ISTANBUL AYDIN UNIVERSITY
ENGINEERING FACULTY

Airline Ticket System Database Report

SEN232   DATABASE SYSTEMS 2

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CONTENTS

INTRODUCTION:

This database will store the information of an online airline ticket system. Customers who register on the site, reservations/ booking, ticket records, customer payment information, passenger information, baggage prices, employees working in the system, plane crew, flight information including where and from where it will go, seat classes, seat prices and numbers, flight statuses, plane information including the airline they belong to and their models, departure times and dates, airport information will be stored in this database.

(The information used in this database has no reality, all of them are random data except names of airline companies, codes, cities and airports.)

Entities and Attributes: *Reds Primary Key*   *Greens Foreign Key*   *Whites Just Attribute*

Client

char(2)	ClientID
varchar(25)	First_Name
varchar(25)	Last_name
varchar(16)	Tel_No
varchar(16)	Card_number

Baggage

varchar(4)	BaggageID
varchar(8)	PNR
int	Weight
int	Price

Passenger

char(9)	Passport_No
varchar(25)	First_Name
varchar(25)	Last_Name

Booking

varchar(8)	PNR
varchar(8)	FlightID
char(2)	ClientID
varchar(8)	ReceptID
int	Total_Price

Receptionist

varchar(8)	ReceptID
varchar(25)	First_Name
varchar(25)	Last_Name

Ticket

int	Ticket_No
varchar(25)	First_Name
varchar(25)	Last_Name
char(9)	Passport_No
char(3)	Carrier
varchar(5)	Seat
varchar(10)	Departure_Time
varchar(40)	PLocation
varchar(40)	Destination
varchar(8)	PNR

Employee

varchar(8)	EmpID
varchar(16)	Tel_No
varchar(15)	Apartment
varchar(25)	Street
varchar(20)	City

Crew

varchar(8)	CrewID
varchar(25)	First_Name
varchar(25)	Last_Name
varchar(25)	Task
varchar(10)	CrewNo

Payment

varchar(8)	PaymentID
varchar(8)	PNR
char(16)	Card_Number
varchar(15)	Payment_Type

Flight

varchar(8)	FlightID
varchar(6)	FlightSitID
varchar(8)	AirplaneID
varchar(3)	ArrAir_Code
varchar(3)	DeptAir_Code

Seat

int	SeatID
varchar(8)	FlightID
varchar(15)	AvailabilityS
varchar(15)	Seat_Class
varchar(6)	SeatNumber
int	Price

FlightSituation

int	FlightSitID
varchar(15)	Situation

Airport

varchar(3)	AirportCode
varchar(45)	Airport_Name
varchar(20)	City
varchar(20)	Country

Airplane

varchar(8)	AirplaneID
varchar(5)	AirlineID
varchar(25)	Model

Airline

varchar(5)	AirlineID
varchar(25	Airline_Name
char(11)	Contact_Number

Movement

varchar(6)	Movement_Code
varchar(8)	AirplaneID
varchar(15)	Departure_Time
date	Departure_Date
varchar(15)	Arrival_Time
date	Arrival_Date

Primary And Foreign Keys

Primary Keys: ClientID, Ticket_No, Passport_No, PNR, PaymentID, BaggageID, EmpID, SeatID, FlightSitID, FlightID, AirplaneID, AirportCode, AirlineID, Movement_Code, ReceptID , CrewID

Foreign Keys:

Ticket→PNR, Seat, Passport_no

Baggage→PNR

Payment→PNR
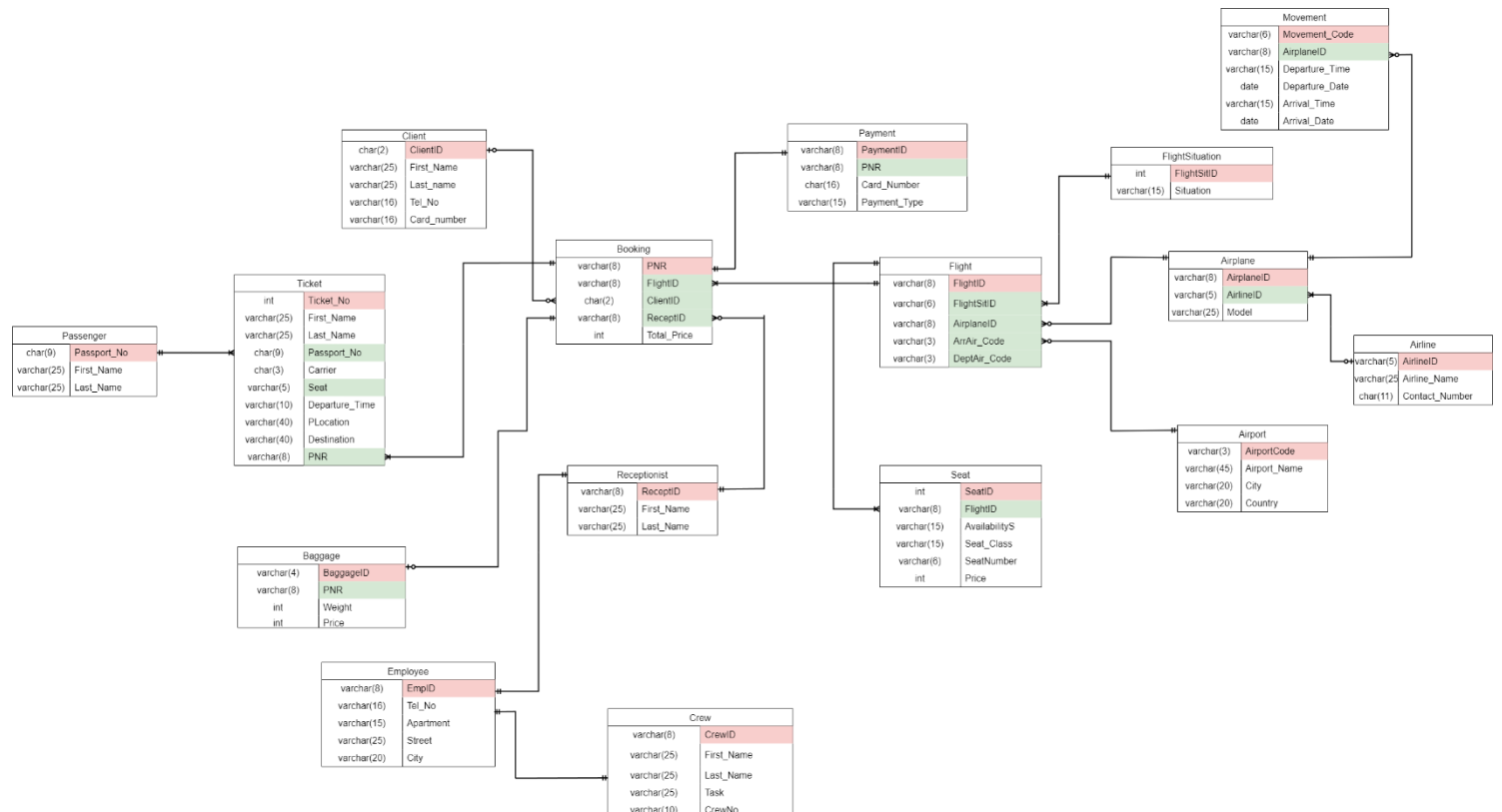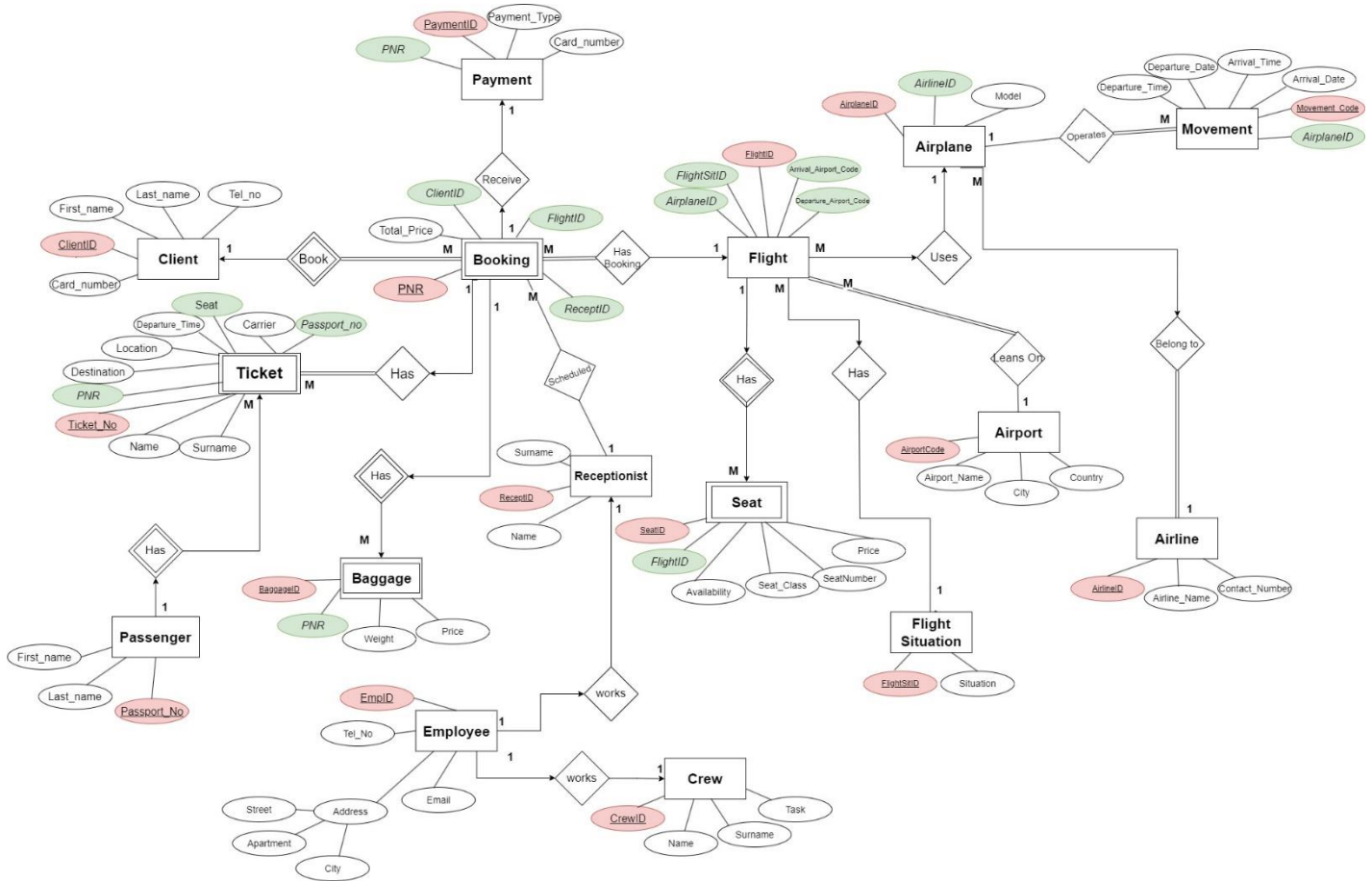
Booking→ClientID, FlightID, ReceptID

