Hotel Management System

Zannatul Adon Sabiha ID-220042123

Tanzia Rahman

ID-220042129

Mrittika Jahan

ID- 220042150

01 September, 2025

Overview

- Backend project for hotel operations
- Handles room booking, customer management, reservations
- Automates tasks via PL/SQL procedures, functions, triggers
- Role-based access: Admin & Guest
- Focus on data integrity, performance optimization

Motivation

- Hotel operations are complex and time-consuming if managed manually
- Need for an automated system to handle bookings, reservations, and customer data
- Reduce chances of double booking, data loss, or human error
- Improve efficiency of Admin and enhance guest experience
- Ensure data integrity, security, and role-based access
- Provide a scalable system that can adapt to growing demands

User Roles

Admin



Guest



Room Management

- 01 Add/remove room
- Reservation creation & cancellation
- 03 Manages check-in/check-out
- 04 Edit booking details

Customer Management

- 01 Can make reservation
- 02 Link reservations with customer data
- 03 View room details

Reservation System

- Ol Dynamic pricing (demand/season)
- Reservation creation & cancellation
- O3 Detailed room info (type, price, status)

Room Management

- 01 Add, remove, edit rooms
- 02 Manage room amenities & status

Tools & Technologies

Frontend

React (UI for customers & admin)



Backend

Node.js (API & business logic)



Database

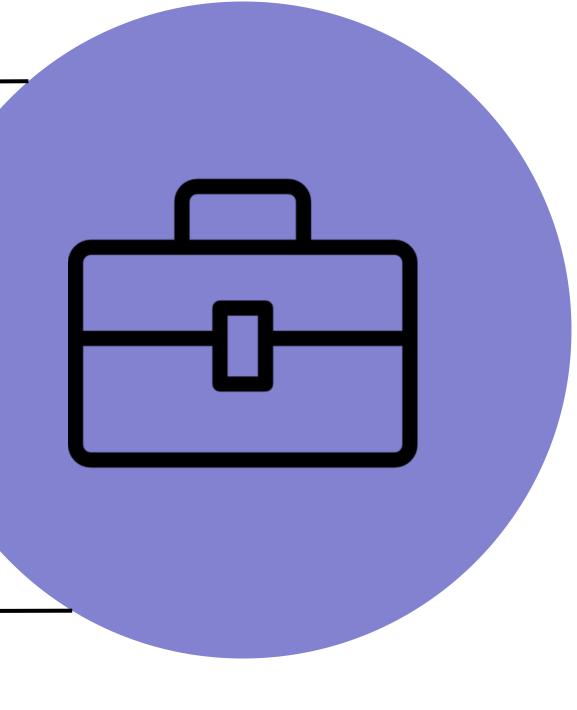
Oracle (PL/SQL, triggers, procedures)



Version Control

GitHub





Contribution

Zannatul Adon Sabiha

- Room Management
- Reservation Management

Mrittika Jahan

- Admin Dashboard
- Sign In Page

Tanzia Rahman

- Guest Dashboard
- Billing

Thank You