HOTEL MANAGEMENT SYSTEM

HOTEL PARADISE

GROUP - 06

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AGENDA

- Introduction
- Background research/motivation
- Resources/Technologies
- Project Design
- System Specification
- Sitemap
- Snapshots
- Conclusion and future work
- Contributions and Problems

Introduction

- Hotel Management System is a web-based system that helps users to get information about our hotel, learn about its services, browse through a wide range of rooms, and later on book a room that suits their preferences.
- On our website, there will be two components – one for users, the other for admins.
- This project will have a sign up system which will help different users to make an account separately, and later login when they want to book a room. Likewise, this project will have a login system which will help different admins to sign in separately. Admins and users will use their own personal email address to sign up or login.
- Admins will receive user queries, booking details, user information. Basically the admin will control the whole hotel management system, such as adding/deleting/updating rooms while users can only view the hotel services and book available rooms.

Background Research/ Motivations

- There are several hotels in Dhaka, but there is still a lack of a management system, lack of technical support and organizational capacity in our country where tourists can talk with admins, get to know about the hotel services, and hence, book rooms and further plan their travel – which can be very frustrating for a tourist. Booking a hotel room might be hard, but our website makes it much easier.
- The motivation behind choosing this project is because of our bad experiences while booking hotels in foreign countries. Many times, while visiting a country, we see a hotel that we like – and when we inquire about the facilities, features and services of the said hotel to the admins – we either don't get a reply or get one after several days. Thus, we want to solve this problem and have tourists visiting our Hotel Paradise in Bangladesh to get a good, memorable experience, as we believe we can properly assist them.

Resources/ Technologies

- Technologies:

For this project we used PHP for backend, PHP and CSS for Frontend and MySQL for the database.

- Resources:

We mostly took help from the internet, watched multiple tutorial videos on PHP for backend and basically self-taught ourselves to learn the basics of web-development to complete this hotel management system from scratch.

PROJECT DESIGN

- FEATURES:

- The users can view the price, features, facilities of the rooms they might want to order.
- Users can also leave multiple reviews about their stay in our hotel.
- Users also have option to reach out to hotel admins about any queries they might have, by filling out a form and submitting it.
- The hotel room will be reserved in the user's name after booking is complete. So, this affects the next users search suggestions, as that particular room will now be available to the next user.
- Users have the option of cancelling their reservation.

- FEATURES (CONTINUED):

- The website and database will be managed by admins who can login with their admin ID and unique password.
- The administration will have the ability to add, remove, update or change details about hotel rooms, theirs features and facilitIes.
- They will be controlling everything of the hotel such as viewing user information, user queries, maintaining the design and view of the website and more.
- They can view entire hotel room booking list and delete any record, as well as edit the reservation date.

SHORT SUMMARY OF USER'S VIEW

- Can see description about the hotel.
- The facilities, features provided by the hotel.
- Location, contact information and reviews(by users) of the hotel.
- Types of rooms + their prices, features and more.
- The login/ sign up panel of the hotel which needed in order to reserve rooms, where they can select the type of room as well the duration of their stay, which is conveniently done with the help of a calendar.
- Query form which can submitted to hotel.
- Booking option.

SHORT SUMMARY OF ADMIN'S VIEW

- Admins will have whole power of controlling our HOTEL PARADISE.
- Add, edit, remove, update, change hotel and room information.
- Can add/delete facilities and features of hotel room.
- Can view user queries.
- Can view list of users signing up to website.
- Can change check-in check-out information if requested by user, can also cancel a reservation.

SYSTEM SPECIFICATION

Strong Entities(Attributes):

- Contact info(C_ID, G map, Address, Email, Instagram, FB, Twitter)
- Booking Order(B_ID, Order ID, Arrival Time, Date, Trav, Check in, Check Out, Trans Amount, Refund, Status, Trans ID)
- Users(U_ID, Name, Address, Email, Password, DOB)
- Ratings and Reviews(RR_ID, Date, Ratings, Reviews)
- Facilities(Facilities ID, Name, Description, Icon)
- Features(Feature ID, Name)
- Admin(ID, Name, Password)
- Rooms(R_ID, Name, Quantity, Guest, Availability)

Weak entities(Attributes):

- Images(R_ID, I_ID, Image)

SYSTEM SPECIFICATION continued:

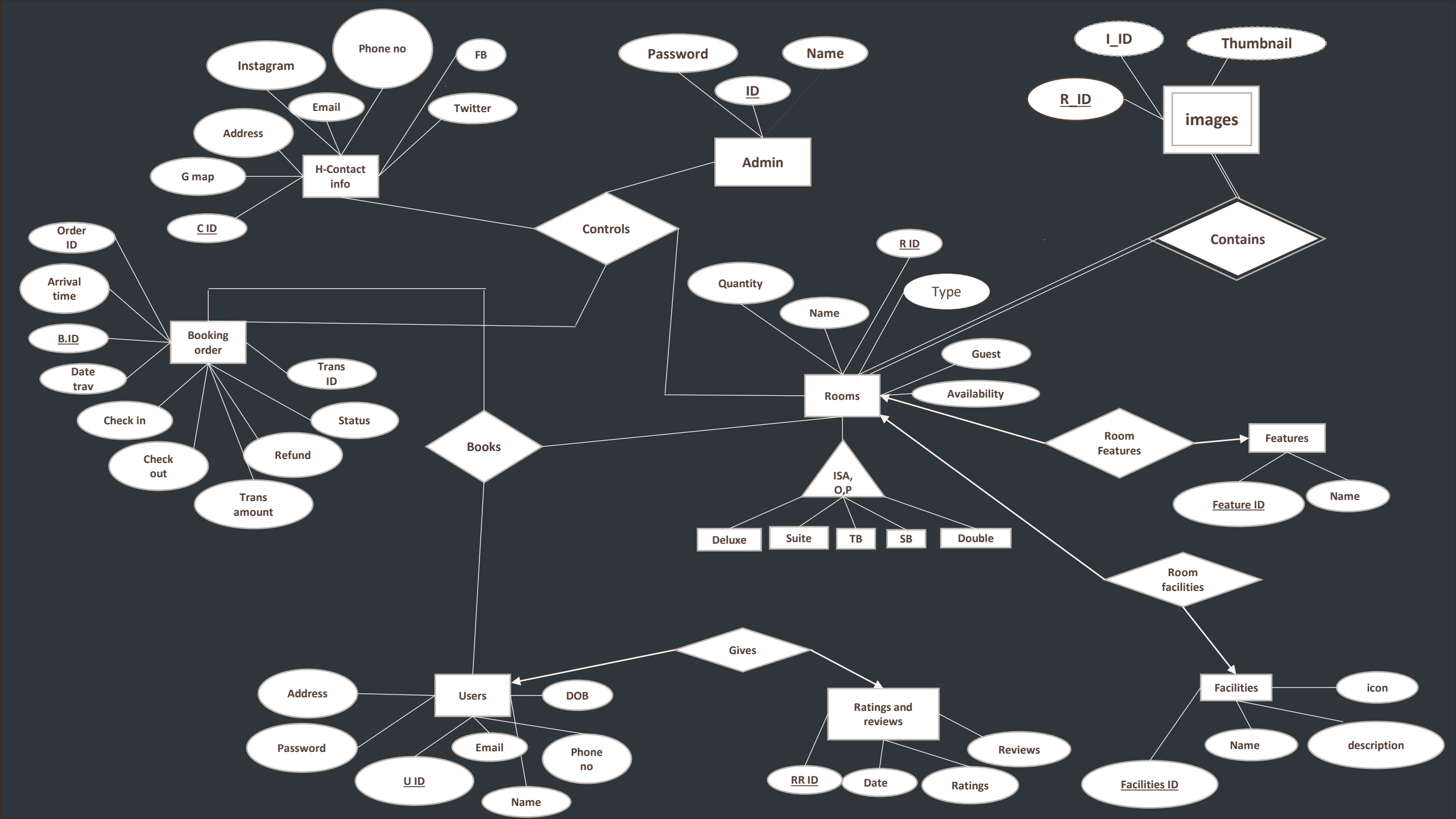
<Relationships>

(Cardinality Constraint):

- Users<Gives> Ratings and reviews (M:M),
- Rooms <Room Facilities> Facilities(M:M)
- Room < Room Features > Features(M:M),
- Booking order< Books > Rooms<Books> Users(Ternary Relationship)
- Admin< Controls > Contact info<Controls> Booking order <Controls> Rooms (4-nary Relationship:)

ISA relationship: Rooms ISA Deluxe, Suite, TB, SB, Double

ER DIAGRAM


Phone no
Instagram
FB
Email
Twitter
Address
G map
H-Contact info
C ID
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Name
ID
Admin
I_ID
Thumbnail
R_ID
images
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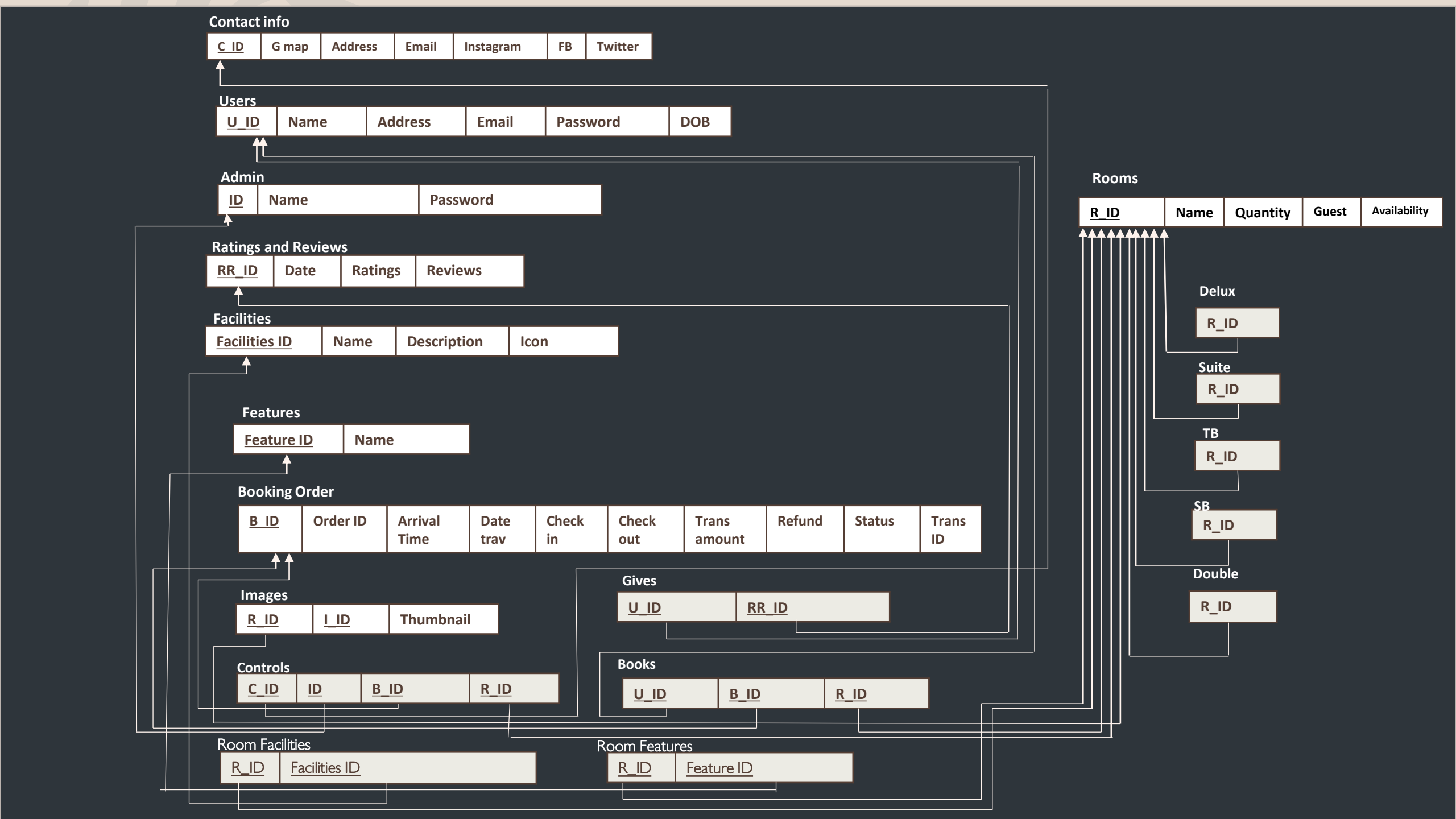
Controls
Order ID
Arrival time
B.ID
Date trav
Booking order
Trans ID
Check in
Status
Check out
Refund
Trans amount
Books
R ID
Quantity
Name
Type
Rooms
Guest
Availability
Room Features
Features
Feature ID
Name
ISA, O,P
Deluxe
Suite
TB
SB
Double
Room facilities
Gives
Address
Users
DOB
Password
Email
Phone no
U ID
Name
Ratings and reviews
Reviews
RR ID
Date
Ratings
Facilities
icon
Name
description
Facilities ID

