Lab-1

1. Generate the SRS document for the
   1) Hotel Management system
   2) Credit Card Processing

i) Hotel Management system

1. Introduction:

1.1 Purpose of this Document : The purpose of this document is to define the requirements for the Hotel Management system. It also outlines contain the outline of features and objectives of the hotel management system.

1.2 Scope of this Document : This document provides detailed description of the services of Hotel Management system that includes bookings, staff management, billing and food ordering. It also enhances customer efficiency and improve customer experience. It also includes automated cost and die duration of for the development of the project.

1.3. Overview: The Hotel Management system is web-based application that includes booking, staff management, billing and food order-ing for the customers.

2. General Description: The Hotel Management system provides platform for managing bookings, staff management, billing and food ordering for the customers. It reduces manual workloads for the staff.

3. Functional requirements:
- Room Management : Booking booking and checking availability of rooms.
- Staff management : Managing staff roles and

responsibilities.

- **Billing and Payment Processing**: Booking history can be viewed.
- **Food ordering serviced**: Food can be ordered by resident customers through website.

4. **Interface requirements**:
- **User interface**: Web-based GUI for both administrators and customers.
- **API-Integration**: Integrating with external gateway payments.

5. **Performance Requirements**:
- Capable of handling 1000 simultaneous users.

6. **Design Constraints**:
- Integrating with MySQL databases for data management is must
- Developed using html/css, Javascript

7. **Non-Functional attributes**:
- Security - Secured transaction.
- Usability - User-friendly interface.
- Reliability - minimal disruptions

8. **Preliminary Schedule and Budget**:
- Estimated Budget : $ 60,000
- Development time : 7 months   → Req - $10,000
→ Design & Implementation - $15,000   → Verification & validation - $25,000   → Evolution - $10,000

Class diagram: Hotel Management System

<<enumerations>>

RoomStatus
- Occupied
- NotOccupied
- UnderMaintanance
- Reserved
- NotForBooking

Room
- roomNo: String
- roomType: String
- noOfBeds: Integer
- status: RoomStatus
- price: Double
- getAvailability()
- bookRoom()
- Maintanance()

Service
- serviceID: String
- serviceName: String
- serviceCost: Double
- Accomplishment: String
- requestService()
- getServiceDetails()

Hotel
- Name: String
- HotelID: String
- Location: String
- Address: String
- Staff: list<staff>
- Room: list<rooms>
- Register()
- Logout()
- SignIn()
- getAvailableRoom()
- getStaffDetails()

Staff
- staffID: Integer
- Name: String
- Salary: Double
- Position: String
- AssignTask()
- getDetail()

Transactions
- PaymentMethod: String
- time: Timestamp
- paymentStatus: String
- TransactionID: Integer
- makePayment()
- choosePaymentMethod()
- getInvoice()

Customers
- CustID: Integer
- CustName: String
- #phone: LTint
- emailID: String
- makeBooking()
- cancelBooking()
- giveFeedback()

+Has +choose +Contain +Provider +Has

Managers

HouseKeeping staff

+Has   +Has