



**King Saud University**  
**College of Computer and Information Sciences**  
**Department of Information Technology**

**CSC 113 - Project**

**Second Semester 1444-1445**

**Hotel Reservation**

**Phase 2**

<b>Section #</b>	<b>NAME</b>	<b>ID</b>	<b>Division of work a</b>
73033	<i>Aroub Alsalihi</i>	444200560	<i>introduction</i> Describing GUI components & screenshots File, GUI
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## Project introduction:

The online hotel reservations system is a useful system that allows the user to book hotel rooms. It provides the user with a menu from which he can choose options such as viewing the available rooms in the hotel, placing a new reservation, canceling the reservation, and searching for reservations. The room has two types: Regular room or Suite, and each has its own features.

We have modified methods: **duration()** and **totalPrice()** in **class Reservation** that if the customer decides to check in and out in the same day the method will return the room's default price instead of return 0 , because the duration method calculates the duration in the following formula :  $\text{checkOut} - \text{checkIn}$ .

We have also modified the **constructor** of **class Reservation** to check if the room is already booked; if it is already booked, a message will appear and the new room will be null, and in method **addReservation** in **class hotel**, we include an if statement to check if the room for this reservation is not null, then the room will be added to the array of reservations, but if the room is null, it will not be added to the array.

## Exception handled:

We added a **NumberFormatException** which is used to handle situations where the user enters a room number, and it cannot be successfully converted into a numeric format but encounters issues with the input format.

We also defined an exception class with the name **ReservationNotFound**, as when the user searches for a reservation by entering a room number, if there is no reservation with the entered room number, the exception will be thrown.

## Manage files:

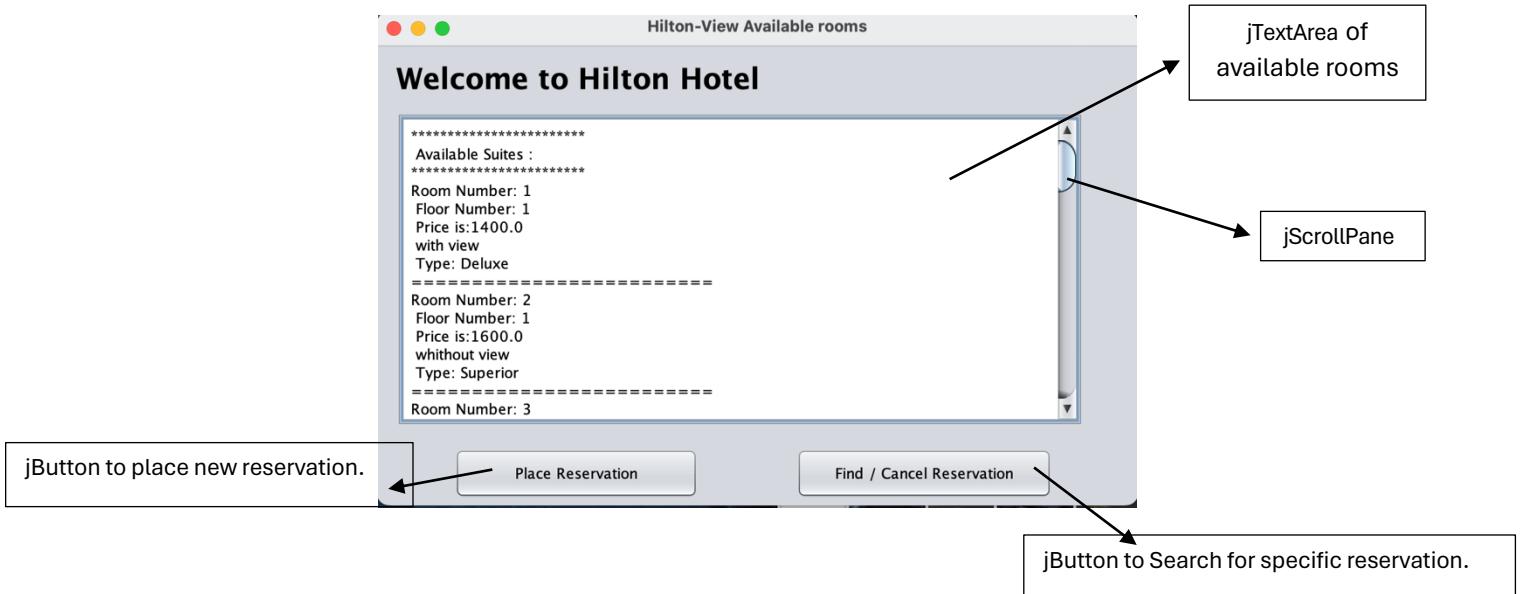
We include objectFile which is **saveHotel** and **readHotel**, saveHotel method writes all the Hotel information including list of reservations and list of rooms while the readHotel method is to display the customer information.