RELATIONAL TABLE


Contact info
C_ID
G map
Address
Email
Instagram
FB
Twitter
Users
U_ID
Name
Address
Email
Password
DOB
Admin
ID
Name
Password
Ratings and Reviews
RR_ID
Date
Ratings
Reviews
Facilities
Facilities ID
Name
Description
Icon
Features
Feature ID
Name
Booking Order
B_ID
Order ID
Arrival Time
Date trav
Check in
Check out
Trans amount
Refund
Status
Trans ID
Images
R_ID
I_ID
Thumbnail
Controls
C_ID
ID
B_ID
R_ID
Gives
U_ID
RR_ID
Books
U_ID
B_ID
R_ID
Room Facilities
R_ID
Facilities ID
Room Features
R_ID
Feature ID
Rooms
R_ID
Name
Quantity
Guest
Availability
Delux
R_ID
Suite
R_ID
TB
R_ID
SB
R_ID
Double
R_ID

NORMALIZATION

1NF:

Conditions for 1NF:

- Each cell has to be single valued.
- Domain of each column should be same.
- There should be a primary key.
- The order of the rows and columns do not matter.

❑ **All our tables are in 1NF.**

2NF:

Conditions for 2NF:

- The table should be in 1NF.
- There should be no partial dependency.

❑ **All our tables are in 2NF.**

NORMALIZATION continued:

3NF:

Conditions for 3NF:

- The table should be in 2NF.
- There should be no transitive dependency.

In booking order entity,
Refund -> Status(Transitive Dependency)
So we need to create another table for booking order and refund.

Booking Order: (B_ID, Check-in, Check-out, date trav, Order_ID, Trans_ID)
Amount: (B_ID, Status, Refund)

NORMALIZATION continued:

4NF:

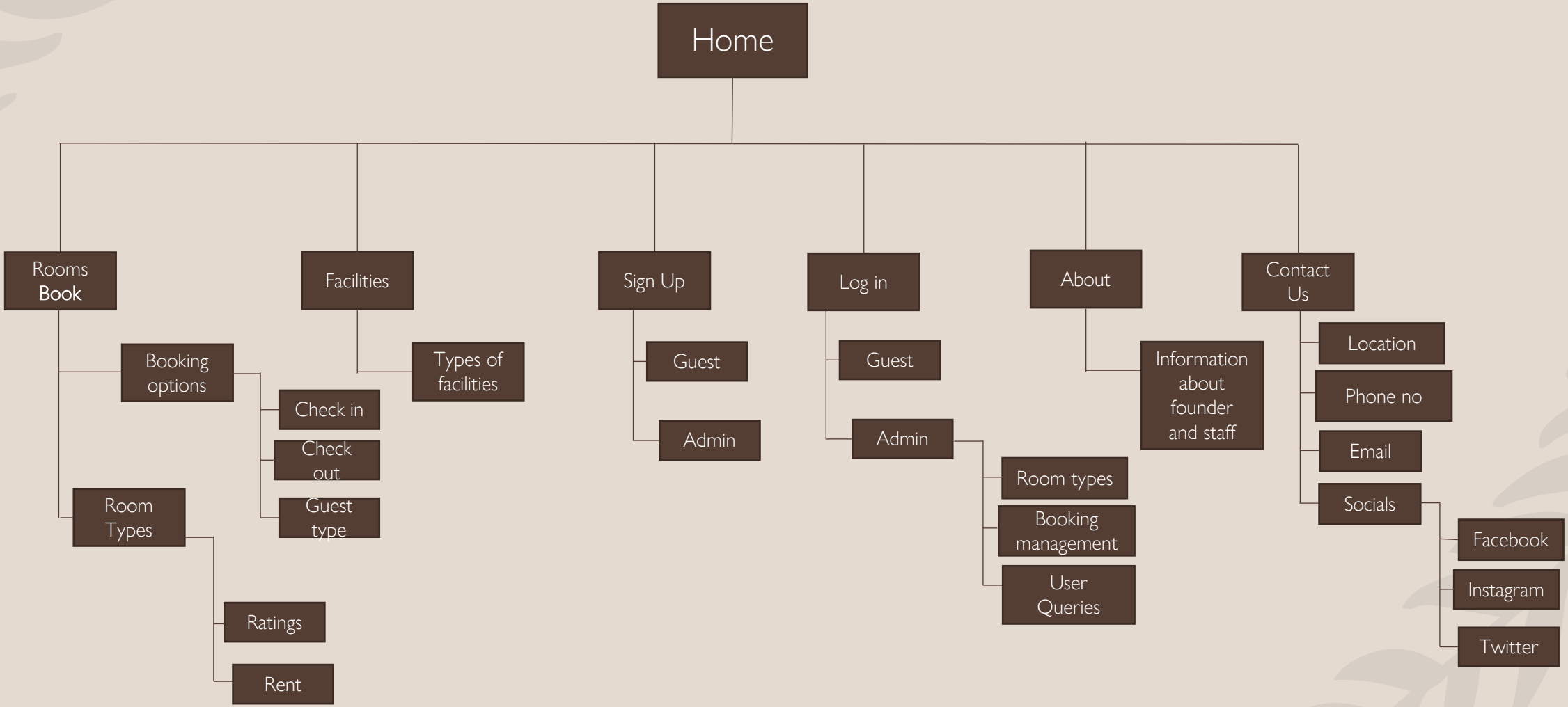
Conditions for 4NF:

The table should be in 3NF.

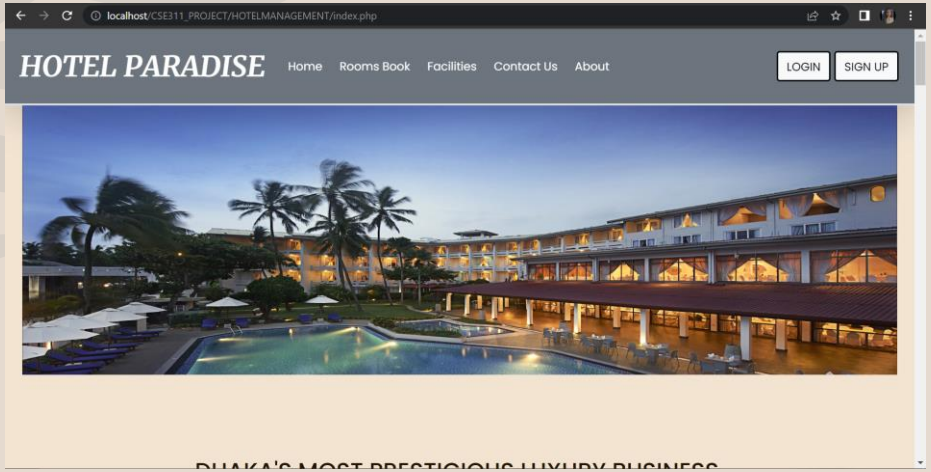
There should be no multivalued dependency.

All our tables are in 4NF.

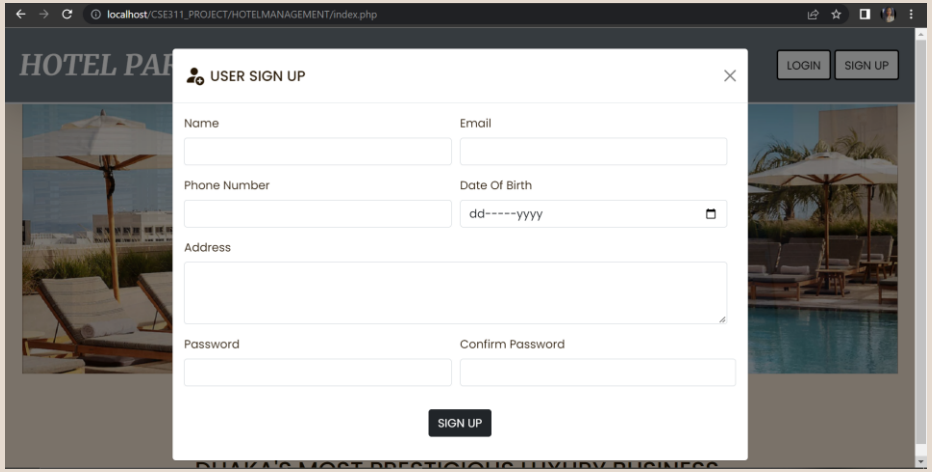
SITEMAP


Home
Rooms Book
Booking options
Check in
Check out
Guest type
Room Types
Ratings
Rent
Facilities
Types of facilities
Sign Up
Guest
Admin
Log in
Guest
Admin
Room types
Booking management
User Queries
About
Information about founder and staff
Contact Us
Location
Phone no
Email
Socials
Facebook
Instagram
Twitter