Seat→FlightID

Flight → FlightSitID, AirplaneID, Arrival_ariport_Code, Departure_Airport_Code

Airplane → AirlineID

Movement → AirplaneID

ER DIAGRAM   *Reds Primary Key*   *Greens Foreign Key* *Whites Just Attribute*

Conceptual ER Diagram

Payment: PaymentID, Payment_Type, PNR, Card_number

Movement: Movement_Code, AirplaneID, Departure_Date, Arrival_Time, Departure_Time, Arrival_Date

Airplane: AirplaneID, AirlineID, Model — *Operates* — Movement

Client: ClientID, First_name, Last_name, Tel_no, Card_number

Booking: PNR, ClientID, FlightID, ReceptID, Total_Price

Flight: FlightID, FlightSitID, AirplaneID, Arrival_Airport_Code, Departure_Airport_Code

Ticket: Ticket_No, Seat, Departure_Time, Carrier, Passport_no, Location, Destination, PNR, Name, Surname

Receptionist: ReceptID, Surname, Name

Baggage: BaggageID, PNR, Weight, Price

Seat: SeatID, FlightID, Availability, Seat_Class, SeatNumber, Price

Airport: AirportCode, Airport_Name, City, Country

Airline: AirlineID, Airline_Name, Contact_Number

Flight Situation: FlightSitID, Situation

Passenger: Passport_No, First_name, Last_name

Employee: EmpID, Tel_No, Email, Address, Street, Apartment, City

Crew: CrewID, Name, Surname, Task

Relationships: Book, Receive, Has Booking, Uses, Has, Belong to, Leans On, Scheduled, works

Relational Schema

Client
char(2)	ClientID
varchar(25)	First_Name
varchar(25)	Last_name
varchar(16)	Tel_No
varchar(16)	Card_number

Payment
varchar(8)	PaymentID
varchar(8)	PNR
char(16)	Card_Number
varchar(15)	Payment_Type

Movement
varchar(6)	Movement_Code
varchar(8)	AirplaneID
varchar(15)	Departure_Time
date	Departure_Date
varchar(15)	Arrival_Time
date	Arrival_Date

FlightSituation
| int | FlightSitID |
| varchar(15) | Situation |

Booking
varchar(8)	PNR
varchar(8)	FlightID
char(2)	ClientID
varchar(8)	ReceptID
int	Total_Price

Flight
varchar(8)	FlightID
varchar(6)	FlightSitID
varchar(8)	AirplaneID
varchar(3)	ArrAir_Code
varchar(3)	DeptAir_Code

Airplane
varchar(8)	AirplaneID
varchar(5)	AirlineID
varchar(25)	Model

Airline
varchar(5)	AirlineID
varchar(25)	Airline_Name
char(11)	Contact_Number

Ticket
int	Ticket_No
varchar(25)	First_Name
varchar(25)	Last_Name
char(9)	Passport_No
char(3)	Carrier
varchar(5)	Seat
varchar(10)	Departure_Time
varchar(40)	PLocation
varchar(40)	Destination
varchar(8)	PNR

Passenger
char(9)	Passport_No
varchar(25)	First_Name
varchar(25)	Last_Name

Receptionist
varchar(8)	ReceptID
varchar(25)	First_Name
varchar(25)	Last_Name

Seat
int	SeatID
varchar(8)	FlightID
varchar(15)	AvailabilityS
varchar(15)	Seat_Class
varchar(6)	SeatNumber
int	Price

Airport
varchar(3)	AirportCode
varchar(45)	Airport_Name
varchar(20)	City
varchar(20)	Country

Baggage
varchar(4)	BaggageID
varchar(8)	PNR
int	Weight
int	Price

Employee
varchar(8)	EmpID
varchar(16)	Tel_No
varchar(15)	Apartment
varchar(25)	Street
varchar(20)	City

Crew
varchar(8)	CrewID
varchar(25)	First_Name
varchar(25)	Last_Name
varchar(25)	Task
varchar(10)	CrewNo

RELATIONS

Client- Booking:

A client can make reservation minimum 0 maximum many.

A reservation can belong maximum 1 client.

Payment- Booking:

Maximum and minimum 1 payment can be made for 1 reservation.

There can be at most and at least 1 payment per reservation.

Ticket- Booking:

1 reservation can have at least 1 ticket and maximum many tickets.

1 ticket can only belong to 1 reservation.

Flight- Booking:

A reservation can have minimum and maximum 1 flight.

A flight can have minimum 1 maximum many booking.

Baggage – Booking:

A reservation can have at least 0 baggage maximum 1 baggage. (There may also be passengers without any luggage)

A baggage can only belong maximum and minimum 1 reservation.

Booking – Receptionist:

A receptionist can process minimum 0 maximum many reservations.

A reservation can belong just 1 receptionist.

Flight – Airplane:

One airplane can make a minimum of 0 and maximum of multiple flights.(For example, the airplane may not fly at all due to maintenance, or it can have multiple flights in one day.)