The GUI has four frames as followed:

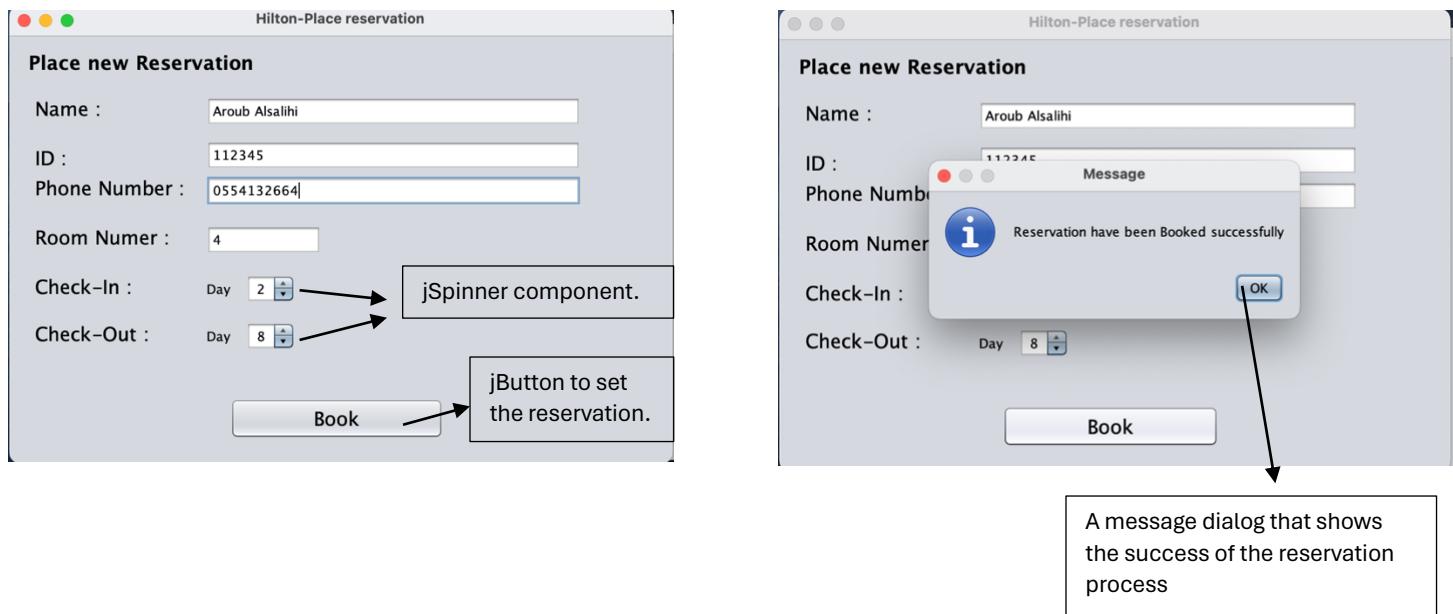
- First Frame for display available rooms.
- Second Frame for place new reservation.
- Third Frame for find and cancel specific reservation.
- Fourth Frame for display customer information.

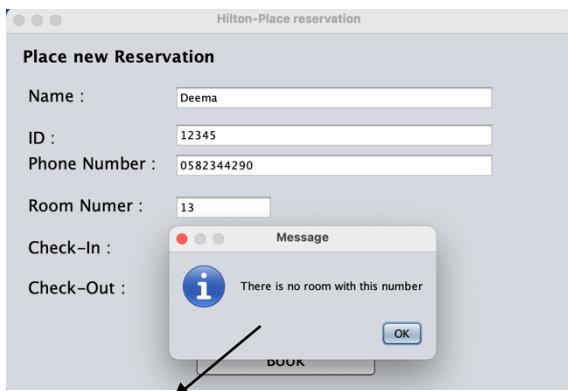
## Screenshots of GUI & Describing components:

1. First Frame: Displays available Rooms.

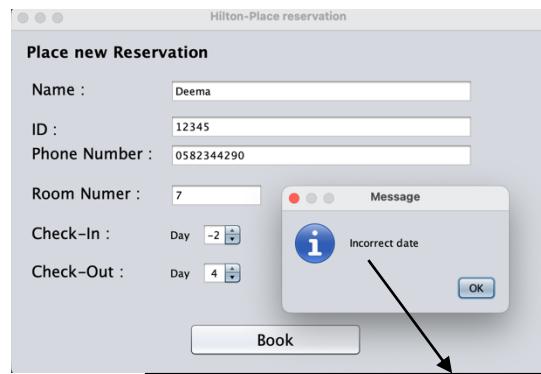


2. Second Frame: Place new reservation.



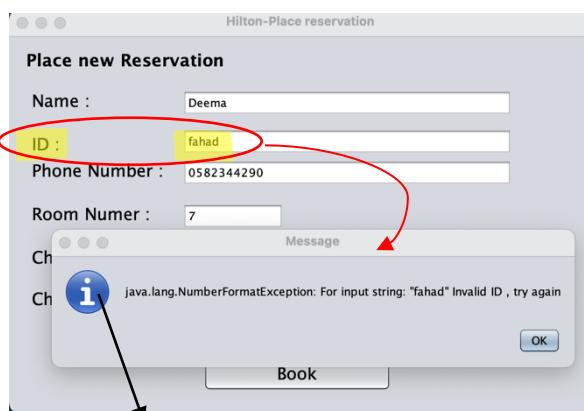


A message dialog will appear when the user enters a room number that doesn't exist in the hotel.

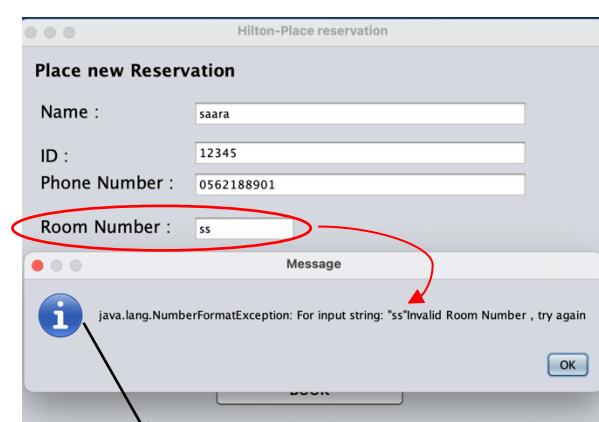


A message dialog when the user enters an invalid date:  
invalid date is one of the following:

1. negative number
2. check-in day is greater than the check-out day.
3. check-in or check-out day is equal to 0



An unchecked exception message when you enter string instead of integer for the ID ( NumberFormatException).



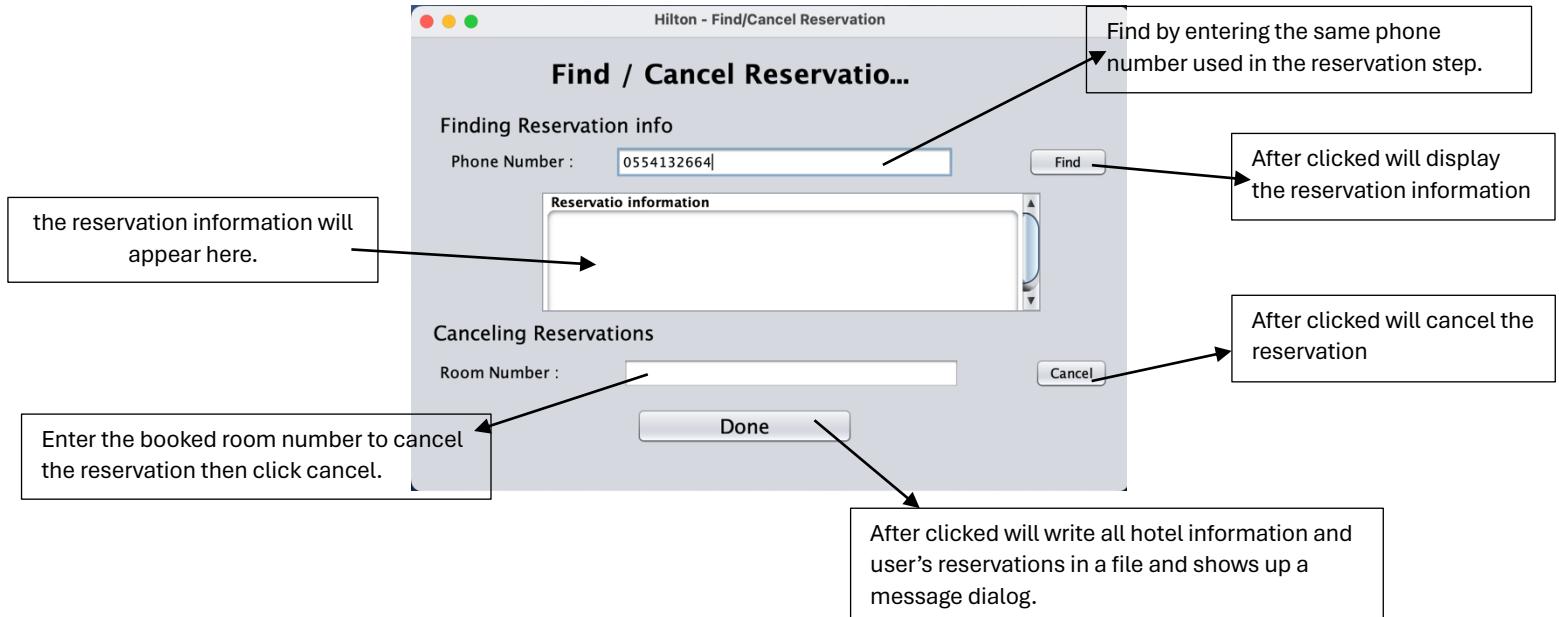
An unchecked exception message when you enter string instead of integer for the Room number ( NumberFormatException).



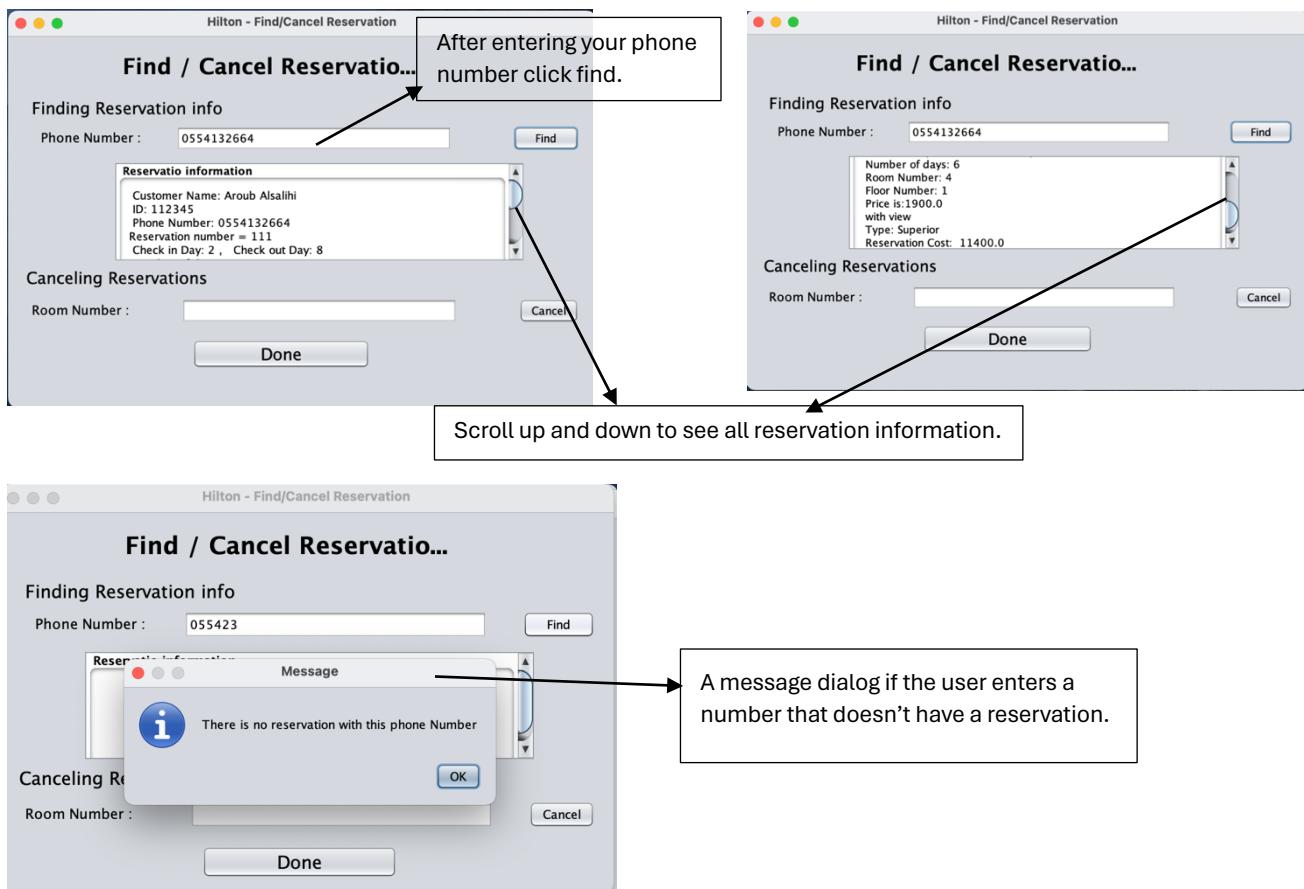
Two message dialog that will show up if the user enters a room number that already booked before and informs that the reservation can't be done.



