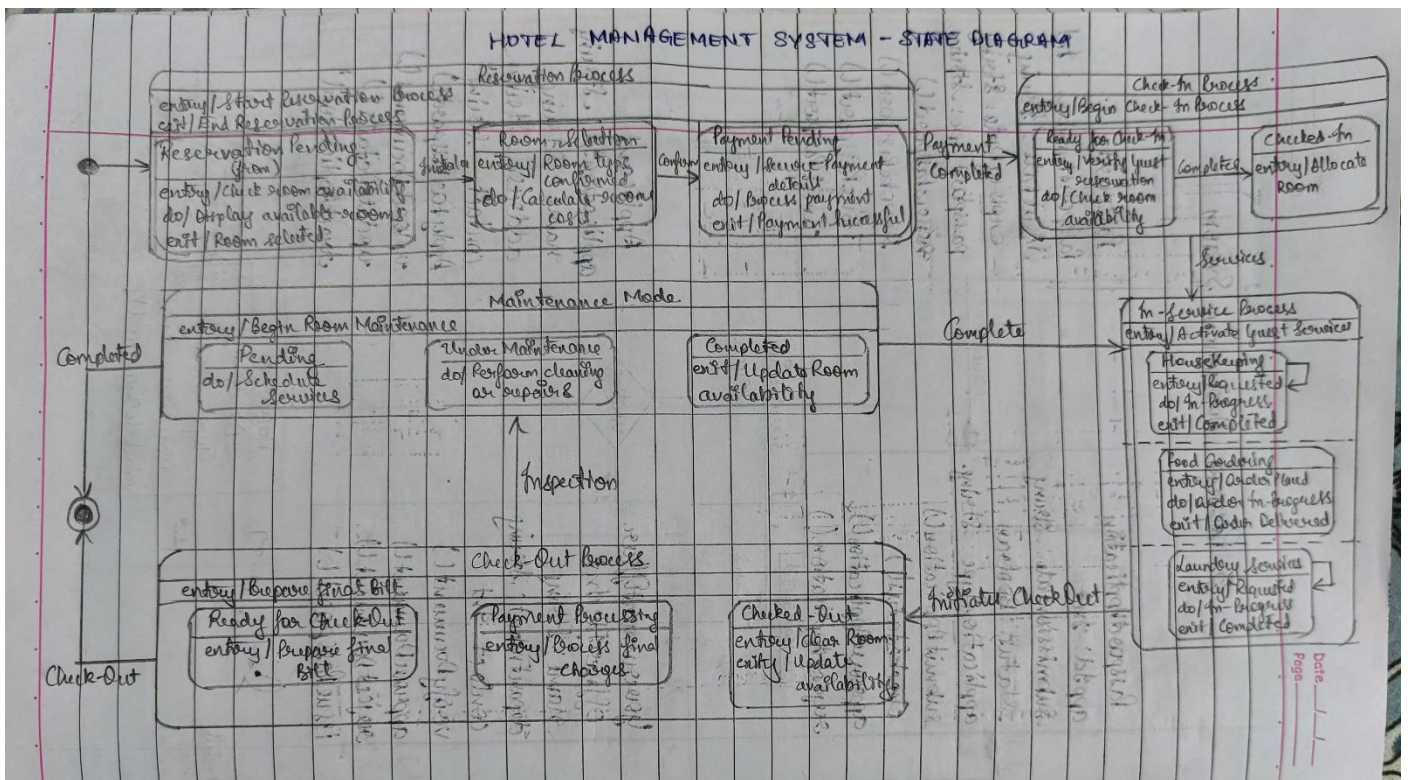
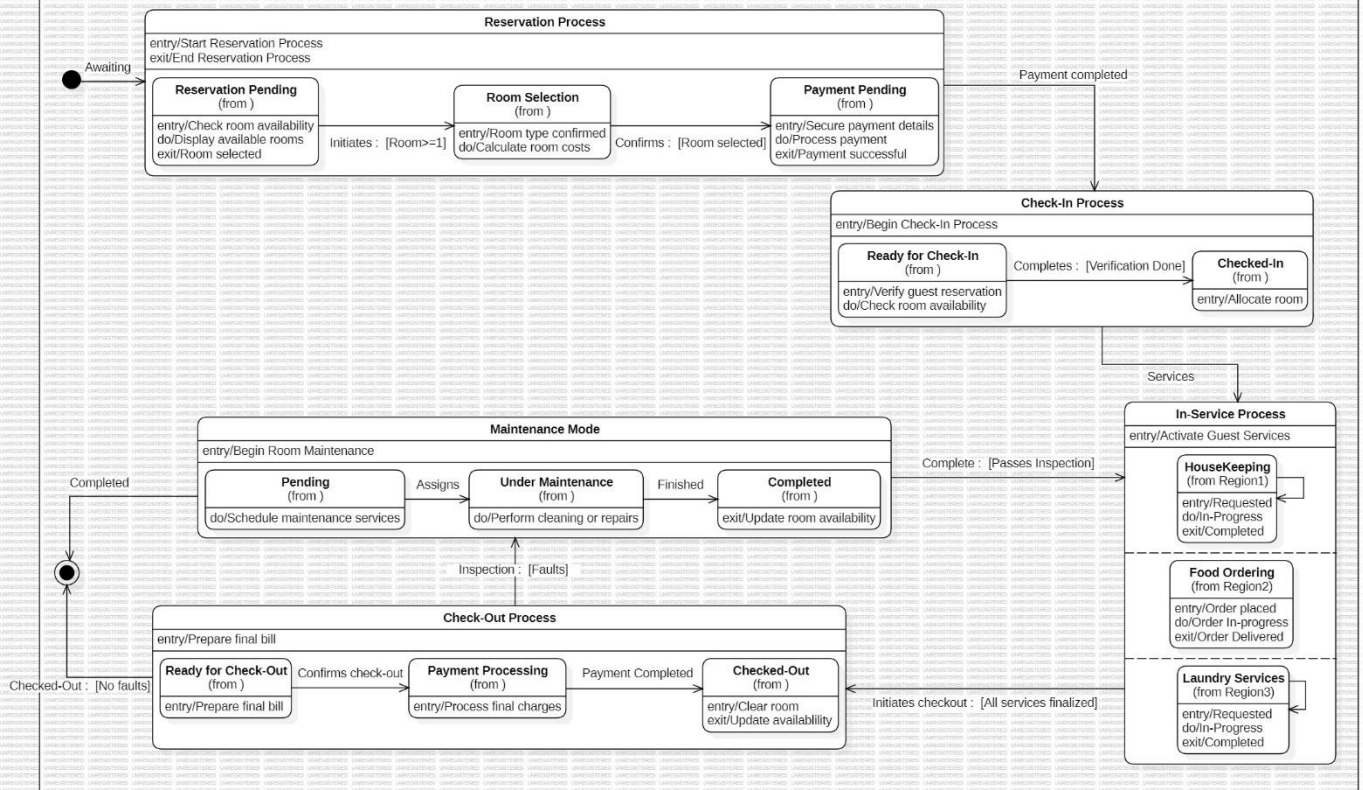
CLASS DIAGRAM



