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Software Engineering Lab

Group Members:

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Topic: Resort Property Management System

Experiment No.: 2B

Aim: UML Class Diagram for Resort Property Management System

Problem Statement: The main objective of this project is to build a resort management system that consists of all the features and functions required for effectively managing a chain of resorts and to have an online presence that makes the reservation process easier and delivers outstanding customer service. The Resort Property Management System will permit employees to manage the daily administrative tasks of the resort and ensure smooth functioning of the resort. The system will be able to handle many services to take care of all customers in a quick manner. As a solution to the large amount of file handling happening at the resort, this software will be used to overcome those drawbacks.

Noun / Noun Phrases: User, Owner, Manager, Receptionist, Resort, Inventory, Credit, Payment, Cash

Classes: User, Owner, Manager, Receptionist, Resort, Inventory, Property, Guest, Reservation, Staff, Room, Report, Bill, Payment

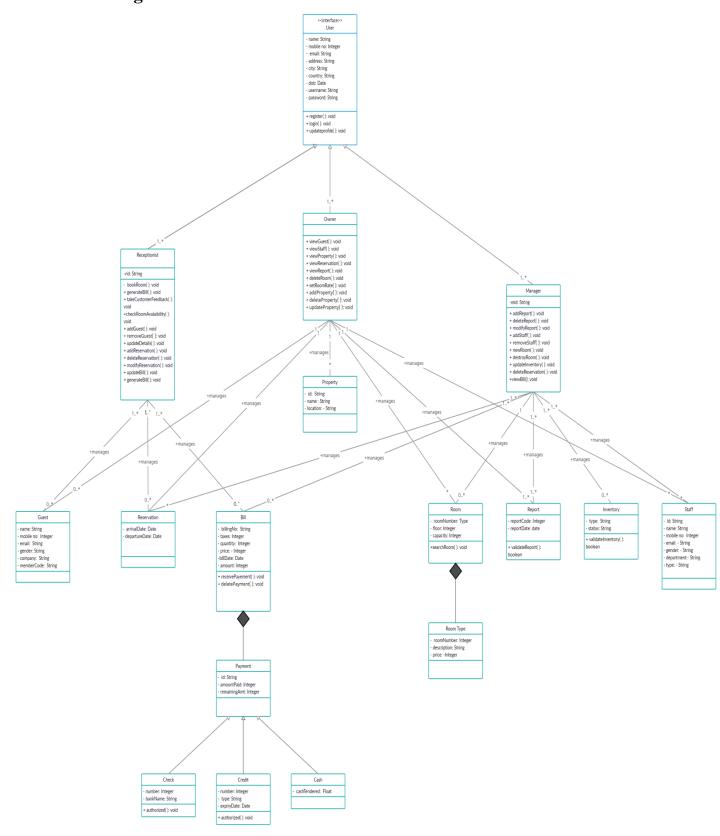
Verb Phrases:

- 1. User creates profile in the system
- 2. Receptionist adds/ removes guests
- 3. Owner manages property
- 4. Receptionist generates bills and makes/cancels reservations
- 5. Owner deletes the staff
- 6. Manager adds new staff members
- 7. Credit, cheque and cash are the three options for payment
- 8. Rooms, reports and inventory are taken care by manager primarily

Relations:

- 1. Owner, Manager and Receptionist are users of system and therefore we can generalize them to a User class
- 2. The credit, cheque and cash class would inherit all the properties of its parent class payment
- 3. There is a composition relation between bill and payment. Only when bill is generated, payment is done. Without bill, there is no payment.
- 4. There is a composition relation between room and room type. Only when three is a room, its room type with all details of particular room exists.
- 5. A single Owner manages the property and deletes staff members
- 6. One or more Receptionists can manage bills, reservation and guests
- 7. One or more managers can generate reports and manage staff members and inventory
- 8. A managers can add/delete one or multiple rooms
- 9. Owner manages multiple guest, reservations, rooms, report and staff

UML Class Diagram:



Conclusion: Class diagram is used for visualizing, describing, and documenting different aspects of a system. It describes the attributes and operations of a class. Thus, in this experiment, UML Class diagram was successfully created for our case study of resort property management system.