

1. Hotel Management System

a. SRS Document:

25/09/24

classmate

SRS for a Hotel Management System

1. Introduction:

1.1 Purpose of this Document
This SRS defines the functional and non-functional requirements for a Hotel Management System. It serves as a blueprint for the development team, outlining the expected capabilities and behaviour of the system.

1.2 Scope of this Document
The system will manage various aspects of a hotel's operations:

- Guest reservations and check-in/check-out process.
- Room management and assignment.
- Billing and payment system.
- Staff management.
- Reporting and analytics.

1.3 Overview:
The Hotel Management System will be a web-based application accessible to hotel staff. It will provide a user-friendly interface for managing day-to-day operations efficiently and accurately.

2. General description:
This application provides features for management among the ~~hotel~~ staff, receptionist... and also provides the user for checking the availability of room, pricing, check-in/check-out. It also provides online reservation and cancellation.

3. Functional Requirement:

- Reservation Management:
 - Allow user to reserve, modify or cancel reservation.
 - Validate guest information.
 - Confirmation email and payment receipt generation.
- Room management:
 - Track room status.
 - Assign room to guest based on availability.
- Billing and payment:
 - Calculate guest bills based on room rates and additional charges.
 - Generate receipt and invoice.
- Staff management:
 - Create staff profiles with role.
 - Schedule shifts and assign job.

4. Interface requirement:
The logging system must have interactive pictures of each room and it must show a grid of the hotel floor for customers to choose their room.

5. Performance requirement:
The response time shouldn't exceed 1.5 sec and should run on 16gb ram and 512gb terminal - The error rate shouldn't exceed 12.

