

Hotel Plaza Project



In groups...

The Plaza is a Hotel that is driven by a very enthusiastic staff. The Hotel is renting out rooms to guests. The rooms are identified by a room-number and is located on a specific floor. Furthermore, the room should have information such as: Number of beds, whether there is Internet access, and a price per night. Guests are registered by their name (First/Last), address, and telephone-number. As mentioned, the hotel has a very competent staff. The staff is registered by a title, name (First/Last), and telephone-number. When the staff creates a booking for a customer (Guest), the system needs to record the room- number, start-date, end-date, number of nights, and the name of the guest which has booked the room.

Business:

- Make a Gantt chart for the whole project
- Make a stakeholder analysis for the project
- Make a Business canvas model
 - Identify what the hotels product is - to ensure our solution will serve that value
- Make a swot analysis so the Hotel is prepared for competition and future development

Design:

- Define the functionality from the narrative above
 - Use Case(s) (3-4)
 - Use Case Descriptions (your choice)
- Make a rough model of the system
 - Use Case Model
 - Domain Model
- Model actor -> system interaction
 - System Sequence Diagram (min. 2 use cases)
- Model system interactions
 - Sequence Diagram (min. 2 use cases)
- Create a static model
 - Class Diagram

Construction:

Write the classes (based upon your class diagram)

Make the fields in class *Room*, *Guest* and *Staff* private and add getters and setters. If necessary, change the methods you have made in your classes, to handle the encapsulation.

Add code to your classes so that you will have the following functionality:

- you should be able to change the price of a room
- you should be able to change all the fields in a guest object
- you should be able to change the last name, title, phone number and salary in a staff object
- you should be able to extend a booking by days.

In your main

Make a menu where you can choose to create rooms, guests, staff members and bookings.

Use a Switch so that you return to the menu, every time you have created an object. You should be able to end the program in the menu.

Make files and save rooms, guests, staff and bookings so that they are available when you run the program next time.

Create at least 6 rooms (2 one bed, 2 double beds, 2 suites)

Create staff (at least: one director, one receptionist, one cleaning lady, one accountant), with the appropriate field values

Create at least 8 guests for the rooms

Make bookings for the rooms so that you can print the bill (on console, formatted nicely!)

Remember to update your class diagram along the way!!

Hand-in is Sunday, December 5, 2021 on Fronter

Tips:

- *Create one class at a time*
- *Test it by creating an object*
- *Make a toString method in the classes so that the object can print itself*
- *Test the functionality methods on the objects*
- *Make the menu (Switch) and out comment all choices except the one you are working on*
- *Make the choices/methods one at a time*
- *TEST ALL THE TIME!!!!!!!!!!!!!!*