

# Hotel Management System

ITMD-510

Final Project

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### **Functionality According To Users:**

1. Administrator:
  - a. Login to account
  - b. View, add, update and delete rooms in the hotel
  - c. View, add, update and delete customers in the hotel
  - d. View, add, update and delete employees in the hotel
  - e. Exit from application
2. Employee:
  - a. Login to account
  - b. View rooms in the hotel
  - c. View customers in the hotel
  - d. Exit from application
3. Customer:
  - a. Login to account
  - b. View rooms in the hotel
  - c. Search for room in the hotel
  - d. Book the searched room in the hotel
  - e. Exit from application

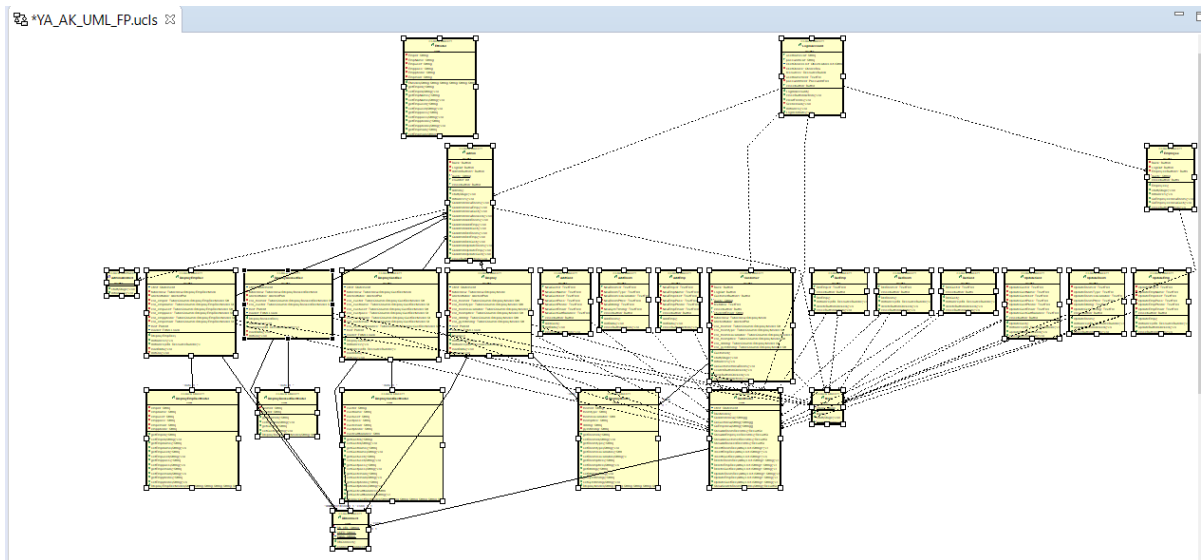
### **Brief Description of Classes:**

- a. Project is divided into a four packages: application, controllers, models and views.
- b. The main file to be executed is the Main.java file found in the applications package.
- c. AdminAbstract is the interface that is extended by the Admin class.
- d. Admin has rights for updating, inserting, viewing and deleting rooms, employees and customers
- e. Employee has rights to view rooms and customers
- f. Customer has rights to view rooms and search for rooms.

## Project Breakdown:

- ▼  application
  - >  Main.java
  -  application.css
- ▼  controllers
  - >  AddCust.java
  - >  AddEmp.java
  - >  AddRoom.java
  - >  Admin.java
  - >  AdminAbstract.java
  - >  Customer.java
  - >  DelCust.java
  - >  DelEmp.java
  - >  DelRoom.java
  - >  Display.java
  - >  DisplayBookedRec.java
  - >  DisplayCustRec.java
  - >  DisplayEmpRec.java
  - >  Employee.java
  - >  LoginAccount.java
  - >  UpdateCust.java
  - >  UpdateEmp.java
  - >  UpdateRoom.java
- ▼  models
  - >  DaoModel.java
  - >  DBConnect.java
  - >  DisplayBookedRecModel.java
  - >  DisplayCustRecModel.java
  - >  DisplayEmpRecModel.java
  - >  DisplayModel.java
- ▼  views
  -  AddCust.fxml
  -  AddEmp.fxml
  -  AddRoom.fxml
  -  AdminView.fxml
  -  CustomerView.fxml
  -  DelCust.fxml
  -  DelEmp.fxml
  -  DelRoom.fxml
  -  Display.fxml
  -  DisplayBookedRec.fxml
  -  DisplayCustRec.fxml
  -  DisplayEmpRec.fxml
  -  EmployeeView.fxml
  -  LoginView.fxml
  -  UpdateCust.fxml
  -  UpdateEmp.fxml
  -  UpdateRoom.fxml

## UML Diagram:



## Login Details For Users:

	Username	Password
Administrator	Ahmed	Abcd
Employee	CDrac	CDrac
Customer	JDoe	JDoe



