

Group 5: - 25409 Dushime Brother(Leader)

- 24690 Muhorakeye Honnette

- 24705 Mugeni Ahadi Leila

- 24778 Muhorakeye Honnette

Project Proposal: Room Booking System

1. Project Name:

Room Booking System

Description:The Room Booking System is a user-friendly platform that simplifies the process of reserving spaces for different purposes, such as meetings, study sessions, or events.

2. Problem Statement:

Managing room bookings manually often leads to inefficiencies such as double bookings, under-utilization of spaces, and lack of real-time availability updates. Traditional methods also make it difficult for users to easily check room availability, track bookings, or manage cancellations, resulting in poor user experience and operational challenges.

3. Objective:

To develop a Room Booking System that simplifies and streamlines the booking process for both users and administrators. Key objectives include:

- Providing real-time room availability and status updates.
- Enabling users to book, modify, and cancel reservations with ease.
- Offering a dashboard for administrators to manage bookings and track room usage.
- Integrating features such as notifications for upcoming bookings and conflicts.
- Enhancing user experience with a modern, intuitive interface.

4. Functional and Non-Functional Requirements:

Functional Requirements:

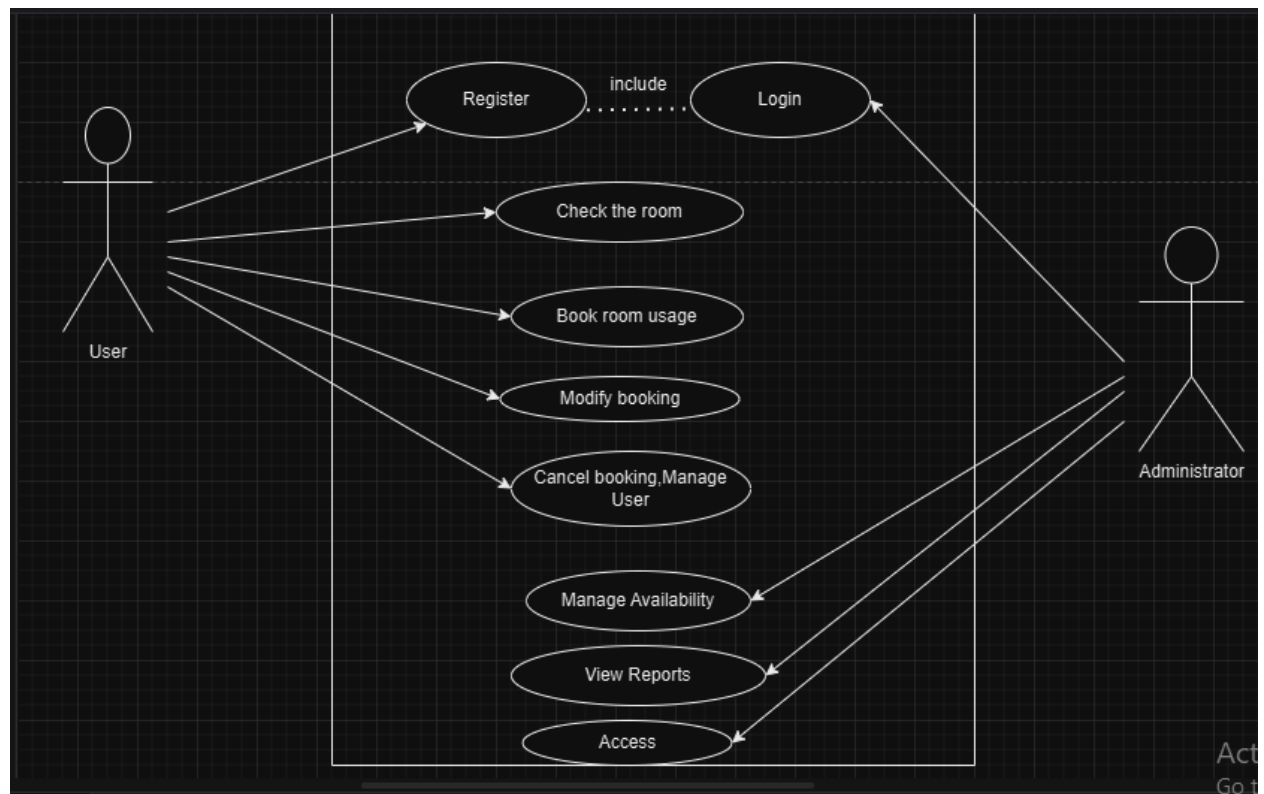
- User authentication and role-based access (e.g., admin, regular user).
- Real-time room availability display.