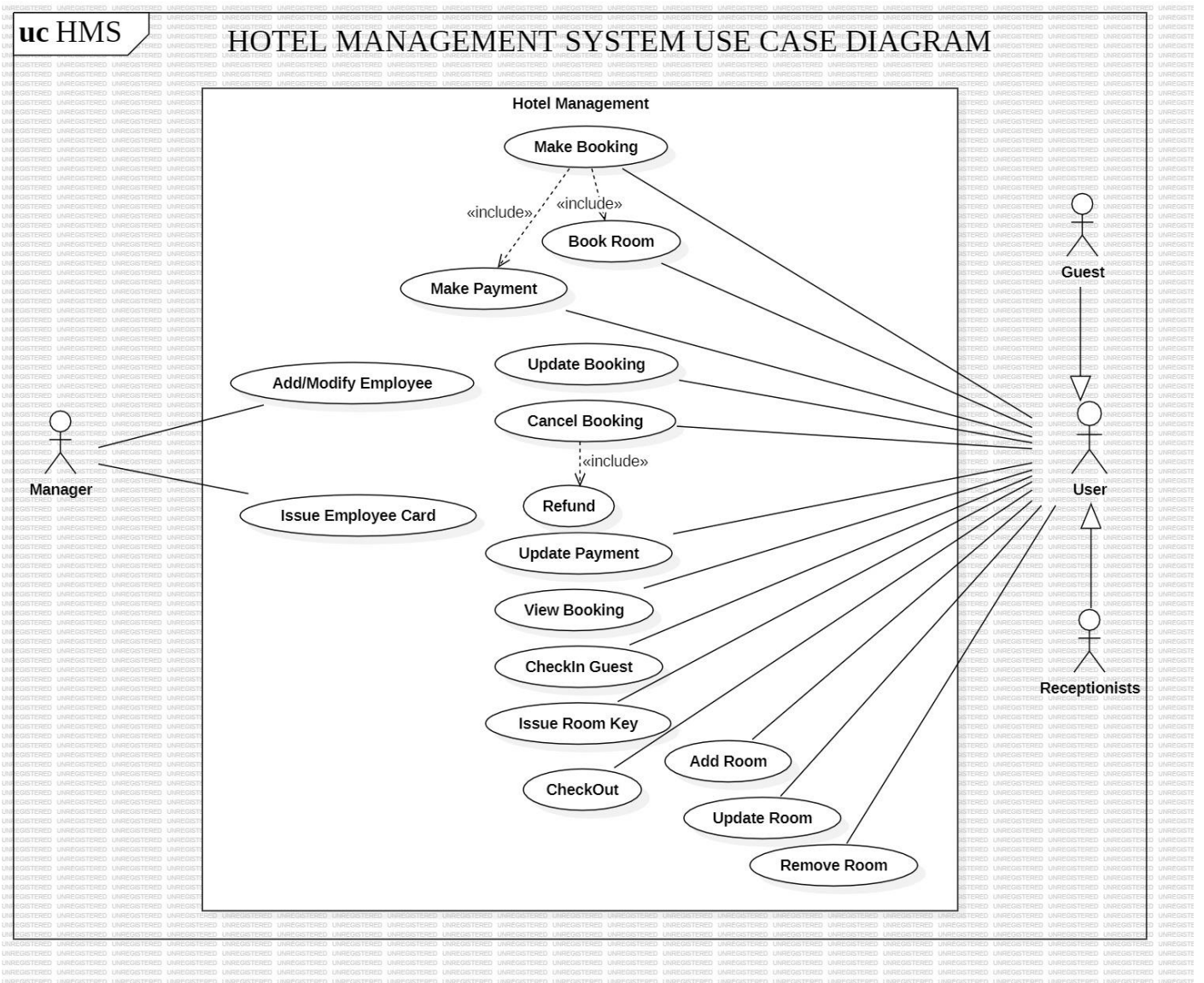
STATE DIAGRAM

stm HMS

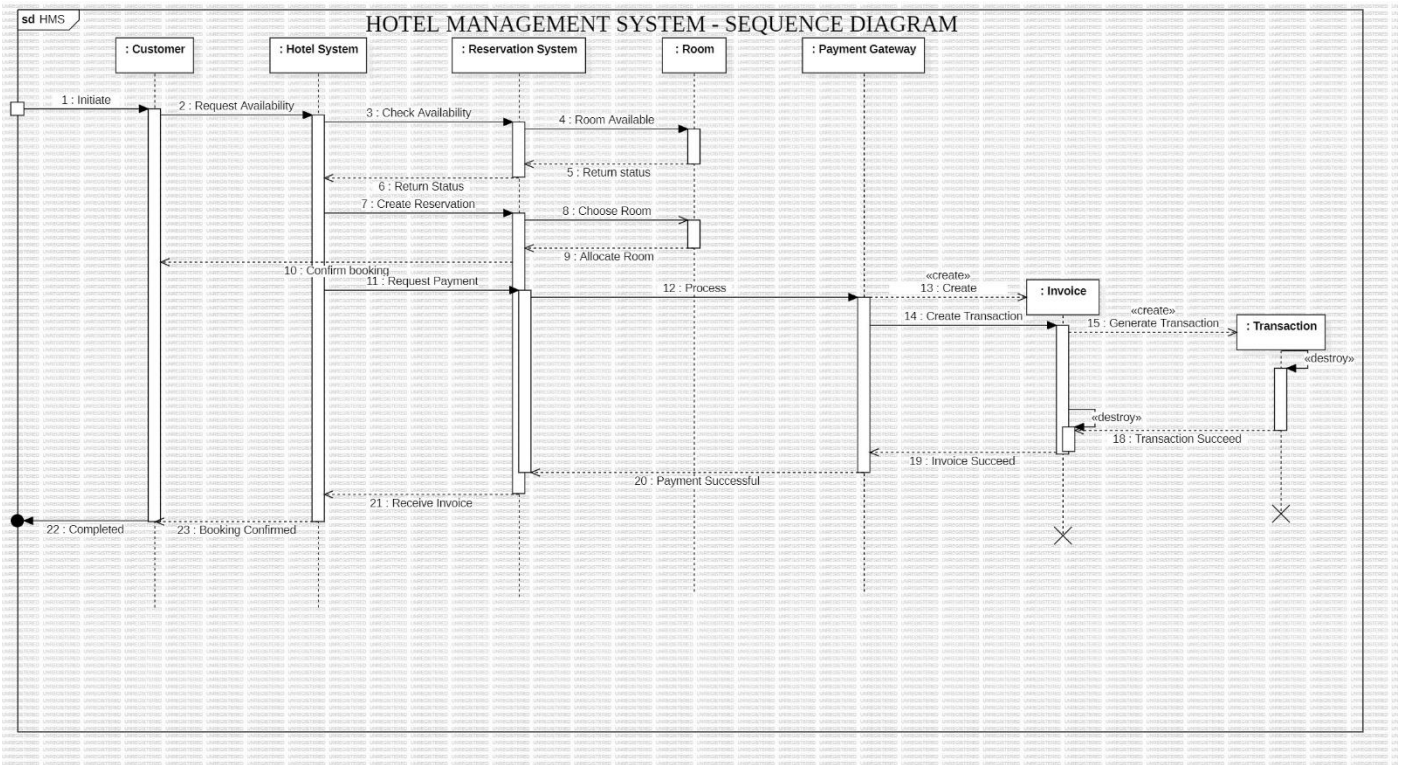
HOTEL MANAGEMENT SYSTEM - STATE DIAGRAM



USE CASE DIAGRAM



SEQUENCE DIAGRAM



ACTIVITY DIAGRAM