

DATA STRUCTURES AND ALGORITHMS-CSE2003

LITERATURE REVIEW

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TOPIC:

HOTEL MANAGEMENT SYSTEM

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METHODOLOGY:

Data Structures are the building blocks of every efficient program. There are several data structures widely used for problem solving, be it array, stack, queue, linked lists, etc. To create the backend working mechanism of the program, we have decided to use linked list. Our project provides a common platform for both customers as well as staff of the hotel. This makes the conduction of hotel management fluid and automated thus reducing manual work. Throughout the implementation of the project we have created every operation using linked list only to understand all the principal operations on linked lists like insertion of nodes at various position, deletion of nodes at different positions, searching elements in the list and updating of elements in the list. Our program serves as a common application to three types of operators: customer, receptionist and manager. We have provided ample amount of operation for each person to operate. The customers can check in, update their details; the receptionist can check room availability and the manager can change the cost and number of available rooms in the hotel. Our program is user-friendly and provides accurate and error free output.

ADVANTAGE:

- Easy management of a huge data and customers
- Easy allotment of rooms to guests
- Access to both receptionists and guests
- Guests can select rooms of their own priority depending upon the vacancy.
- Manager and receptionists can modify and alter the type of rooms.

LIMITATIONS:

- It will take a lot of time for searching the data and checking the availability as the data structure used , that is , linked list uses linear search for this operation.