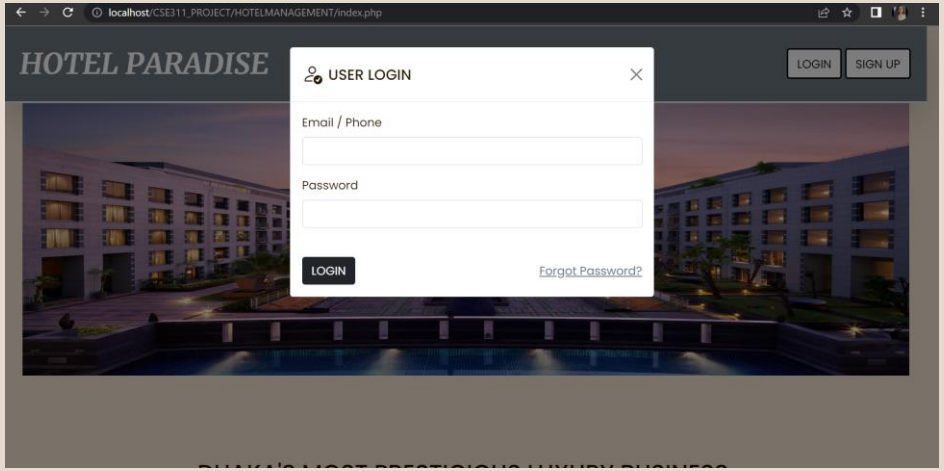
SNAPSHOTS



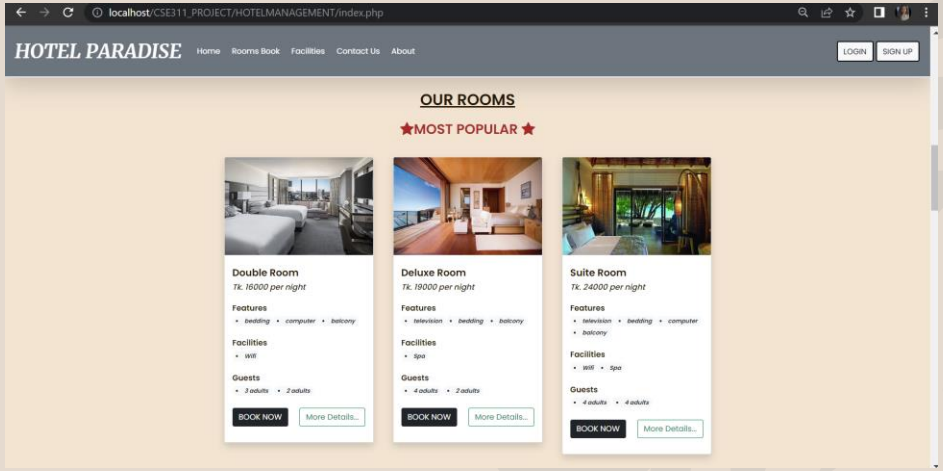
User's view Home page



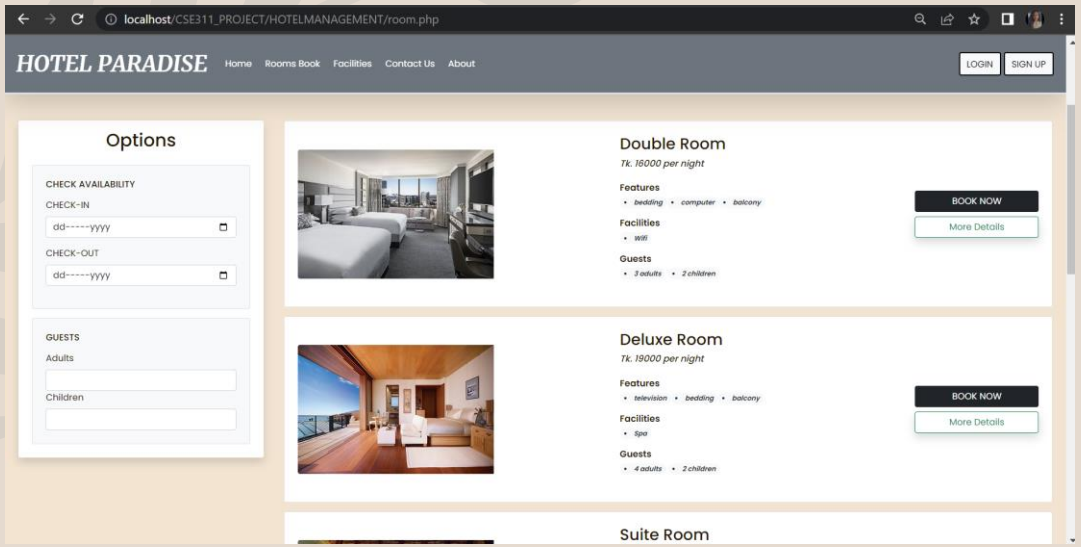
User's Sign Up Panel



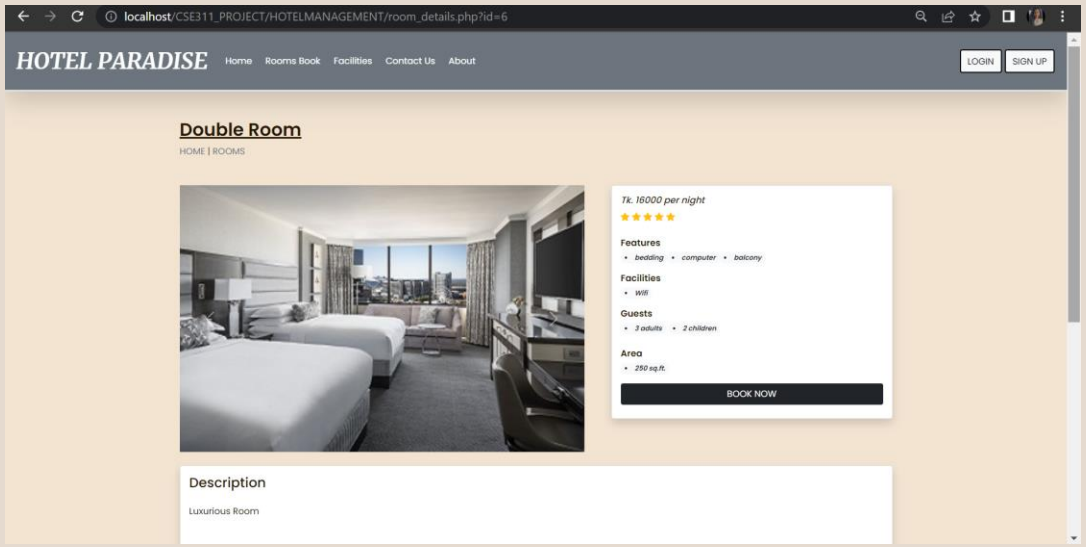
User's Login Panel



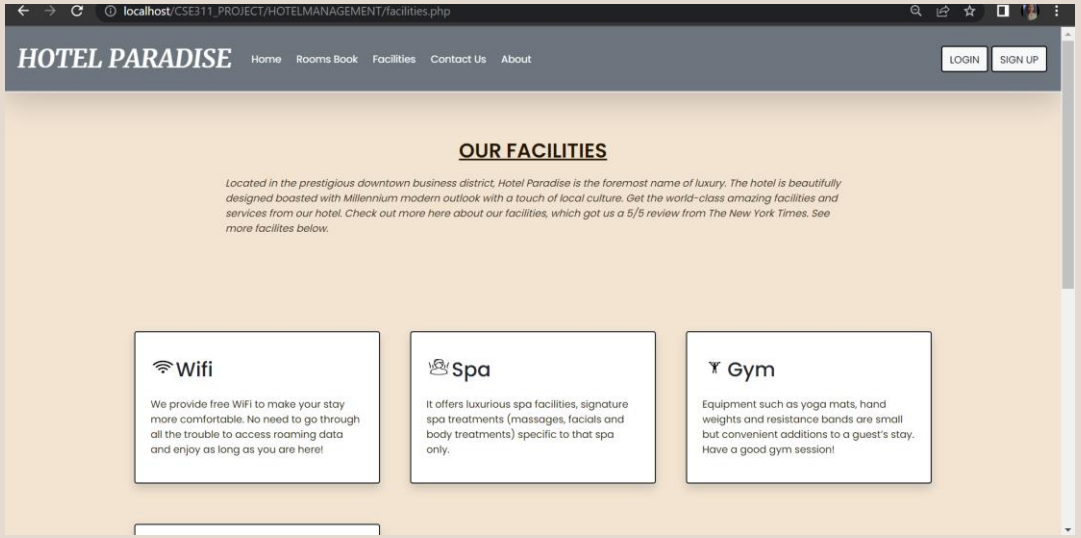
Popular Rooms



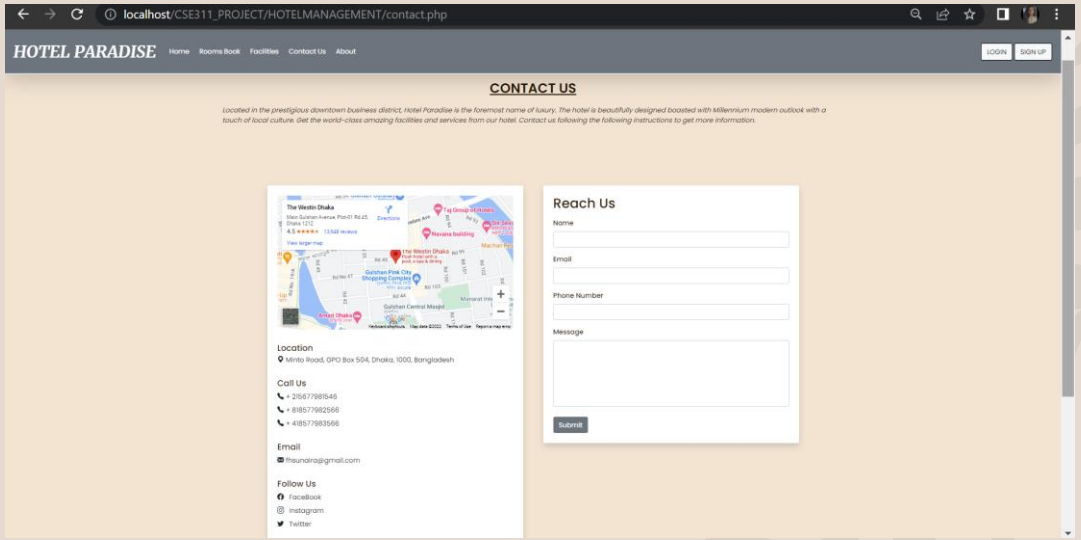
User's view After pressing Rooms book button



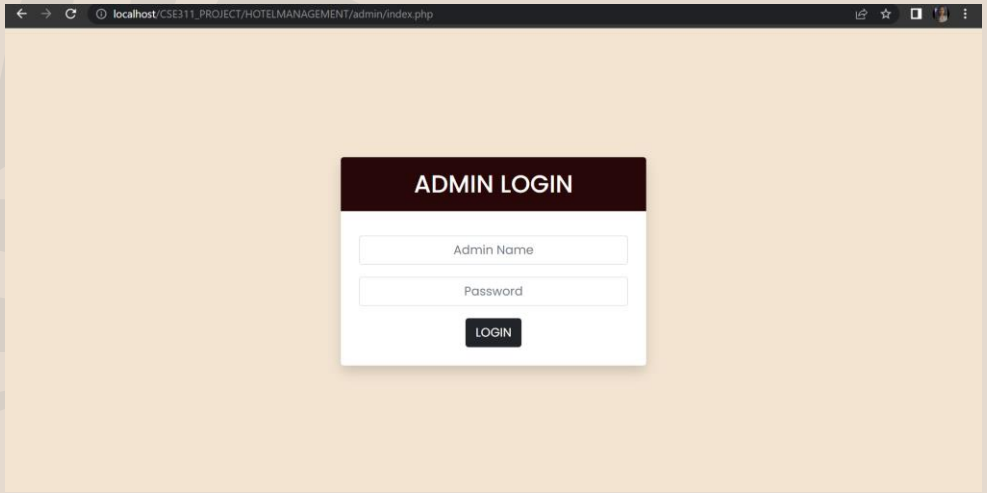
Room details



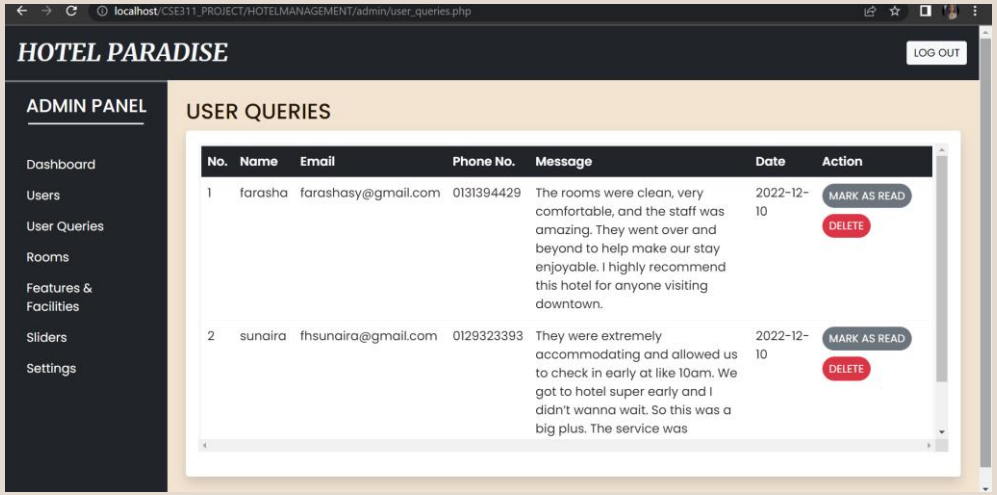
User's view After pressing Facilities button



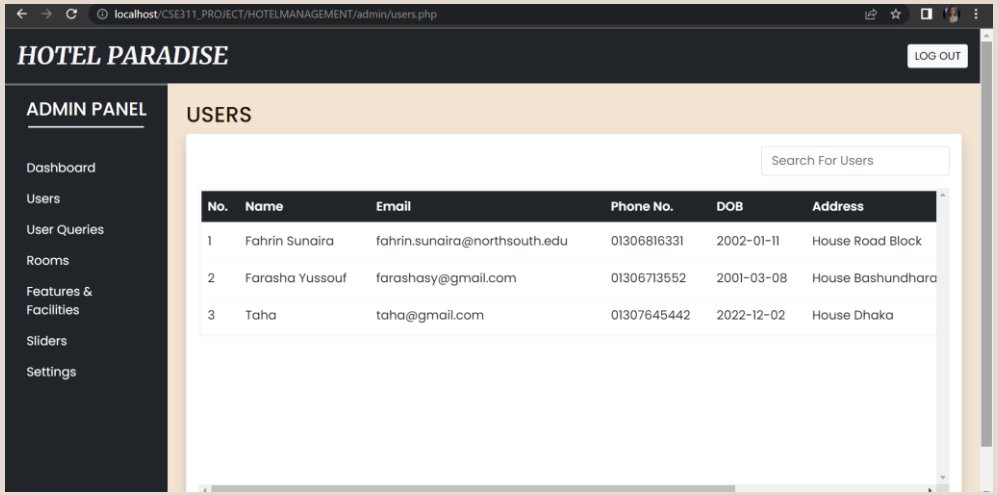
User's view After pressing Contact Us button



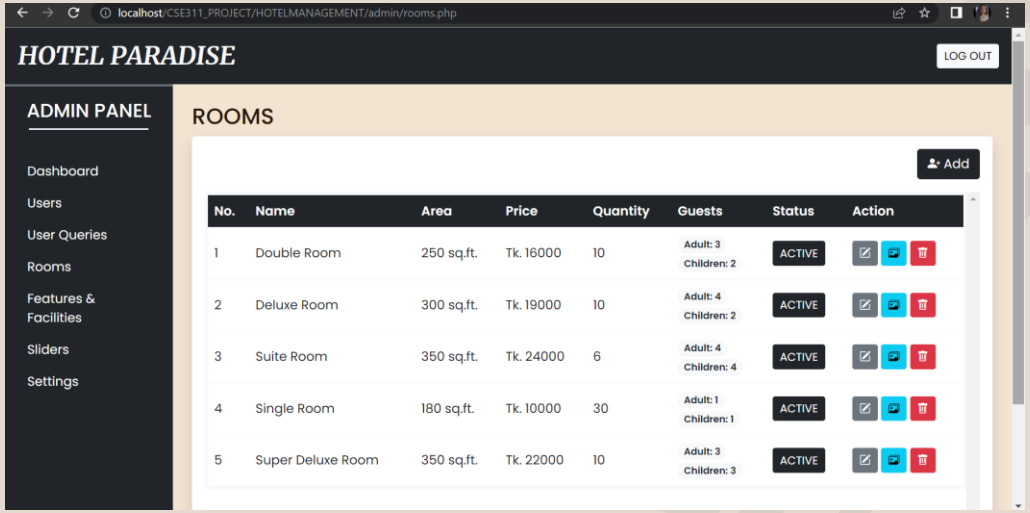
Admin Login Panel



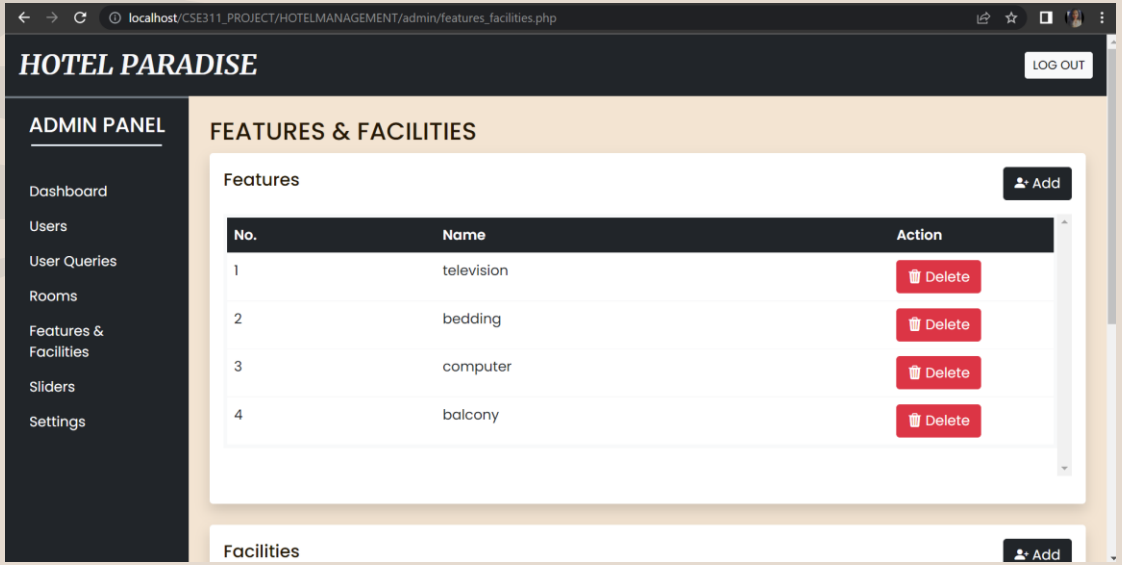
After Logging in Admin's view after User Queries button on the side bar is pressed



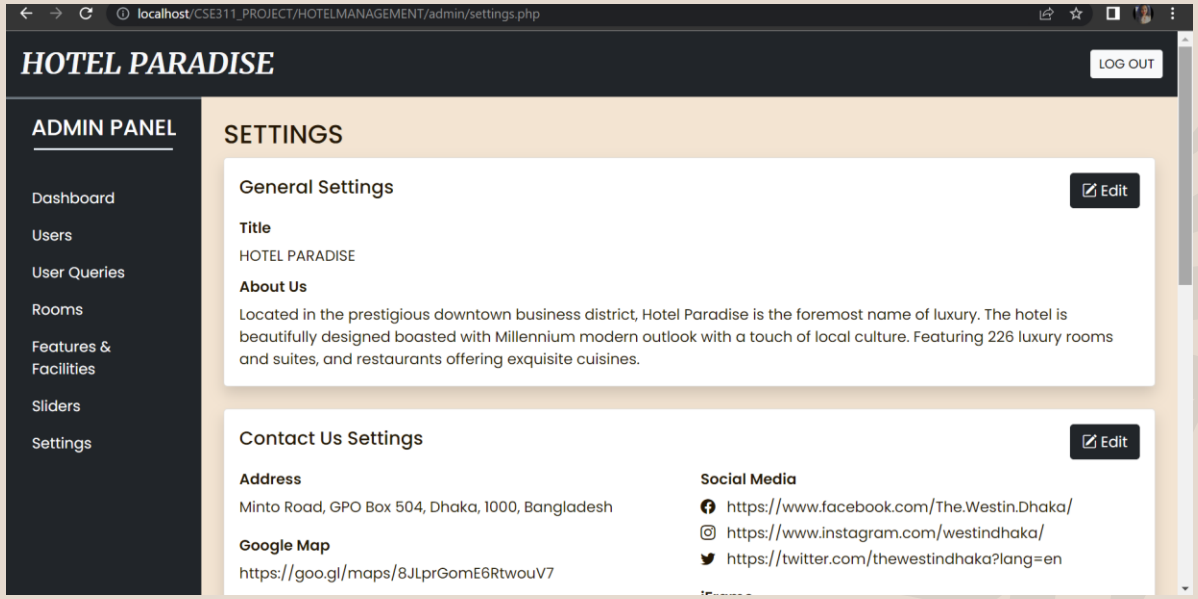
Admin's view after Users button on the side bar is pressed



Admin's view after Rooms button on the side bar is pressed



Admin's view after Features and Facilities button on the side bar is pressed



Admin's view after Settings button on the side bar is pressed

CONCLUSION AND FUTURE WORK

- **Risk** was the biggest hurdle in this project. The fact that it will work or not or if we would be able to complete it without any issues was the biggest concern. Many potential external events could've had a negative impact on our project if they occurred.

- **Resources** were required to carry out this project tasks. We mostly used internet to find resources. Saw multiple YouTube videos to learn PHP backend implementation from scratch and then implemented the knowledge into our project.

- **Time** was also one of the biggest issue. To be able to complete it within the specified time-period was important to us since it is often the most frequent project oversight in developing projects.

- For future work, we would like to take in factor of the above issues. Risk, Resources and Time is usually the problems that a group faces and we did so as well. As we got to learn about the whole thing while completing our first website design, we hope our next web applications will be made compact and more polished.

CONTRIBUTION

- **FAHRIN HOSSAIN SUNAIRA – 2031856642**

Contribution: PHP using backend, frontend helping, MYSQL database creating.

- **FARASHA SHAMMA YUSSOUF – 2031250642**

Contribution: Make final report, help in frontend.

- **TAHIATUN NASA TAHA – 2031452642**
- **Contribution:** Database

THANK YOU!

Github Repository Link:
https://github.com/Sunaira1101/CSE311_PROJECT