## Working Screenshots:

### Login Page for Customer

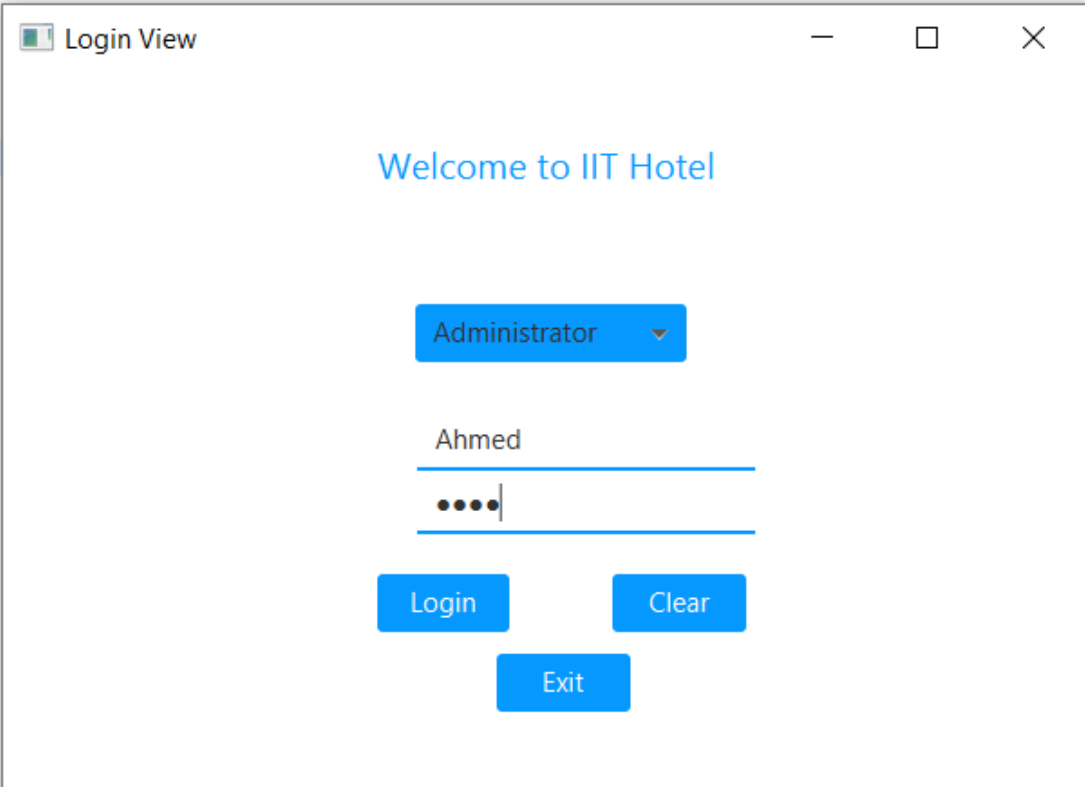
The screenshot shows a window titled "Login View" with standard window controls. The main heading is "Welcome to IIT Hotel" in blue. Below it is a blue dropdown menu currently set to "Customer". Underneath the dropdown are two input fields: the first contains the text "JDoe", and the second contains four black dots for a password. Below the input fields are three blue buttons: "Login", "Clear", and "Exit".

### Successful Login for Customer:

The screenshot shows a window titled "Customer Page" with standard window controls. The main heading is "Customer" in blue, with an "Exit" button to its right. Below the heading is the text "What would you like to do?". There is a blue button labeled "View All Rooms". Below this is a search section with a text input field containing the placeholder "Enter the Room ID you are looking for" and a blue "Search" button. Underneath the search section is a table with the following headers: "RoomId", "RoomType", "RoomIsA...", "RoomPrice", "Dining", and "GymTimi...". The table body contains the text "No content in table". At the bottom of the window is a blue button labeled "Book This Room".

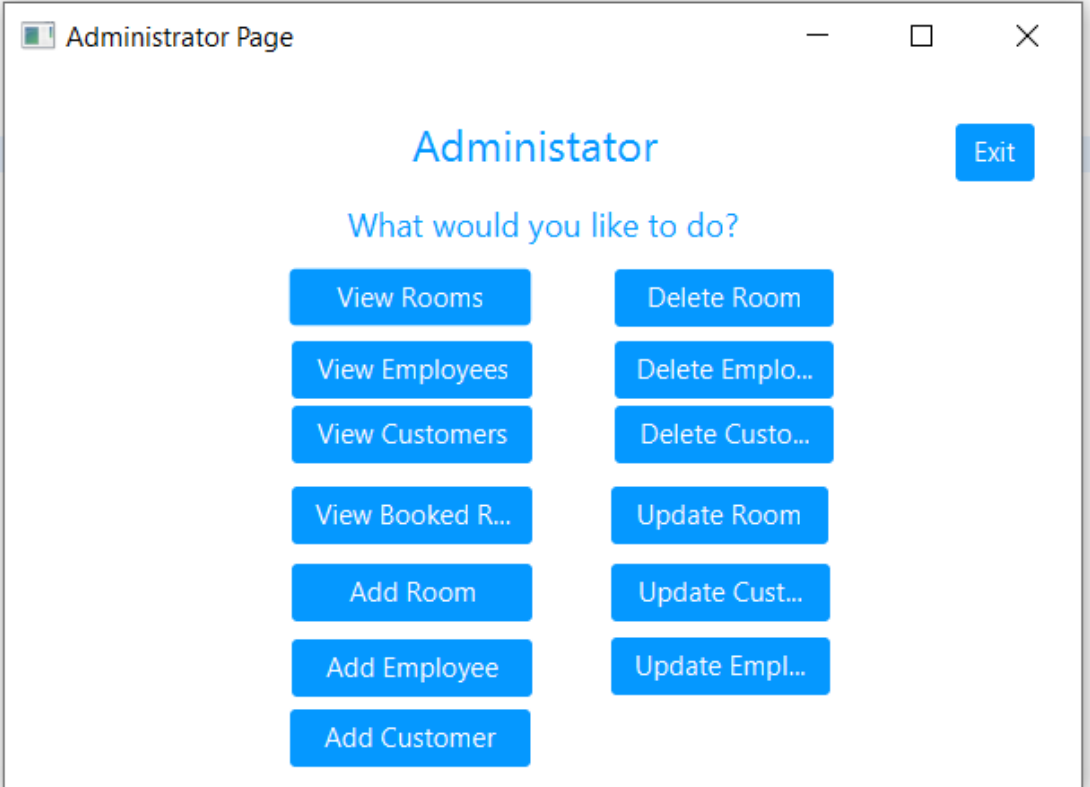
RoomId	RoomType	RoomIsA...	RoomPrice	Dining	GymTimi...
No content in table					

Login Page for Admin:



The screenshot shows a window titled "Login View" with standard Windows window controls (minimize, maximize, close). The main content area has a light blue background. At the top, it says "Welcome to IIT Hotel" in blue text. Below this, there is a blue button labeled "Administrator" with a small downward arrow, indicating a dropdown menu. Underneath the button is a text input field containing the name "Ahmed". Below the text field is a password input field represented by four black dots and a cursor. At the bottom of the window, there are three blue buttons: "Login" and "Clear" are side-by-side, and "Exit" is centered below them.

Successful login for Admin:



The screenshot shows a window titled "Administrator Page" with standard Windows window controls. The main content area has a light blue background. At the top, it says "Administator" (note the typo) in blue text. In the top right corner, there is a blue button labeled "Exit". Below the title, it asks "What would you like to do?" in blue text. The main area contains two columns of blue buttons. The left column has: "View Rooms", "View Employees", "View Customers", "View Booked R...", "Add Room", "Add Employee", and "Add Customer". The right column has: "Delete Room", "Delete Emplo...", "Delete Custo...", "Update Room", "Update Cust...", and "Update Empl...".

Rooms Displayed when View Rooms is clicked:

Display of records					
RoomId	RoomType	RoomIsAv...	RoomPrice	Dining	GymTiming
101	Suite	YES	100	YES	12PM-2PM
102	Single	NO	400	YES	3PM-5PM

Adding Room:

Adding records for room

Add Room To Database

Exit

103

Single

YES

200

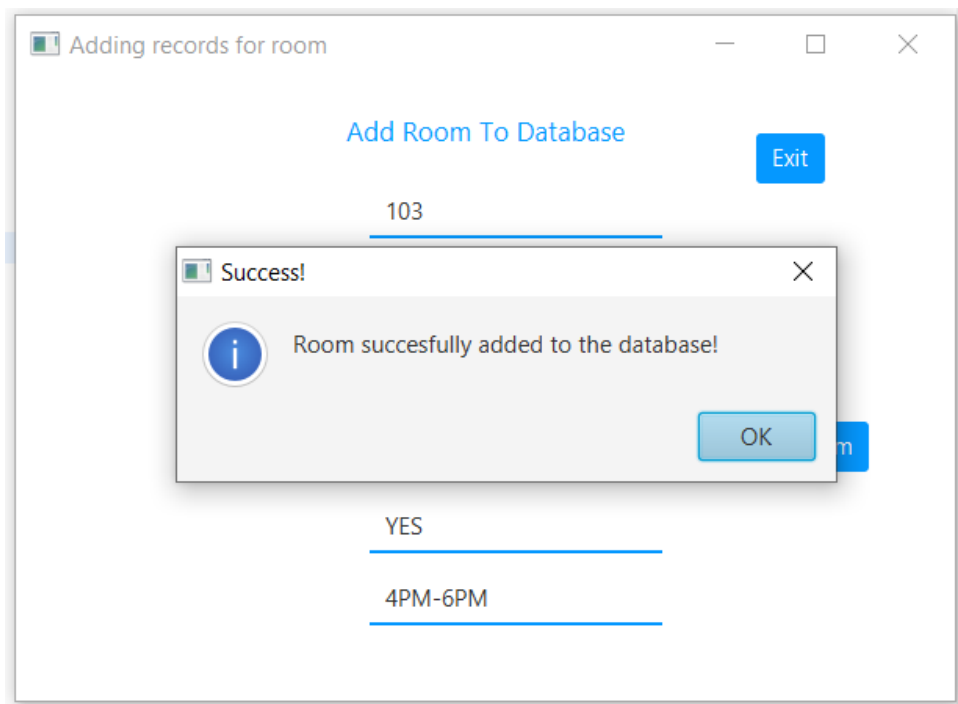
YES

4PM-6PM

Add Room



Success dialog box after adding:



Records Screenshot from Database after adding 10 records:

Server: localhost:3307 » Database: 510labs » Table: aak\_rooms

Browse

Structure

SQL

Search

Insert

Export

Import

Privilege





































Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

+ Options

			RoomId	RoomType	RoomsAvailable	RoomPrice	Dining	GymTiming	
<input type="checkbox"/>	 Edit	 Copy	 Delete	101	Suite	YES	100	YES	12PM-2PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	102	Single	NO	400	YES	3PM-5PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	103	Single	YES	200	YES	4PM-6PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	104	Suite	NO	100	NO	3PM-5PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	105	Double	YES	600	YES	4PM-7PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	106	Single	YES	200	NO	2PM-3PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	107	Studio	NO	1200	YES	1PM-7PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	108	Single	YES	400	NO	2PM-5PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	109	Studio	YES	1300	YES	12PM-8PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	110	Single	NO	300	NO	1PM-2PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	111	Double	YES	600	YES	2PM-9PM
<input type="checkbox"/>	 Edit	 Copy	 Delete	112	Studio	YES	1000	YES	12PM-8PM

Customer view while searching for room:

Customer Page

Customer

Exit

What would you like to do?

View All Rooms

108

Search

RoomId	RoomType	RoomIsA...	RoomPrice	Dining	GymTimi...
No content in table					

Book This Room

Customer view after clicking on the search button:

Customer Page

Customer

Exit

What would you like to do?

View All Rooms

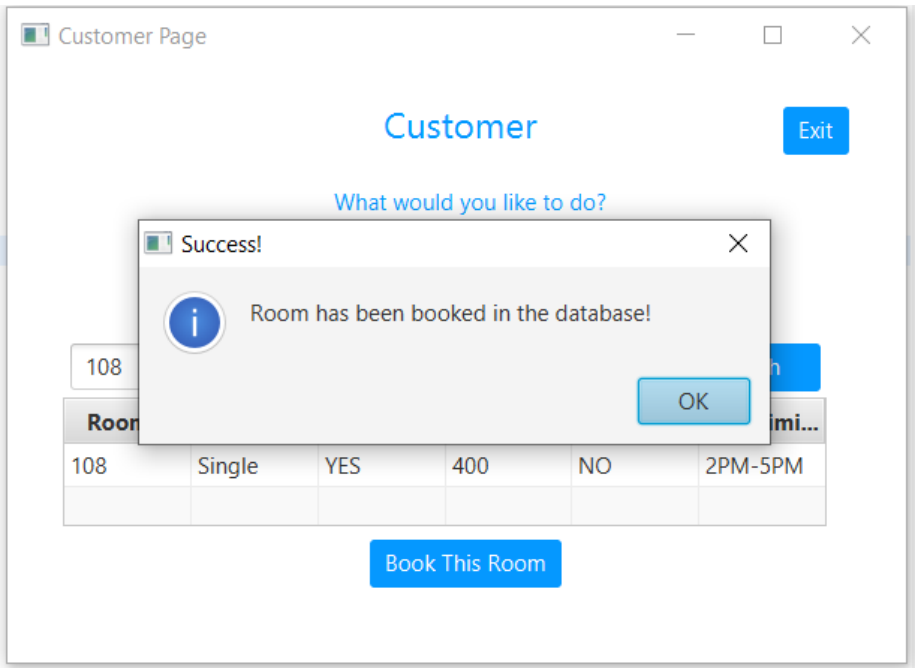
108

Search

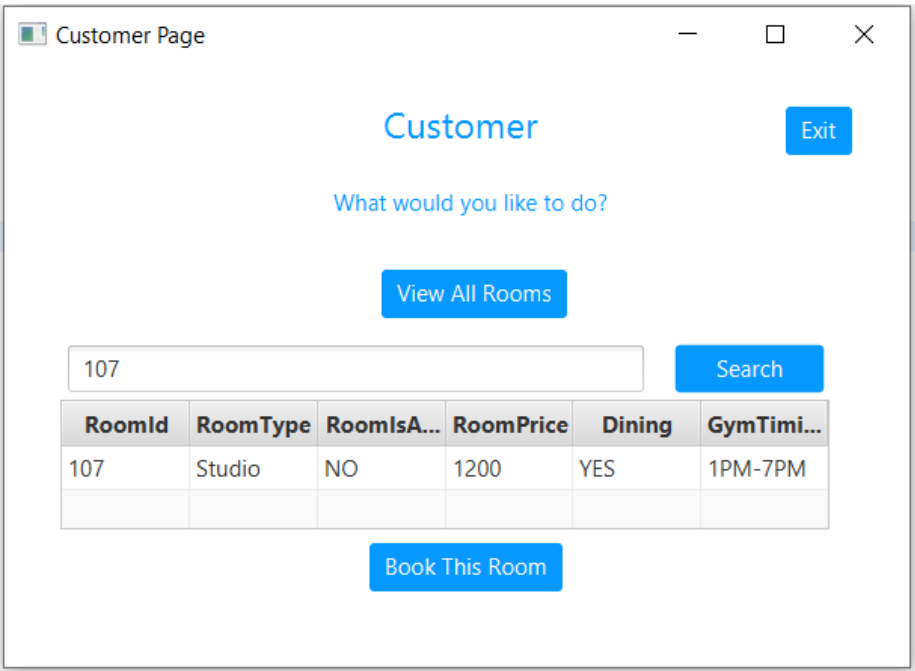
RoomId	RoomType	RoomIsA...	RoomPrice	Dining	GymTimi...
108	Single	YES	400	NO	2PM-5PM

Book This Room

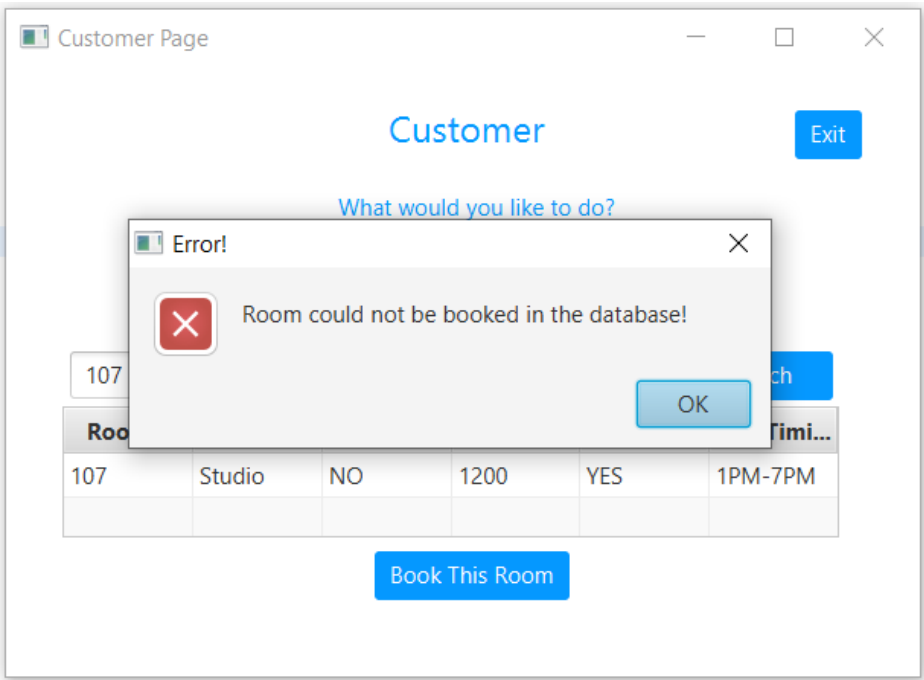
Successful booking for Customer:



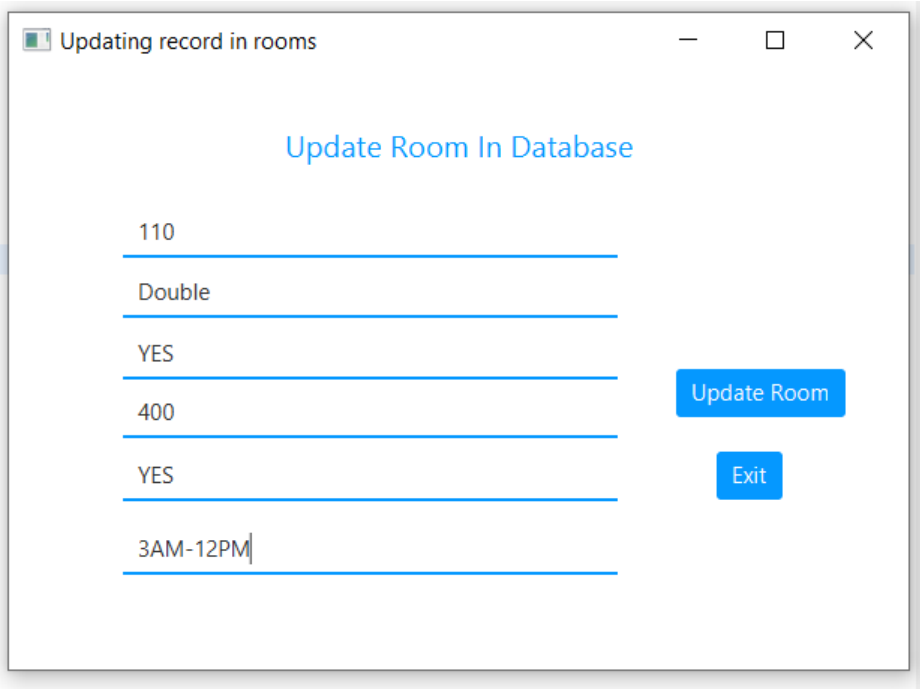
Unavailable room booking attempt for customer:



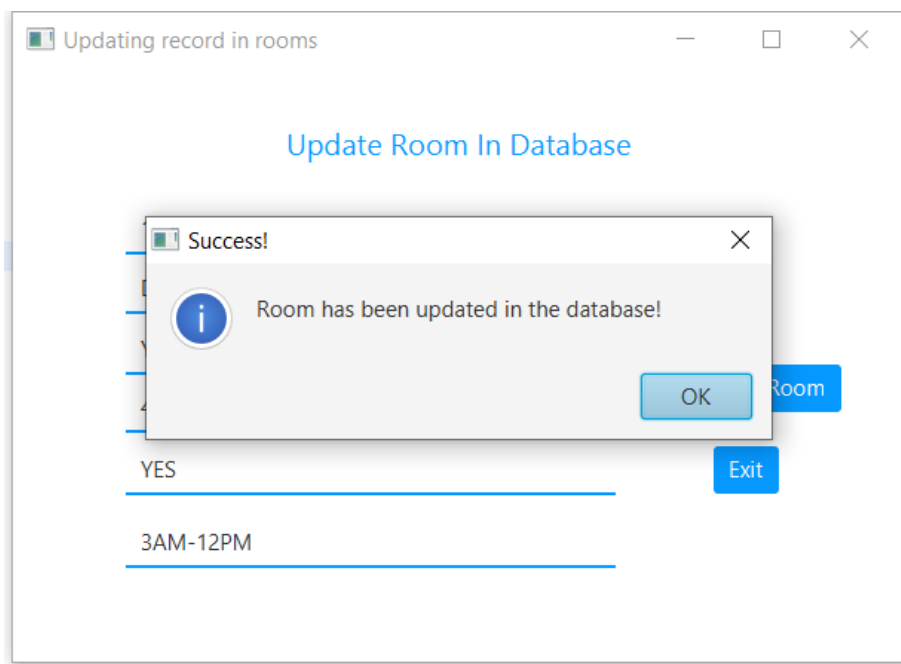
Unsuccessful room booking attempt for customer:



Update room:



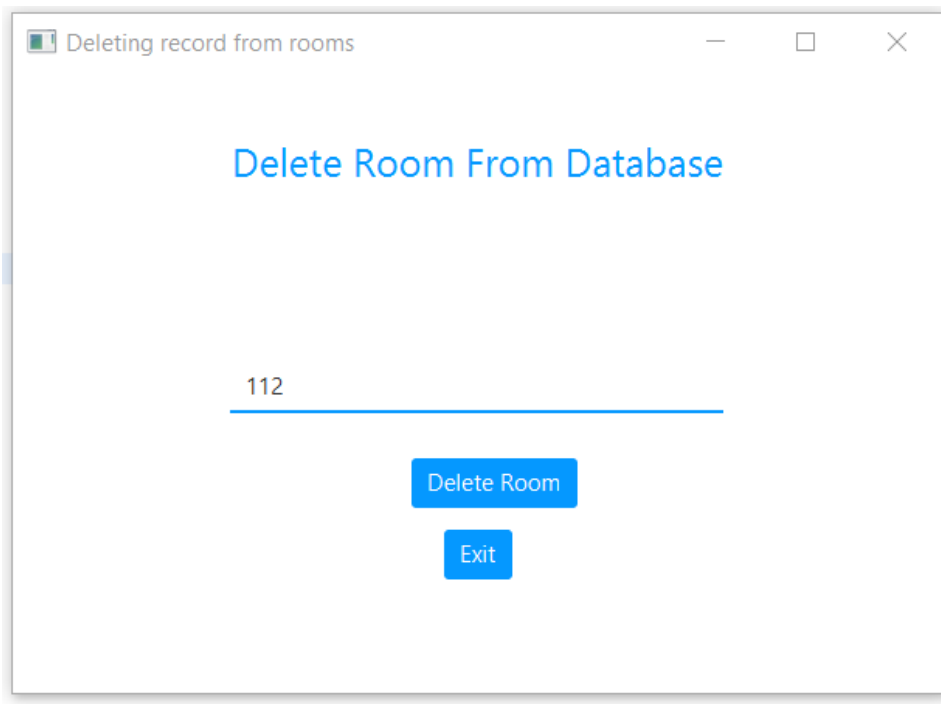
### Successful Room Update:



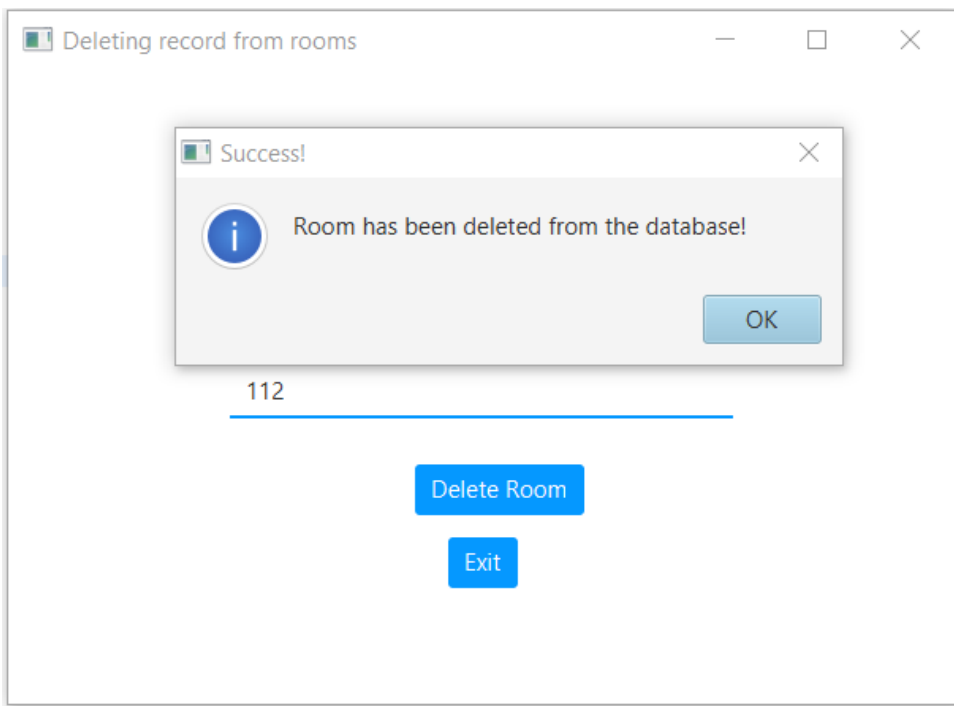
### Room Records after updating:

RoomId	RoomType	RoomIsAv...	RoomPrice	Dining	GymTiming
101	Suite	YES	100	YES	12PM-2PM
102	Single	NO	400	YES	3PM-5PM
103	Single	YES	200	YES	4PM-6PM
104	Suite	NO	100	NO	3PM-5PM
105	Double	YES	600	YES	4PM-7PM
106	Single	YES	200	NO	2PM-3PM
107	Studio	NO	1200	YES	1PM-7PM
108	Single	YES	400	NO	2PM-5PM
109	Studio	YES	1300	YES	12PM-8PM
110	Double	YES	400	YES	3AM-12PM
111	Double	YES	600	YES	2PM-9PM
112	Studio	YES	1000	YES	12PM-8PM

Delete Room:



Successful Delete Room:



Room records after deleting sorted by room type ascending order:

Display of records					
RoomId	RoomType▲	RoomIsAv...	RoomPrice	Dining	GymTiming
105	Double	YES	600	YES	4PM-7PM
110	Double	YES	400	YES	3AM-12PM
111	Double	YES	600	YES	2PM-9PM
103	Single	YES	200	YES	4PM-6PM
102	Single	NO	400	YES	3PM-5PM
108	Single	YES	400	NO	2PM-5PM
106	Single	YES	200	NO	2PM-3PM
107	Studio	NO	1200	YES	1PM-7PM
109	Studio	YES	1300	YES	12PM-8PM
101	Suite	YES	100	YES	12PM-2PM
104	Suite	NO	100	NO	3PM-5PM

Admin Table from database:

+ Options					
← T →					
			AdminId	AdminUser	AdminPass
<input type="checkbox"/>	Edit	Copy	Delete	9001	Ahmed
				abcd	
<input type="checkbox"/>	Edit	Copy	Delete	9002	Yazeed
				efgh	

Employees Table from database:

+ Options

				EmpId	EmpName	EmpUser	EmpPass	EmpPhone	EmpEmail
<input type="checkbox"/>	Edit	Copy	Delete	8001	Count Dracula	CDrac	CDrac	1234567890	cdrac@gmail.com
<input type="checkbox"/>	Edit	Copy	Delete	8002	Van Helsing	VHel	VHel	0987654321	vhel@gmail.com

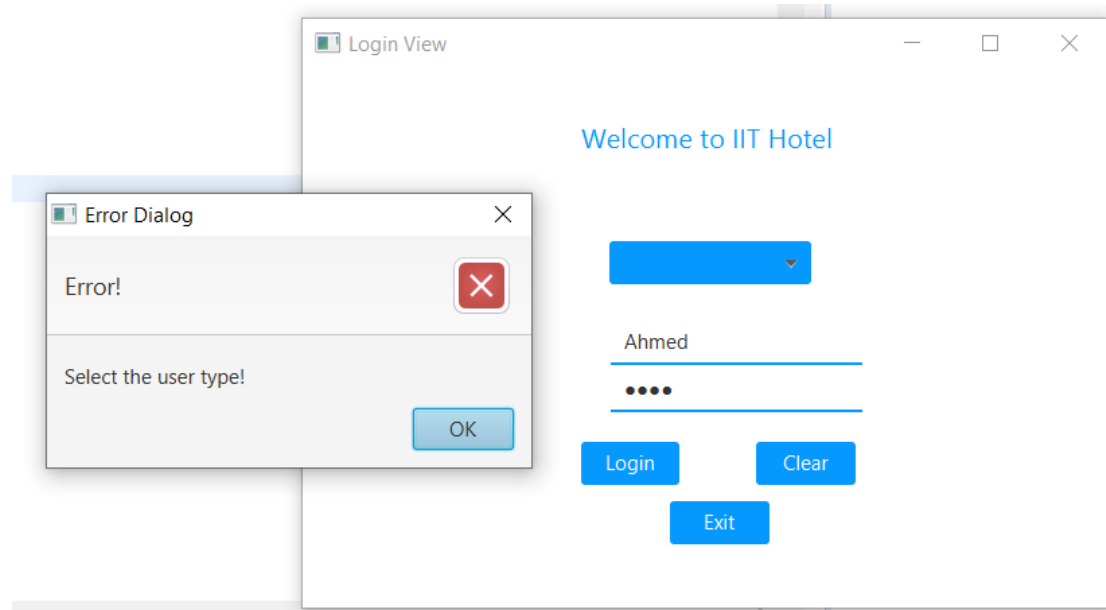
Customers Table from database:

+ Options

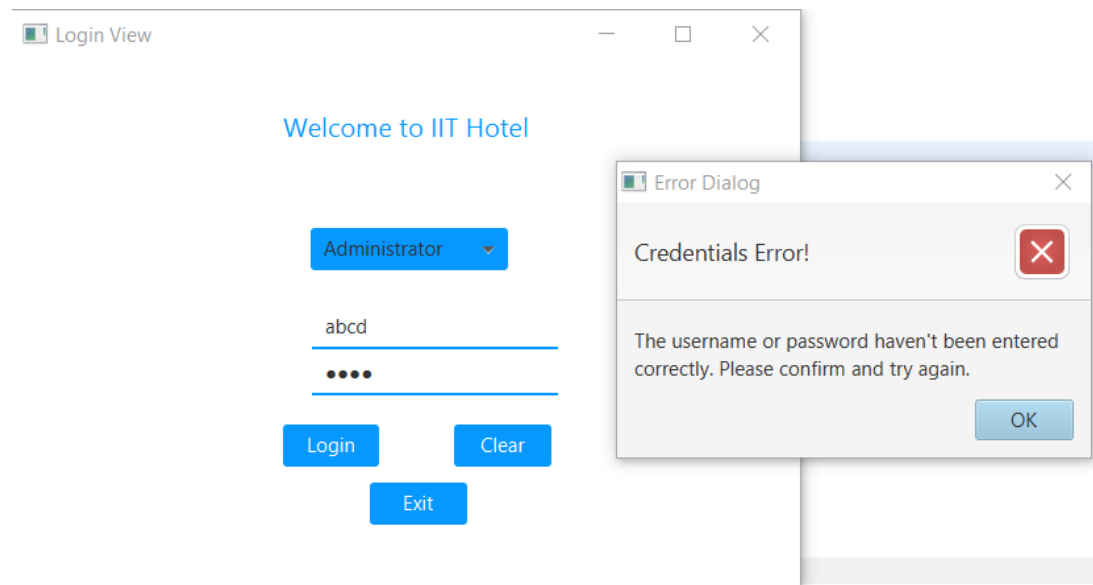
			CustId	CustName	CustUser	CustPass	CustPhone	CustEmail	CustCurrBalance
<input type="checkbox"/>	Edit  Copy  Delete	101	John Doe	JDoe	JDoe	1234567890	jdoe@gmail.com	100	
<input type="checkbox"/>	Edit  Copy  Delete	102	Jane Doe	JaDoe	JaDoe	0123456789	jadoe@gmail.com	1000	

## Error Handling Screenshots:

Unselected user type:

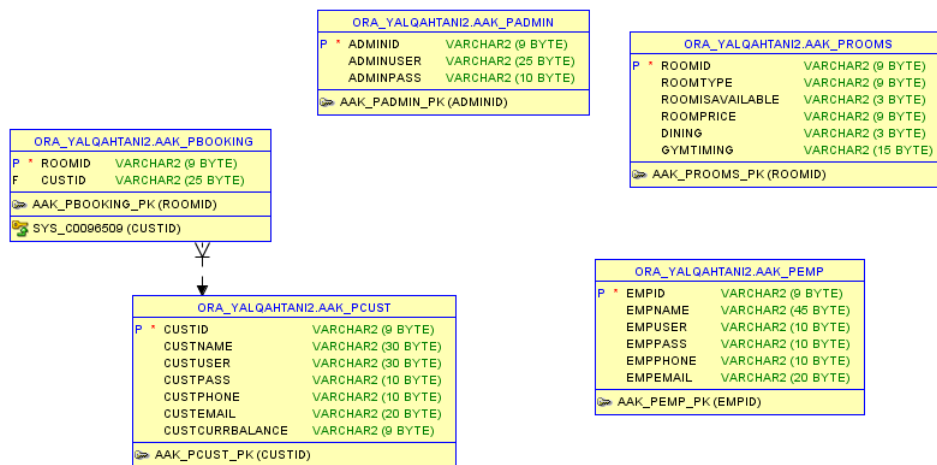


Invalid username/password:





## Extra Credit- Entity Relationship Diagram



## Extra Credit- Use Case

