HACETTEPE UNIVERSITY DEPARTMENT OF COMPUTER ENGINEERING



BBM 473 FALL 2019 DATABASE MANAGEMENT SYSTEMS LABORATORY

ADVISOR: Arş. Gör. Merve Özdeş, Arş. Gör. Nebi Yılmaz

HOTEL RESERVATION SYSTEM PROJECT DESIGN

PROJECT MEMBER

21527142 - Doğukan Berat KARATAŞ21527381 - Meltem TOKGÖZ21527189 - Yahya KOÇAK

HOTEL RESERVATION SYSTEM

Project Definition:

Our project is an application with the theme of the Hotel Reservation System. Our system has two main elements. The first part is the users and the second part is the hotels. Users consist of 3 different classes as a customer, hotel managers, and hotel employees. Customers are divided into 2 registrants and non-registrants. All customers in our system can search and review hotels, but only registered customers can book rooms or organizations. In addition, customers can filter rooms according to some features. They can also rate the hotel based on the satisfaction of the hotel.

The other main structure of the project is the hotels that have rooms and organizations. Hotel managers and staff manage the rooms, add new rooms, update the room's usage status (Maintenance, cleaning, etc.) and delete the rooms. They can organize events for certain days. Administrators can monitor the account status based on the availability of their rooms. Only the managers can see the hotel's account information. The hotel rooms are divided into special and standard rooms. Special rooms also include meal service.

Project Main Functions:

- 1. Hotels and Users (Customers, Managers, and Employees) can register for the system.
- 2. Registered Customers, Managers, and Employees log into the system.
- 3. Manages Hotels and Users profiles.
- 4. Customers can review the hotel, the rooms, and organizations.
- 5. Registered Customers can book a hotel room and the organization.
- 6. The Employee works at the hotel, so they manage rooms and reservations.
- 7. The Manager does what the employees do, but additionally manages the hotel's financial budget.
- 8. Registered Customers can add extra features to the rooms they book.
- Registered Customers can add food services to the special rooms where they will book

- 10. The rooms are added, updated and deleted by the hotel employee.
- 11. Organizations are added, updated and deleted by the employees of the hotel they are connected to.
- 12. Customers can filter the rooms according to the feature they set.
- 13. Registered Customers can rate the hotel.

Entity Sets & Relations Role:

Hotel: The main system user who adds rooms and organizations to the system and enables registered customers to make reservations.

Customer: One of the system users who can search the hotel and filter them according to the features they want.

Registered: Customers registered in the system. Unlike customers, they can book hotels and organizations.

Employee: The hotel employee who makes maintenance and bookings for hotel rooms.

Manager: The person who manages the hotel and controls the financial affairs.

Room: The structures reservation by registered users within the hotels.

SpecialRoom: Room type with extra food service.

StandartRoom: Room's type.

Organization: Various events organized by hotels.

Balance: The financial account information of the hotel and registered users.

Reservation: Registered users can book hotels.

ExtraService: Additional features that users can add to rooms according to their wishes.

FoodService: Features that can be added according to the wishes of users who book a special room (breakfast, dinner, etc.).