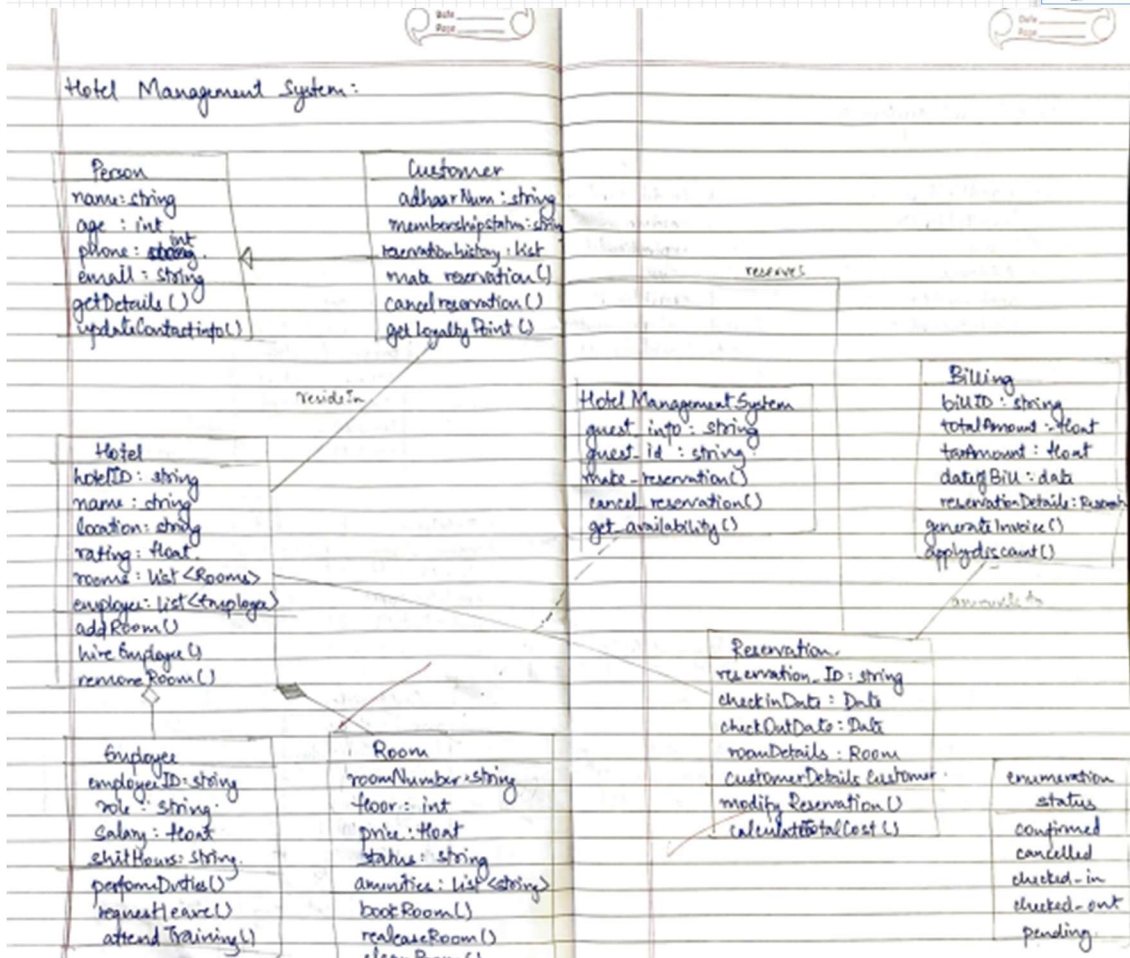
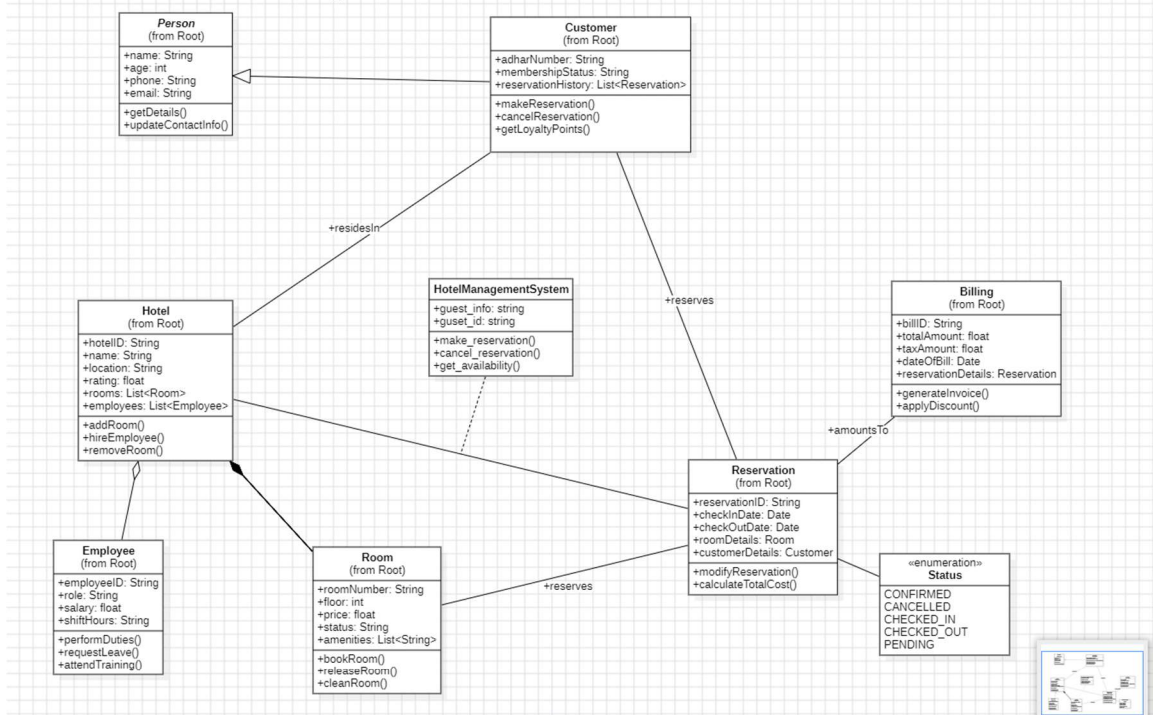
6. Design constraints:
The algorithm should have $O(n!)$ time complexity the system should use only J2EE.

7. Non functional Requirement:
The system must have AES encryption standard and must be architectural neutral. The system must be able to handle 1000 users at a time and should be scalable.

