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**Gebze Technical University
Computer Engineering**

CSE 222 - 2018 Spring

HOMEWORK 01 REPORT

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1 INTRODUCTION

1.1 Problem Definition

Design and implement simple hotel management system. The System has users that receptionist and guests. Guests and receptionist has abilities that can book a room, cancel booking. Receptionist have also abilities that check in and check out. Program need to keep this all data on csv file. CSV file must include record that which rooms reserved by whom. So that, program will create **2 CSV files** that first one is system user's login info and second one hotel, guest, checkin/out and room status info. System user can choose 2 choice that **DefaultHotel**(20 rooms) / **CustomHotel**(50Room) when login system. This custom hotel will only create main class for tests.

When if users choose default hotel, they see login menu that **Guest Login (1)** and **Receptionist Login(2)**, they also can choose that back to **Hotels's Menu(0)**.

When if a user choose Guest Menu, program will ask guest name for login system. Guest can input own name. Program will create a **guestID**, and will keep this informations. After enter own name, they can see 3 choose that **Booking(1)**, **Cancel Booking(2)** and **Go Back(0)**.

When if Guest choose Booking Menu, system will find first empty room and will reserved this room(System is checking from room number 1 until last). So if Guest has been booked successfully or not, program will show that on interface as reservation info(GuestID, GuestName, RoomNumber).

When if Guest choose Cancel Booking Menu, system will check if it's really reserved and will cancel booking. If it's successfully(or not) end, program will show that. Guest must know own guest ID if they can cancel booking.

When if users choose Receptionist Menu, system will ask receptionist login info. It's default as **name:"admin" pass:"admin"**. If receptionist has been login successfully, will see 6 choose on receptionist menu that **Booking(1)**, **Cancel Booking(2)**, **CheckIn(3)**, **CheckOut(4)**, **ShowBooking(5)**, **GoBack(0)**.

For Booking and Cancel Booking Menu is similar like Guest. If receptionist choose booking program will ask guest name for make booking. At the same time, system will keep same information like guest.

If receptionist choose checkIn or checkOut menu, System will ask GuestID and RoomNumber. After system check this information, if there are a booking given info, system will make check in. if there are no booking, system will immediately create a booking and will make check in. If receptionist choosed checkout, system will cancel reservation or delete guest record if there are a reservation.

1.2 System Requirements

Program have 2 main class that Hotel class implementing Hotel interface and System Users Abstract Class implementing SystemUsers Interface. Guest class and Receptionist class extends System Users Class.

You can execute Hotel Management System on intellij 2017.3.4 with JDK-8. You will need to input file named "input.txt" in project folder. If you want to enter inputs on console, you need to change "Scanner" parameter as "System.in" in Main class.

Program will create 2 CSV file each exexute program. If you execute program again, system will remove old datas.

CSV files will keep bookings info and users info who login that first one named **"HotelID+statusOfRooms.csv"** include :

"HotelID,GuestID,GuestName,RoomNo,isReserve,CheckInOrOut"

second one named **"HotelID+systemUsers"** inculde :

"HotelID,ID,Name"

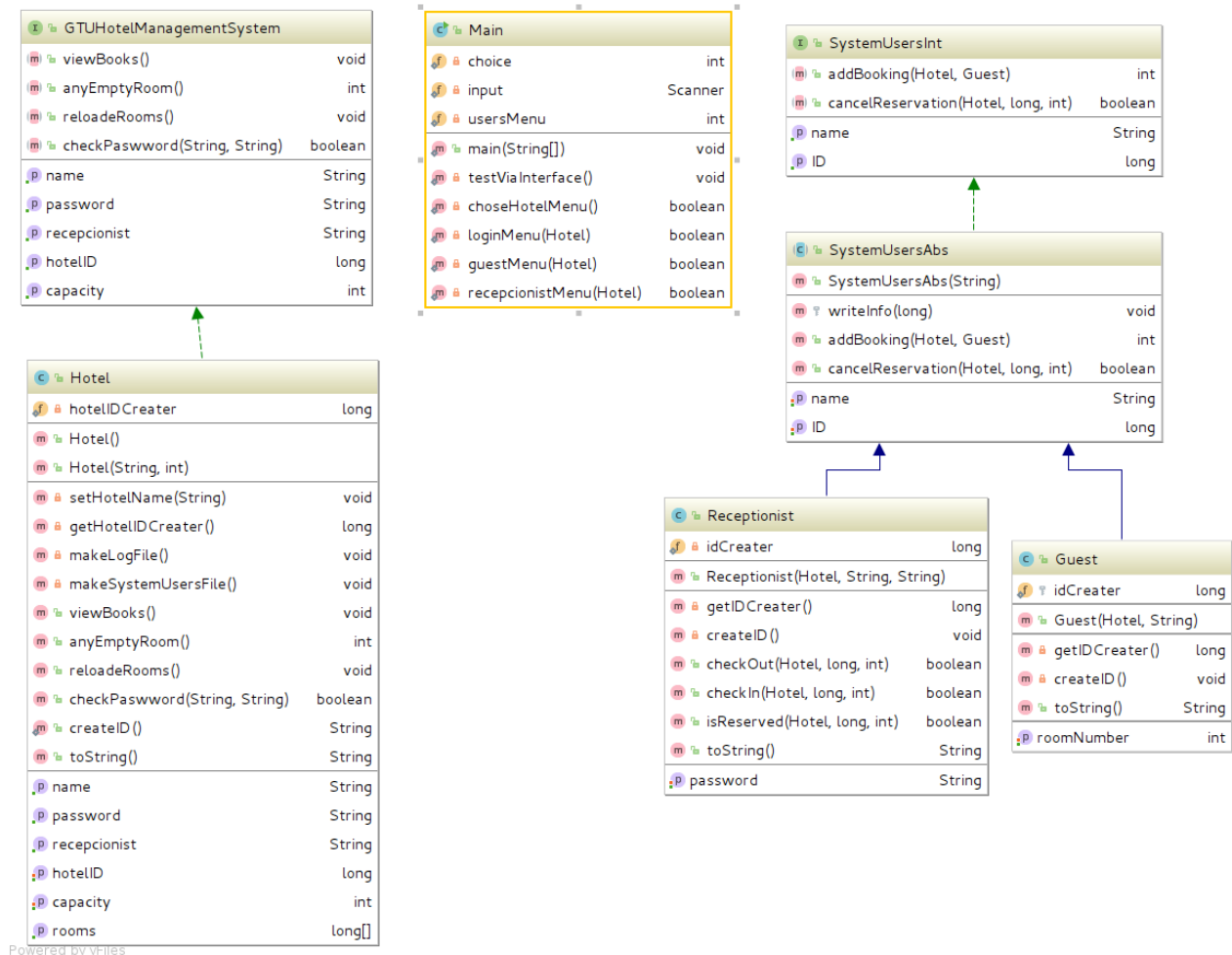
If there are any wrong input program will catch error and will stop the program if need. If you want to change inputs, you must change to "input.txt" content. You can use all features said homework or problem definition. There are no known errors.

Don't exeute all test at the same time, exeute them one by one. Becouse program won't delete csv files for TA viewed. If you execute all at the same time, you can see some csv files in project folder.

You can follow menus while prepare inputs in input file for your tests. Menu look like that at **Running Results in Result** title. Browse it.

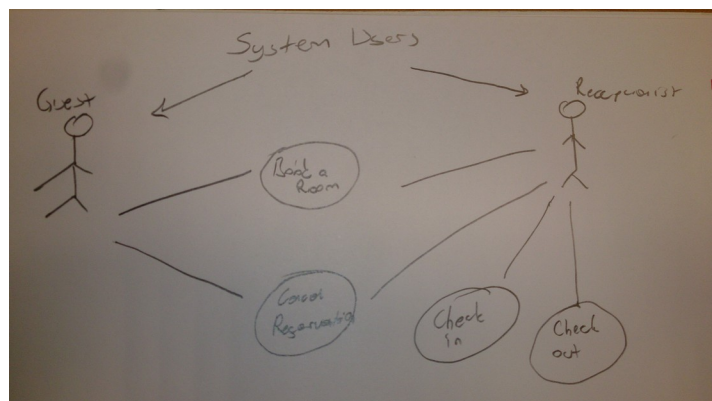
2 METHOD

2.1 Class Diagrams



UML Diagram has been created by IntelliJ. There are 2 Interfaces for Hotel and SystemUsers classes. SystemUsers classes have 2 subclasses that Receptionist and Guest as relative Hotel Class.

2.2 Use Case Diagrams



2.3 Other Diagrams (optional)

There are no diagram more.

2.4 Problem Solution Approach

All problems has been solving. All methot ise executing. There are no more, just woring correctly. You can see menu interface while running program.

3 RESULT

3.1 Test Cases

All tests has been ended succesfully. If there are any error, it will catch exception.

For Guest;

Booking tested succesfully

Cancel Reservation tested succesfully

For Recepcionist

Booking tested succesfully

Cancel Reservation tested succesfully

Check in tested succesfully

Check out Reservation tested succesfully

Other tests(like polymorphism) in before terminate program.

3.2 Running Results

Follow in inut.txt file

Hotel Management System

1 - Enter to NEW default Hotel

2 - Create NEW hotel

0 - Exit

Hotel Management System - Sinan's Hotel

1 - Guest

2 - Recepcionist

0 - Back to hotel menu

Enter your name(only one word!)

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

GuestName1 has booked a new room succesfully.

Reservation info :

Guest ID : 101

Room Number : 1

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

1 - Guest

2 - Recepcionist

0 - Back to hotel menu

Enter your name(only one word!)

Hotel Management System - Sinan's Hotel - Guest##

- 1 - Book a room
- 2 - Cancel your reservation
- 0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

GuestName2 has booked a new room succesfully.

Reservation info :

Guest ID : 102

Room Number : 2

Hotel Management System - Sinan's Hotel - Guest##

- 1 - Book a room
- 2 - Cancel your reservation
- 0 - Back to login menu

Enter to GUEST ID:

Enter to ROOM NUMBER that has booked:

Reservation has been canceled succesfully

Hotel Management System - Sinan's Hotel - Guest##

- 1 - Book a room
- 2 - Cancel your reservation
- 0 - Back to login menu

1 - Guest

2 - Recepcionist

0 - Back to hotel menu

Enter your name(only one word!)

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

GuestName3 has booked a new room succesfully.

Reservation info :

Guest ID : 103

Room Number : 1

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

1 - Guest

2 - Recepcionist

0 - Back to hotel menu

Enter recepcionist name(hint:'admin')

Enter recepcionist password(hint:'admin')

Wrong password

1 - Guest

2 - Recepcionist

0 - Back to hotel menu

Enter recepcionist name(hint:'admin')

Enter recepcionist password(hint:'admin')

##Hotel Management System - Custom Hotel - Recepcionist##

1 - Book a room

2 - Cancel Booking

3 - Check in

4 - Check out

5 - Show booking

0 - Back to login menu

##Hotel Management System - Custom Hotel - Recepcionist - Booking##

Enter guest name (only word):

GuestName4recepconasked has booked a new room succesfully.

Reservation info :

Guest ID : 104

Room Number : 3

##Hotel Management System - Custom Hotel - Recepcionist##

1 - Book a room

2 - Cancel Booking

3 - Check in

4 - Check out

5 - Show booking

0 - Back to login menu

1. room is full.

2. room is full.

3. room is full.

4. room is empty.
5. room is empty.
6. room is empty.
7. room is empty.
8. room is empty.
9. room is empty.
10. room is empty.
11. room is empty.
12. room is empty.
13. room is empty.
14. room is empty.
15. room is empty.
16. room is empty.
17. room is empty.
18. room is empty.
19. room is empty.
20. room is empty.

##Hotel Management System - Custom Hotel - Receptionist##

- 1 - Book a room
- 2 - Cancel Booking
- 3 - Check in
- 4 - Check out
- 5 - Show booking
- 0 - Back to login menu

##Hotel Management System - Custom Hotel - Receptionist - Booking##

Enter guest name (only word):

GuestName5repcionAsked has booked a new room succesfully.