There is maximum and minimum of 1 airplane available for one flight.

Airplane- Movement:

One airplane can have minimum of 0 and maximum of multiple departure dates and times.(It can have multiple flights on the same day or no flights at all.)

Flight – Airport:

At least 0 and at most many flights can be operated from an airport. (If there are no airplane left at the airport, then 0 flights will be operated from there.)

A specific flight can only belong to one airport.(Considering the passengers and crew inside, flight can only belong to one airport.)

Seats- Flight:

There are multiple seats on one flight.

A seat can only belong to one flight.

Flight Situation- Flight:

A flight can have only one flight status. It either operated flight or flight cancelled.

One flight can have one flying status.

Airplane – Airline:

An airline company can have at least 1 and at most many airplane.

An airplane can minimum belong to 0 airline company and at most 1 airline company. (Plane can belong one person)

Passenger – Ticket:

A passenger can have at least 1 and at most multiple tickets.

One ticket can only belong to a single passenger.

Employee- Crew:

An employee can only have one task. (Such as pilot, co-pilot, host, hostess)

Employee -Receptionist:

An employee can only have one task.

Queries

1) Details of passenegers who have booked a ticket to Atlanta with a departure time of 17.00

```sql
SELECT First_Name, Last_Name, Ticket_No, Destination
FROM Ticket
WHERE Destination= 'Atlanta' AND Departure_Time= 17.00
```

	First_Name	Last_Name	Ticket_No	Destination
1	Caleb	Judge	4	Atlanta
2	Emily	Green	7	Atlanta
3	Samuel	Green	13	Atlanta
4	Ava	Judge	15	Atlanta
5	Ted	Judge	22	Atlanta

2) Which airline's plane is not currently in the ariplane table.

```sql
SELECT AirlineID FROM Airline
EXCEPT
SELECT AirlineID FROM Airplane
```

	AirlineID
1	UEU

3) Print the prices of seats 5000 to 10000 and the classes of seats in ascending order.

```sql
SELECT Seat_Class, Price FROM Seat
WHERE Price BETWEEN 5000 and 10000
ORDER BY Price
```

	Seat_Class	Price
1	BC	6000
2	BC	6000
3	BC	6500
4	BC	7000
5	BC	7450
6	BC	7500
7	BC	8000
8	BC	8000
9	BC	9000

4) Show top 5 destinations with the highest number of tickets bought for for departures between 08.00 and 18.00.

```sql
SELECT TOP 5 Destination, COUNT(*) AS num_of_tickets_bought
FROM Ticket
WHERE Departure_Time > '08.00' AND Departure_Time < '18.00'
GROUP BY Destination
ORDER BY num_of_tickets_bought DESC;
```

	Destination	num_of_tickets_bought
1	Atlanta	5
2	İstanbul	2
3	Beijing	2
4	Barcelona	2
5	Tokyo	1

5) How many different airplane crews do we have?

```sql
SELECT DISTINCT CrewNo FROM Crew
```

	CrewNo
1	C004
2	C005
3	C006
4	C007

6) Show all Flight informations where the arrival airport code is either ATL or BCN.

```sql
SELECT* FROM Flight WHERE ArrAir_Code IN('ATL','BCN')
```

	FlightID	FlightSitID	AirplaneID	ArrAir_Code	DeptAir_Code
1	0010BA	5	NB841NO	ATL	PEK
2	0013KB	4	N489DS	BCN	IEV
3	007BA	4	G45-F78	ATL	PEK

7) Show all Seat table informations where the price of the seat is equal to the highest price for the Business Class.

```sql
SELECT * FROM Seat
WHERE Price = (SELECT TOP 1 Price FROM Seat WHERE Seat_Class = 'BC' ORDER BY Price DESC)
```

	SeatID	FlightID	AvailabilityS	Seat_Class	SeatNumber	Price
1	1126	007BA	Reserved	BC	B20	9000

8) Find out which customer preferred which airline company how many times. (We can use this for personal recommendation systems or advertising.)

```sql
SELECT Client.ClientID, Airline.AirlineID, COUNT(Booking.PNR) AS Number
FROM Client
JOIN Booking ON Booking.ClientID = Client.ClientID
JOIN Flight ON Flight.FlightID = Booking.FlightID
JOIN Airplane ON Airplane.AirplaneID = Flight.AirplaneID
JOIN Airline ON Airline.AirlineID = Airplane.AirlineID
GROUP BY Client.ClientID, Airline.AirlineID
```

	ClientID	AirlineID	Number
1	13	GWY	1
2	6	GWY	1
3	14	JAL	1
4	3	JAL	1
5	15	LEA	1
6	11	LEP	2
7	12	LEP	1
8	17	LEP	1
9	2	LEP	1
10	20	LEP	1
11	4	LEP	1
12	8	LEP	1
13	9	LEP	1
14	10	THY	3
15	13	THY	2
16	18	THY	1

9) How many flights took place between 2023-01-01 and 2023-10-10 from which airline companies?

```sql
SELECT Airline.Airline_Name, COUNT(Movement.Departure_date) AS number_of_flights FROM Movement
JOIN Airplane ON Airplane.AirplaneId = Movement.AirplaneId
JOIN Airline ON Airline.AirlineId = Airplane.AirlineId
WHERE Departure_date > '2023-01-01' AND Departure_date < '2023-10-10'
GROUP BY Airline.Airline_Name ORDER BY number_of_flights DESC
```

