

# Kingdom of Saudi Arabia Ministry of Higher Education King Faisal University College of Computer Sciences & Information Technology

# **Tourism Management Agency Database System**

# **Database Concepts and Design Course Project**

Year: 2023-24 Semester: 2

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|-----------|------------------|------------|
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# 1. Introduction

The Tourism Management Agency Database System is designed to revolutionize the manner tourism-associated activities are controlled and facilitated. In today's fast-moving world, the tourism enterprise faces demanding situations in successfully coordinating bookings and different associated services. This system's goals are to deal with those demanding situations through offering a centralized platform.

**Tourists'** requirements and travel agents' services form the foundation of the Tourism Management Agency Database System. **Travel agencies** are used by both individual and group tourists to plan and coordinate their travels. Travel agencies can have thorough client profiles with all their information and travel history on file, which they can use to recommend or assign **hotels** or **airlines** and effectively manage bookings and reservations. guaranteeing **Tourists** a unique travel experience.

**Hotels and airlines** play important roles in the tourism industry, and effective management is critical to customer satisfaction. The travel agency makes the selections for flights and hotels. **The hotel** provides ratings, pricing, and availability of rooms. **Airlines** can also include information such as prices, arrival time, ratings, etc. A tourists' whole travel experience is improved by a smooth process of hotels and airlines, enhancing the overall travel experience for tourists.

**In conclusion**, the Tourism Management Agency Database System offers a central platform that transforms the facilitation and control of tourism-related operations. Technology facilitates the smooth management of **bookings** and guarantees an enjoyable trip for **tourists** by perfectly combining the needs of tourists with the services provided by **travel agencies**. The approach also improves the processes of **hotels and airlines**, improving overall customer pleasure, while acknowledging the important role that these businesses play in the tourism industry. The tourist Management Agency Database System solves the difficulties facing the tourism industry by providing a comprehensive solution for efficiently organizing and supporting great travel experiences.

# 2. System Analysis

#### A. List of users

- Tourists
- Travel Agents
- Hotels
- Airlines

#### **B.** List of main functions

- **Agency add Tourists who** can book tours and provide details of the trip.
- **Agency add Travel Agents** who can manage bookings on behalf of tourists, track commissions, and provide assistance during the booking process.
- **Agency add Hotels who** They are assigned by Travel Agents and can view bookings to generate reports to optimize operations, providing details about prices and ratings.
- Agency add Airlines who They are assigned by Travel Agents and can view their bookings, provide information about flights such as arrival times, and manage flightrelated details.

#### C. List of main reports

#### 1. Booking Reports:

Summary of all bookings made by tourists, including tour details, booking dates, and status.

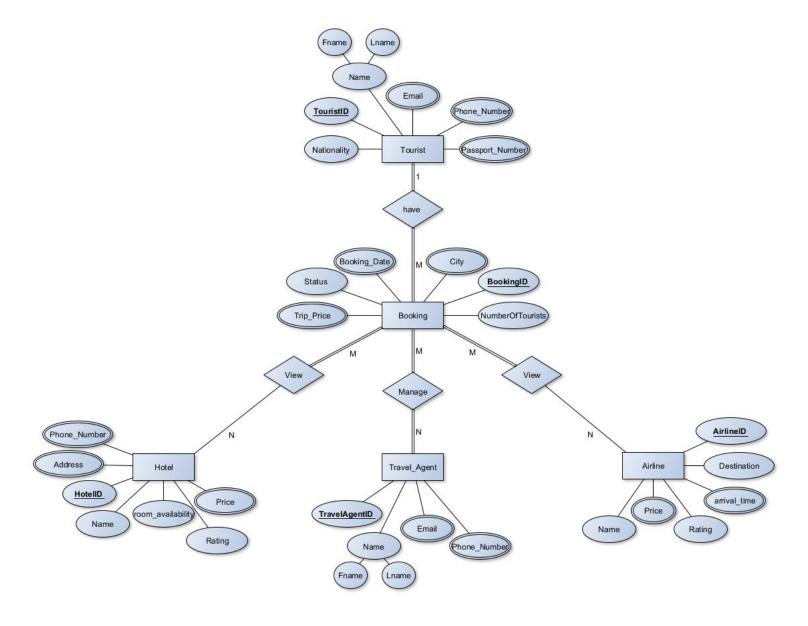
#### 2. Hotel Operations Reports:

Reports generated by hotels to optimize operations, including rates, prices, room availability.

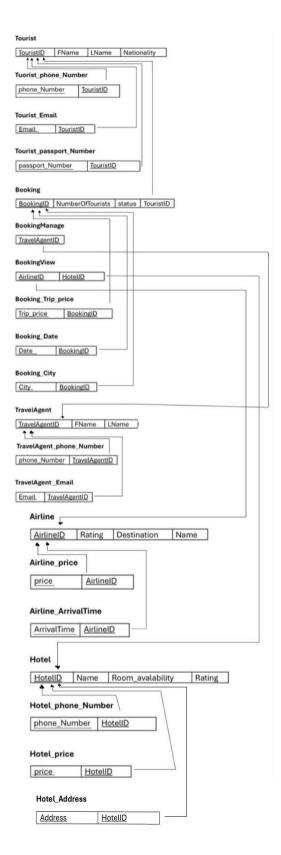
#### 3. Flight Booking Reports:

Summary of flight bookings made by airlines, including flight details, arrival times, and Destination...

# 3. Database Conceptual Design (ERD)



# 4. Logical Design (Relational Schema)



# 5. Physical Design

#### Table name: Tourist

| Column      | ToristID | FName    | LName    | Nationality |
|-------------|----------|----------|----------|-------------|
| name        |          |          |          |             |
| Key type    | PK       |          |          |             |
| Not null=NN |          | NN       | NN       | NN          |
| Unique =UN  |          |          |          |             |
| Check       |          |          |          |             |
| Data type   | Number   | Varchar2 | varchar2 | Varchar2    |
| Length      | 10       | 30       | 30       | 50          |

Create table tourist (
TouristID number(10) ,
Fname varchar2(30) not null ,
Lname varchar2(30) not null ,
Nationality varchar2(50) not null,
Primary key (touristID)
);

#### Table name: Tourist phone Number

| Column name | Phone_number | ToristID |
|-------------|--------------|----------|
| Key type    | PK           | FK       |
| Not null=NN |              |          |
| Unique =UN  |              |          |
| Check       |              |          |
| Data type   | Number       | Number   |
| Length      | 10           | 10       |

