

Assignment 9

***Video Demo Below

https://drive.google.com/file/d/1GtRULrM4_D5Lp0WFX79dxKWGs-pPW2HO/view?usp=sharing

***Screen shots below

Main menu

```
PS C:\Users\sakib\Downloads\Assignment9Program (4)\Assignment9Program> javac -cp ".;ojdbc8.jar" DBAdminUI.java
PS C:\Users\sakib\Downloads\Assignment9Program (4)\Assignment9Program> java -cp ".;ojdbc8.jar" DBAdminUI

=== Hotel Reservation System ===
1. Create all tables
2. Drop all tables
3. Populate tables
4. Create views
5. Drop views
6. Run advanced queries
7. Run search
8. Exit
Choose an option: |
```

Create All Tables

Choose an option: 1

Creating all tables...

Created table ROOM_TYPE

Created table Customer

Created table Employee

Created table Room

Created table Service

Created table Booking

Created table Booking_Room

Created table Booking_Customer

Created table Payment

Created table Service_Booking

All tables created successfully.

=== Hotel Reservation System ===

1. Create all tables

2. Drop all tables

3. Populate tables

4. Create views

5. Drop views

6. Run advanced queries

7. Run search

8. Exit

Choose an option: |

Create Views

```
Choose an option: 4

Creating views...
Created VIEW_BOOKING_WITH_CUSTOMERS
Created VIEW_ACTIVE_CUSTOMERS
Created VIEW_BOOKING_SERVICES
All views created successfully.

=== Hotel Reservation System ===
1. Create all tables
2. Drop all tables
3. Populate tables
4. Create views
5. Drop views
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8. Exit
Choose an option: |
```

Populate Tables

```
Choose an option: 3

Populating tables with sample data...
Sample data inserted successfully.

=== Hotel Reservation System ===
1. Create all tables
2. Drop all tables
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4. Create views
5. Drop views
6. Run advanced queries
7. Run search
8. Exit
Choose an option: |
```

Advanced Queries (AQ) Menu

Choose an option: 6

=== Advanced Queries Menu ===

1. Customers with NO bookings
2. Employees with NO bookings OR only bookings with TotalPrice < 300
3. For each booking, count unique services (only where count >= 2)
4. Total quantity of each service across all bookings
5. Employees with bookings, excluding those earning >= 50000
6. Number of bookings per room type (only where > 0)
7. Back to main menu

Choose an option: |

AQ1

Choose an option: 1

[Q1] Customers that have NOT made any bookings:
CustomerID=4, Name=Aisha Khan

AQ2

Choose an option: 2

[Q2] Employees with NO bookings OR only bookings with TotalPrice < 300:
EmployeeID=2, Name=Brian Lee
EmployeeID=3, Name=Carlos Rivera
EmployeeID=4, Name=Diana Patel
EmployeeID=5, Name=Edward Brown

AQ3

Choose an option: 3

[Q3] Bookings with COUNT(DISTINCT ServiceID) >= 2:
BookingID=1001, NumServices=2

AQ4

```
Choose an option: 4
```

```
[Q4] Total quantity of each service across all bookings:  
ServiceID=1, Name=Breakfast Buffet, TotalQuantity=14  
ServiceID=2, Name=Airport Shuttle, TotalQuantity=1
```

AQ5

```
Choose an option: 5
```

```
[Q5] Employees with at least one booking, but salary < 50000:  
EmployeeID=1, Name=Alice Johnson
```

AQ6

```
Choose an option: 6
```

```
[Q6] Number of bookings associated with each room type (only > 0):  
RoomTypeID=2, NumBookings=2  
RoomTypeID=1, NumBookings=1
```

Specific Record Search

Search Menu

```
Choose an option: 7
```

```
=== Search Menu ===
```

1. Search Customer by ID
2. Search Employee by ID
3. Search Room by ID
4. Search Booking by ID
5. Back to main menu

```
Choose an option: |
```

Customer Search

```
Choose an option: 1
Enter CustomerID: 1

Searching Customer for CustomerID = 1
-----
CUSTOMERID: 1
CUSNAME: John Smith
PHONENUM: 4161234567
EMAIL: john.smith@example.com
IDTYPE: Passport
```

Employee Search

```
Choose an option: 2
Enter EmployeeID: 3

Searching Employee for EmployeeID = 3
-----
EMPLOYEEID: 3
EMPNAME: Carlos Rivera
EMPROLE: Cook
PHONENUM: 4165551003
EMAIL: carlos.rivera@example.com
SALARY: 38000
```

Room Search

```
Choose an option: 3
Enter RoomID: 2

Searching Room for RoomID = 2
-----
ROOMID: 2
ROOMNUM: 102
FLOOR: 1
ROOMTYPE: 2
PRICE: 180
STATUS: Available
```

Booking Search

```
Choose an option: 4
Enter BookingID: 1002

Searching Booking for BookingID = 1002
-----
BOOKINGID: 1002
EMPLOYEEID: 4
NUMGUESTS: 1
CHECKIN: 2025-11-10 00:00:00
CHECKOUT: 2025-11-12 00:00:00
STATUS: Confirmed
TOTALPRICE: 240
```

Drop All Views

```
Choose an option: 5

Dropping all views...
Dropped VIEW_BOOKING_WITH_CUSTOMERS
Dropped VIEW_ACTIVE_CUSTOMERS
Dropped VIEW_BOOKING_SERVICES
Done attempting to drop views.
```

Drop All Tables

```
Choose an option: 2

Dropping all tables...
Dropped table BOOKING
Dropped table CUSTOMER
Dropped table ROOM
Dropped table EMPLOYEE
Dropped table SERVICE
Dropped table BOOKING_ROOM
Dropped table BOOKING_CUSTOMER
Dropped table PAYMENT
Dropped table SERVICE_BOOKING
Dropped table ROOM_TYPE
Done attempting to drop tables.
```

Exit

```
Choose an option: 8
Exiting...
PS C:\Users\sakib\Downloads\Assignment9Program (4)\Assignment9Program> |
```