

Database Design Document

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Project Title: Bon Voyage Database Management System



Team Members:

Raseswari Das (NUID: 001259634)

Soumya Prateek Adhikaree (NUID: 001280941)

Zixuan Xu (NUID: 001224785)

Overview

A hotel's reservation system is the heart of the hotel itself. Think about it: if you can't get rooms booked, what's the function of a hotel?

For many hotels, a reservations system does more than just book rooms. It also organizes reservations, saves details about guest preferences, and can even keep contact with some special event and restaurant to yield maximum returns. Many reservation solutions can also help you craft hotel deal packages for busy seasons or certain holidays, while still enabling you to come out on the end with a remarkable price.

Doing this by hand would take a ton of time.

Again, hotel reservations database or booking software can consolidate all of these booking across a multitude of platforms so that they are organized and available right in front of you in one user-friendly interface. No overbooking or mistakes made on your end. You can even know about guest preference before they come as well. Not to mention, it can also let prospective guests book online at all hours, meaning front desk employees can spend more time assisting check-ins and focus on keeping the current guests happy. Now imagine if this could be done for multiple hotels whereby they act as franchises and you get a lot more options to choose from.

'Bon Voyage' does all this and more. We let you connect with private event organizers and you can get access to a multitude of events across your city of choice. Each restaurant, room, event organizer is rated by you and this helps all prospective guests to know the pros and cons of each service. We even provide a list of some of the local tourist attractions that may interest you during your visit to the city.

Mission Statement:

A project to create a database to view and manage bookings by various customers. It searches through all the hotels or properties and events in the locality that are registered in the system and returns the deals as per the customer requirements and date availability.

Objective:

To make traveling an even more of a delightful experience, we will also store the details or profiles of the customers and once a booking is made the customer will get an option to view/match with other travelers staying in the same area or hotel during the same duration of stay. We will have the details of various hotels, restaurants, pubs in and around the city. We will also have details, like things to do around the city and store the information of event organizers to help customers to explore the city. We will be creating the following tables:



Included with xls document, here are explanations about important tables. Our project contains entertainment items as well such as restaurants and tourist attractions, hosts called Event Organizers would manage special events.

Key Business Rules:

1. Bookings are converted to Order and so, Order contains BookingID as FK only once the customer has paid for the booking.
2. Order can also have some orders like ticket to some event etc. In this case, it will have the reference ie OrganizerId/HotelID who provided the service.
3. Any person who uses our services has to be a registered customer ie no guests.
4. Address has columns namely CustomerID, HotelID and RestaurantID corresponding to whose address it is.

Design Decisions:

Entity Name	Why Entity is Included	How Entity is Related to Other Entities
Cities	Since there would many different hotels with various locations in our system, we will set up a city table to represent the geographic information.	The primary key(PK) <i>CityID</i> relates to Hotels, Address, Restaurants and TouristAttractions entities to tell us which city it belongs to.
Hotels	Each Hotel will be assigned an unique ID, and some detailed information such as Name and Contact Number and basic description.	Hotels' PK HotelID is a foreign key(FK) of Rooms which tells us which hotel the room belongs to.
Rooms	This entity will have all the information about the room such as ac/non-ac, room type, no. of beds, pricing, etc.	PK RoomID is used as a FK in RoomBookings, Bookings, and Reviews to tell us if a room is booked or available, reviews and ratings about the room
Customers	This stores the details of all the customers who uses the services.	PK CustomerID is used as a FK in Bookings and Reviews. From Bookings we can extract the information of the customer who has made a booking. Customer can submit a review in the Reviews table to help other travelers.
Bookings	Bookings gives the information about the booking such as	The PK BookingID is a FK in Orders to tell us if a booking was

	who has made the booking, when the booking was made, what was booked, no. of visitors, etc.	completed and if the payment is made.
TouristAttractions	This will have the details about places to visit, best time to visit and other relevant information	
Restaurants	This will have details about the restaurant such as address, phone no., city located in etc.	PK RestaurantID is used as FK in Reviews to allow users to review or rate a restaurant.
Reviews	Ratings and reviews always help fellow travelers. Reviews will contain details such as ratings and comments about all the hotels, restaurants and organizers.	
EventOrganizers	It will have all the details of the organizers, events, prices etc. to make the travel easy and enjoyable.	PK OrganizerID is a FK in Bookings and Reviews. Customers can book an event with an organizer and rate and review them as well, according to their experiences.
Address	It is used to store all the address of customers, hotels, restaurants, and organizers.	PK Address ID is used as FK in Customers, Restaurants, Orders, Organizers, TouristAttractions and Hotels which stores all the contact information.
PaymentMethods	It tells us the type of the payment when a booking is made by a customer.	PK PaymentMethodID is a FK in Orders to track a payment if the need be.
Orders	Orders will have all the details when a booking is confirmed and a payment is made.	
BookingType	This tells us what is the type of booking such as a restaurant booking, hotel booking or an event booking.	BookingTypeID is a FK in Bookings which stores all the information about a booking.
RoomBookings	This a look-up table that keeps track of the room bookings between a date interval.	