# **CREATE TABLE Tourist\_phone\_Number (**

Phone\_number NUMBER(10) CONSTRAINT Phone\_number\_pk PRIMARY KEY,

TouristID NUMBER(10) CONSTRAINT TouristID\_FK REFERENCES tourist(TouristID)
);

# Table name: Tourist\_Email

| Column      | Email    | ToristID |
|-------------|----------|----------|
| name        |          |          |
| Key type    | PK       | FK       |
| Not null=NN |          |          |
| Unique =UN  |          |          |
| Check       |          |          |
| Data type   | Varchar2 | Number   |
| Length      | 30       | 10       |

#### **CREATE TABLE Tourist\_Email(**

Email varchar2(30) CONSTRAINT Email\_pk PRIMARY KEY,

TouristID NUMBER(10) CONSTRAINT TouristID\_Email\_FK REFERENCES tourist(TouristID)

);

# Table name: Tourist\_ Passport\_Number

| Column      | Passport_number | ToristID |
|-------------|-----------------|----------|
| name        |                 |          |
| Key type    | PK              | FK       |
| Not null=NN | UN              |          |
| Unique =UN  |                 |          |
| Check       |                 |          |
| Data type   | Number          | Number   |
| Length      | 10              | 10       |

#### **CREATE TABLE Tourist\_Passport\_Number (**

Passport\_Number number(10) CONSTRAINT Passport\_Number\_pk PRIMARY KEY,

TouristID NUMBER(10) CONSTRAINT TouristID\_Passport\_Number\_FK REFERENCES tourist(TouristID)

);

#### Table name: Booking

| Column<br>name               | BookingID | NumberOfTourists | Status   | ToristID |
|------------------------------|-----------|------------------|----------|----------|
| Key type                     | PK        |                  |          | FK       |
| Not<br>null=NN<br>Unique =UN |           | NN               | NN       |          |
| Check                        |           |                  |          |          |
| Data type                    | Number    | Number           | Varchar2 | Number   |
| Length                       | 10        | 10               | 20       | 10       |

#### **CREATE TABLE Booking (**

BookingID NUMBER(10) PRIMARY KEY, NumberOfTourists NUMBER(10) NOT NULL,

Status VARCHAR2(20) NOT NULL,

TouristID NUMBER(10),

CONSTRAINT touristID\_booking\_FK FOREIGN KEY (TouristID) REFERENCES Tourist(TouristID));

#### Table name:Booking\_Trip\_price

| Column name | Trip_price | ToristID |
|-------------|------------|----------|
| Key type    | PK         | FK       |
| Not null=NN |            |          |
| Unique =UN  |            |          |
| Check       |            |          |
| Data type   | Number     | Number   |
| Length      | 10         | 10       |

```
CREATE TABLE Booking_Trip_price (
    Trip_price NUMBER(10),
    TouristID NUMBER(10),
    CONSTRAINT PK_Trip PRIMARY KEY (Trip_price),
    CONSTRAINT FK_Trip_Tourist FOREIGN KEY (TouristID) REFERENCES Tourist(TouristID)
);
```

#### Table name: Booking Date

| <u> </u>    |              |          |
|-------------|--------------|----------|
| Column name | Booking_date | ToristID |
| Key type    | PK           | FK       |
| Not null=NN | NN           |          |
| Unique =UN  |              |          |
| Check       |              |          |
| Data type   | TO_DATE      | Number   |
| Length      |              | 10       |

```
CREATE TABLE Booking_DATE (
Booking_date DATE NOT NULL,
TouristID NUMBER(10),
CONSTRAINT PK_Booking PRIMARY KEY (Booking_date),
CONSTRAINT FK_Booking_Tourist FOREIGN KEY (TouristID) REFERENCES Tourist(TouristID)
);
```

#### Table name:Booking City

| <u> </u>           |          |          |  |
|--------------------|----------|----------|--|
| Column             | City     | ToristID |  |
| name               |          |          |  |
| Key type           | PK       | FK       |  |
| Not null=NN        | NN       |          |  |
| Unique =UN         |          |          |  |
| Check              |          |          |  |
| Data type          | Varchar2 | Number   |  |
| Length             | 20       | 10       |  |
| Check<br>Data type |          |          |  |

```
CREATE TABLE Booking_city (
   City VARCHAR2(20),
   TouristID NUMBER(10),
   CONSTRAINT PK_City PRIMARY KEY (City),
   CONSTRAINT FK_City_Tourist FOREIGN KEY (TouristID) REFERENCES Tourist(TouristID)
);
```

#### Table name: Travel agent

| Column name | TravelAgentID | FName    | LName    |
|-------------|---------------|----------|----------|
| Key type    | PK            |          |          |
| Not null=NN |               | NN       | NN       |
| Unique =UN  |               |          |          |
| Check       |               |          |          |
| Data type   | Number        | Varchar2 | Varchar2 |
| Length      | 10            | 30       | 30       |
|             |               |          |          |

```
CREATE TABLE TravelAgent (
TravelAgentID NUMBER(10) PRIMARY KEY,
FName VARCHAR2(30) NOT NULL,
LName VARCHAR2(30) NOT NULL
);
```

#### Table name: TravelAgent\_phone\_Number

| Column name               | Phone_number | TravelAgentID |
|---------------------------|--------------|---------------|
| Key type                  | PK           | FK            |
| Not null=NN<br>Unique =UN | NN           |               |
| Check                     |              |               |
| Data type                 | Number       | Number        |
| Length                    | 10           | 10            |

#### CREATE TABLE TravelAgent\_Phone\_number (

Phone\_number NUMBER(10) PRIMARY KEY,

TravelAgentID NUMBER(10) NOT NULL,

CONSTRAINT FK\_TravelAgent\_Phone FOREIGN KEY (TravelAgentID) REFERENCES TravelAgent(TravelAgentID)

);

#### Table name: TravelAgent\_Email

| Column<br>name | Email    | TravelAgentID |
|----------------|----------|---------------|
| Key type       | PK       | FK            |
| Rey type       | I K      | TK            |
| Not null=NN    |          |               |
| Unique =UN     |          |               |
| Check          |          |               |
| Data type      | Varchar2 | Number        |
| Length         | 30       | 10            |

