**National University of Computer and Emerging Sciences**

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**Database Project Proposal**

**<Hotel Reservation System with Room Management>**

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**Introduction**

The hotel reservation system with room management that we will be designing addresses a modern need in the hotel industry, replacing traditional, labor-intensive record-keeping methods. This system seeks to offer a smooth experience for both hotel managers and guests by utilizing technological improvements. Simplified reservation procedures that enable simple room selection and booking would benefit guests. Concurrently, automated processes like room assignment and availability tracking will result in increased operational efficiency for hotel workers. In general, the system uses technology to improve the visitor experience and streamline hotel operations.

**Functionalities** for Hotel Reservation System with Room Management:

**1. Login/Logout:**

   - Admin and users access the system using valid credentials to manage reservations and room information.

**2. Sign up/Register:**

   - Guests register with necessary details for creating profiles and accessing reservation services.

**3. Room Reservation:**

   - Users can browse available rooms, select preferences, and book accommodations for specific dates.

**4. Guest Check-in/Check-out:**

   - Admin manages guest arrivals and departures, updating room status accordingly.

**5. Room Allocation:**

   - Efficiently assign available rooms to guests based on their preferences and reservation details.

**6. Room Availability:**

   - Users can check real-time room availability for specific dates and room types.

**7. Add/Modify Room Information:**

   - Admin can update room details, add new rooms, or modify existing ones to reflect changes.

**8. Billing and Invoicing:**

   - System generates accurate bills for guests, considering room charges, additional services, and applicable taxes.

**9. Housekeeping Management:**

   - Admin monitors and manages the cleanliness and maintenance of rooms through the system.

**10. Profile Management:**

    - Users can edit their profiles, update personal information, and view reservation history.

**11. Cancellation and Refund:**

    - Users can cancel reservations, and the system calculates applicable refunds based on cancellation policies.

**12. Customer Feedback:**

   - Allows users to provide feedback on their stay, helping hotels improve services.

These functionalities collectively contribute to the efficient management of hotel reservations and room services.

**Conclusion**

In conclusion, the comprehensive features outlined for the hotel reservations with room management system signify advancements in the hospitality industry, aiming to modernize and streamline operations. By leveraging technology, this system enhances the guest experience through simplified reservation processes, it also increases operational efficiency for hotel staff by automating tasks such as room allocation and billing. Overall, the integration of these functionalities marks a pivotal step towards improving both guest satisfaction and hotel management effectiveness.