- Room reservation, modification, and cancellation.
- Administrator dashboard for room management and usage reports.

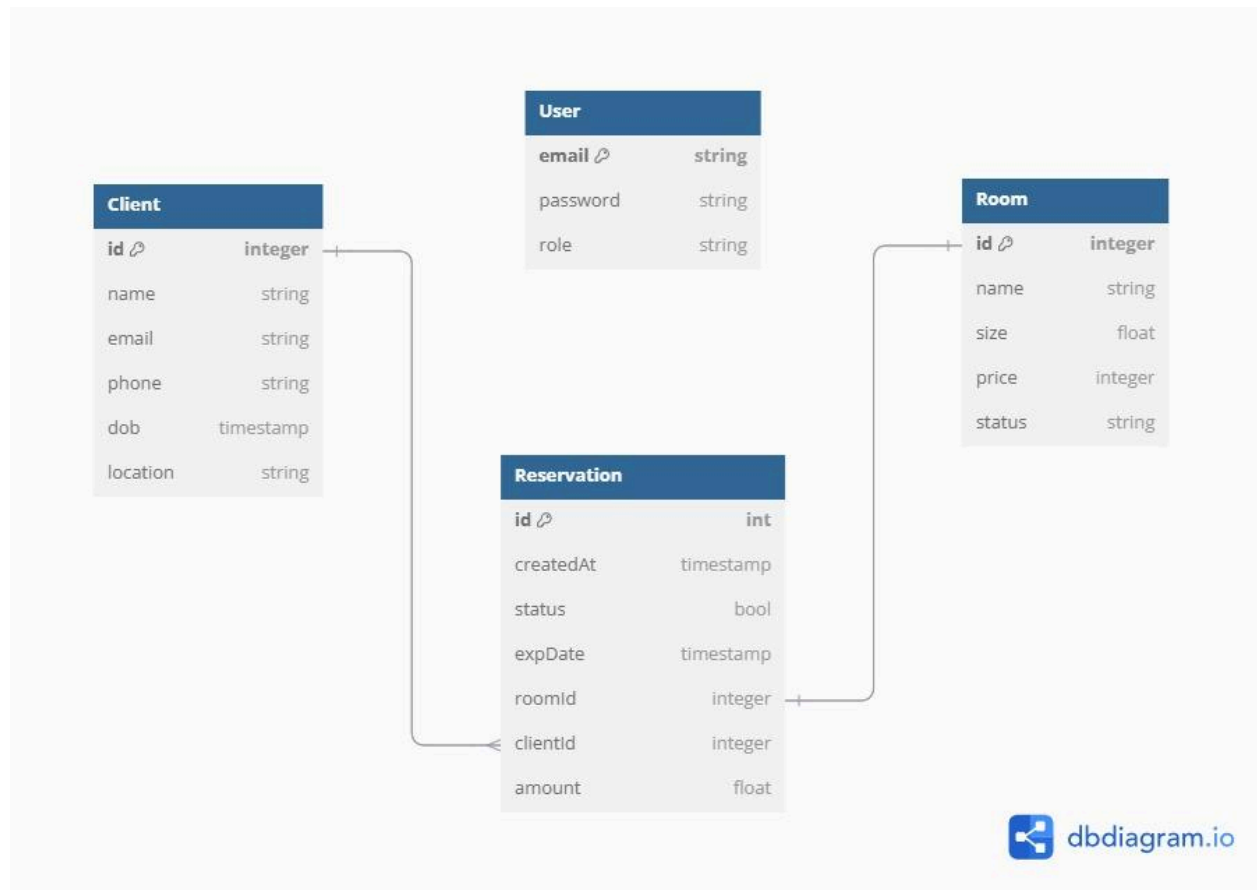
Non-Functional Requirements:

- System scalability to support multiple users simultaneously.
- Secure storage and transmission of user data.
- High system reliability and uptime.
- User-friendly and visually appealing interface design.

5. Use Case Diagram:



6. Database Diagram:



7. Project Timeline

Phase	Duration	Description
Requirements Analysis	2 Days	Gather and document functional and non-functional requirements.
System Design	2 Days	Create architecture, use case diagram, and database design.
Development	2 Weeks	Develop front-end, back-end, and database functionalities.
Testing	1 Day	Perform unit, integration, and user acceptance testing.
Deployment	1 Day	Deploy the system to a live environment and provide user training (if needed).
Maintenance	Ongoing	Monitor performance and provide updates as needed.

