Hotels Management System

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Team Members:

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Abstract:

The Hotel management system allows a user to check for the availability of rooms at a hotel, book a room and view his/her bookings. Hotel management systems is best suitable for tracking room bookings in a very simple and effective manner with minimal effort and time so that it increases revenue.

Specifications:

Each hotel has a name, a few staff members, and some rooms associated with it. The hotel is uniquely identified by its ID. A staff member can work only at a single hotel. Each staff member has a name, email and address. Each room is uniquely identified by its ID. A room has a room number (can be the same across multiple hotels), floor, capacity and its cost.

A user can make an online booking at a hotel. Each online booking has a single or multiple rooms with it. A room can be booked multiple times. A bookingId is maintained to identify each booking uniquely. Check-in date, Check-out date are tracked as part of each booking. Each of the users are differentiated using their unique ID.

Username, email, mobile number and address are tracked as part of each user. Street, city and zipCode are tracked as part of each address. A user can make multiple bookings. A user can even create a booking offline at a hotel with the help of a staff member. A staff member can book multiple rooms for a user.

Each booking is associated with a payment that is made by the client for booking the room. Each payment has a unique reference number to track it. It also tracks the amount paid along with the payment method.

User functionalities overview :

- Check availability of rooms.
- Registered users can book a room by selecting check-in date, checkout date, type of room, and the number of persons and subsequently making payment.
- View booking history.
- View current, past and future bookings.
- Cancel current, future bookings.
- **Users will be provided with various payment methods like debit/credit cards, UPI/BHIM, and mobile wallets.**

Staff member functionalities overview:

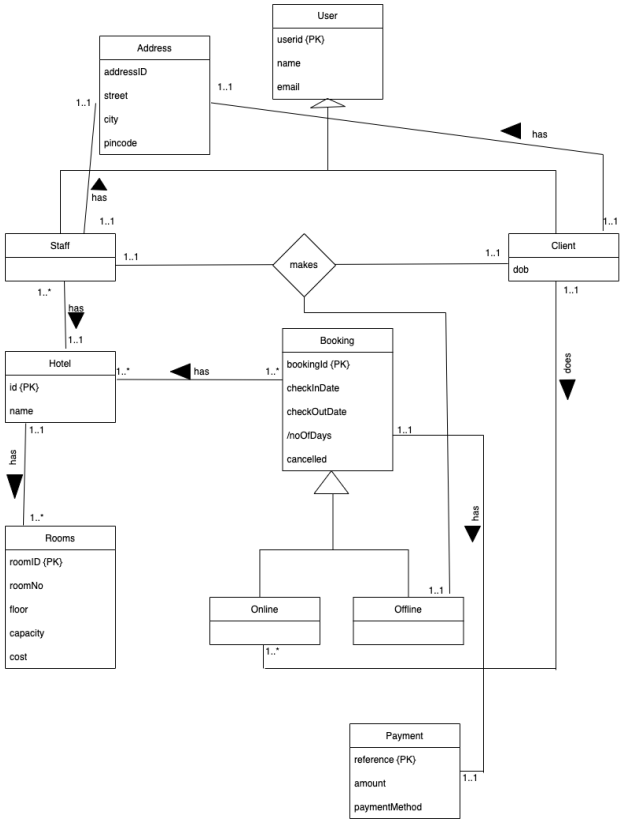
- Staff can book rooms for users who have not registered online.(Offline booking at the office).
- Can view all the bookings of all the users.
- Can cancel current, and future bookings.
- Can cancel the online booking of users on a no-show.

