

FACULDADE DE ENGENHARIA DA UNIVERSIDADE DO PORTO

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Hotel BDAD

Bases de Dados
2018/2019



2MIEIC03_04:

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Introduction

For the development of our project of the curricular unit of "*Bases de Dados*", we had the opportunity to choose an appropriate theme to create and analyze a database. This way, we decided to choose a defiant theme, but also useful and present in our day-to-day life. Our choice was about a database to manage a hotel's website, focusing on booking reservations, as their related information.

In the database, we can access and manipulate information relative to clients, reservations, rooms, user's avaliations, and others. We tried to group and organize the data at the most simple and appealing way, as is possible to see in the next page of this report.

Project Specification

Client

Any Hotel client in the hotel's website's database is a **Client**. Each client has a unique ID, which is the class's primary key. We also have access to other information, such as, name, email, password, tax number (for payment informations) and photo. A client can reserve multiple **rooms** through **reservations**.

Reservation

All **reservations** also have an unique id, a startDate and endDate, as well as an associated finalPrice, and a isPaid indicator in case the **Client** decides to pay upfront. This finalPrice attribute can be calculated by multiplying the number of rooms by the number of nights spent (endDate - startDate) and finally adding any extraCost.

ReservationType

This module specifies what type of reservation the client intends, and depending on the type, there is an associated extraCost. The type can vary from all included, full board, half board and only accommodation.

Guest

Each Reservation also includes **guests**, which represent the people that are staying in the hotel. Guests only have name as their attribute. The Client itself, who made the reservation, might not be part of this guest list.

Cancelling

If a client decides to cancel a reservation he had previously booked, he can do it on a certain date.

Room

Regarding the **Rooms** class, each **Room** has a number, a certain capacity and a price (per night). The **Room** class is a generalization of **MeetingRoom** and **Bedroom**, each with its own associated class that specifies its type.

MeetingRoomType and BedroomType

These modules specify the meeting room and bedroom type accordingly. The client has access to the room's features, photos and a small description.

Comment

After the client leaves the hotel, he can evaluate those days he passed there. In a rating between 0 and 5, and a small text (with a date), the client could explain to others how good was his stay in the hotel, to help people decide if they will make a reservation there in the future, and help the managers to improve the hotel's quality.