	Airline_Name	number_of_flights
1	Air Costa	5
2	Turkish Airline	2
3	Unijet	1
4	USA3000 Airlines	1
5	Jet Air Group	1
6	Japan Airlines	1

10) Airplane codes with the highest number of seats in our database.

```sql
SELECT TOP 3 Airplane.AirplaneId,  COUNT(*) AS Number_Of_Seats
FROM Seat
JOIN Flight ON Flight.FlightId = Seat.FlightId
JOIN Airplane ON Airplane.AirplaneId = Flight.AirplaneId
GROUP BY Airplane.AirplaneId
ORDER BY COUNT(*) DESC;
```

	AirplaneId	Number_Of_Seats
1	NB841NO	5
2	G45-F78	3
3	KKA987	2

11) List the bookings with a total price greater than all seats whose seat number starts with 'A'.

```sql
SELECT *
FROM Booking
WHERE Total_Price > ALL(
  SELECT Price
  FROM Seat
  WHERE SeatNumber LIKE 'A%'
);
```

	PNR	FlightID	ClientID	ReceptID	Total_Price
1	AWE32	0010BA	13	0015	16000
2	AWE41	002TC	2	0020	12000
3	DFD87	0010BA	13	0015	16000
4	GHT78	008PN	13	0015	16000
5	GTH11	003UI	8	0021	16000
6	KML66	0013KB	20	0020	8700
7	MLH98	0013KB	12	0020	16000
8	TYF25	0015ZI	3	0018	11000
9	VCX58	007BA	17	0022	18000

Strong and Weak Entities

Strong Entities: *Client, Passenger, Payment , Employee, Crew, Receptionist, Flight, Airplane, Movement, Airline, Airport, Flight Situation. These entities can exist on their own, they are not depend on other entities.*

Weak Entities: *Ticket, Booking, Baggage. These entities can not exist without their related entities. For example booking can not exist without a client, flight or payment. Or ticket can not exist without booking. Baggage can not exist without client.*

Tables With Data

Airplane Table:

AirplaneID	AirlineID	Model
B-AIMB7	LEA	Airbus A350-900
G45-F78	LEP	Boeing 987-65
JLA817A	LEP	Boeing 787-8
KKA987	JSI	Boeing 787-8
KL-9874B	THY	Boeing 798-236BY
L15791M	GWY	Airbus A380
LH-1234	GWY	Boeing 300ER
LP-RKP	THY	Airbus A387
M12548	LEP	Boeing 693
N123844	THY	Boeing 737-800
N489DS	LEP	Airbus A396
N98701DN	JAL	Boeing 777-200LR
NB841NO	THY	Boeing 109-99
NM377AN	JSI	Airbus A310
PSH-BKA	QTR	Boeing 747-400
S8E-RBA	THY	Airbus A320neo
TC-DE789	WEC	Airbus A387
TC-DEF88	AFR	Boeing 737 MAX 8

	Column Name	Data Type	Allow Nulls
🔑	AirplaneID	varchar(8)	☐
	AirlineID	varchar(5)	☐
	Model	varchar(25)	☑

Baggage Table:

BaggageID	PNR	Weight	Price
ABC	ABC123	30	140
AWE	AWE32	12	0
AWE4	AWE41	30	0
DFD	DFD87	25	0
FGT	FGT87	36	350
FRT	FRT78	29	105
GHT	GHT78	42	400
KLM	KLM78	25	100
KML	KML66	30	140
MLH	MLH98	15	0
MNB	MNB88	25	100
NHG	NHG78	30	200
PAZ	PAZ69	35	315
SER	SER97	27	35
TYF	TYF25	28	70
VCX	VCX58	40	320
XYZ	XYZ89	25	0
ZXC	ZXC36	30	140

	Column Name	Data Type	Allow Nulls
🔑	BaggageID	varchar(4)	☐
	PNR	varchar(8)	☐
	Weight	int	☐
	Price	int	☐

Airport Table:

AirportCode	Airport_Na...	City	Country
AAT	Altay	Altay	China
AFL	Alta Floresta	Alta Floresta	Brazil
AGZ	Aggeneys	Aggeneys	South Africa
AJA	Campo Dell...	Ajaccio	France
AMS	Amsterdam ...	Amsterdam	Netherlands
AMV	Amderma	Amderma	Russia
ANF	Cerro More...	Antofagasta	Chile
AOR	Alor Setar	Alor Setar	Malaysia
ATL	Hartsfield A...	Atlanta	US
AWZ	Ahwaz	Ahwaz	Iran
BAH	Bahrain Inte...	Muharraq	Bahrain
BCN	Barcelona I...	Barcelona	Spain
BGY	Milano Berg...	Milano	Italy
BOS	Logan Inter...	Boston	US
DUS	Dusseldorf ...	Dusseldorf	Germany
DXB	Dubai Inter...	Dubai	UAE
ESB	Ankara Esen...	Ankara	Turkey
ESF	Esler Field	Alexsandria	United States
HKG	Hong Kong ...	Hong Kong	China
IEV	Kyiv Internat...	Kyiv	Ukraine
ISL	İstanbul Air...	İstanbul	Turkey
KOJ	Kagoshima ...	Kagoshima	Japan
LGA	LaGuardia A...	New York	US
MXP	Milano-Mal...	Milano	Italy
NRT	Narita Inter...	Tokyo	Japan
ORY	Paris Ory Air...	Paris	France
PEK	Beijing Capi...	Beijing	China
PHL	Philadelphi...	Philadelphia	US
PVG	Shanghai Pu...	Shanghai	China
SAW	Sabiha Gök...	İstanbul	Turkey
STN	London Sta...	London	UK
XHX	Adeladie Ke...	Adeladie	Australia
ZRH	Zurich Airp...	Zurich	Switzerland

	Column Name	Data Type	Allow Nulls
🔑	AirportCode	varchar(3)	☐
	Airport_Name	varchar(45)	☐
	City	varchar(20)	☑
	Country	varchar(20)	☑

Booking Table:

PNR	FlightID	ClientID	ReceptID	Total_Price
ABC123	0010BA	10	0015	6000
AWE32	0010BA	13	0015	16000
AWE41	002TC	2	0020	12000
DFD87	0010BA	13	0015	16000
FGT87	001TJ	15	0019	7500
FRT78	006DN	18	0022	6900
GHT78	008PN	13	0015	16000
GTH11	003UI	8	0021	16000
KLM78	0012TN	11	0017	1000
KML66	0013KB	20	0020	8700
KOI82	002TC	9	0020	6500
MLH98	0013KB	12	0020	16000
MNB88	008PN	6	0015	1200
NHG78	0012TN	11	0017	1000
PAZ69	0010BA	10	0015	6000
SER97	0015ZI	14	0018	6500
TYF25	0015ZI	3	0018	11000
VCX58	007BA	17	0022	18000
XYZ89	0010BA	10	0015	6000
ZXC36	003UI	4	0021	7000

	Column Name	Data Type	Allow Nulls
🔑	PNR	varchar(8)	☐
	FlightID	varchar(8)	☐
	ClientID	char(2)	☐
	ReceptID	varchar(8)	☐
	Total_Price	int	☐

FlightSituation Table:

FlightSitID	Situation
3	Scheduled
4	Delayed
5	Cancelled

	Column Name	Data Type	Allow Nulls
🔑	FlightSitID	int	☐
	Situation	varchar(15)	☐

Receptionist Table:

ReceptID	First_Name	Last_Name
0015	Gabriel	Lee
0016	Anthony	Brown
0017	Benjamin	Davis
0018	Lily	Allen
0019	Jacob	Turner
0020	Tyler	Baker
0021	Ryan	James
0022	Sophia	Phillips
0023	Victoria	Nelson
0024	Natalie	Mitchell

Column Name	Data Type	Allow Nulls
ReceptID	varchar(8)	☐
First_Name	varchar(25)	☐
Last_Name	varchar(25)	☐

Client Table:

ClientID	First_Name	Last_Name	Tel_No	Card_Number
1	Defne	Dağdeviren	05079841236	1234596878965236
10	Ted	Judge	78965445214	7896452623022623
11	Meltem	Kılıç	05079632587	0058765870205489
12	Carl	Clayton	45698712001	5500698745300158
13	Emily	Green	36925874125	5578150808650565
14	Carl	Luna	02540987203	6609870024068860
15	Mehmet	Çekiç	05079861477	9980014750089856
16	Jim	Beesly	78965401154	8756500878945688
17	Angela	Leon	75001840698	2568912154012354
18	Şevval	Güneş	05078412368	4400789055687040
19	Ali	Yeşil	05098714657	7894654132148898
2	Michael	Scott	15784658796	1122334455889956
20	Selin	Deniz	05326987446	0058980655659889
3	Mehmet	Demir	05326987416	1472583698745632
4	John	Reinhardet	78945632587	1596489515623574
5	Ayşe	Yeşil	05065841236	5478963258741236
6	Betty	Luna	87459632587	1478523698742563
7	Osman	Işık	05329874563	4546467861316548
8	David	Robinson	98745632145	4789564632646889
9	Matthew	Palmer	45646465546	7896541236598952

Column Name	Data Type	Allow Nulls
🔑 ClientID	char(2)	☐
First_Name	varchar(25)	☐
Last_Name	varchar(25)	☐
Tel_No	varchar(16)	☑
Card_Number	varchar(16)	☐

Seat Table:

SeatID	FlightID	AvailabilityS	Seat_Class	SeatNumber	Price
1111	0010BA	Available	BC	A20	6000
1112	0010BA	Available	BC	B22	6000
1113	0010BA	Available	EC	A2	700
1114	0011NL	Reserved	FC	B25	15000
1115	0011NL	Available	EC	A5	600
1116	0012TN	Available	BC	A45	7000
1118	0012TN	Reserved	EC	A10	800
1119	0013KB	Available	BC	B20	6500
1120	0015ZI	Available	EC	B25	1000
1121	0015ZI	Reserved	BC	A15	7500
1122	001TJ	Available	EC	A65	1200
1123	002TC	Available	FC	C2	17000
1124	003UI	Available	EC	A78	850
1125	006DN	Available	BC	B17	7450
1126	007BA	Reserved	BC	B20	9000
1127	008PN	Available	EC	A87	1200
1128	0010BA	Available	EC	A45	1000
1129	0010BA	Available	BC	B1	8000
1130	002TC	Available	BC	B5	8000
1131	003UI	Available	EC	A5	850
1132	008PN	Available	EC	A5	1200
1133	0013KB	Available	EC	A8	1000

	Column Name	Data Type	Allow Nulls
🔑	SeatID	int	☐
	FlightID	varchar(8)	☐
	AvailabilityS	varchar(15)	☐
	Seat_Class	varchar(15)	☐
	SeatNumber	varchar(6)	☐
	Price	int	☐

Payment Table:

PaymentID	PNR	Payment_Ty...	Card_Number
P1	ABC123	Debit Card	7896452623022623
P10	KML66	Credit Card	0058980655659889
P11	KOI82	Credit Card	7896541236598952
P12	MLH98	Credit Card	5500698745300158
P13	MNB88	Credit Card	1478523698742563
P14	NHG78	Credit Card	0058765870205489
P15	PAZ69	Credit Card	7896452623022623
P16	SER97	Debit Card	6609870024068860
P17	TYF25	Debit Card	1472583698745632
P18	VCX58	Debit Card	2568912154012354
P19	XYZ89	Credit Card	7896452623022623
P2	AWE32	Debit Card	5578150808650565
P20	ZXC36	Credit Card	1596489515623574
P3	AWE41	Credit Card	1122334455889956
P4	DFD87	Debit Card	5578150808650565
P5	FGT87	Credit Card	9980014750089856
P6	FRT78	Credit Card	4400789055687040
P7	GHT78	Debit Card	5578150808650565
P8	GTH11	Debit Card	4789564632646889
P9	KLM78	Credit Card	0058765870205489

	Column Name	Data Type	Allow Nulls
🔑	PaymentID	varchar(8)	☐
	PNR	varchar(8)	☐
	Payment_Type	varchar(15)	☐
	Card_Number	char(16)	☐

Movement Table:

Movement...	AirplaneID	Departure_Time	Departure_Date	Arrival_Time	Arrival_Date
BA001	G45-F78	17.00.00	2023-06-26	07:00.00	2023-06-27
BA568	NB841NO	17.00.00	2023-06-26	07.00.00	2023-06-27
DN745	KL-9874B	10.00.00	2023-06-05	00.00.00	2023-06-05
KB478	N489DS	12.00.00	2023-07-05	18.00.00	2023-07-01
NL789	KKA987	14.00.00	2023-06-10	22.00.00	2023-06-10
PN145	LH-1234	18.00.00	2023-06-17	02.00.00	2023-06-18
TC587	G45-F78	20.00.00	2023-06-25	17.00.00	2023-06-26
TJ1678	B-AIMB7	15.00.00	2023-04-20	08.00.00	2023-04-21
TN456	M12548	08.00.00	2023-07-01	21.00.00	2023-07-01
UI546	JLA817A	18.00.00	2023-06-20	04.00.00	2023-06-21
ZI789	N98701DN	15.00.00	2023-07-10	18.00.00	2023-07-10

	Column Name	Data Type	Allow Nulls
🔑	Movement_Code	varchar(6)	☐
	AirplaneID	varchar(8)	☐
	Departure_Time	varchar(15)	☐
	Departure_Date	date	☐
	Arrival_Time	varchar(15)	☐
	Arrival_Date	date	☐

Crew Table:

CrewID	First_Name	Last_Name	Task	CrewNo
0001	Hakan	Can	Flight Atten...	C004
0002	Ali	Deniz	Pilot	C004
0003	Handan	Su	Flight Atten...	C004
0004	Emily	Smith	Flight Atten...	C004
0005	Madison	Scott	Pilot	C005
0006	Ethan	Wilson	Flight Atten...	C005
0007	Samuel	Cooper	Flight Atten...	C005
0008	Charlotte	Wright	Flight Atten...	C005
0009	Zeynep	Gerim	Pilot	C006
0010	Ava	Lewis	Flight Atten...	C006
0011	Sophia	Brown	Flight Atten...	C006
0012	Noah	Baker	Pilot	C007
0013	Ryan	Green	Flight Atten...	C007
0014	Can	Yılmaz	Flight Atten...	C007

	Column Name	Data Type	Allow Nulls
🔑	CrewID	varchar(8)	☐
	First_Name	varchar(25)	☐
	Last_Name	varchar(25)	☐
	Task	varchar(25)	☐
	CrewNo	varchar(10)	☑

Employee Table:

EmpID	Tel_No	Apartment	Street	City
0001	45785110035	Marina	Oak Street	New York
0002	00254795122	Zen	Sycamore	New York
0003	05074896521	Cherry	Green	New York
0004	78912123555	Hamlet	Birch Street	New York
0005	46581000259	River	Willow Ave...	Paris
0006	46465465548	Akdeniz	Linden Aven...	Paris
0007	56686542344	NULL	Magnolia A...	Paris
0008	65989898986	River	Willow Ave...	Paris
0009	05078952368	Akdeniz	Yeşil	İstanbul
0010	05326876580	Yıldırım	İstanbul	İstanbul
0011	05169874056	Er	Manolya	İstanbul
0012	05078846066	Papatya	Park	İstanbul
0013	58403546340	Green	Town Place	Amsterdam
0014	56568465413	Family	Happy	Amsterdam
0015	05464046580	Lucky	Greenspace	Amsterdam
0016	06454984940	Pinetree	GardenHouse	Amsterdam
0017	89798246401	Red	Cheerful	Hong Kong
0018	87987105055	Greenville	Yuen Long	Hong Kong
0019	08987008987	Pearl	Aldrich	Hong Kong
0020	08987079807	Blue	Chai Wan	Hong Kong
0021	20154840456	Millenia	Yanaka Ginza	Tokyo
0022	01545088400	Silver	Stanley Gap	Tokyo
0023	04008870655	Community	Yanaka Ginza	Tokyo
0024	07540884441	Sunset	Sweet	Tokyo

Column Name	Data Type	Allow Nulls
🔑 EmpID	varchar(8)	☐
Tel_No	varchar(16)	☑
Apartment	varchar(15)	☑
Street	varchar(25)	☑
City	varchar(20)	☑

Passenger Table:

Passport_No	First_Name	Last_Name
123456789	Caleb	Judge
149820878	Carl	Luna
159786548	Carl	Clayton
365892465	Emily	Green
369852147	Meltem	Kılıç
456789514	Sıla	Kılıç
482698256	Betty	Luna
482987222	Şevval	Güneş
645549898	David	Robinson
696465415	Samuel	Green
698787117	Ali	Deniz
741852963	Ava	Judge
787297279	Mehmet	Demir
798727107	John	Reinhardet
798787171	Daniel	Green
829817754	Amelia	Palmer
848727898	Michael	Scott
987289711	Angela	Leon
987456321	Ted	Judge
987717725	Mehmet	Çekiç

Column Name	Data Type	Allow Nulls
🔑 Passport_No	char(9)	☐
First_Name	varchar(25)	☐
Last_Name	varchar(25)	☐

Flight Table:

FlightID	FlightSitID	AirplaneID	ArrAir_Code	DeptAir_Code
0010BA	5	NB841NO	ATL	PEK
0011NL	3	KKA987	STN	LGA
0012TN	5	M12548	NRT	LGA
0013KB	4	N489DS	BCN	IEV
0015ZI	3	N98701DN	SAW	ZRH
001TJ	3	B-AIMB7	NRT	ISL
002TC	3	G45-F78	PEK	ESB
003UI	4	JLA817A	BGY	BOS
006DN	3	KL-9874B	LGA	DXB
007BA	4	G45-F78	ATL	PEK
008PN	3	LH-1234	LGA	ORY

	Column Name	Data Type	Allow Nulls
🔑	FlightID	varchar(8)	☐
	FlightSitID	int	☐
	AirplaneID	varchar(8)	☐
	ArrAir_Code	varchar(3)	☐
	DeptAir_Code	varchar(3)	☐

Ticket Table:

Ticket_No	First_Name	Last_Name	Passport_No	Carrier	Seat	Departure_...	PLocation	Destination	PNR
4	Caleb	Judge	123456789	THY	1111	17.00	Beijing	Atlanta	ABC123
5	Carl	Luna	149820878	JAL	1120	15.00	Zurich	İstanbul	SER97
6	Carl	Clayton	159786548	LEP	1133	12.00	Kyiv	Barcelona	MLH98
7	Emily	Green	365892465	THY	1112	17.00	Beijing	Atlanta	AWE32
8	Meltem	Kılıç	369852147	LEP	1116	08.00	New York	Tokyo	KLM78
9	Sıla	Kılıç	456789514	LEP	1118	08.00	New York	Tokyo	NHG78
10	Betty	Luna	482698256	GWY	1127	18.00	Paris	New York	MNB88
11	Şevval	Güneş	482987222	THY	1125	10.00	Dubai	New York	FRT78
12	David	Robinson	645549898	LEP	1124	18.00	Boston	Milano	GTH11
13	Samuel	Green	696465415	THY	1113	17.00	Beijing	Atlanta	DFD87
14	Ali	Deniz	698787117	LEP	1119	12.00	Kyiv	Barcelona	KML66
15	Ava	Judge	741852963	THY	1129	17.00	Beijing	Atlanta	XYZ89
16	Mehmet	Demir	787297279	JAL	1121	15.00	Zurich	İstanbul	TYF25
17	John	Reinhardet	798727107	LEP	1131	18.00	Boston	Milano	ZXC36
18	Daniel	Green	798787171	GWY	1132	18.00	Paris	New York	GHT78
19	Amelia	Palmer	829817754	LEP	1130	17.00	Ankara	Beijing	KOI82
20	Michael	Scott	848727898	LEP	1123	17.00	Ankara	Beijing	AWE41
21	Angela	Leon	987289711	LEP	1126	20.00	Beijing	Atlanta	VCX58
22	Ted	Judge	987456321	THY	1128	17.00	Beijing	Atlanta	PAZ69
23	Mehmet	Çekiç	987717725	LEA	1122	15.00	İstanbul	Tokyo	FGT87

	Column Name	Data Type	Allow Nulls
🔑	Ticket_No	int	☐
	First_Name	varchar(25)	☑
	Last_Name	varchar(25)	☑
	Passport_No	char(9)	☑
	Carrier	char(3)	☑
	Seat	int	☑
	Departure_Time	varchar(10)	☑
	PLocation	varchar(40)	☑
	Destination	varchar(40)	☑
	PNR	varchar(8)	☑

Airline Table:

AirlineID	Airline_Name	Contact_Number
AFR	Air France	32424234211
GWY	USA3000 Airlines	12005856888
JAL	Japan Airlines	00257500458
JSI	Jet Air Group	14005555766
LEA	Unijet	05087963535
LEP	Air Costa	78945002154
QTR	Qatar Airways	14725896000
THY	Turkish Airline	08503330849
UEU	United European ...	14585645400
WEC	Universal Airlines	12345678888

	Column Name	Data Type	Allow Nulls
🔑	AirlineID	varchar(5)	☐
	Airline_Name	varchar(25)	☐
	Contact_Number	char(11)	☐