# Name table: Airline

| Column      | AirlineID | Name    | Rating | Destination |
|-------------|-----------|---------|--------|-------------|
| name        |           |         |        |             |
| Key type    | PK        |         |        |             |
| Not null=NN |           | NN      | NN     | NN          |
| Unique =UN  |           |         |        |             |
| Check       |           |         |        |             |
| Data type   | Number    | Varchar | Char   | Varchar2    |
|             |           | 2       |        |             |
| Length      | 10        | 20      | 20     | 30          |

CREATE TABLE Airline (
AirlineID NUMBER(10) PRIMARY KEY,
Name VARCHAR2(20) NOT NULL,
Rating CHAR(2) NOT NULL,
Destination VARCHAR2(30) NOT NULL
);

# Name table: Airline\_price

| Columnname  | Price  | AirlineID |
|-------------|--------|-----------|
| Key type    | PK     | FK        |
|             |        |           |
|             |        |           |
| Not null=NN | NN     |           |
| Unique =UN  |        |           |
| Check       |        |           |
| Data type   | Number | Number    |
|             |        |           |
| Length      | 10     | 10        |

```
CREATE TABLE Airline_price (
    Price NUMBER(10) NOT NULL,
    AirlineID NUMBER(10),
    CONSTRAINT PK_Flight PRIMARY KEY (Price),
    CONSTRAINT FK_Flight_Airline FOREIGN KEY (AirlineID) REFERENCES Airline(AirlineID)
);
```

#### Name table: Airline ArrivalTime

| Column name | Arrival_time | AirlineID |
|-------------|--------------|-----------|
| Key type    | PK           | FK        |
| Not null=NN | NN           |           |
| Unique =UN  |              |           |
| Check       |              |           |
| Data type   | TO_DATE      | Number    |
|             |              |           |
| Length      |              | 10        |

```
CREATE TABLE Airline_Arrivaltime (
   Arrival_time DATE NOT NULL,
   AirlineID NUMBER(10),
   CONSTRAINT PK_Flight_Arrival PRIMARY KEY (Arrival_time),
   CONSTRAINT FK_Flight_Arrival_Airline FOREIGN KEY (AirlineID) REFERENCES Airline(AirlineID)
);
```

#### Table name: Hotel

| Column name               | HotlelID | Name     | Room_availability | Rating    |
|---------------------------|----------|----------|-------------------|-----------|
| Key type                  | PK       |          |                   |           |
| Not null=NN<br>Unique =UN |          | NN       | NN                |           |
| Check                     |          |          |                   |           |
| Data type                 | Number   | Varchar2 | Char              | Varchar2. |
| Length                    | 10       | 30       | 20                | 20        |

#### **CREATE TABLE Hotel (**

```
HoteIID NUMBER(10) PRIMARY KEY,
Name VARCHAR2(30) NOT NULL,
Room_availability CHAR(20) NOT NULL,
Rating VARCHAR2(20) NOT NULL
);
```

Table name: Hotel\_phone\_Number

| _                         | _            |          |
|---------------------------|--------------|----------|
| Column name               | Phone_number | HotlelID |
| Key type                  | PK           | FK       |
| Not null=NN<br>Unique =UN | NN           |          |
| Check                     |              |          |
| Data type                 | Number       | Number.  |
| Length                    | 10           | 10       |

#### **CREATE TABLE Hotel\_Phone (**

Phone\_number NUMBER(10) PRIMARY KEY,
HotelID NUMBER(10) NOT NULL,
CONSTRAINT FK\_Hotel\_Phone\_HotelID FOREIGN KEY (HotelID) REFERENCES Hotel(HotelID)
);

Table name: Hotel Price

| Column name | Price  | HotlelID |
|-------------|--------|----------|
|             |        |          |
| Key type    | PK     | FK       |
| Not null=NN | NN     |          |
| Unique =UN  |        |          |
| Check       |        |          |
| Data type   | Number | Number.  |
|             |        |          |
| Length      | 10     | 10       |

#### **CREATE TABLE Hotel\_Price (**

Price NUMBER(10) PRIMARY KEY,
HotelID NUMBER(10) NOT NULL,
CONSTRAINT EK Hotel Price HotelID FORFIGN KEY

CONSTRAINT FK\_Hotel\_Price\_HotelID FOREIGN KEY (HotelID) REFERENCES Hotel(HotelID) );

#### Table name: Hotel Address

| _                         |          |          |
|---------------------------|----------|----------|
| Column name               | Address  | HotlelID |
| Key type                  | PK       | FK       |
| Not null=NN<br>Unique =UN | UN       |          |
| Check                     |          |          |
| Data type                 | Varchar2 | Number.  |
| Length                    | 20       | 10       |

```
CREATE TABLE Hotel_Address (
   Address VARCHAR2(20),
   HotelID NUMBER(10),
   CONSTRAINT PK_Hotel_Address PRIMARY KEY (Address),
   CONSTRAINT FK_Hotel_Address_HotelID FOREIGN KEY (HotelID) REFERENCES Hotel(HotelID)
);
```

# Table name:BookingManage

| Columnname  | TravelAgentID |
|-------------|---------------|
| Key type    | FK            |
| Not null=NN |               |
| Unique =UN  |               |
| Check       |               |
| Data type   | Number        |
| Length      | 10            |

```
CREATE TABLE BookingManage (
    TravelAgentID NUMBER(10),
    CONSTRAINT FK_Booking_TravelAgentID FOREIGN KEY (TravelAgentID) REFERENCES
    TravelAgent(TravelAgentID)
);
```

# Table name:BookingView

| Columnname  | AirlineID | HotlelID |
|-------------|-----------|----------|
| Key type    | FK        | FK       |
| Not null=NN |           |          |
| Unique =UN  |           |          |
| Check       |           |          |
| Data type   | Number    | Number   |
|             |           |          |
| Length      |           | 10       |
|             |           |          |

```
CREATE TABLE BookingView (
   AirlineID NUMBER(10),
   HoteIID NUMBER(10),
   CONSTRAINT FK_FlightHotel_AirlineID FOREIGN KEY (AirlineID) REFERENCES Airline(AirlineID),
   CONSTRAINT FK_FlightHotel_HoteIID FOREIGN KEY (HoteIID) REFERENCES Hotel(HoteIID)
);
```

# 6. Populate Database

# **Tourist**

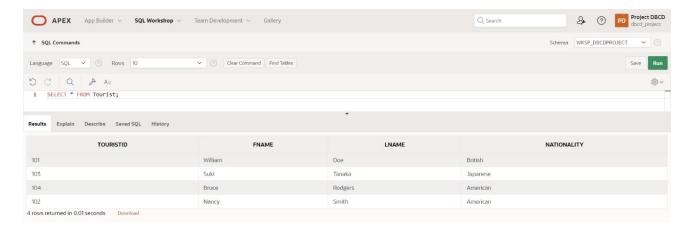
INSERT INTO Tourist (TouristID, Fname, Lname, Nationality) VALUES (101, 'William', 'Doe', 'British');

| TouristID | FName   | LName   | Nationality |
|-----------|---------|---------|-------------|
| 101       | William | Doe     | British     |
| 102       | Nancy   | Smith   | American    |
| 103       | Suki    | Tanaka  | Japanese    |
| 104       | Bruce   | Rodgers | American    |

INSERT INTO Tourist (TouristID, Fname, Lname, Nationality) VALUES (102, 'Nancy', 'Smith', 'American');

INSERT INTO Tourist (TouristID, Fname, Lname, Nationality) VALUES (103, 'Suki', 'Tanaka', 'Japanese');

INSERT INTO Tourist (TouristID, Fname, Lname, Nationality) VALUES (104, 'Bruce', 'Rodgers', 'American');



# **Tourist\_phone\_Number**

| TouristID | Phone_Num  |
|-----------|------------|
| 101       | 5677437755 |
| 102       | 1155589944 |
| 103       | 2346569998 |
| 104       | 5873679977 |

INSERT INTO Tourist\_Phone\_number (Phone\_number, TouristID)

VALUES (5677437755, 101);

INSERT INTO Tourist\_Phone\_number (Phone\_number, TouristID)

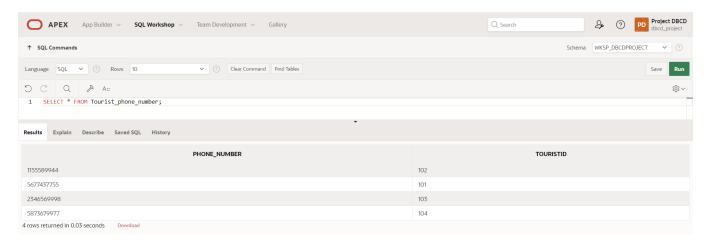
VALUES (1155589944, 102);

INSERT INTO Tourist\_Phone\_number (Phone\_number, TouristID)

VALUES (2346569998, 103);

INSERT INTO Tourist\_Phone\_number (Phone\_number, TouristID)

VALUES (5873679977, 104);



# Tourist\_Email

| TouristID | Email                 |
|-----------|-----------------------|
| 101       | William@mymail.com    |
| 102       | nanhalf@freemail.com  |
| 103       | Sup@ggmail.com        |
| 104       | brodgers@coolmail.com |

INSERT INTO Tourist\_Email (Email, TouristID)

VALUES ('william@mymail.com', 101);

INSERT INTO Tourist\_Email (Email, TouristID)

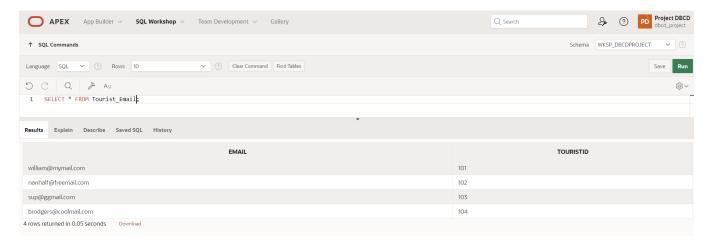
VALUES ('nanhalf@freemail.com', 102);

INSERT INTO Tourist\_Email (Email, TouristID)

VALUES ('sup@ggmail.com', 103);

INSERT INTO Tourist\_Email (Email, TouristID)

VALUES ('brodgers@coolmail.com', 104);



# **Tourist\_passport\_Number**

| TouristID | Passport_Num |
|-----------|--------------|
| 101       | 560333040    |
| 102       | 500304988    |
| 103       | 123456763    |
| 104       | 478553459    |

INSERT INTO Tourist\_Passport\_number (Passport\_number, TouristID)

VALUES (560333040, 101);

INSERT INTO Tourist\_Passport\_number (Passport\_number, TouristID)

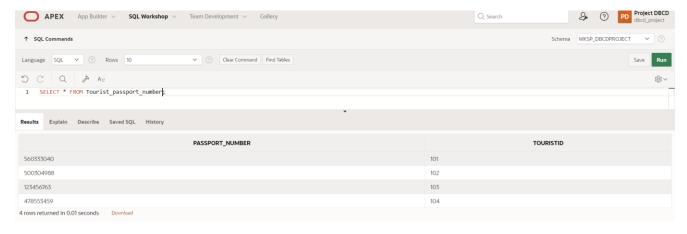
VALUES (500304988, 102);

INSERT INTO Tourist\_Passport\_number (Passport\_number, TouristID)

VALUES (123456763, 103);

INSERT INTO Tourist\_Passport\_number (Passport\_number, TouristID)

VALUES (478553459, 104);



# **Booking**

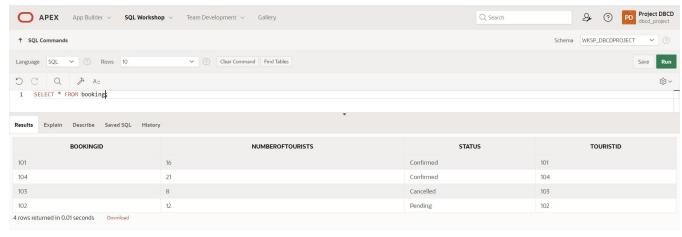
| BOOKINGID | NUMOFTOURISTS | STATUS    | TouristID |
|-----------|---------------|-----------|-----------|
| 101       | 16            | Confirmed | 101       |
| 102       | 12            | Pending   | 102       |
| 103       | 8             | Cancelled | 103       |
| 104       | 21            | Confirmed | 104       |

INSERT INTO Booking (BookingID, NumberOfTourists, Status, TouristID) VALUES (101, 16, 'Confirmed', 101);

INSERT INTO Booking (BookingID, NumberOfTourists, Status, TouristID) VALUES (102, 12, 'Pending', 102);

INSERT INTO Booking (BookingID, NumberOfTourists, Status, TouristID) VALUES (103, 8, 'Cancelled', 103);

INSERT INTO Booking (BookingID, NumberOfTourists, Status, TouristID) VALUES (104, 21, 'Confirmed', 104);



# **Booking\_trip\_price**

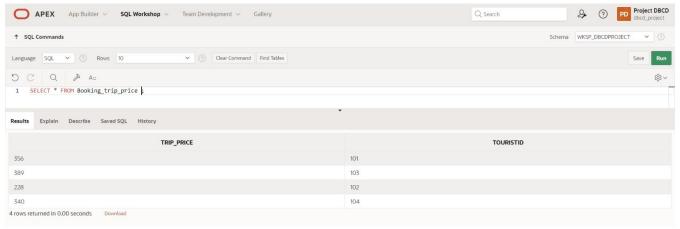
| TRIP_PRICE | BOOKINGID |
|------------|-----------|
| 356        | 101       |
| 228        | 102       |
| 389        | 103       |
| 340        | 104       |

INSERT INTO Booking\_Trip\_Price (TouristID, Trip\_price)
VALUES (101, 356);

INSERT INTO Booking\_Trip\_Price (TouristID, Trip\_price) VALUES (102, 228);

INSERT INTO Booking\_Trip\_Price (TouristID, Trip\_price) VALUES (103, 389);

INSERT INTO Booking\_Trip\_Price (TouristID, Trip\_price) VALUES (104, 340);



# **Booking\_Date**

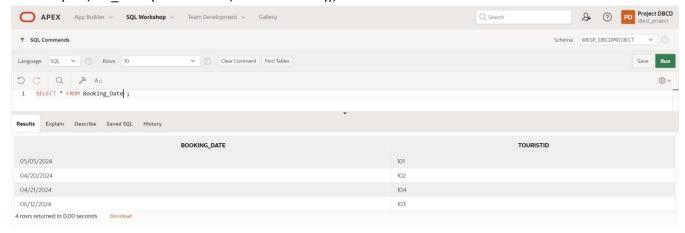
| BOOKING_DATE | BOOKINGID |
|--------------|-----------|
| 5/5/2024     | 101       |
| 4/20/2024    | 102       |
| 6/12/2024    | 103       |
| 4/21/2024    | 104       |

INSERT INTO Booking\_Date (TouristID, Booking\_date) VALUES (101, TO\_DATE('2024-05-05', 'YYYY-MM-DD'));

INSERT INTO Booking\_Date (TouristID, Booking\_date) VALUES (102, TO\_DATE('2024-04-20', 'YYYY-MM-DD'));

INSERT INTO Booking\_Date (TouristID, Booking\_date) VALUES (103, TO\_DATE('2024-06-12', 'YYYY-MM-DD'));

INSERT INTO Booking\_Date (TouristID, Booking\_date)
VALUES (104, TO\_DATE('2024-04-21', 'YYYY-MM-DD'));



# **Booking\_City**

| <u> </u> |           |  |
|----------|-----------|--|
| CITY     | BOOKINGID |  |
| London   | 101       |  |
| Dubai    | 102       |  |
| Rome     | 103       |  |
| Tokyo    | 104       |  |

INSERT INTO Booking\_City (TouristID, City)

VALUES (101, 'London');

INSERT INTO Booking\_City (TouristID, City)

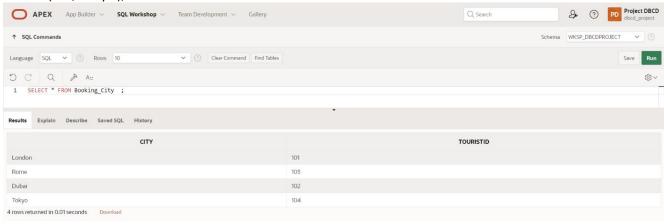
VALUES (102, 'Dubai');

INSERT INTO Booking\_City (TouristID, City)

VALUES (103, 'Rome');

INSERT INTO Booking\_City (TouristID, City)

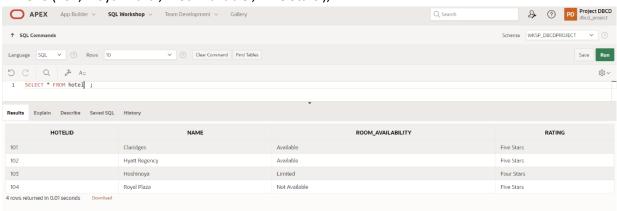
VALUES (104, 'Tokyo');



# Hotel

| HOTELID | NAME          | ROOM_AVAILBILITY | RATING     |
|---------|---------------|------------------|------------|
| 101     | Claridges     | Available        | Five Stars |
| 102     | Hyatt Regency | Available        | Five Stars |
| 103     | Hoshinoya     | Limited          | Four Stars |
| 104     | Royal Plaza   | No Available     | Five Stars |

INSERT INTO Hotel (HotelID, Name, Room\_availability, Rating) VALUES (101, 'Claridges', 'Available', 'Five Stars'); INSERT INTO Hotel (HotelID, Name, Room\_availability, Rating) VALUES (102, 'Hyatt Regency', 'Available', 'Five Stars'); INSERT INTO Hotel (HotelID, Name, Room\_availability, Rating) VALUES (103, 'Hoshinoya', 'Limited', 'Four Stars'); INSERT INTO Hotel (HotelID, Name, Room\_availability, Rating) VALUES (104, 'Royal Plaza', 'Not Available', 'Five Stars');



# **Hotel phone number**

| PHONE_NUM  | HOTELID |
|------------|---------|
| 1234567890 | 101     |
| 2893781177 | 102     |
| 5031348096 | 103     |
| 567377966  | 104     |

INSERT INTO Hotel\_Phone\_Number (Phone\_number, HotelID)

VALUES (1234567890, 101);

INSERT INTO Hotel\_Phone\_Number (Phone\_number, HotelID)

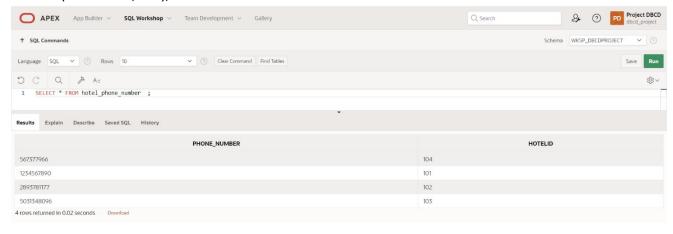
VALUES (2893781177, 102);

INSERT INTO Hotel\_Phone\_Number (Phone\_number, HotelID)

VALUES (5031348096, 103);

INSERT INTO Hotel\_Phone\_Number (Phone\_number, HotelID)

VALUES (567377966, 104);



# Hotel\_price

| PRICE | HOTELID |
|-------|---------|
| 1412  | 101     |
| 249   | 102     |
| 1643  | 103     |
| 979   | 104     |

INSERT INTO Hotel\_Price (HotelID, Price)

VALUES (101, 1412);

INSERT INTO Hotel\_Price (HotelID, Price)

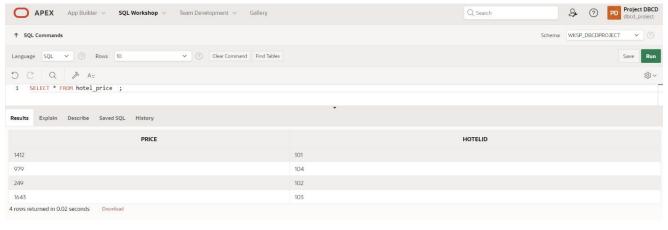
VALUES (102, 249);

INSERT INTO Hotel\_Price (HotelID, Price)

VALUES (103, 1643);

INSERT INTO Hotel\_Price (HotelID, Price)

VALUES (104, 979);



# **Hotel Address**

| ADDRESS           | HOTELID |
|-------------------|---------|
| '41 - 43 Brook    | 101     |
| Street'           |         |
| 'Al Khaleej Road' | 102     |
| 'Otemachi'        | 103     |
| '25 Scotts Road'  | 104     |

INSERT INTO Hotel\_Address (HotelID, Address)

VALUES (101, '41 - 43 Brook Street');

INSERT INTO Hotel\_Address (HotelID, Address)

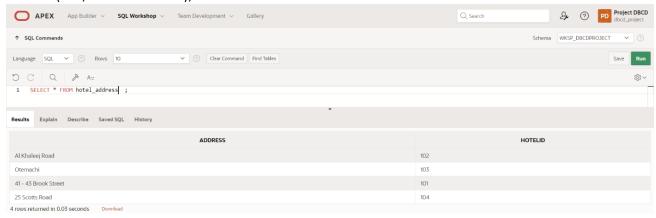
VALUES (102, 'Al Khaleej Road');

INSERT INTO Hotel\_Address (HotelID, Address)

VALUES (103, 'Otemachi');

INSERT INTO Hotel\_Address (HotelID, Address)

VALUES (104, '25 Scotts Road');



# <mark>Airline</mark>

| AirlineID | Rating | Name               | Destination |
|-----------|--------|--------------------|-------------|
| 101       | 3      | American Airlines  | London      |
| 102       | 4      | Emirates           | Dubai       |
| 103       | 5      | Japan Airlines     | Tokyo       |
| 104       | 5      | Singapore Airlines | Singapore   |

INSERT INTO Airline (AirlineID, Rating, Name, Destination)

VALUES (101, 3, 'American Airlines', 'London');

INSERT INTO Airline (AirlineID, Rating, Name, Destination)

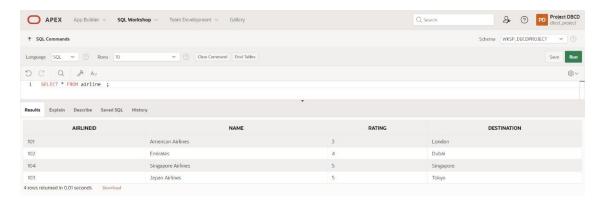
VALUES (102, 4, 'Emirates', 'Dubai');

INSERT INTO Airline (AirlineID, Rating, Name, Destination)

VALUES (103, 5, 'Japan Airlines', 'Tokyo');

INSERT INTO Airline (AirlineID, Rating, Name, Destination)

VALUES (104, 5, 'Singapore Airlines', 'Singapore');



# Airline\_price

| Price | AirlineID |
|-------|-----------|
| 607   | 101       |
| 644   | 102       |
| 1628  | 103       |
| 1829  | 104       |

INSERT INTO Airline\_Price (Price, AirlineID)

VALUES (607, 101);

INSERT INTO Airline\_Price (Price, AirlineID)

VALUES (644, 102);

INSERT INTO Airline\_Price (Price, AirlineID)

VALUES (1628, 103);

INSERT INTO Airline\_Price (Price, AirlineID) VALUES (1829, 104);



# **Airline ArrivalTime**

| Arrival_time | AirlineID |
|--------------|-----------|
| 05/11/2024   | 101       |
| 04/05/2024   | 102       |
| 04/25/2024   | 103       |
| 05/06/2024   | 104       |

INSERT INTO Airline\_ArrivalTime (Arrival\_time, AirlineID)

VALUES (TO\_DATE('05/11/2024', 'MM/DD/YYYY'), 101);

INSERT INTO Airline\_ArrivalTime (Arrival\_time, AirlineID)

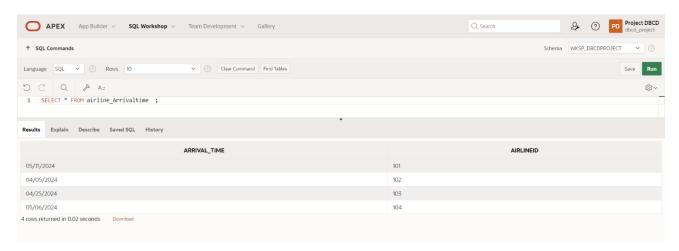
VALUES (TO\_DATE('04/05/2024', 'MM/DD/YYYY'), 102);

INSERT INTO Airline\_ArrivalTime (Arrival\_time, AirlineID)

VALUES (TO\_DATE('04/25/2024', 'MM/DD/YYYY'), 103);

INSERT INTO Airline\_ArrivalTime (Arrival\_time, AirlineID)

VALUES (TO\_DATE('05/06/2024', 'MM/DD/YYYY'), 104);



#### **TRAVELAGENT**

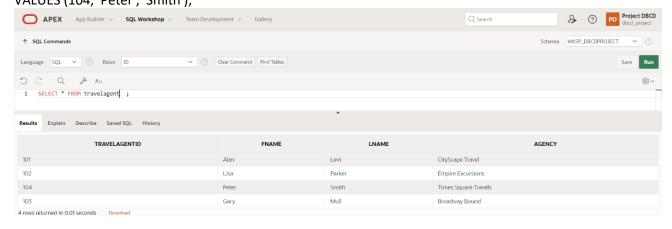
| TRAVELAGENTID | FNAME | LNAME  |
|---------------|-------|--------|
| 101           | Alan  | Levi   |
| 102           | Lisa  | Parker |
| 103           | Gary  | Mull   |
| 104           | Peter | Smith  |

INSERT INTO TravelAgent (TravelAgentID, Fname, Lname) VALUES (101, 'Alan', 'Levi');
INSERT INTO TravelAgent (TravelAgentID, Fname, Lname)

INSERT INTO TravelAgent (TravelAgentID, Fname, Lname) VALUES (102, 'Lisa', 'Parker';

 $\label{local-problem} \begin{tabular}{l} INSERT\ INTO\ TravelAgent\ (TravelAgentID,\ Fname,\ Lname) \\ VALUES\ (103,\ 'Gary',\ 'Mull'); \end{tabular}$ 

INSERT INTO TravelAgent (TravelAgentID, Fname, Lname) VALUES (104, 'Peter', 'Smith');



#### TRAVELAGENT\_Email

| EMAIL                 | TRAVELAGENTID |
|-----------------------|---------------|
| alevi@safemail.com    | 101           |
| lisap@gmail.com       | 102           |
| garymull@nextmail.com | 103           |
| Peter@Mail.com        | 104           |

INSERT INTO TravelAgent\_Email (Email, TravelAgentID)

VALUES ('alevi@safemail.com', 101);

INSERT INTO TravelAgent\_Email (Email, TravelAgentID)

VALUES ('lisap@gmail.com', 102);

INSERT INTO TravelAgent\_Email (Email, TravelAgentID)

VALUES ('garymull@nextmail.com', 103);

INSERT INTO TravelAgent\_Email (Email, TravelAgentID)

VALUES ('Peter@Mail.com', 104);



#### TRAVELAGENT\_phone\_number

| PHONE_NUMBER | TRAVELAGENTID |
|--------------|---------------|
| 7894432277   | 101           |
| 1234567632   | 102           |
| 4112335565   | 103           |
| 5877849977   | 104           |

INSERT INTO TravelAgent\_Phone\_Number (Phone\_number, TravelAgentID)

VALUES (7894432277, 101);

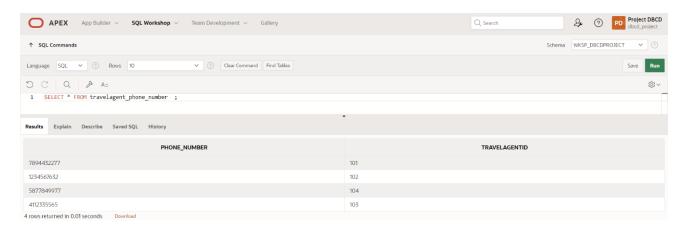
INSERT INTO TravelAgent\_Phone\_Number (Phone\_number, TravelAgentID)

VALUES (1234567632, 102);

INSERT INTO TravelAgent\_Phone\_Number (Phone\_number, TravelAgentID)

VALUES (4112335565, 103);

INSERT INTO TravelAgent\_Phone\_Number (Phone\_number, TravelAgentID) VALUES (5877849977, 104);



# **BookingManage**

| TravelAgentID |  |
|---------------|--|
| 101           |  |
| 102           |  |
| 103           |  |
| 104           |  |

INSERT INTO BookingManage (TravelAgentID)

**VALUES (101)**;

INSERT INTO BookingManage (TravelAgentID)

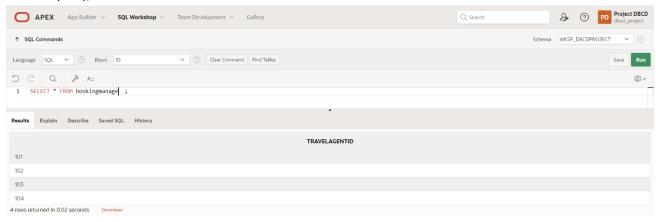
VALUES (102);

INSERT INTO BookingManage (TravelAgentID)

VALUES (103);

INSERT INTO BookingManage (TravelAgentID)

VALUES (104);



# **BookingView**

| AirlineID | HotelID |
|-----------|---------|
| 101       | 101     |
| 102       | 102     |
| 103       | 103     |
| 104       | 104     |

INSERT INTO BookingView (AirlineID, HoteIID)

VALUES (101, 101);

INSERT INTO BookingView (AirlineID, HoteIID)

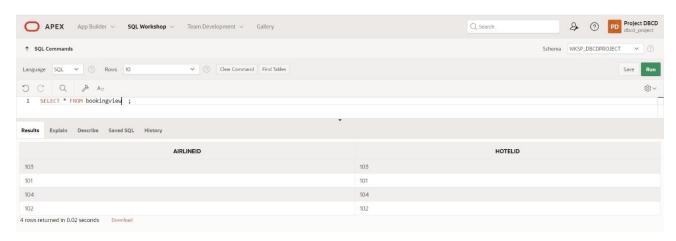
VALUES (102, 102);

INSERT INTO BookingView (AirlineID, HoteIID)

VALUES (103, 103);

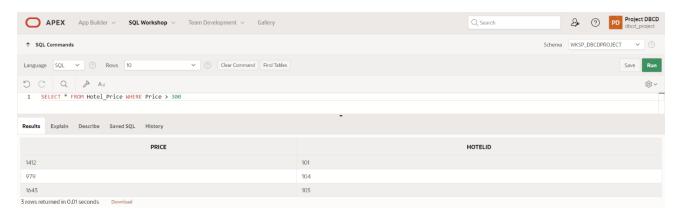
INSERT INTO BookingView (AirlineID, HoteIID)

VALUES (104, 104);