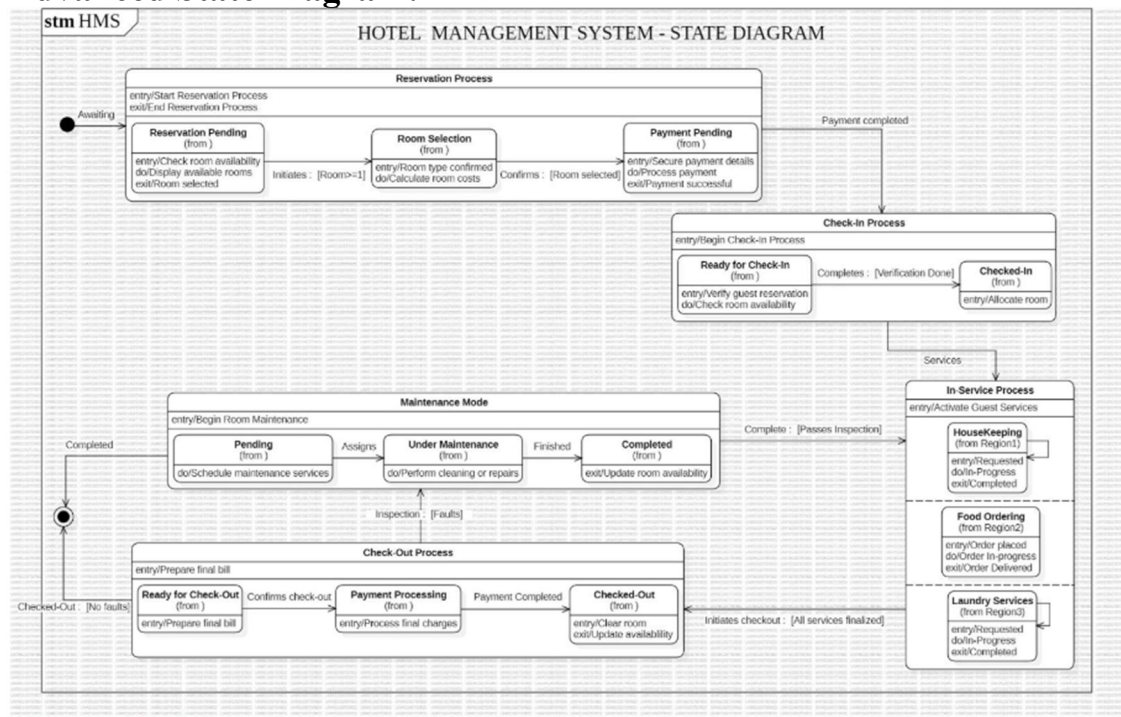
8. Preliminary Schedule and Budget:
The project should be able to be completed by or within 7 months and a budget of 900K is to be allocated.

approvals

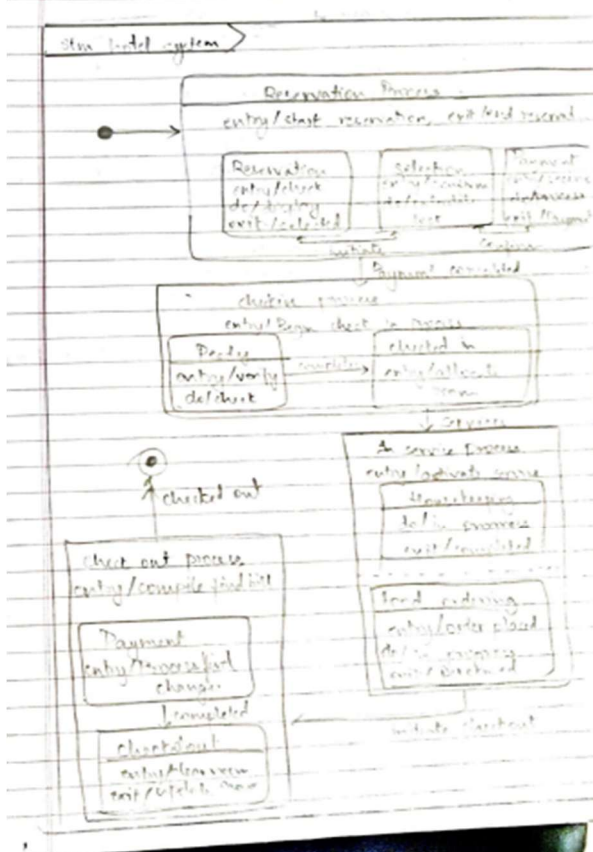
b. Advanced Class Diagram:



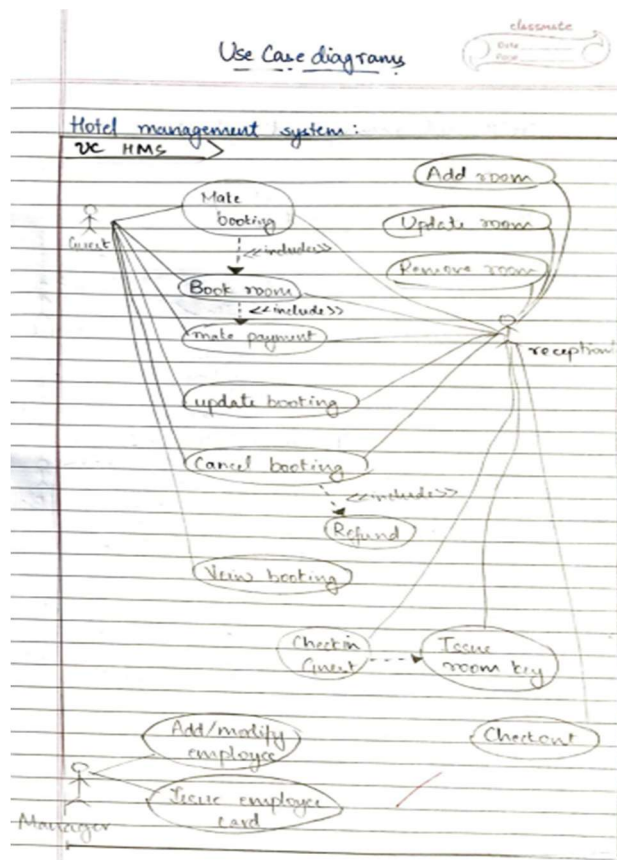
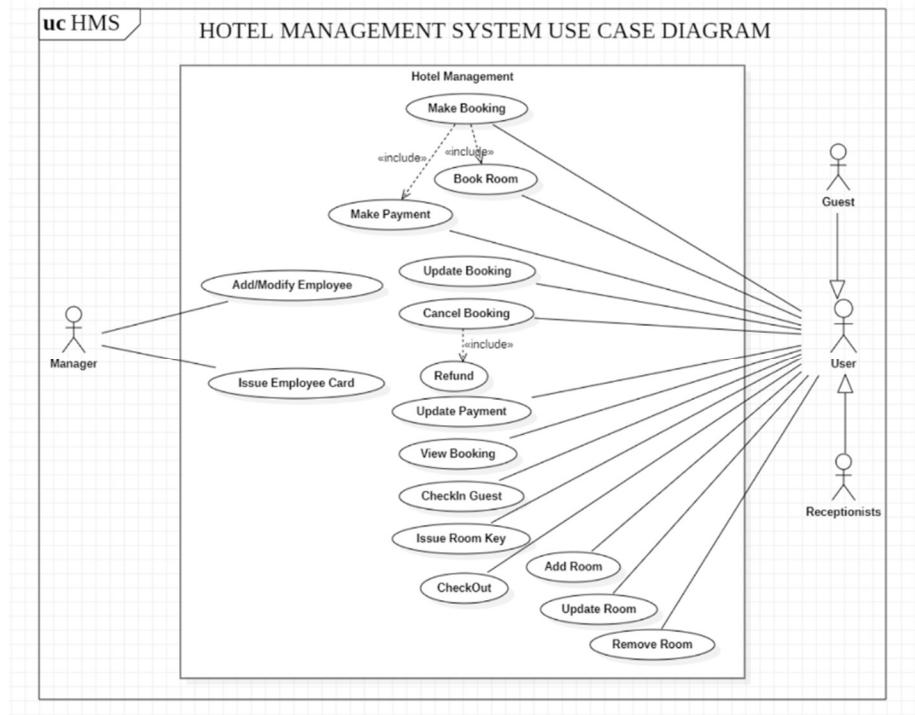
c. Advanced State Diagram:



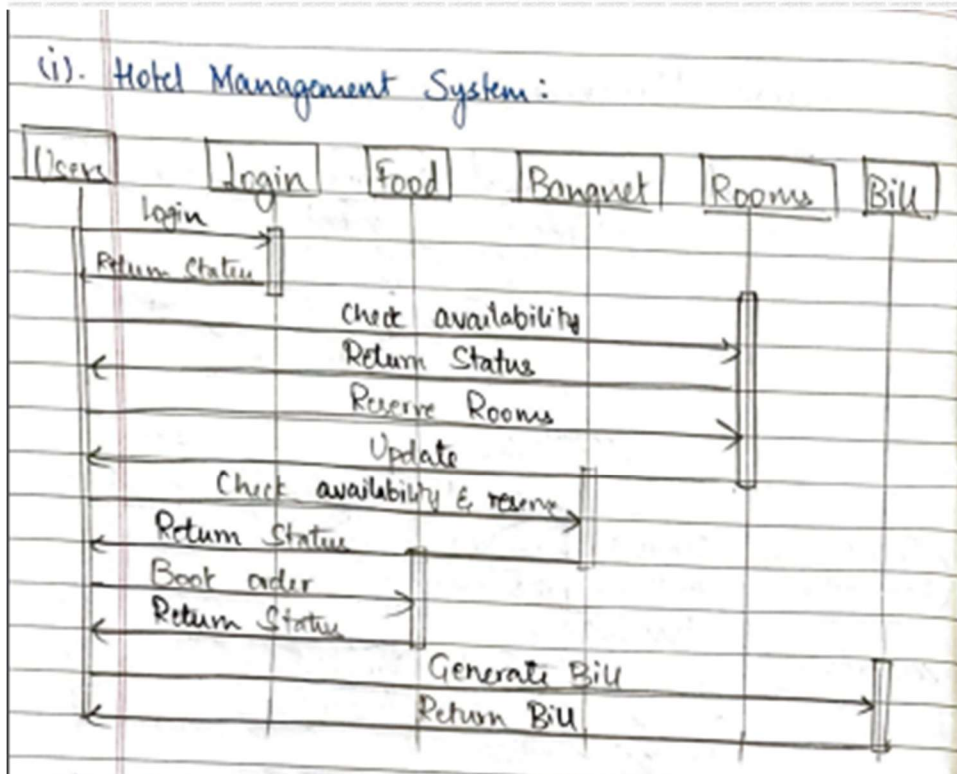
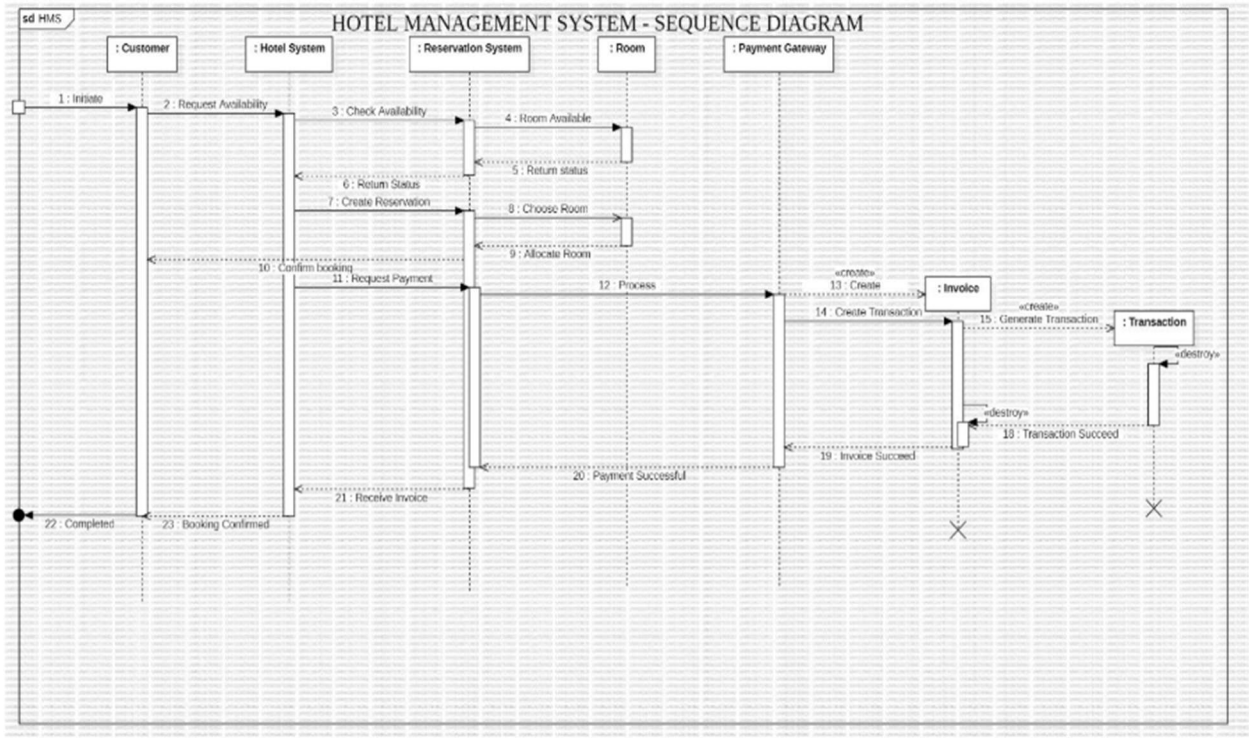
Advance State Diagram:



d. Use Case Diagram:



e. Sequence Diagram



f. Activity Diagram:

