**HOTEL MANAGEMENT SYSTEM**

**GitHub Link -** [**https://github.com/dondeash2025/DMDD-Project-Group-4**](https://github.com/dondeash2025/DMDD-Project-Group-4)

**Shivani Sugurushetty - 002305622**

**Ashlesha Vivek Donde - 002537305  
Mohammed Sayed Hossain – 002562175**

**Meghana Thota - 002591062**

**Mission:**

Hotel Management System is to design and implement a centralized, consistent and scalable solution that helps day – to – day operations of a hotel. The system will support the efficient management of reservations, staff duties, payments and bills, hotel availability, guest bookings, check-in and check-out procedures. It reduces manual labor, minimize errors, provides real – time information access, enhance customer satisfaction, provides prompt and precise service.

**Objectives:**

1. Reservation and Booking Management

* Make new reservations and cancellations in real time.
* Keep track of room availability.
* Prevents double bookings by updating room availability.

1. Guest information management

* Maintain guest profiles like first name, last name, age, address, nationality etc.
* Ensure secure storage of personal data.

1. Room and facilities management

* Manage room assignments and status of the room (booked, available, under maintenance).
* Issue alerts for out – of – service rooms.

1. Check – in and Check – out process

* Log guest arrivals and departures efficiently.
* Create invoices at checkout that include information about room fees and services.

1. Billing and payment management

* Manage several payments options (online, card and cash)
* Maintain detailed billing history.

1. Analytics and reporting

* Generate reports

1. Staff scheduling and allocation

* Assign housekeeping tasks based on guest check-ins and check-outs.
* Track employee shifts and availability.
* Ensure fair and efficient workload distribution.

1. Data security and integrity

* Implement user authentication and role – based access control.
* Protect sensitive information from unauthorized access or manipulation.
* Maintain data accuracy and consistency.

1. Data backup and recovery

* Automated backup schedules to ensure data safety.
* Recovery procedures for system failures.

1. Scalability and maintainability

* Support future enhancements such as mobile integration, loyalty programs and third-party APIs.