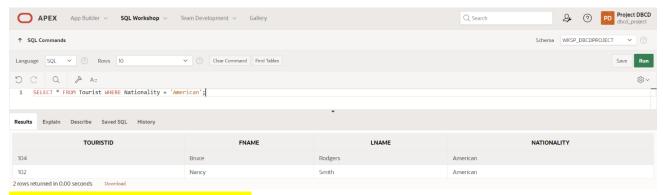


# 7. Queries

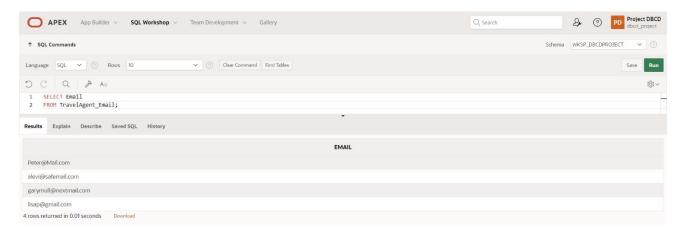
## **SELECT \* FROM Hotel\_Price WHERE Price > 300**



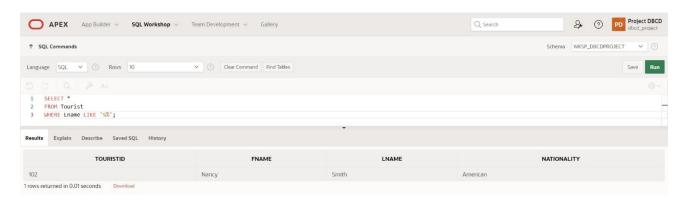
#### SELECT \* FROM Tourist WHERE Nationality = 'American';



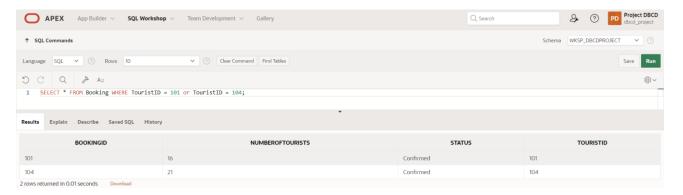
#### SELECT Email FROM TravelAgent\_Email;



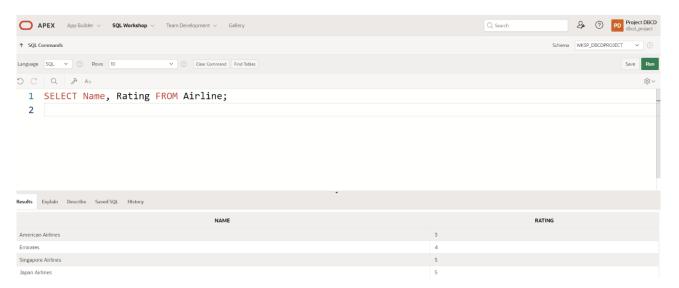
#### **SELECT \* FROM Tourist WHERE Lname LIKE 'S%';**

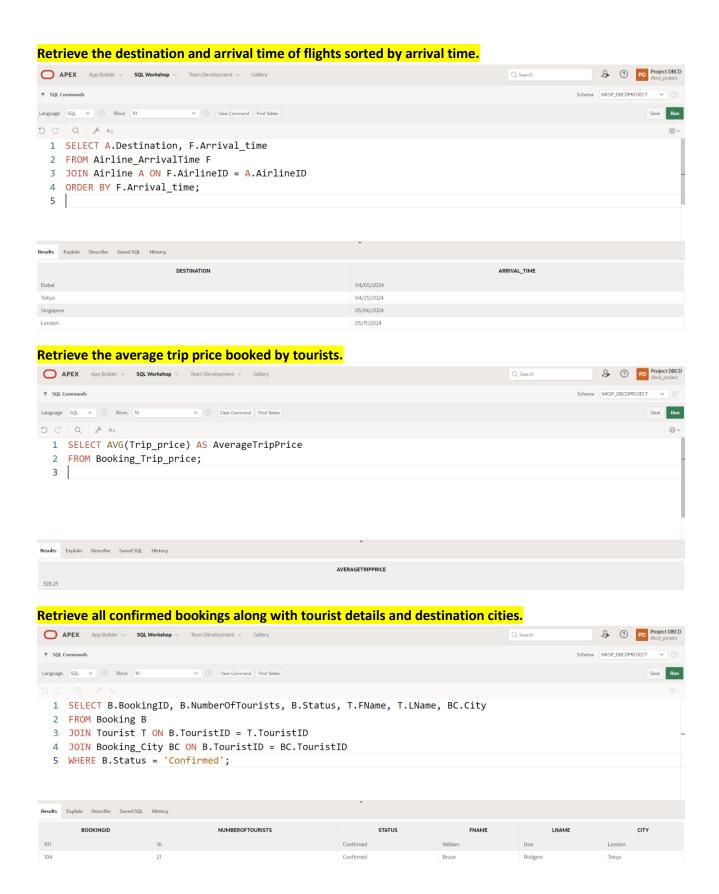


#### SELECT \* FROM Booking WHERE TouristID = 101 or TouristID = 104;

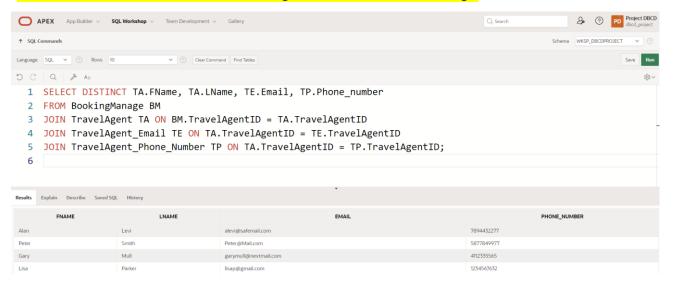


#### Retrieve the names and ratings of airlines.

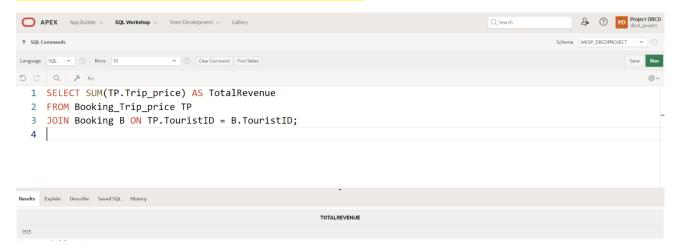




#### Retrieve the contact information of travel agents who have made bookings.



### calculates the total revenue generated from all bookings.



# 8. Application Development

