“Hotel

application”

Team “FIG”

# Introduction

“Hotel application” is a console application and was developed as a team project for the OOP Course in Telerik Academy. The following description contains information about the team members, brief programming details, and the URL of the team repository.

# Team “FIG” members

The team's members have been chosen by the Academy and include the following students:

* Antonina Qnkova ([antonina.qnkova](https://telerikacademy.com/Users/antonina.qnkova))
* Daniela Simeonova ([danisio](http://telerikacademy.com/Users/danisio))
* Georgi Petrov ([BladeScar](https://telerikacademy.com/Users/BladeScar))
* Mariqn Draganov ([mdraganov](https://telerikacademy.com/Users/mdraganov))
* Mihail Seykov ([MSeykov](https://telerikacademy.com/Users/MSeykov))
* Nikolai Iliev ([divided.zero](https://telerikacademy.com/Users/divided.zero))
* Yordan Georgiev ([yordansg](https://telerikacademy.com/Users/yordansg))
* Zlatimir Mihaylov ([mihaylov](https://telerikacademy.com/Users/mihaylov))

You can read the source code:

<https://github.com/mdraganov/FigHotelSystem>

# Program description

The application is designed for making reservations, holding information about all clients, staff, rooms and services in a hotel. It is intended for use by the receptionist and manager. The application is protected from the introduction of invalid data, wrong booking and check-out of client.

# Structure of the program

* **6 interfaces**
  + IAvailable
  + ICleanable
  + IFeatures
  + IPerson
  + IPrice
  + IReservationable
* **22** **classes**
* **3 abstract classes**, one of them has **3 levels of depth in inheritance**
  + Person
    - Client
    - Employee
      * Bellboy
      * Maid
      * Manager
      * Receptionist
  + Room
    - Apartment
    - OneBedroom
    - TwoBedroom
    - Studio
  + Service
    - Fitness
    - Parking
    - Sightseeing
    - Spa
    - SwimmingPool
* 7 **custom exception classes**
  + ClientIDException
  + DateReservationException
  + EmployeeTypeException
  + ReservationException
  + RoomAvailableException
  + RoomBedroomsException
  + RoomNumberException
* **polymorphism usage –** in method Hotel**.** PrintInfo()
* **1 structure –** Reservation
* **5 enumerations**
  + Employee
  + Features
  + Menu
  + Rooms
  + SpaProcedures
* **1 event** - Console.CancelKeyPress

# Class Diagram

