Abstract
Hotel Management System (HMS) database
By Group 10

The Hotel Management System (HMS) database is designed to streamline hotel operations by efficiently managing and integrating various data aspects crucial for effective guest service and operational oversight. The database structure comprises five primary tables: Guests, Rooms, Check-ins, Check-outs, and Billing.

1. *Guests* : This table stores essential information about each guest, including a unique Guest ID (Primary Key), Name, Contact Information, and Loyalty Program Details. It also tracks the Stay History, which records previous stays for better customer relationship management and personalized service.

2. *Rooms* : This table catalogs each room in the hotel, with Room Number as the Primary Key. It includes attributes such as Room Type, Capacity, Amenities, and Room Rates, facilitating efficient room management and rate adjustments.

3. *Check-ins* : The Check-ins table records each instance of a guest checking into a room. It includes a unique Check-in ID (Primary Key), Guest ID (Foreign Key referencing Guests), Room Number (Foreign Key referencing Rooms), Check-in Date/Time, and any Special Requests made by the guest. This table supports real-time tracking of guest arrivals and room assignments.

4. *Check-outs* : Similar to the Check-ins table, the Check-outs table documents guest departures with a unique Check-out ID (Primary Key), Guest ID, Room Number, Check-out Date/Time, Feedback, and the Final Bill. This data is crucial for finalizing guest stays and collecting feedback for service improvement.

5. *Billing* : The Billing table manages financial transactions, including an Invoice ID (Primary Key), Guest ID, Room Charges, Additional Services, Total Amount, and Payment Details. It integrates billing information to streamline financial reporting and payment processing.

Overall, the HMS database structure enhances operational efficiency by centralizing guest information, room details, check-in/check-out processes, and billing, thereby facilitating improved management and guest satisfaction.