Reservation info :

Guest ID : 105

Room Number : 4

##Hotel Management System - Custom Hotel - Receptionist##

- 1 - Book a room
- 2 - Cancel Booking
- 3 - Check in
- 4 - Check out
- 5 - Show booking
- 0 - Back to login menu

###Hotel Management System - Custom Hotel - Recepcionist - Cancel Booking##

Enter guest id :

Enter room number:

cancelled

###Hotel Management System - Custom Hotel - Recepcionist##

- 1 - Book a room
- 2 - Cancel Booking
- 3 - Check in
- 4 - Check out
- 5 - Show booking
- 0 - Back to login menu

###Hotel Management System - Custom Hotel - Recepcionist - Check in##

Enter guest id :

Enter room number:

Checked in

###Hotel Management System - Custom Hotel - Recepcionist##

- 1 - Book a room
- 2 - Cancel Booking
- 3 - Check in
- 4 - Check out
- 5 - Show booking
- 0 - Back to login menu

###Hotel Management System - Custom Hotel - Recepcionist - Check in##

Enter guest id :

Enter room number:

There are NOT reservation, so get new record.

Checked in

109 has booked a new room succesfully.

Reservation info :

Guest ID : 106

Room Number : 4

##Hotel Management System - Custom Hotel - Recepcionist##

1 - Book a room

2 - Cancel Booking

3 - Check in

4 - Check out

5 - Show booking

0 - Back to login menu

##Hotel Management System - Custom Hotel - Recepcionist - Check in##

Enter guest id :

Enter room number:

Checked in

##Hotel Management System - Custom Hotel - Recepcionist##

1 - Book a room

2 - Cancel Booking

3 - Check in

4 - Check out

5 - Show booking

0 - Back to login menu

##Hotel Management System - Custom Hotel - Recepcionist - Check in##

Enter guest id :

Enter room number:

Checked in

##Hotel Management System - Custom Hotel - Recepcionist##

- 1 - Book a room
- 2 - Cancel Booking
- 3 - Check in
- 4 - Check out
- 5 - Show booking
- 0 - Back to login menu

##Hotel Management System - Custom Hotel - Recepcionist - Check out##

Enter guest id :

Enter room number:

checked out

##Hotel Management System - Custom Hotel - Recepcionist##

- 1 - Book a room
- 2 - Cancel Booking
- 3 - Check in
- 4 - Check out
- 5 - Show booking
- 0 - Back to login menu

- 1 - Guest
- 2 - Recepcionist
- 0 - Back to hotel menu

Hotel Management System

- 1 - Enter to NEW default Hotel
- 2 - Create NEW hotel
- 0 - Exit

##Hotel Management System - Custom Hotel ##

1 - Guest

2 - Receptionist

0 - Back to hotel menu

Enter your name(only one word!)

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

TA has booked a new room succesfully.

Reservation info :

Guest ID : 107

Room Number : 1

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

TA has booked a new room succesfully.

Reservation info :

Guest ID : 107

Room Number : 2

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

TA has booked a new room succesfully.

Reservation info :

Guest ID : 107

Room Number : 3

Hotel Management System - Sinan's Hotel - Guest##

1 - Book a room

2 - Cancel your reservation

0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

TA has booked a new room succesfully.

Reservation info :

Guest ID : 107

Room Number : 4

Hotel Management System - Sinan's Hotel - Guest##

- 1 - Book a room
- 2 - Cancel your reservation
- 0 - Back to login menu

Hotel Management System - Sinan's Hotel - Guest - Booking##

TA has booked a new room succesfully.

Reservation info :

Guest ID : 107

Room Number : 5

Hotel Management System - Sinan's Hotel - Guest##

- 1 - Book a room
- 2 - Cancel your reservation
- 0 - Back to login menu

- 1 - Guest
- 2 - Recepcionist
- 0 - Back to hotel menu

Hotel Management System

- 1 - Enter to NEW default Hotel
- 2 - Create NEW hotel
- 0 - Exit

User information:- com.hotelSinanElveren.Guest class :

It is GUEST

ID : 108

Name : test1

RoomNum : 0

Polymorphism has been tested succesfully

User information: - com.hotelSinanElveren.Receptionist class :

It is RECEPCIONIST

ID : 503

Name : admin

password : admin

Polymorphism has been tested succesfully

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 - Subtitles -> 14pt, 1.5 line break
 - Paragraph -> 12pt, 1.5 line break