Database Type: SQL (MySQL)
Technologies used: Flask, MySQL

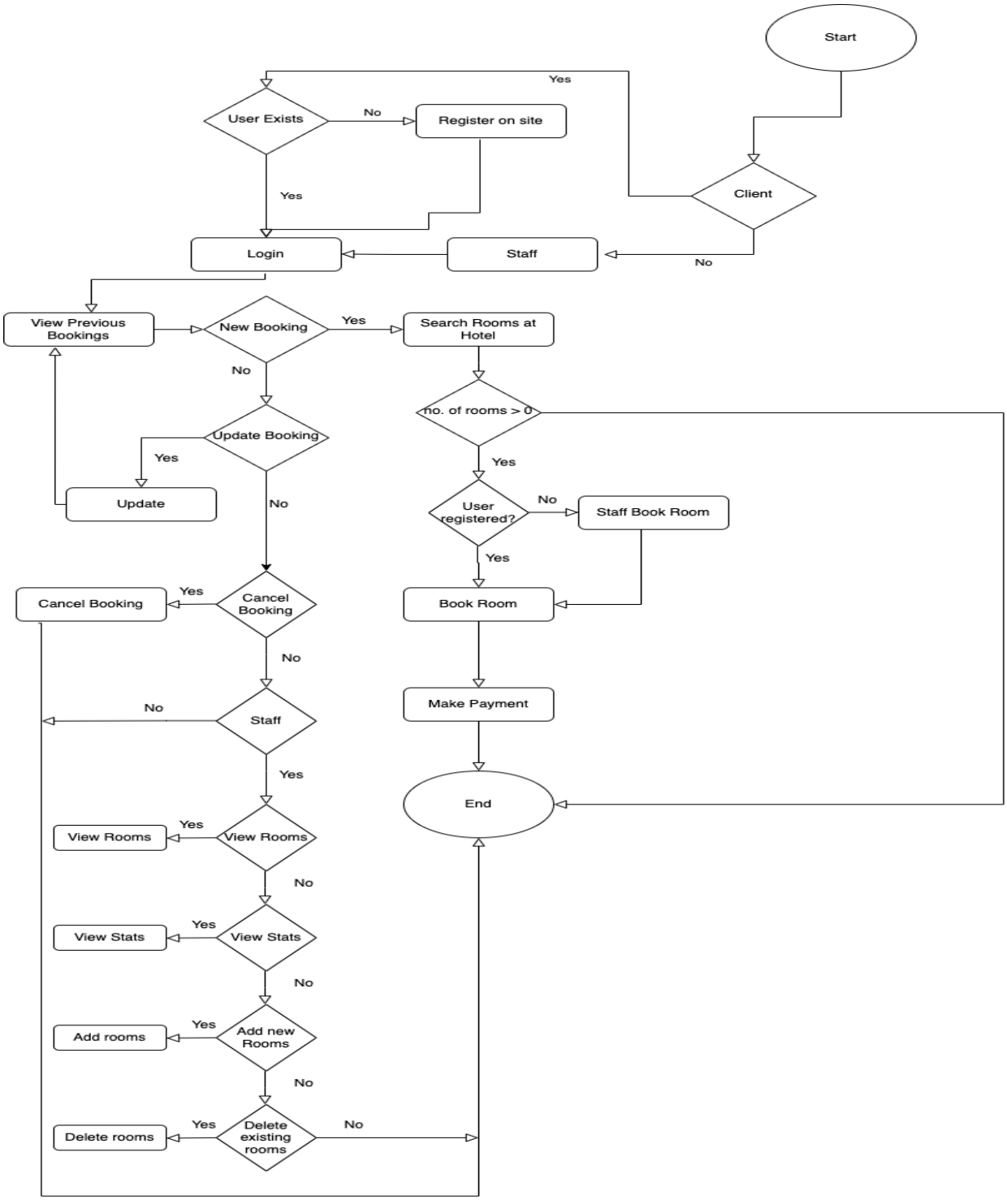
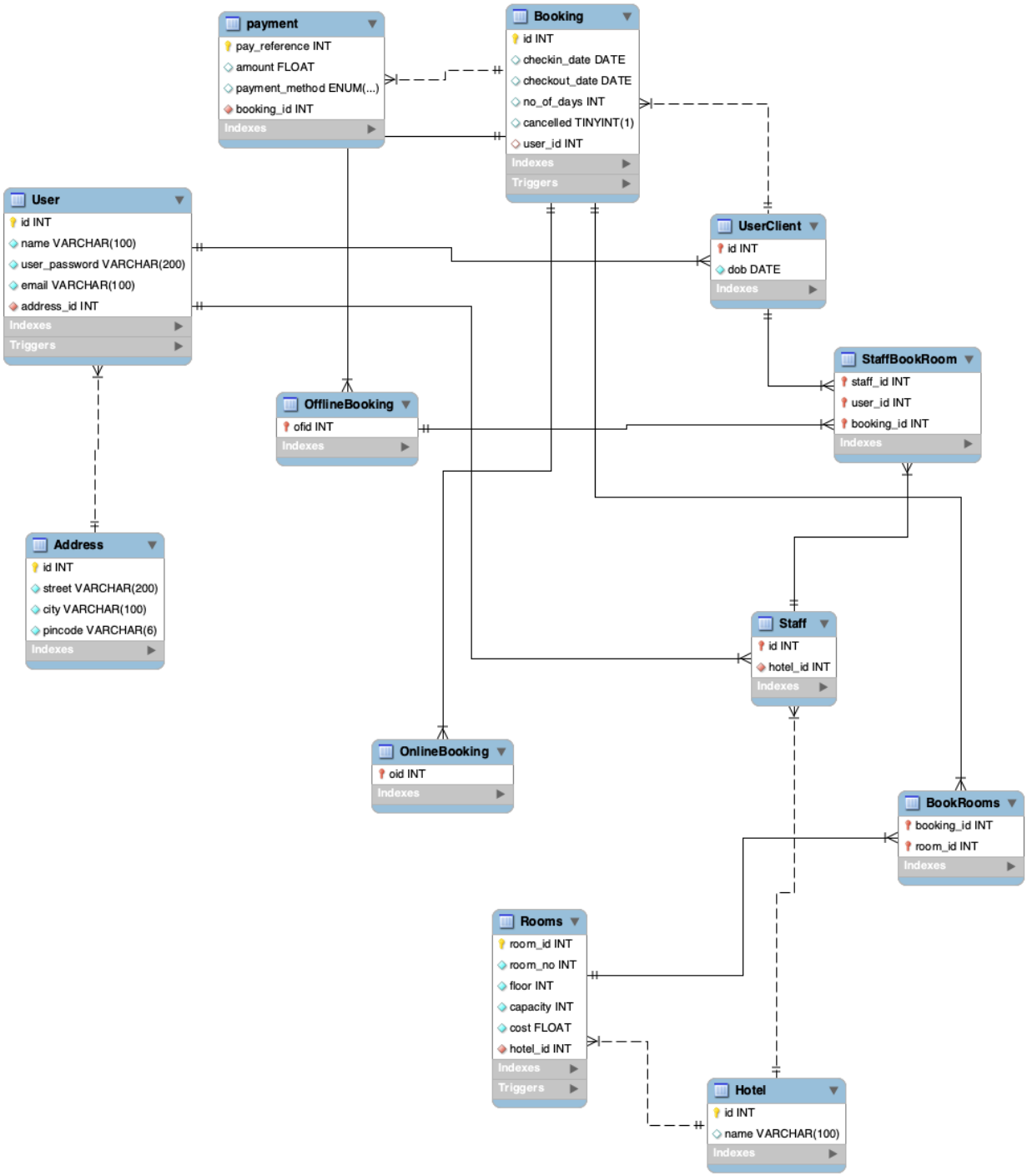
Why does this project or this data domain interest you?

The main reason we chose the Hotel Management System project is that it allows us to work on large datasets, and DBMS makes it easier to work on such data. This project has a substantial advantage in helping hoteliers enhance their operations. Using DBMS, the system can be made consistent and data security is ensured. It also helps clients by planning prior. Decisions made on data are only as good as the information used.
DBMS helps provide a framework to facilitate data quality, which leads to better decision-making.

UML Diagram:



Flow Chart Diagram:



Logical Design: