

User Manual

The Hotel management application includes four main pages which are displayed in the left vertical taskbar of the application and arranged downward, such as Homepage, Room Info, Customer Info and Reservation respectively. Furthermore, this application also contains several of functions that support hotel staffs to manage easier.

A. Homepage

First of all, when successfully running the application, a homepage will display to user. The Homepage presents the number of available of each type of hotel room in which simplifies the management of the available rooms. An Available status showing in Room Info page will be counted and grouped by Room Type, then shows the number of available rooms on Homepage.

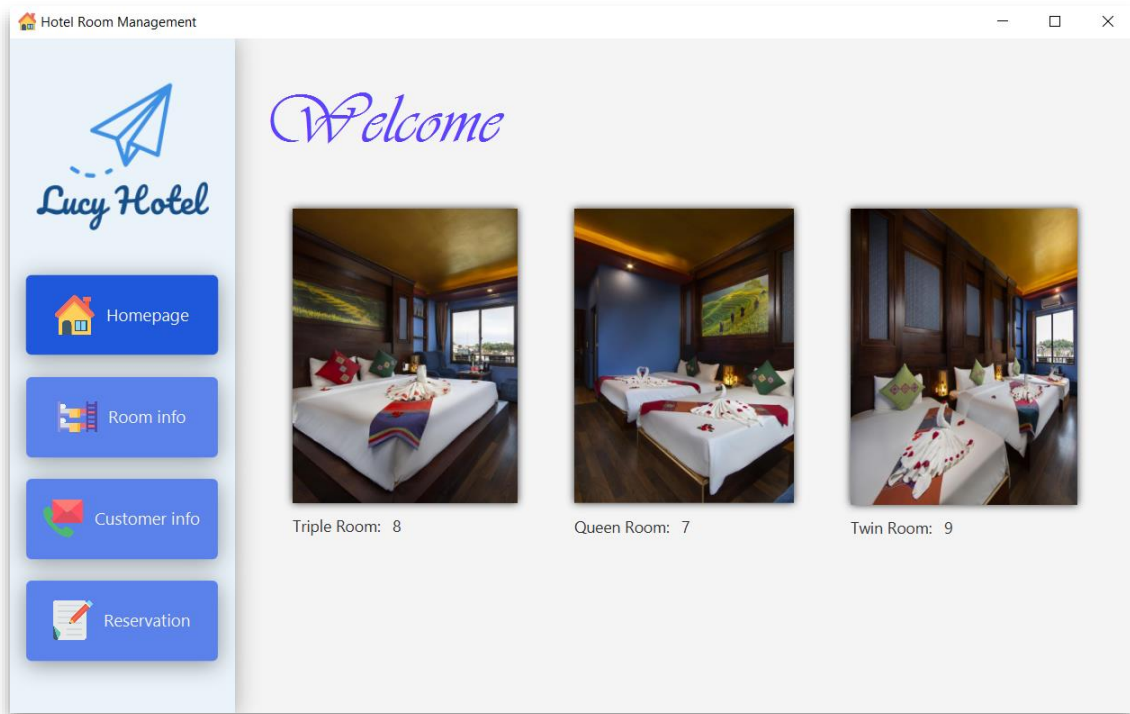
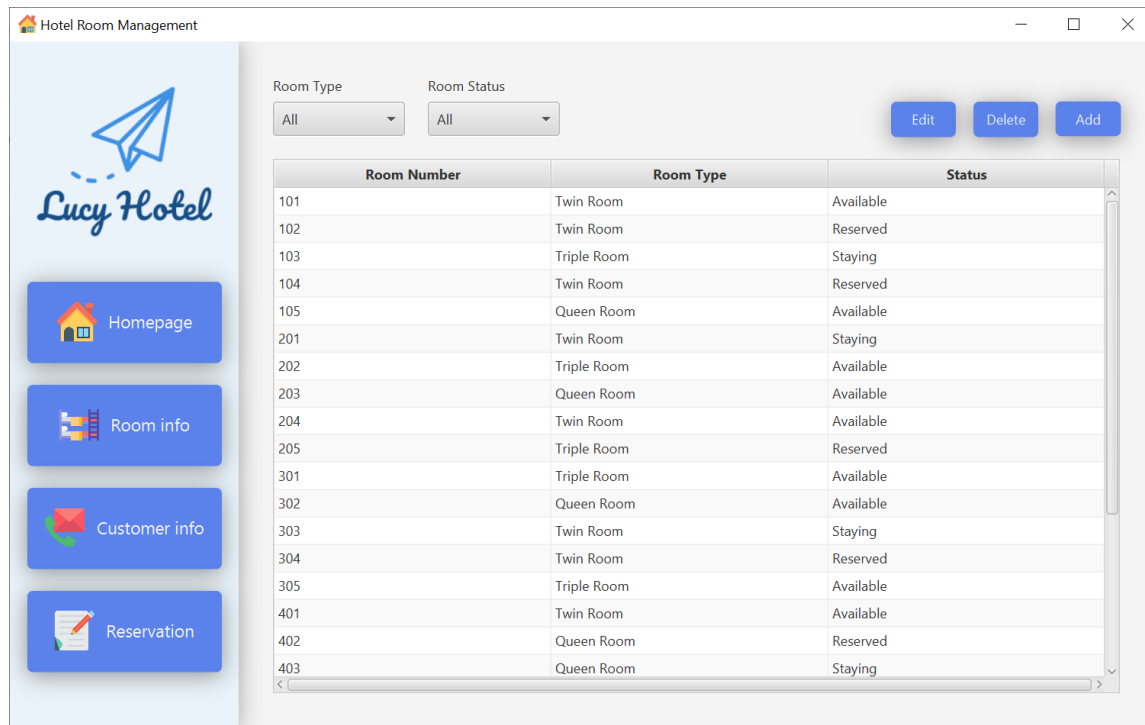


Figure 5-1: Homepage

B. Room Info



Room Number	Room Type	Status
101	Twin Room	Available
102	Twin Room	Reserved
103	Triple Room	Staying
104	Twin Room	Reserved
105	Queen Room	Available
201	Twin Room	Staying
202	Triple Room	Available
203	Queen Room	Available
204	Twin Room	Available
205	Triple Room	Reserved
301	Triple Room	Available
302	Queen Room	Available
303	Twin Room	Staying
304	Twin Room	Reserved
305	Triple Room	Available
401	Twin Room	Available
402	Queen Room	Reserved
403	Queen Room	Staying

Figure 5-2: Room Information Page

Since the Room Info contains all the information of hotel rooms, such as Room Number, Room Type and Room Status, displayed via a table, and five more functions, the hotel staffs easily check the condition and make a change with every single room.

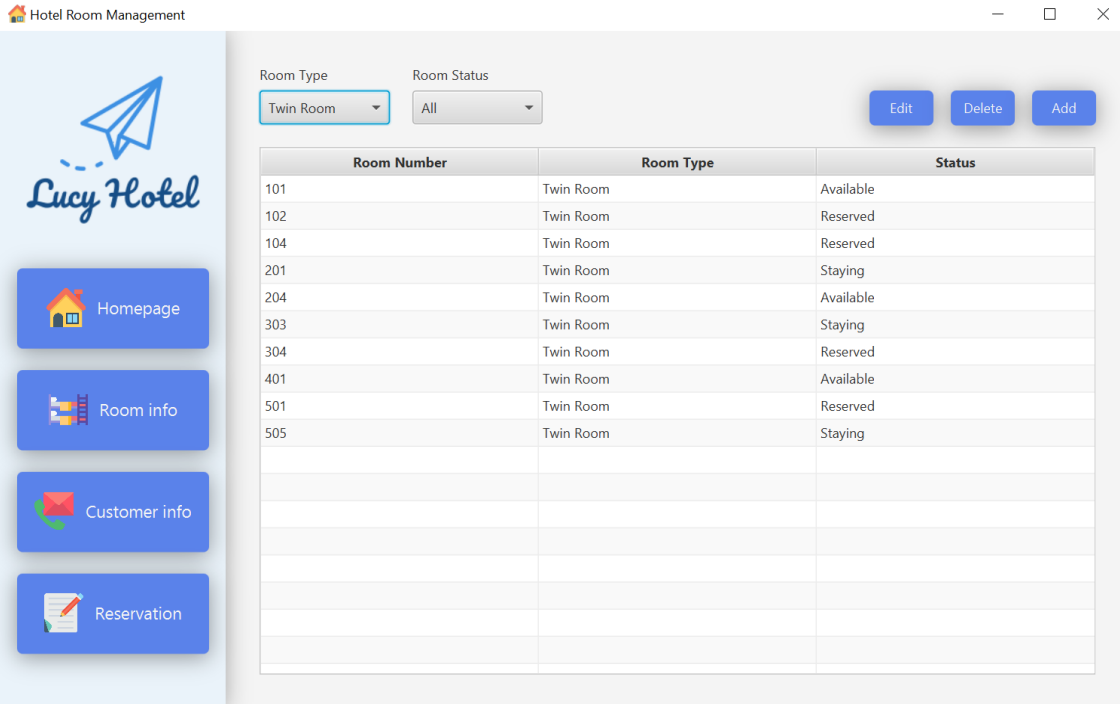
The Room Number is different from each other and arranged ascending by default.

Additionally, the Room Type, which are Triple Room, Queen Room and Twin Room, are distributed to every room number.

Following by the Room Status has three options, such as, Available, Reserved and Staying. When customer successfully makes a reservation via telephone or on desk with hotel staffs, the status for reserved room(s) will automatically change from Available to Reserved. After that, on the reserved date, the Status of that room will replace by Staying.

As mentioned above, there are five functions, namely, Sort by Room Type, Sort by Room Status, Edit, Delete and Add Room.

The room information can be sorted by either Room Type or Room Status. For each sorting option, hotel staffs have four choices, which are All, Twin Room, Triple Room, Queen Room for Room Type, and All, Available, Reserved, Staying for Room Status. Three figures below show results after sorting by three different methods.



The screenshot shows a web application titled "Hotel Room Management". On the left is a sidebar with the "Lucy Hotel" logo and four menu items: "Homepage", "Room info", "Customer info", and "Reservation". The main area contains two dropdown menus: "Room Type" (set to "Twin Room") and "Room Status" (set to "All"). To the right of these are "Edit", "Delete", and "Add" buttons. Below is a table with three columns: "Room Number", "Room Type", and "Status". The table lists 12 rooms, all of which are "Twin Room" type, with statuses alternating between "Available", "Reserved", and "Staying".

Room Number	Room Type	Status
101	Twin Room	Available
102	Twin Room	Reserved
104	Twin Room	Reserved
201	Twin Room	Staying
204	Twin Room	Available
303	Twin Room	Staying
304	Twin Room	Reserved
401	Twin Room	Available
501	Twin Room	Reserved
505	Twin Room	Staying

Figure 5-3: Sorted by Room Type

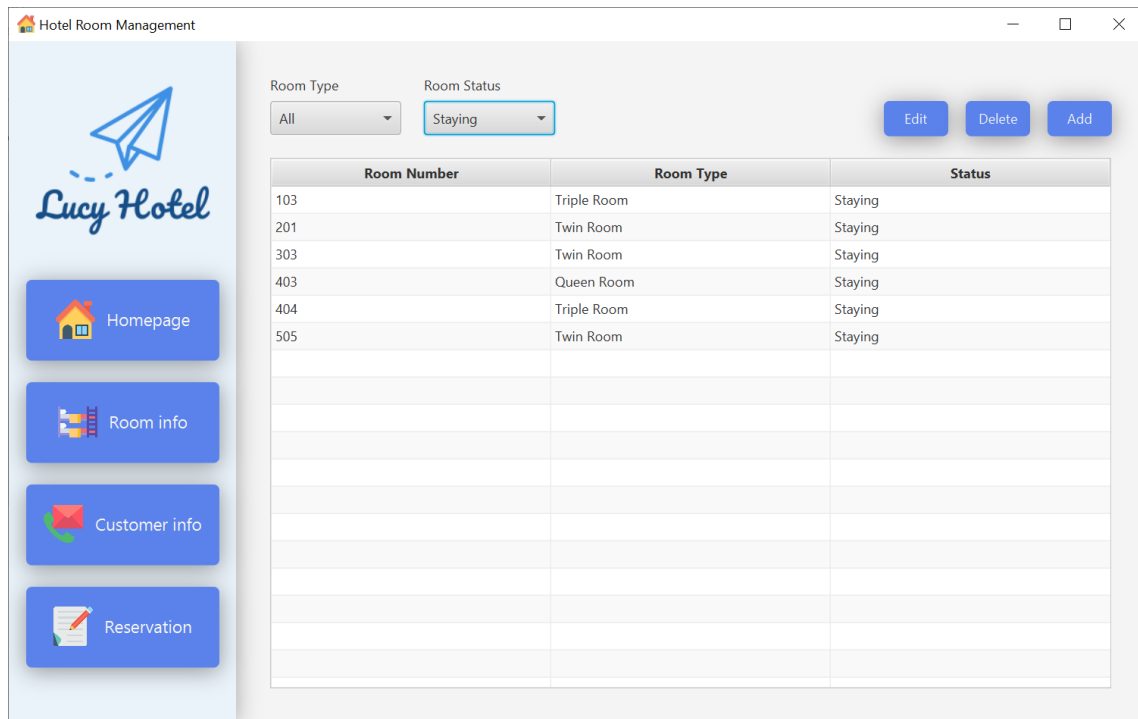


Figure 5-4: Sorted by Room Status

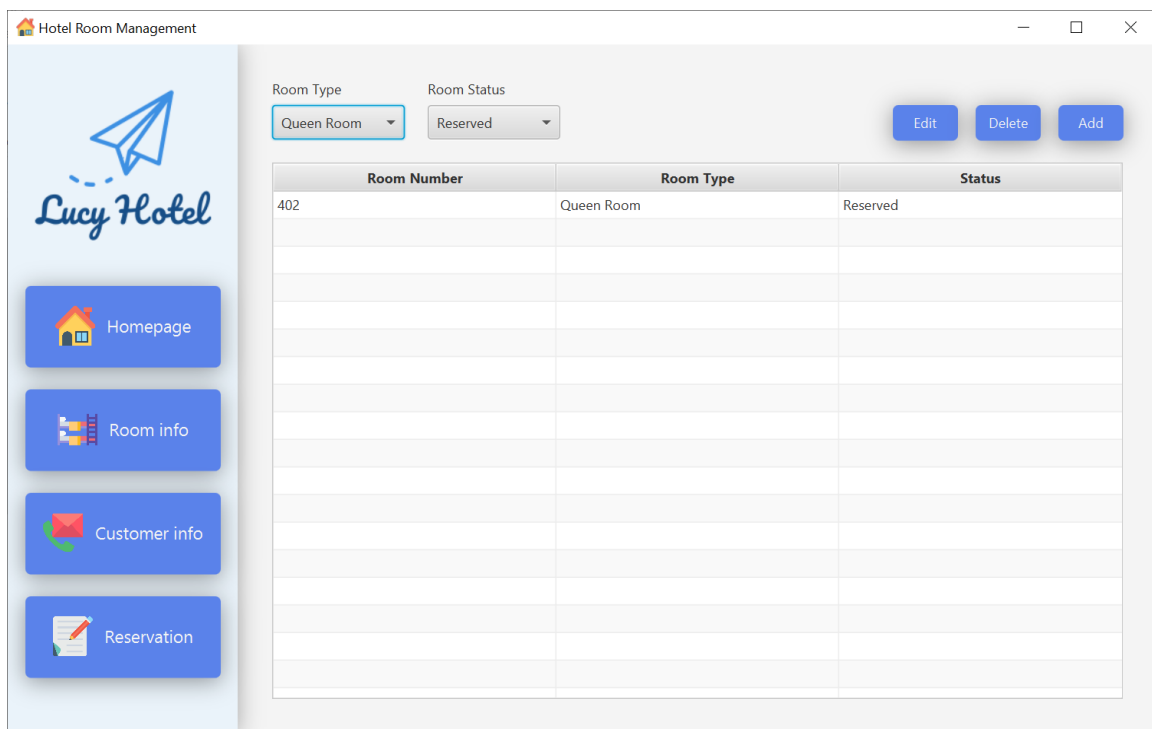


Figure 5-5: Sorted by Room Type and Room Status

Furthermore, the users are able to modify room information, like Edit and Delete, through following steps.

- Step 1: Choose a room to modify
- Step 2: Click Edit or Delete button
- Step 3:
 - Edit Room: Because of unique room number, the hotel staffs cannot change it, however they can change the other two information by choosing either Room Type or Room Status by combo boxes.

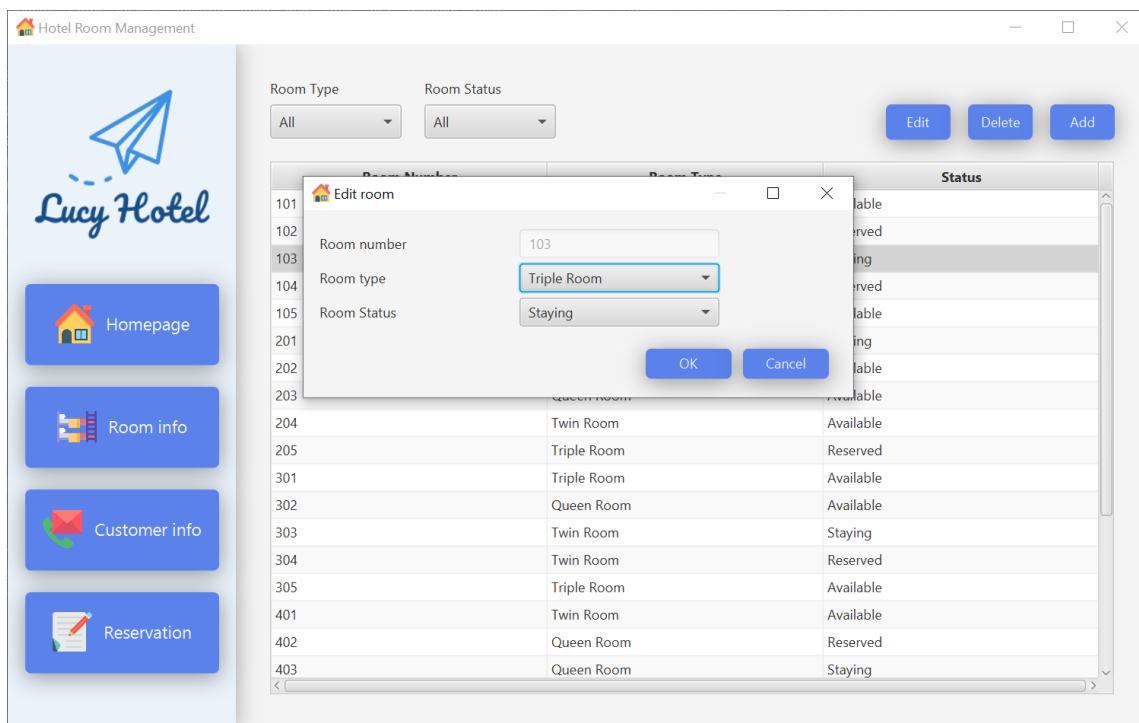


Figure 5-6: Edit Room Dialog

- Delete Room: The hotel staffs will choose OK if they ensure to remove that room from the database. Otherwise, they will return to the previous state.

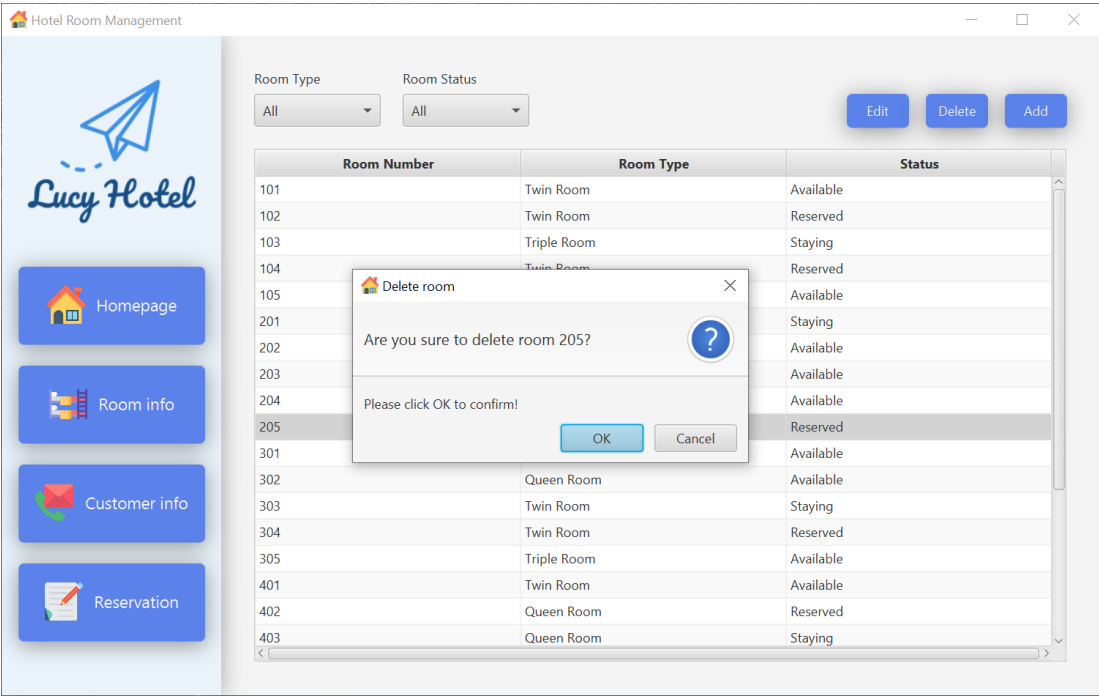


Figure 5-7: Delete Room Dialog

After that, the room information has been changed in the table

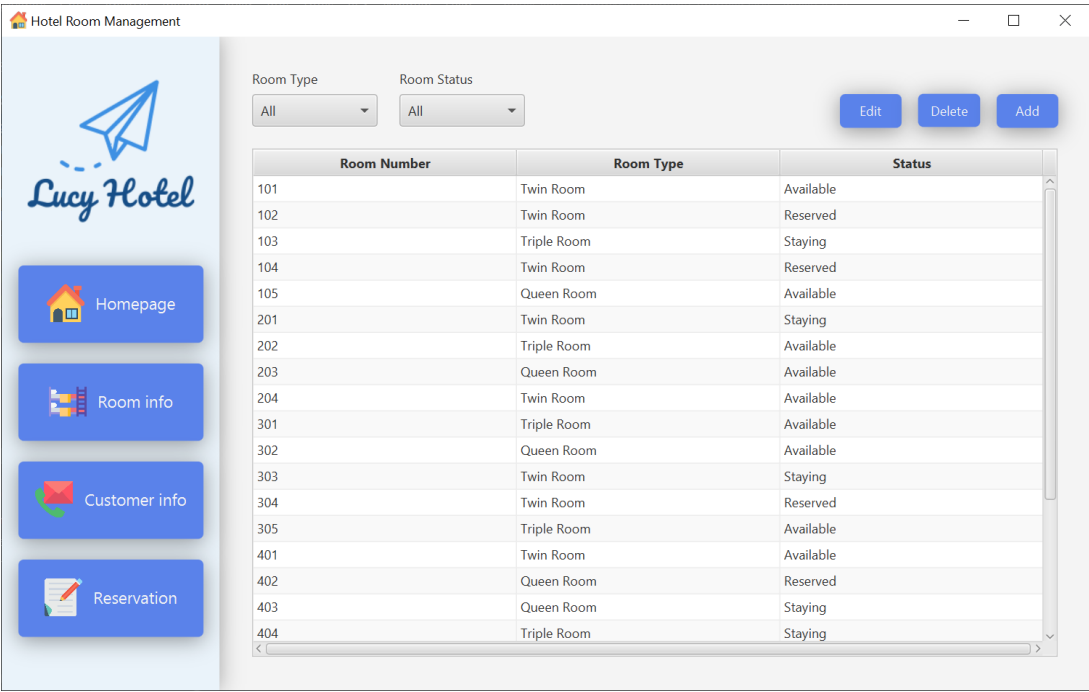


Figure 5-8: After modification (edit and delete)

In contrast, if hotel staff do not choose a room in the table before modification, the system will show the error dialog.

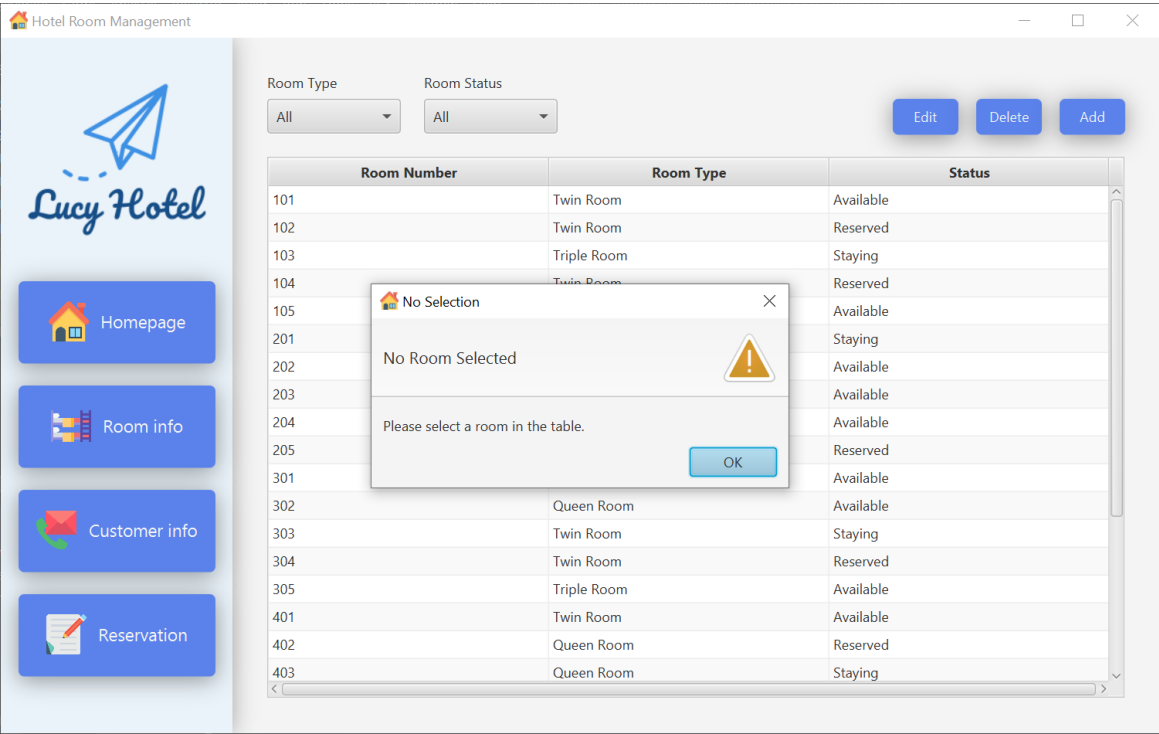


Figure 5-9: Error notification

The last function in this Room info page is Add Room. By those following steps, the hotel staffs will be able to create a new room.

- Step 1: Choose Add button
- Step 2: Fill all the information
- Step 3: Click OK, then the room is successfully created. Otherwise, no room will be added to the database.

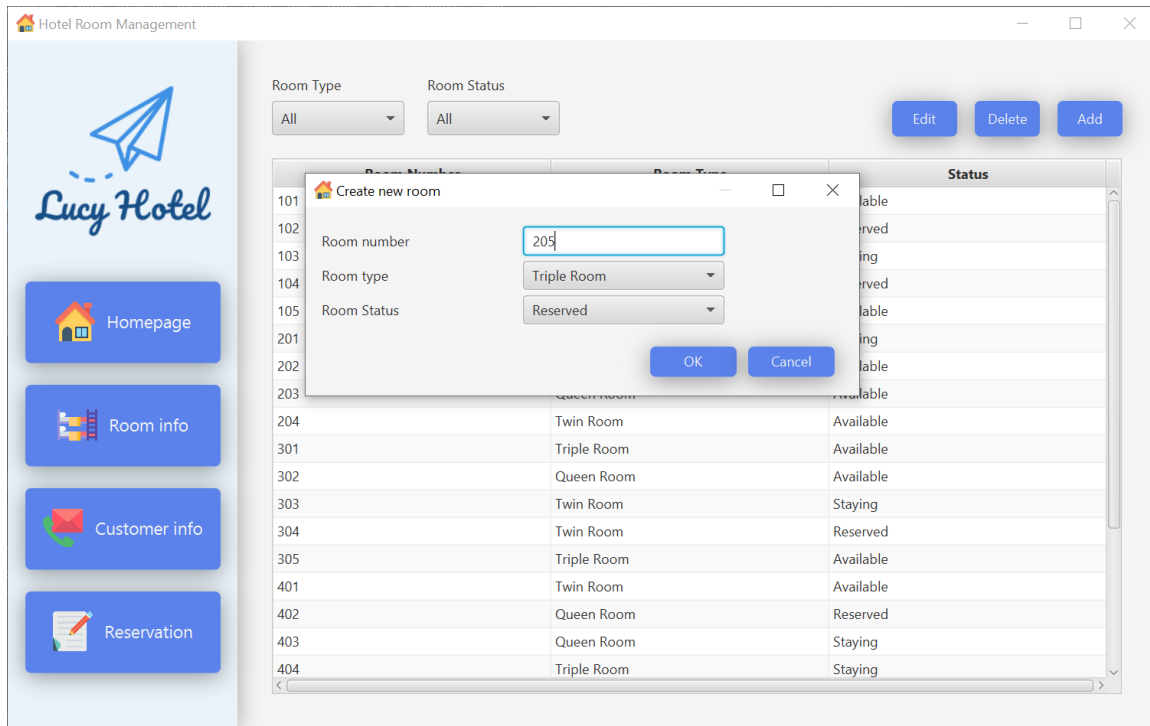


Figure 5-10: Add Room

In step 2, if they miss needed information, the system will display an error dialog

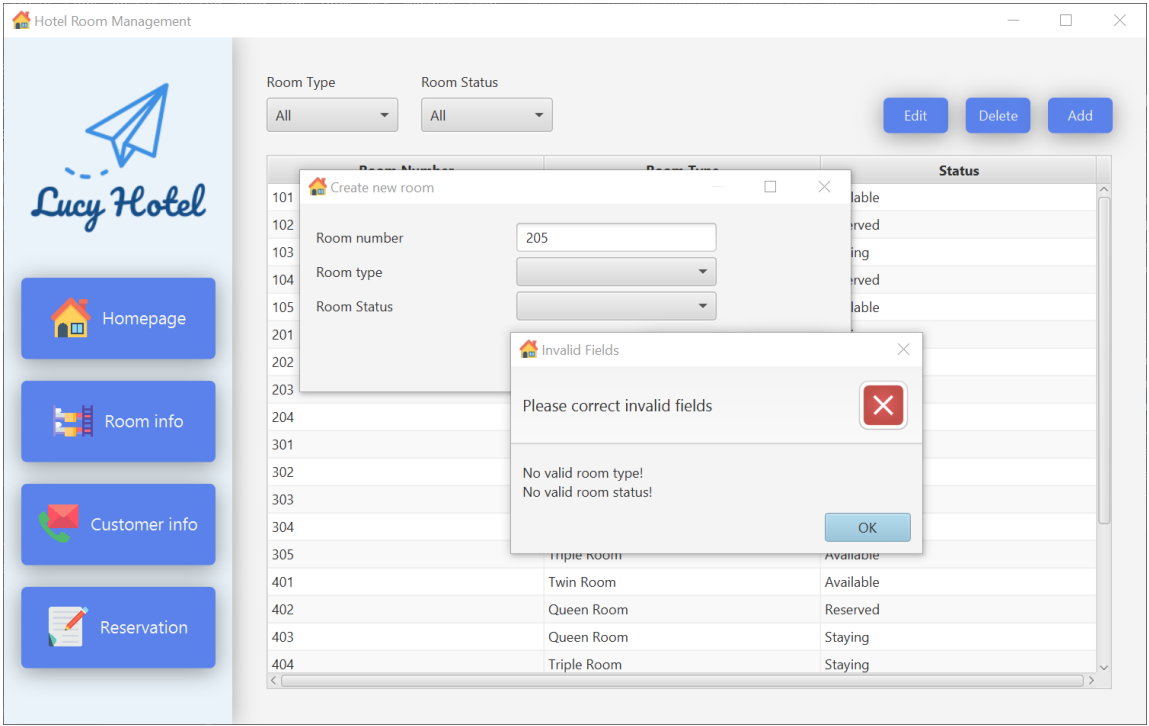


Figure 5-11: Invalid either Room type or Room Status

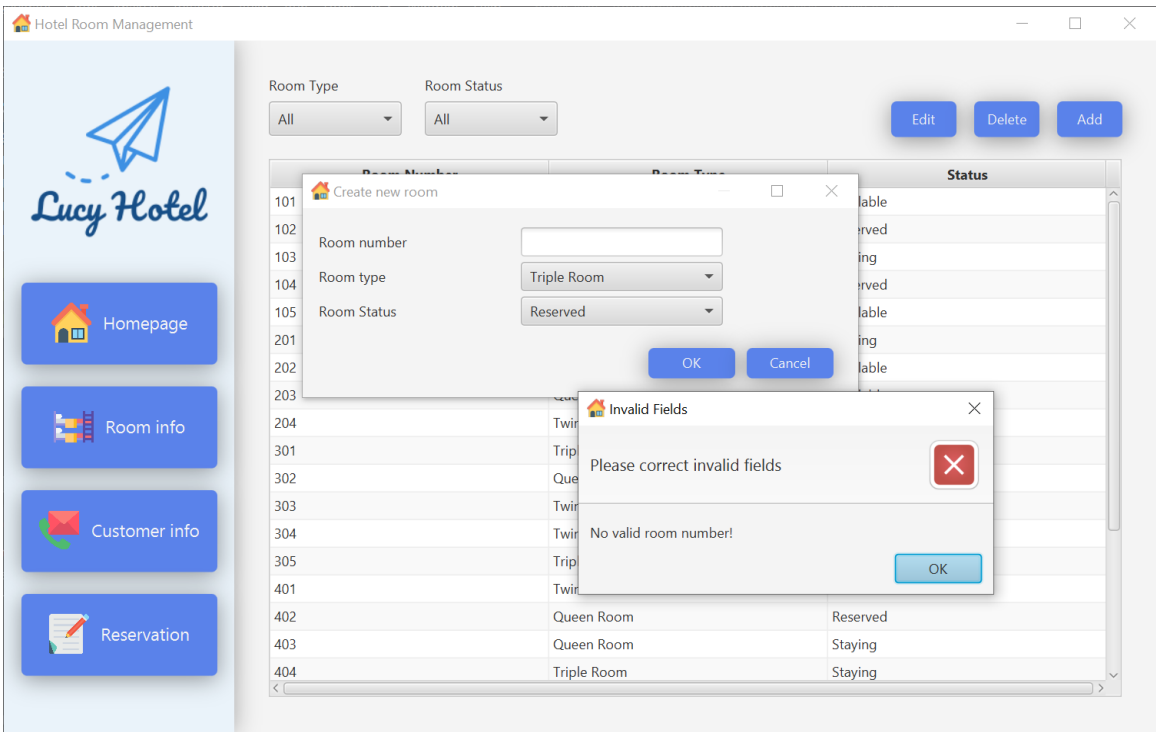


Figure 5-12: Invalid Room Number

C. Customer Info

The third page, Customer Info, supports the hotel staffs to administer the personal information and booking information of customers. By this way, there are not difficulty to find out the data because two kinds of information are linked with each other.

On the left side of the page, there are a Search box and a table which consists of Customer ID, First Name and Last Name. And on the right side, it shows all personal information except Customer ID and a Show booking info button which includes all booking information of customer.

Hotel Room Management

Search

Customer ID	First name	Last name
1	Winnifred	Jewster
2	Thedrick	Conyard
3	Athena	Brisseau
4	Dorolisa	Hanne
5	Oran	Walkling
6	Pru	Yeats
7	Barnett	Bousler
8	Cati	Cicullo
9	Shea	Durie
10	Carmine	D'Elia
11	Lee	Lilburn
12	Vivien	Andreuzzi
13	Gina	Tumini
14	Stanton	Caig
15	Jake	Joost
16	Othilia	Varfalameev
17	Arlyne	Reany
18	Kathrine	Singleton
19	Pooh	Rumble

Personal Information

First Name

Last Name

Date of birth

Tel. Number

Gender

Address

Email

Show booking info

Figure 5-13: Customer Information Page

Firstly, hotel staffs can search their known information about customer in the Search box, for example, 1, W, Gina, etc. The table automatically filter the customer information based on what they searched.

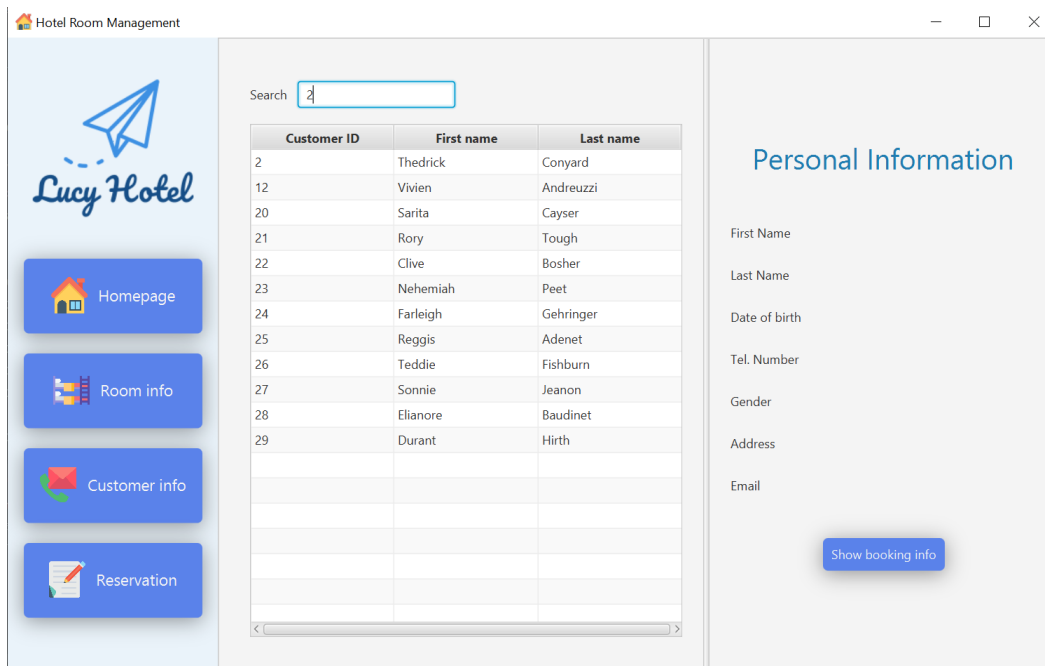


Figure 5-14: Search for Customer Information

If hotel staffs do not choose any customer information in the table, the personal information is empty. Otherwise, it is filled with all detailed information.

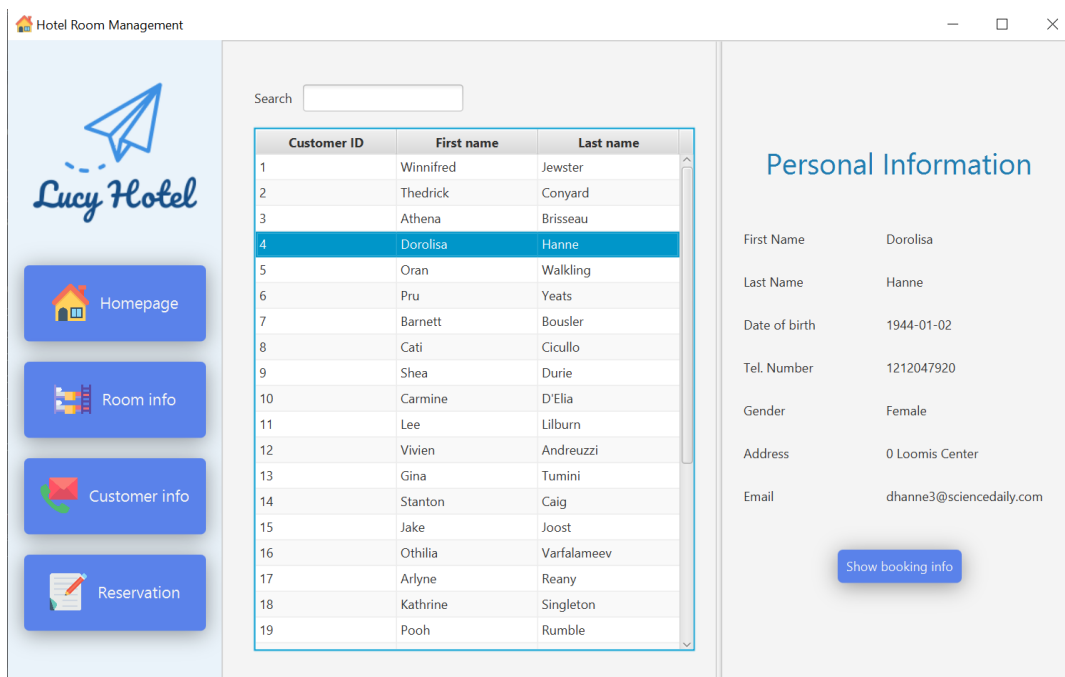


Figure 5-15: Show Personal Information

As mentioned above, Show booking info shows all booking information of the chosen customer.

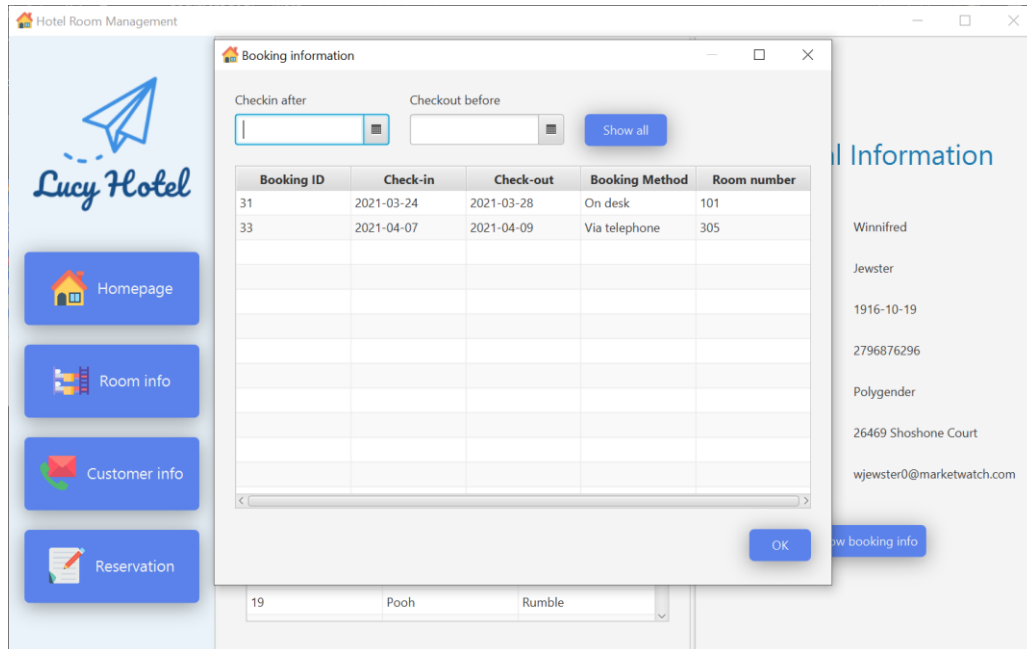


Figure 5-16: Show Booking Information

In this dialog, it contains the table with all booking information, such as, Booking ID, Check-in Date, Check-out Date, Booking Method and Room Number. The Check-in After box and Check-out Before box is to sort out the Booking information of the chosen customer.

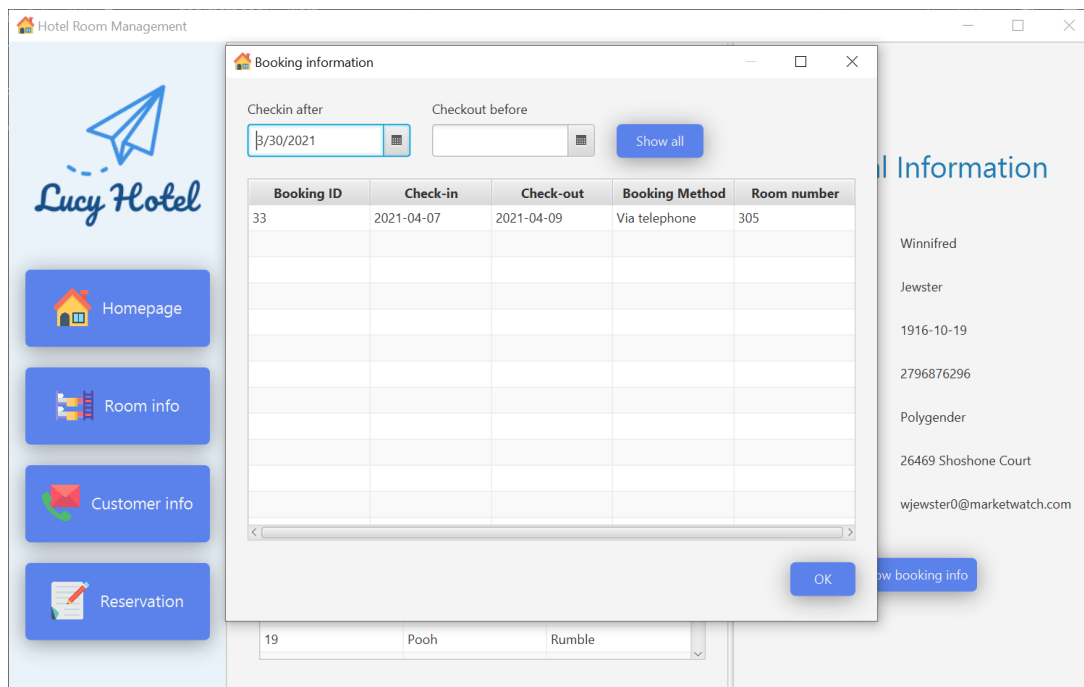
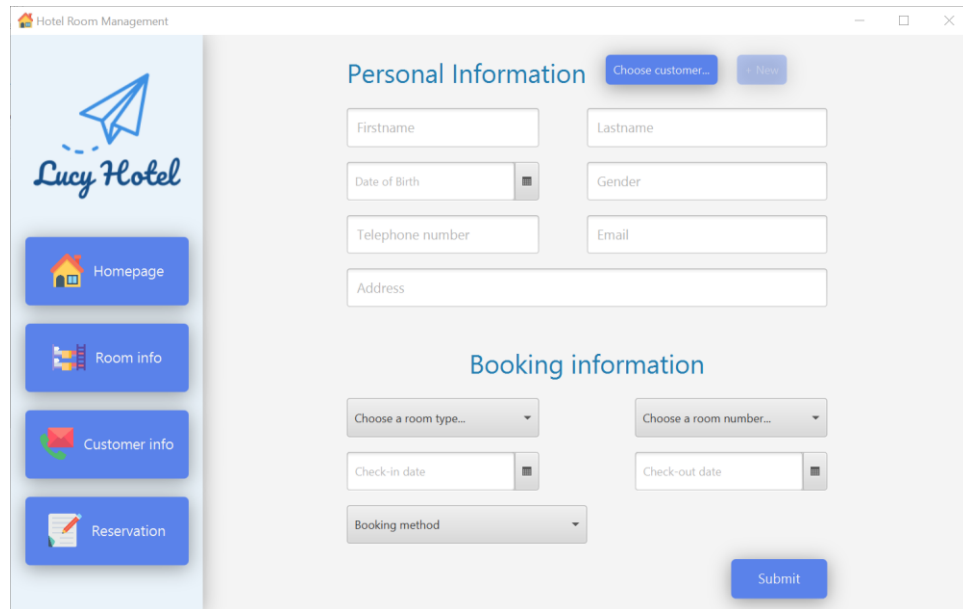


Figure 5-17: Sorted by either Check-in date or Check-out date

There is a Show All button which shows all booking information again after sorting.

D. Reservation

The Reservation page helps hotel staffs receive the booking information from customer at desk or via telephone.



The screenshot displays a web application window titled "Hotel Room Management". On the left is a vertical sidebar with the "Lucy Hotel" logo (a paper airplane) and four menu buttons: "Homepage", "Room info", "Customer info", and "Reservation". The "Reservation" button is highlighted. The main content area is divided into two sections. The "Personal Information" section includes a "Choose customer..." button, a "+ New" button, and input fields for "Firstname", "Lastname", "Date of Birth" (with a calendar icon), "Gender", "Telephone number", "Email", and "Address". The "Booking information" section features dropdown menus for "Choose a room type..." and "Choose a room number...", input fields for "Check-in date" and "Check-out date" (both with calendar icons), and a "Booking method" dropdown. A blue "Submit" button is located at the bottom right of the form.

Figure 5-18: Reservation form

After hotel staffs open the Reservation page, the blank form will appear which can be fill in by two different ways

- Option 1: For new customers, hotel staffs input manually all Personal Information and Booking Information and then submit the booking.

The screenshot shows a web application window titled "Hotel Room Management". On the left is a sidebar with the "Lucy Hotel" logo and four menu buttons: "Homepage", "Room info", "Customer info", and "Reservation". The main content area is titled "Personal Information" and contains several input fields: "Name" (filled with "Lucy"), "Surname" (filled with "Truong"), "Date of Birth" (filled with "11/18/2000"), "Gender" (filled with "Female"), "Phone Number" (filled with "09123445567"), "Email" (filled with "lucytruong@gmail.com"), and "Address" (filled with "Berliner Str. 19"). There are also buttons for "Choose customer..." and "New". Below this is the "Booking information" section, which includes a "Room Type" dropdown (filled with "Queen Room"), a "Room Number" dropdown (filled with "503"), a "Check-in Date" field (filled with "4/18/2021"), a "Check-out Date" field (filled with "3/20/2022"), and a "Booking Method" dropdown (filled with "Via telephone"). A "Submit" button is located at the bottom right of the form.

Figure 5-19: The form is manually filled

- Option 2: For customers who had already stayed in the hotel:
 - Step 1: Hotel staffs click Choose customer button. Then the dialog, which imitates Customer info page, opens.

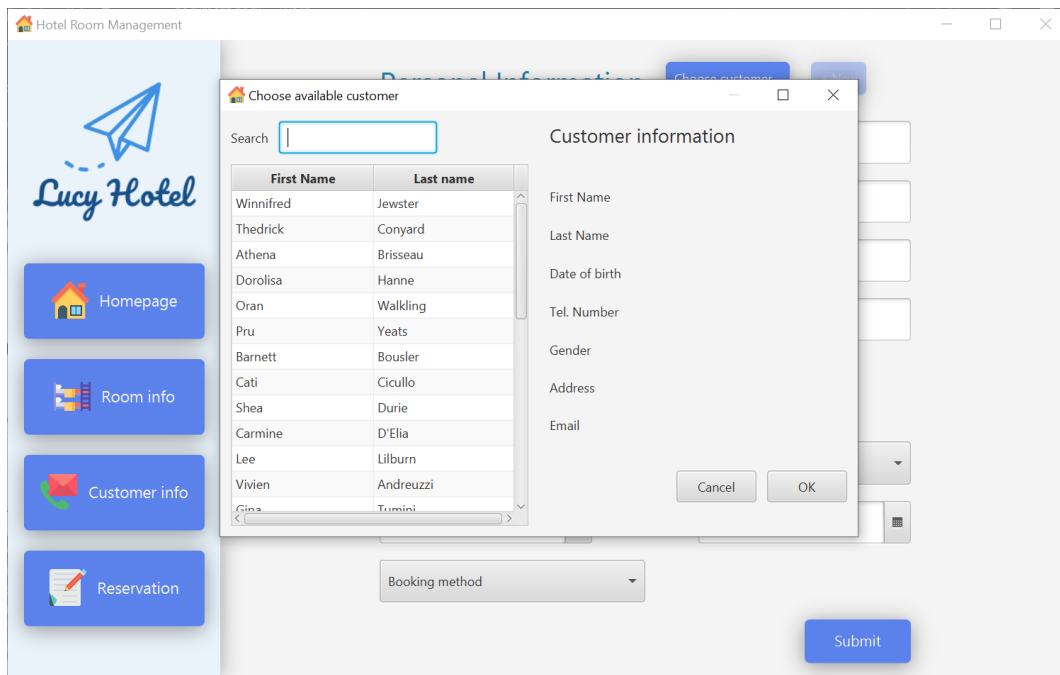


Figure 5-20: Make a reservation for the customer who had already stayed in the hotel

- Step 2: Choose the customer information who is making reservation.

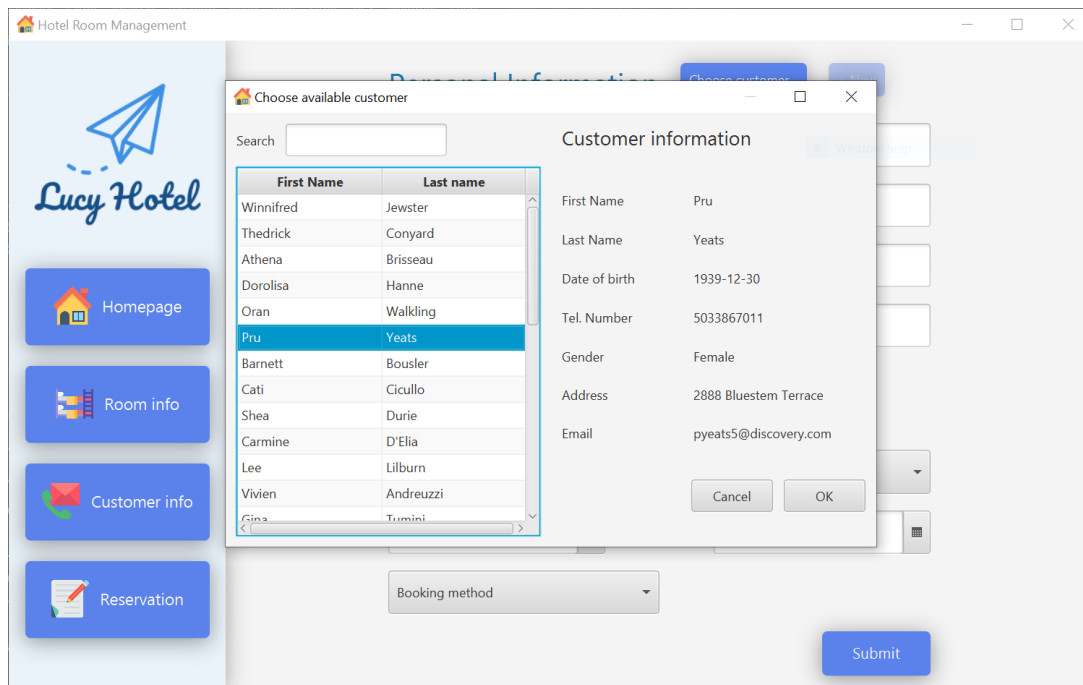


Figure 5-21: Choose available customer

- Step 3: Click OK and finally, all the needed information is automatically filled in the form.

The screenshot shows a web application window titled "Hotel Room Management". On the left is a sidebar with the "Lucy Hotel" logo and four menu items: "Homepage", "Room info", "Customer info", and "Reservation". The main content area is divided into two sections. The "Personal Information" section has a title and two buttons: "Choose customer..." and "+ New". Below the title are several input fields containing pre-filled data: "Athena", "Brisseau", "8/6/1968", "Male", "5245151946", "abrisseau2@gnu.org", and "30274 Harbort Trail". The "Booking information" section also has a title and contains dropdown menus for "Queen Room" and "105", date pickers for "Check-in date" and "Check-out date", and a "Booking method" dropdown. A "Submit" button is located at the bottom right of the form.

Figure 5-22: All personal information is automatically filled

- Step 4: The hotel staffs insert all booking information and submit the reservation. It will change the status of reserved room to Reserved and add this booking to Booking Information page.

In option 2, it consists of the last function of the application which is + New. This function helps hotel staffs after receiving a wrong information, they can refresh to the blank form, same as Figure 3-18.

Since all the information is important, the error dialog will appear whenever the hotel staffs do not completely fill in the reservation form.

The screenshot displays the 'Hotel Room Management' application window. On the left is a sidebar with the 'Lucy Hotel' logo and navigation buttons for 'Homepage', 'Room info', 'Customer info', and 'Reservation'. The main area is titled 'Personal Information' and contains a form with fields for 'Name' (Lucy), 'Surname' (Truong), 'Date of birth' (11/18/2000), 'Telephone number', 'Address' (Berliner Str. 19), 'Room type' (Queen Room), 'Check-in date', 'Check-out date', and 'Booking method'. An 'Invalid Fields' error dialog is overlaid on the form, displaying the message 'Please correct invalid fields' and a list of errors: 'No valid telephone number!', 'No valid check in date', 'No valid check out date', 'No valid booking method', 'No check in date', and 'No check out date'. The dialog has an 'OK' button.

Figure 5-23: Invalid Information

Appendix

Use Case Diagram

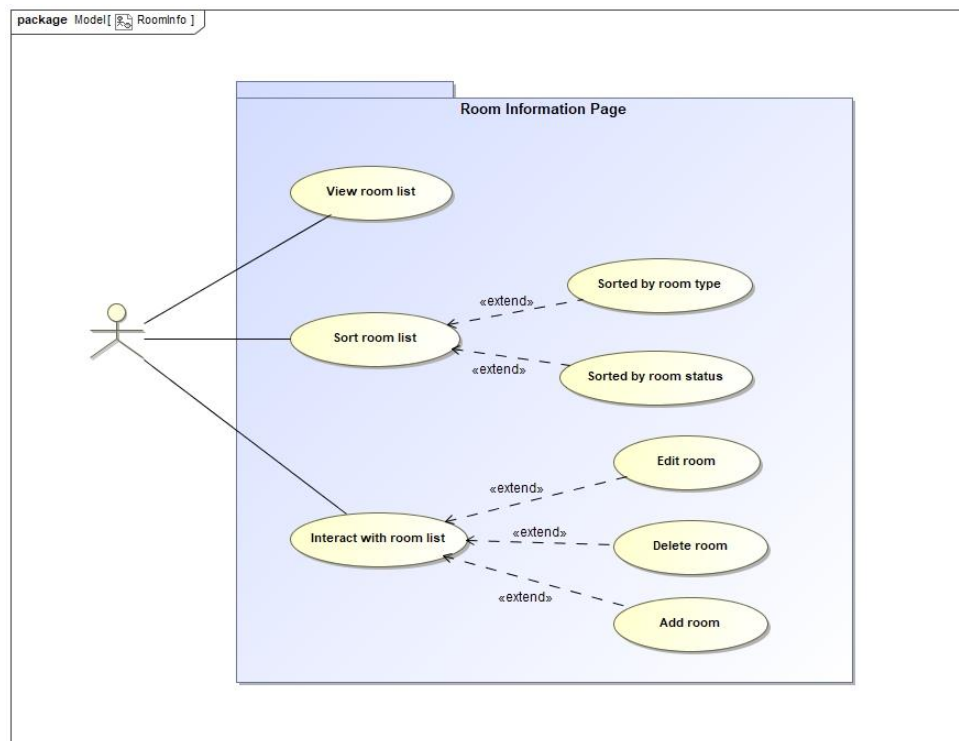


Figure 6-1: Use Case Diagram - Room Information Page

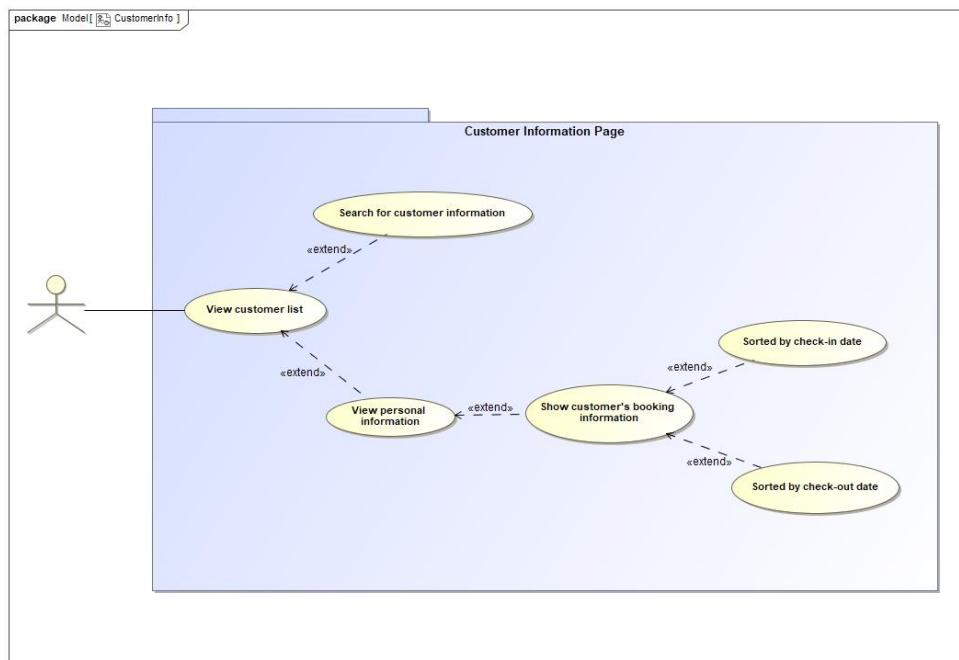


Figure 6-2: Use Case Diagram - Customer Information Page

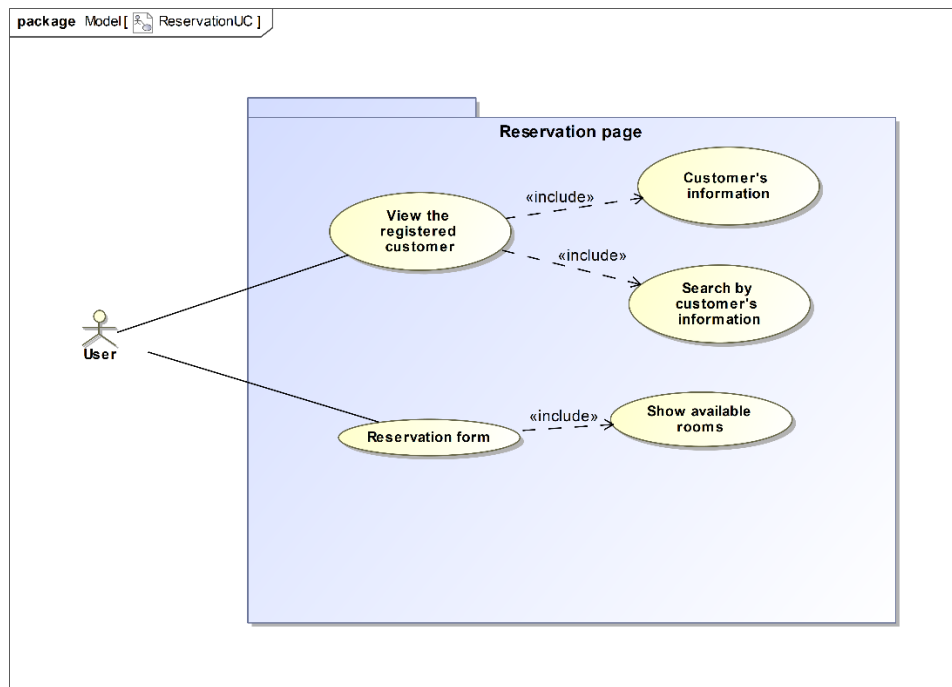


Figure 6-3: Use Case Diagram - Reservation Page

Sequence diagram

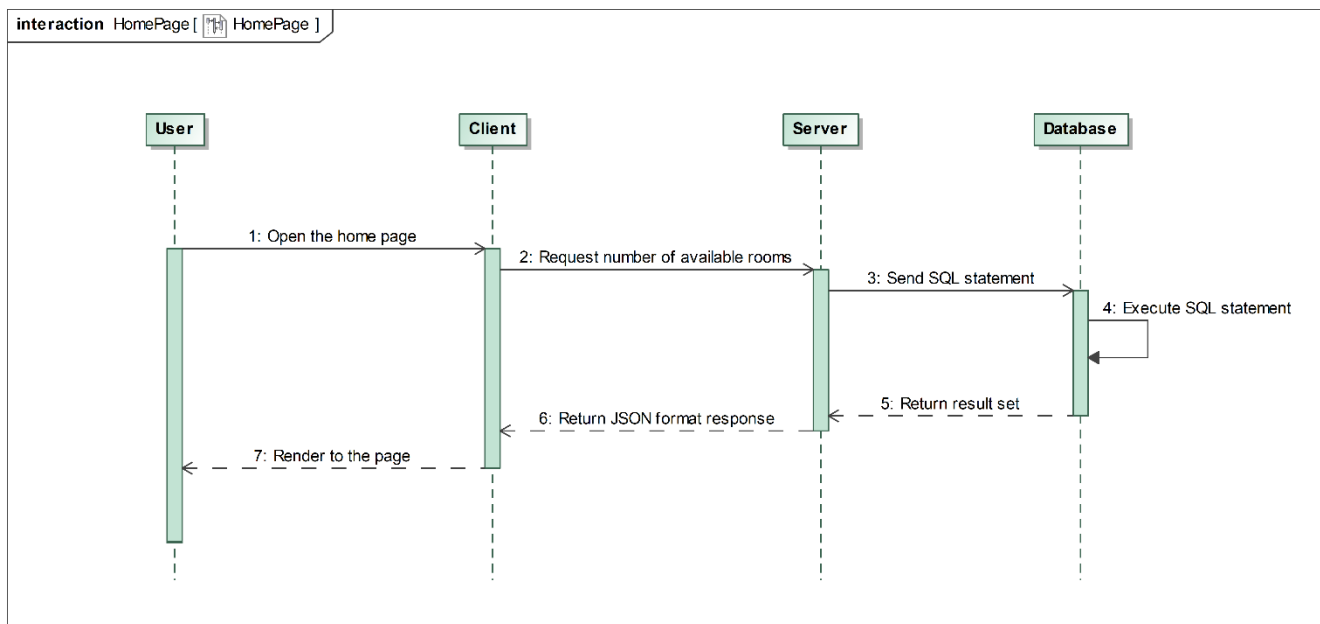


Figure 7-1: Sequence Diagram - Homepage

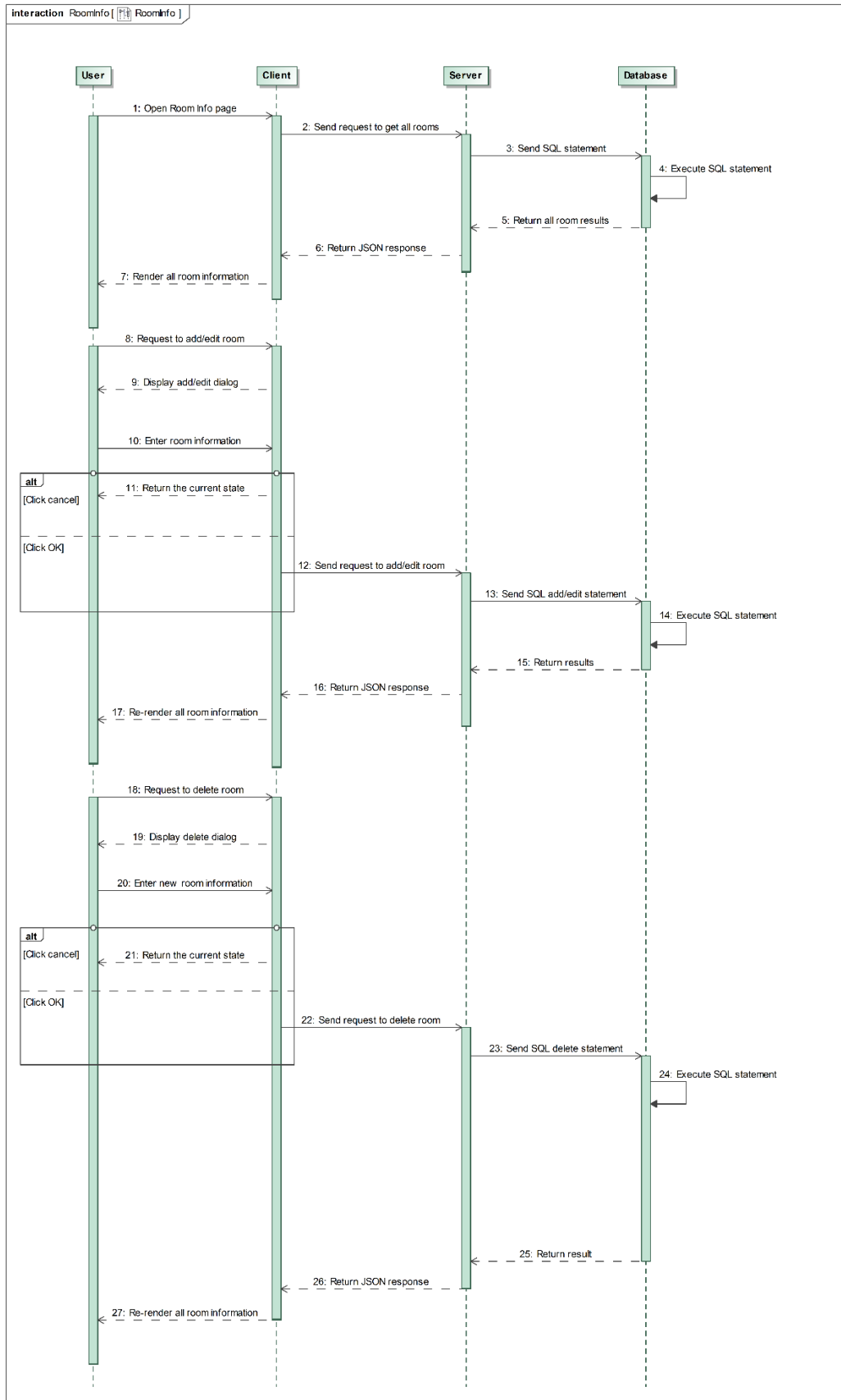


Figure 7-2: Sequence Diagram - Room Information Page

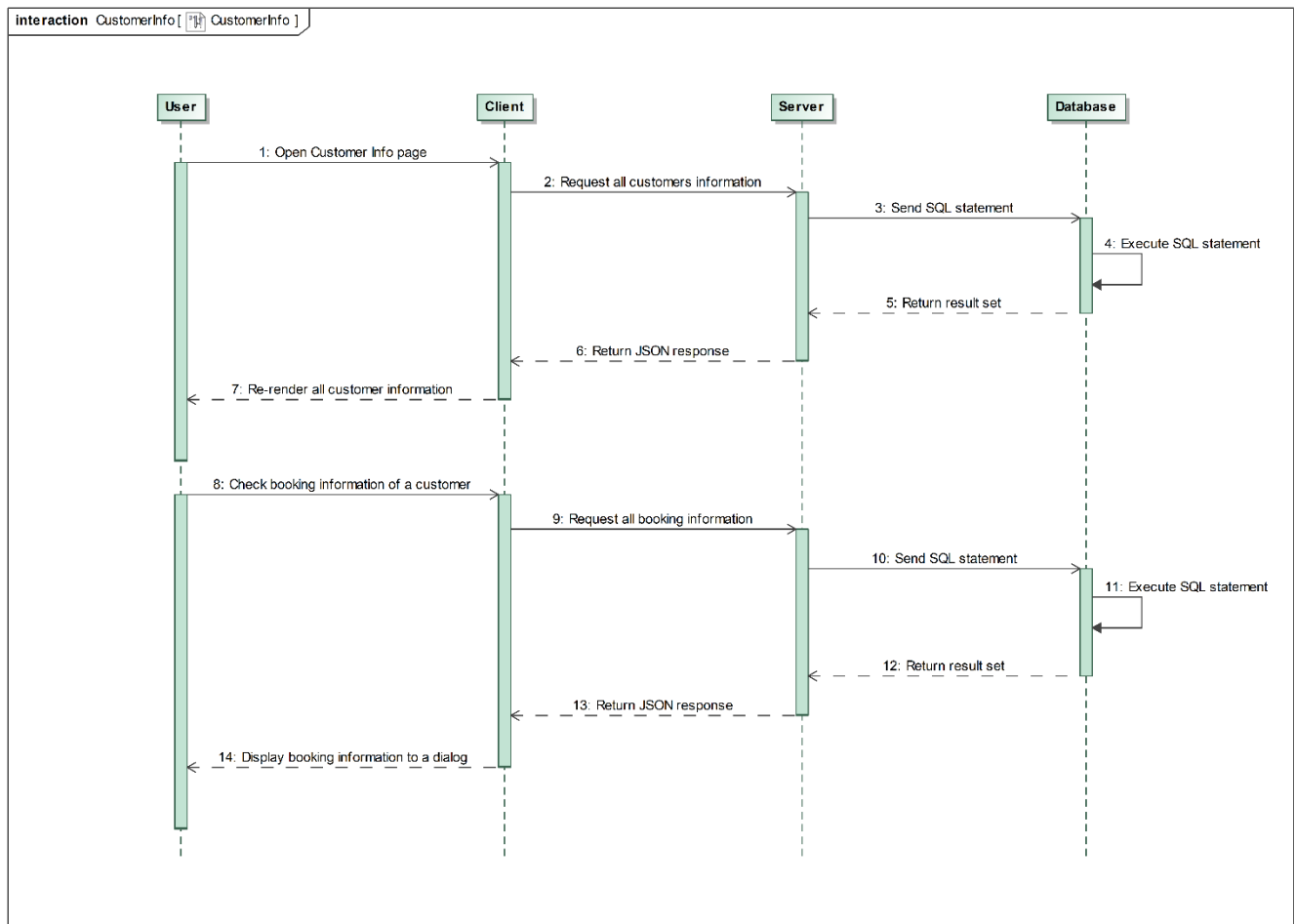


Figure 7-3: Sequence Diagram - Customer Information Page

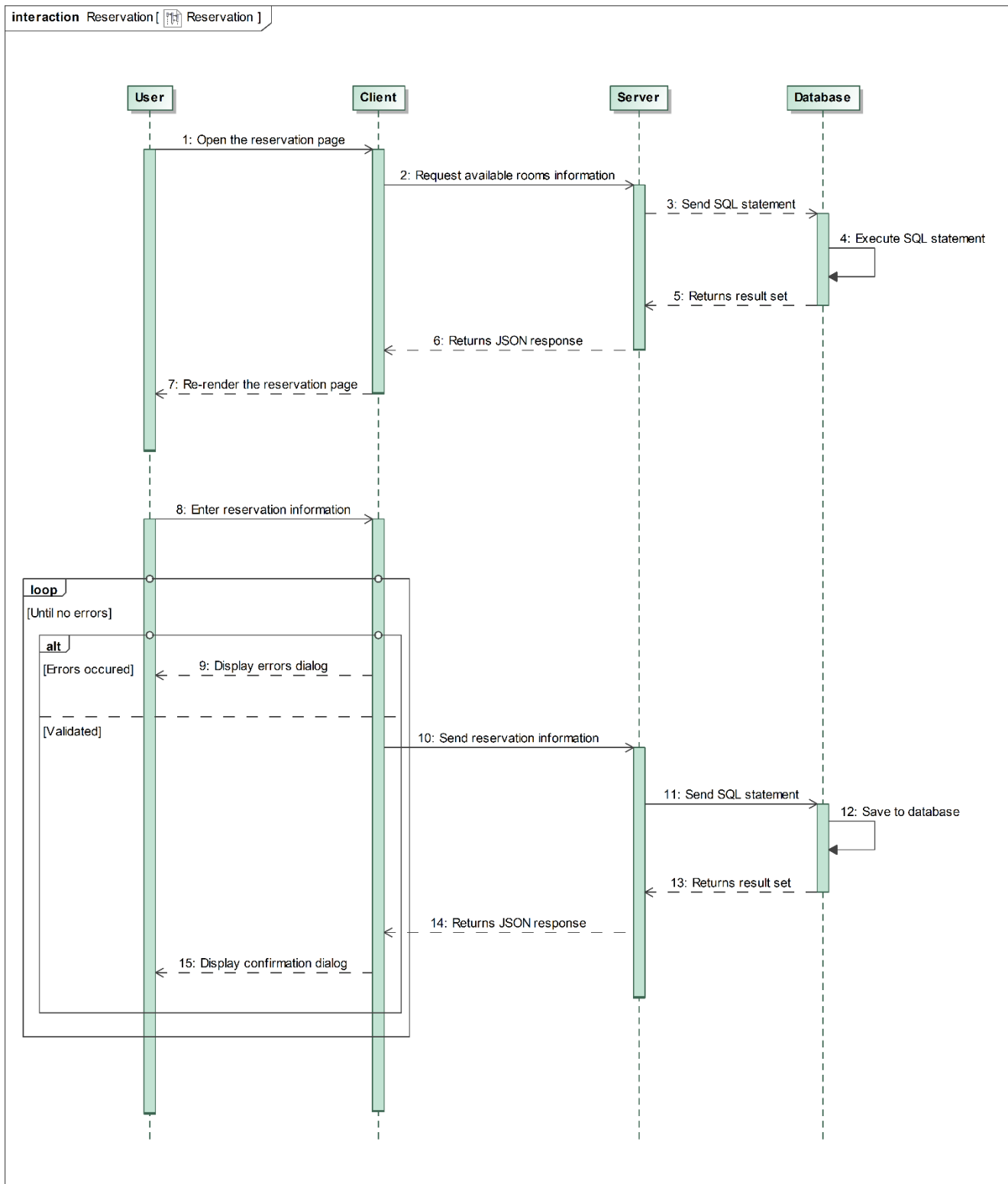


Figure 7-4: Sequence Diagram - Reservation Page

Entity Relational Diagram

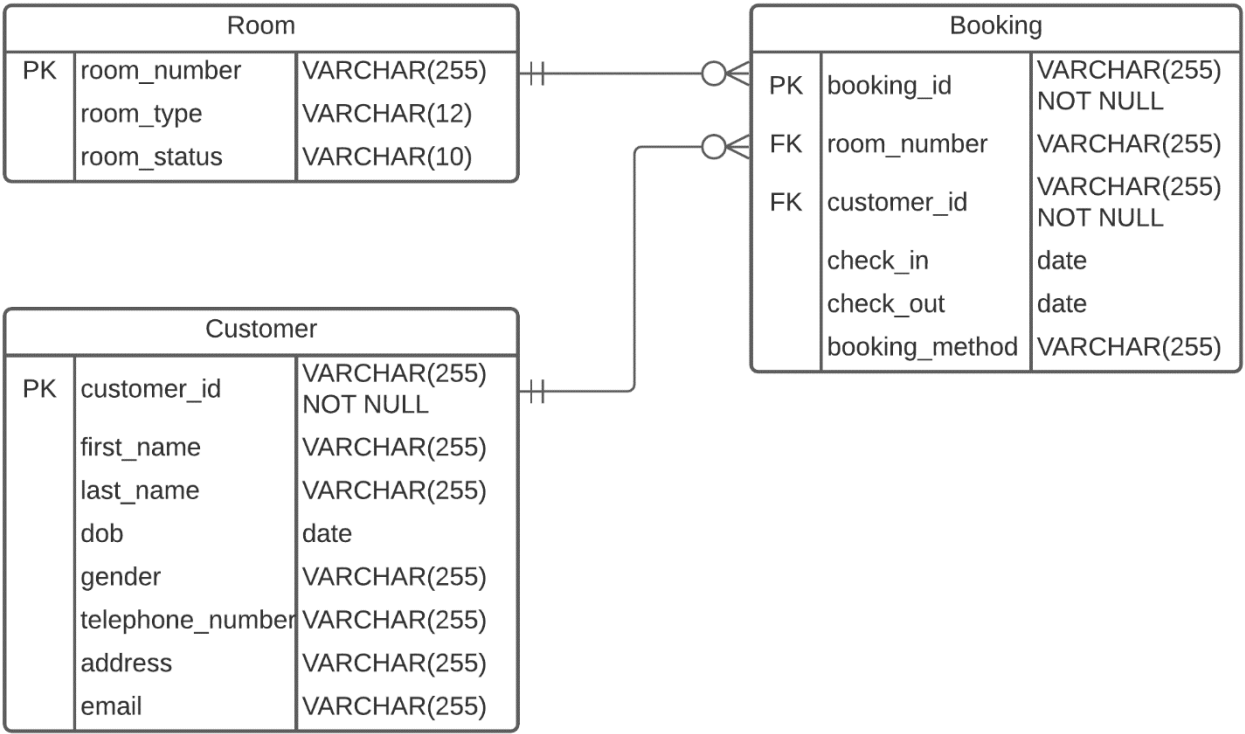


Figure 8-1: Database - ER Diagram