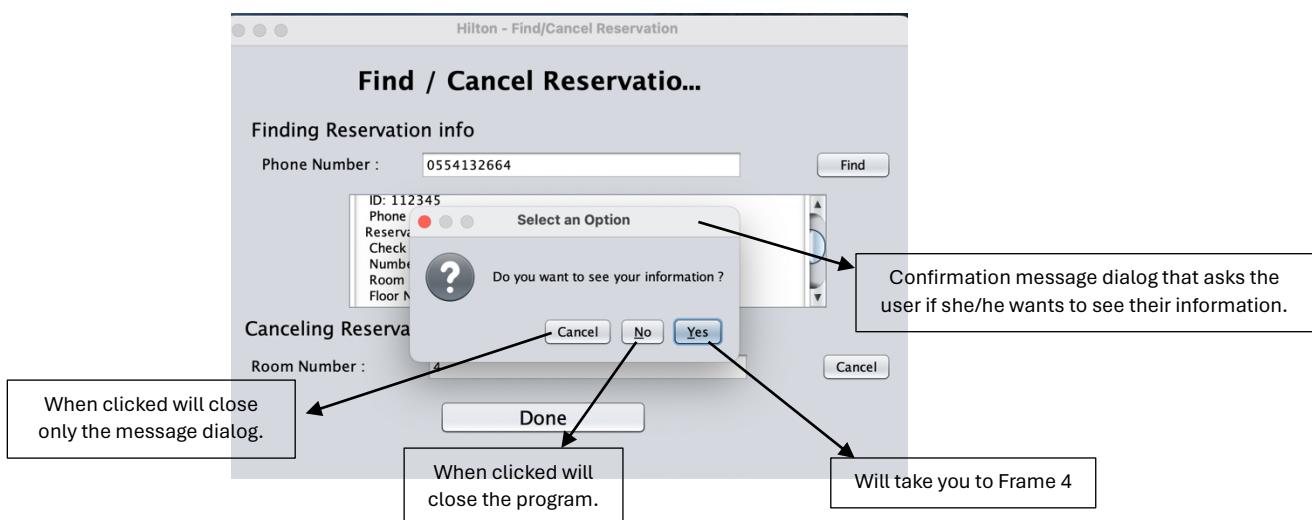
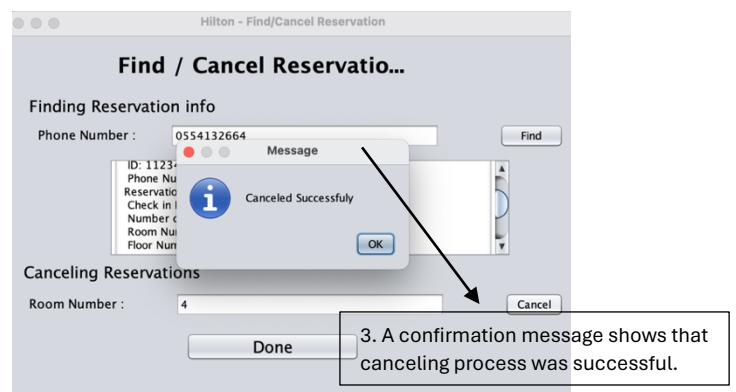
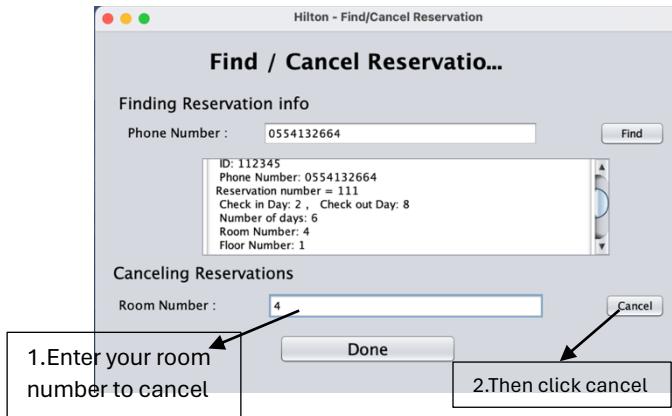
### 3. Third Frame: Find and cancel specific reservation.

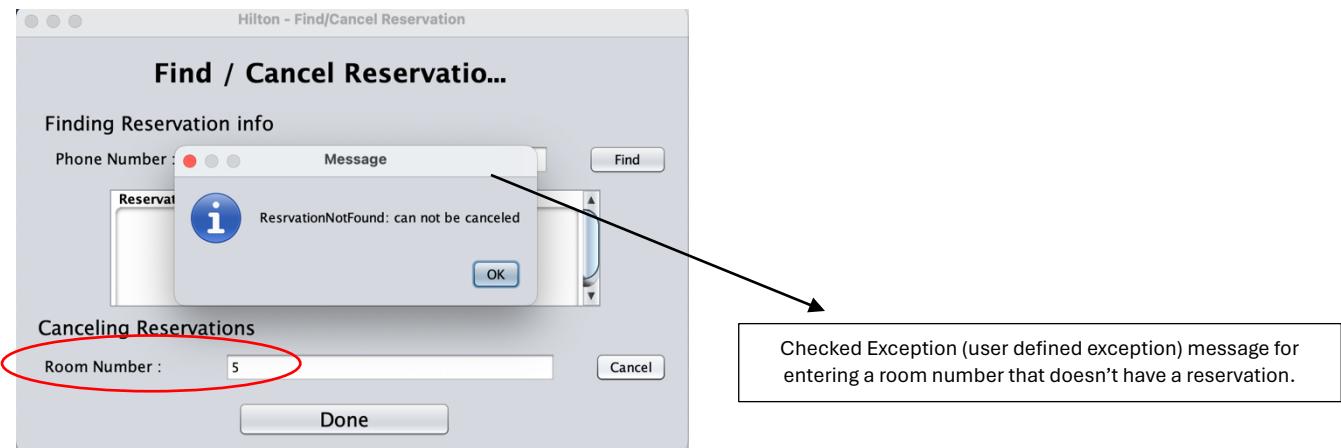


- Find Reservation:



- Cancel Reservation:





#### 4. Forth Frame: Display Customer information.

