

Software Design and Analysis  
CS-3004  
Lecture#06

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# Hotel Management System

Hotels are the place where you stay, eat meals and utilize their other services. As computer has merged with man as single entity so a computerized application can be developed that can handle Hotel Management System (HMS). Various activities take place in hotel like Hotel needs to maintain the record of guests and reserve rooms beforehand. Customers should be able to know the availability of the rooms on a particular date. They should be able to reserve the available rooms according to their need in advance. The record of the customer details and previous visits of current and past customers must be kept somewhere so that privileges and points can be awarded based on their history. Customers can avail various services provided by the hotel like room reservation, restaurant, pool, gym etc. Any particular service usage consists of a single resource (e.g. Room No 110) that belongs to a particular service (e.g. Room Service). When a customer requests a resource, hotel must ensure the availability of the requested resource and maintain record about list of availed services during that visit. To make their stay comfortable, they are provided with food and other services. At the end of the visit, the record of the food taken by each customer and the services availed by the customer should be kept. These records help in generating bill. All the above activity takes place manually, manually carrying out this activity in very tedious time consuming. As we have tried to develop computerized application so as to handle all the activity that takes place in Hotel. As all the activities that happen in the Hotel such as enquiry, check status booking, food order etc. can be handled on this system simultaneously.

# Hotel Management System

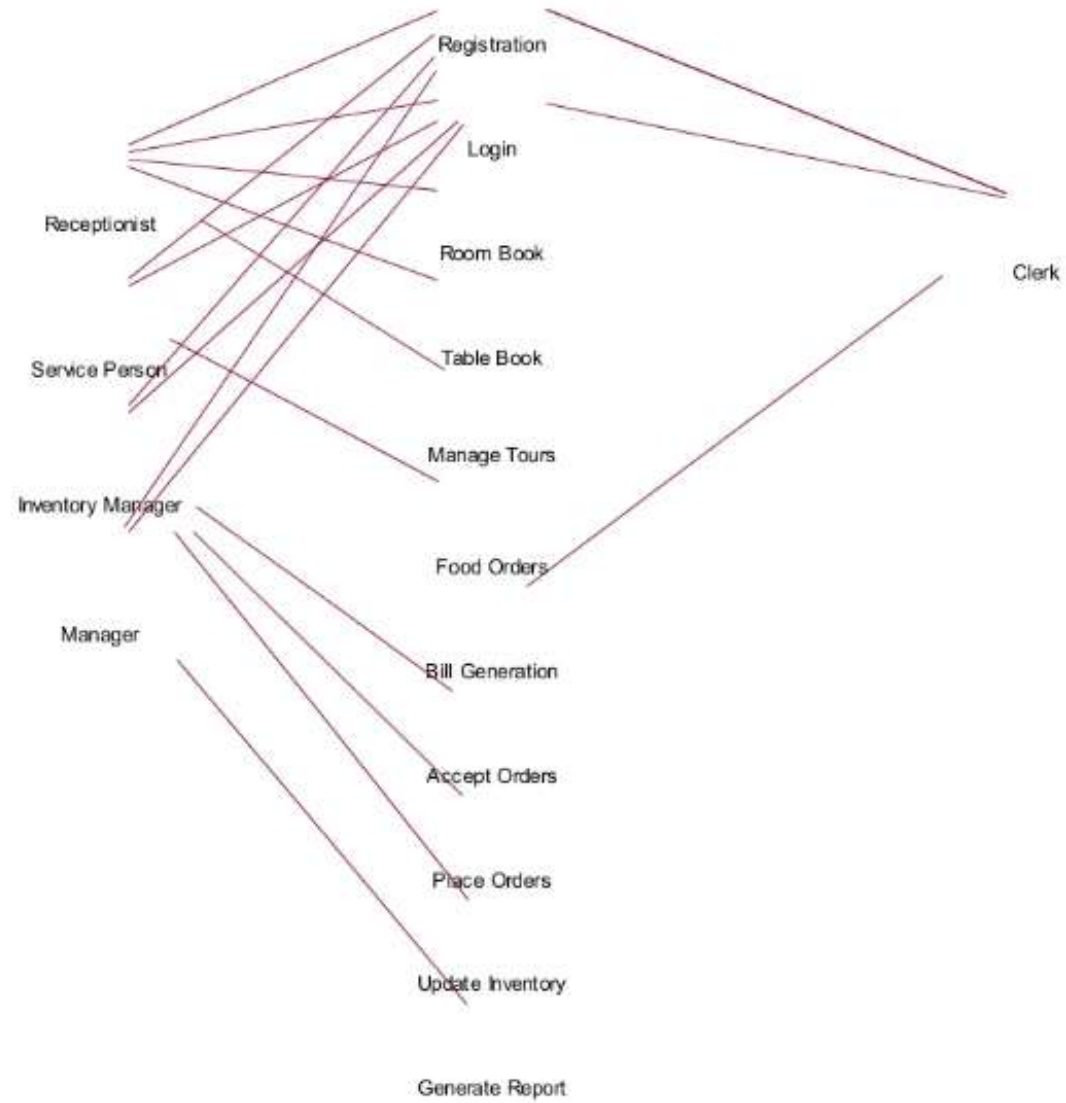
Hotels are the place where you stay, eat meals and utilize their other services. As computer has merged with man as single entity so a computerized application can be developed that can handle Hotel Management System (HMS). Various activities take place in hotel like Hotel needs to **maintain the record of guests** and **reserve rooms** beforehand. Customers should be able to know the **availability of the rooms** on a particular date. They should be able to reserve the available rooms according to their need in advance. The **record of the customer details** and **previous visits** of current and past customers must be kept somewhere so that privileges and points can be awarded based on their history. Customers can avail various **services** provided by the hotel like room reservation, restaurant, pool, gym etc. Any particular service usage consists of a single resource (e.g. Room No 110) that belongs to a particular service (e.g. Room Service). When a customer **requests a resource**, hotel must ensure the **availability of the requested resource** and maintain record about list of availed services during that visit. To make their stay comfortable, they are provided with food and other services. At the end of the visit, the record of the food taken by each customer and the services availed by the customer should be kept. These records help in **generating bill**. All the above activity takes place manually, manually carrying out this activity in very tedious time consuming. As we have tried to develop computerized application so as to handle all the activity that takes place in Hotel. As all the activities that happen in the Hotel such as enquiry, **check status booking**, food order etc. can be handled on this system simultaneously.

# Requirements

- Hotel needs to maintain the record of guests and reserve rooms beforehand.
- Customers should be able to know the availability of the rooms on a particular date.
- Customers should be able to reserve the available rooms according to their need in advance.
- To make their stay comfortable, they are provided with food and other services.
- The record of the food taken by each customer and the services availed by the customer should be kept.
- These records help in generating bill.
- As all the activities that happen in the Hotel such as enquiry, check status booking, food order etc. can be handled on this system simultaneously.

# Use Cases

1. Book Room/ Reserve Room
2. Place Order
3. Make Payment
4. Update Inventory
5. Generate Bills
6. Order Food
7. Generate Report
8. Manage Guest
9. Book Table
10. Cancel Room Booking
11. Check-in
12. Check-out
13. Manage Rooms
14. Manage Services
15. Search Customer
16. Registration
17. Check Room Availability
18. Manage Orders
19. Manage Employees



# Identification of Conceptual Classes

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# Domain Model Conceptual Classes

