

Project Phase One *Due Date: Sunday. 20/1/2023 by 11:30 pm (on ITC)*

Notes:

The Project Phases should be submitted by the due date and time (Late Project phases will not be accepted for any reason) on ITC.

The project phases are individual student effort and copying those phases will be treated as a cheating attempt, which may lead to FAILING the course.

Hotel reservation system

In this Phase, add one new data field called path and two methods as in the following UML (new methods and variable are highlighted with red color):

Hotel
- hotelName: String - hotelAddress: String - <u>MAX_ROOM_NUMBER</u> : int - rooms: Room[] - scan: Scanner
+ Hotel() + Hotel(String name, String adress, int maxRoomNumber, path: String) - readDataFromFile(): void + updateCustomersFile: void + reserveRoom(): void - selectRoomType(int roomNumber): void + changeRoomType(): void + deleteReservedRoom(): void + deleteAllReservedRooms(): void + showAllReservedRoomsInformation(): void - checkRoomType(String roomType): Boolean - askForRoomNumber(): int - listAvaliableRooms(): void +getName(): String +setName(String name): void +getAddress(): String +setAddress(String address): void

In this Phase, you need to consider the following:

- You have a file called *customers.txt* as follow:

```
Sami,6,Single  
Ahmad,7,Deluxe  
Ali,11,King  
Rana,15,King
```

- *Once the Hotel object is created, you should download the reserved rooms information from the file to the rooms array.*
- *You need to update the file before closing the menu. For example, if the customer deleted any room or more new rooms have been reserved, you need to update all these new information to the file.*
- ***Use exception handling with try catch blocks wherever you think is important to prevent any wrong inputs from crashing the system.***

Sample run:

Reserved rooms information have been updated from the file

Please select an option (1-7):

- 1- Reserve an available room.
- 2- Change room type
- 3- Delete the reserved room.
- 4- Delete all reserved rooms.
- 5- Show all reserved rooms information.
- 6- Exit System.

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Room Number	Room Type	Customer Name
6	Single	Sami
7	Deluxe	Ahmad
11	King	Ali
15	King	Rana

Please select an option (1-7):

- 1- Reserve an available room.
- 2- Change room type
- 3- Delete the reserved room.
- 4- Delete all reserved rooms.
- 5- Show all reserved rooms information.
- 6- Exit System.

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please enter a valid room number between 1 and 20 :

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Thank you, the room number: 6 has been deleted

Please select an option (1-7):

- 1- Reserve an available room.
- 2- Change room type
- 3- Delete the reserved room.
- 4- Delete all reserved rooms.
- 5- Show all reserved rooms information.
- 6- Exit System.

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you are exiting the system, Thank you!
All new informations have been updated to the file