

2.4 SQL Queries: Homework

In the **Flight Search UI** of the educational application, you should find some valid data.

1. Check in the database passengers who booked flight number 1, go back to the UI and search for these passengers with IDs which you found in the database. What query did you use? Does the UI work?
2. Add a new flight. What query did you use?
3. Add passengers to this flight. What query did you use?
4. Search this flight and passengers on the UI. Does the UI work?
5. Now move one of the passengers to another flight. What query did you use? Is it possible to find this passenger with the old flight number? With the new one?

1. **Check in the database passengers who booked flight number 1, go back to the UI and search for these passengers with IDs which you found in the database. What query did you use? Does the UI work?**

1.1. Checked all passengers on my BD to choose any passenger (I've choose to work with **passenger_id = 34, flight_flight_id = 33**):

```
select * from passenger p
```

*<192.168.40.150> Script-1 x ftb_nkhaytovich

```
select * from passenger p
select * From flight where flight_id = 33
```

passenger 1 x

select * from passenger p Enter a SQL expression to filter results (use Ctrl+Space)

	passenger_id	address	email	first_n	last_name	passport_number	phone_number	flight_flight_id
1	8	1000 N 4th Street, TEST	john@test.ru	John	Doe	78998787	6414513308	5
2	24	1000 N 4th Street, TEST, MI	anna@test.ru	Anna	Smith	02538467	6414513308	5
3	29	1000 N 4th Street, TEST, MI	chibusi@test.ru	Chibusi	Kelvin	45687997	6414513308	6
4	30	1000 N 4th Street, TEST, MI	ahmadi2008@tes	Ali Mohammed	Ahmadi	45687997	6414513308	5
5	34	1000 N 4th Street, TEST	churn@test.ru	Chinedu	Urbanus	A20193885	23456789	33
6	35	[NULL]	[NULL]	John	Dogh	[NULL]	[NULL]	5

1.2. Selected flight with flight_id = 33

```
select * From flight where flight_id = 33
```

*<192.168.40.150> Script-1 X ftb_nkhaytovich

```
select * from passenger p
select * From flight where flight_id = 33
```

flight 1 X

select * From flight where flight_id = 33 | Enter a SQL expression to filter results (use Ctrl+Space)

	flight_id	arrival_date	arrival_time	departure_date	departure_time	flight_charge	flight_number
1	33	2023-10-04	21:00	2023-10-04	00:00	500	dal - cal

1.3. Also tried this query, which is more convenient and optimal according to the UI:

```
select passenger_id, flight_flight_id From passenger p
where flight_flight_id IS NOT NULL
```

*<192.168.40.150> Script-1 X ftb_nkhaytovich

```
select * from passenger p
select * From flight where flight_id = 33
select passenger_id, flight_flight_id From passenger p
where flight_flight_id IS NOT NULL
```

passenger 1 X

select passenger_id, flight_flight_id From pa | Enter a SQL expression to

	passenger_id	flight_flight_id
1	8	5
2	24	5
3	30	5
4	35	5
5	29	6
6	34	33

1.4. Checked on the UI that everything works for **passenger_id = 34, flight_flight_id = 33**:

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id

Passenger Id

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id

Passenger Id

Search

Verified Successfully!

Customer Info

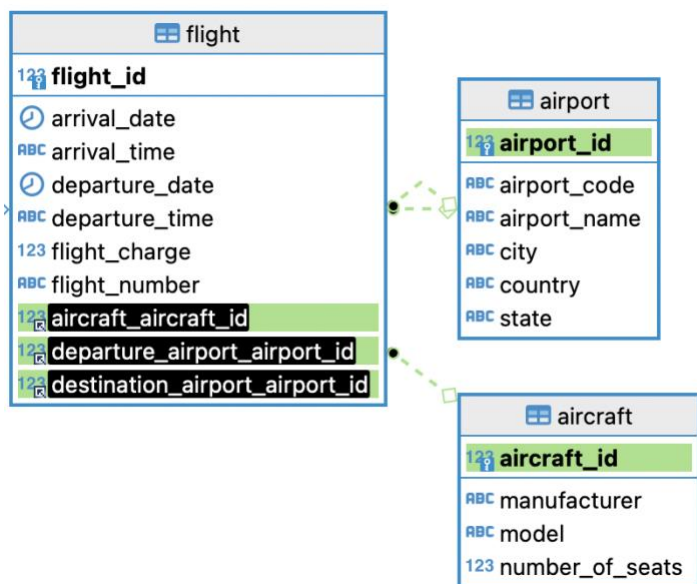
ID	First Name	Last Name	Phone Number	Passport Number	Email
34	Chinedu	Urbanus	23456789	A20193885	churn@test.ru

Flight Info

Flight Number	From	To	Departure	Arrival	Flight Charge	Aircraft
dal - cal	Dallas Love Field	California Airport	2023-10-04 00:00	2023-10-04 21:00	500.0	Boeing 737

2. Add a new flight. What query did you use?

First, I've checked which fields we have in the table flight. Next, I've checked which airports and aircrafts I have in my DB to use the information in my query.



```
INSERT INTO flight (flight_id, arrival_date, arrival_time, departure_date, departure_time, flight_charge, flight_number, aircraft_aircraft_id, departure_airport_airport_id, destination_airport_airport_id) VALUES (56, "2023-11-17", "15:50", "2023-11-17", "10:15", 435, "CHI-CLN-N", 20, 19, 31)
```

or

```
INSERT INTO flight VALUES (56, "2023-11-17", "15:50", "2023-11-17", "10:15", 435, "CHI-CLN-N", 20, 19, 31)
```

I've got the same result:

The screenshot shows a database management tool interface. At the top, there's a script editor with the following SQL queries:

```
select * from passenger p

select * from flight where flight_id = 33

select passenger_id, flight_flight_id from passenger p
where flight_flight_id IS NOT NULL

select * from flight f
select * from airport a
select * from aircraft a

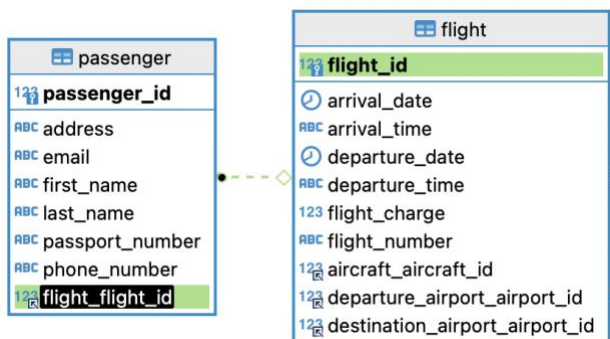
INSERT INTO flight VALUES (56, "2023-11-17", "15:50", "2023-11-17", "10:15", 435, "CHI-CLN-N", 20, 19, 31)
```

Below the script editor, there's a table view titled "flight 1". The table has the following columns: flight_id, arrival_date, arrival_time, departure_date, departure_time, flight_charge, flight_number, aircraft_id, departure_airport_id, and destination_airport_id. The table contains 10 rows of data, with the last row (flight_id 56) highlighted in blue.

	flight_id	arrival_date	arrival_time	departure_date	departure_time	flight_charge	flight_number	aircraft_id	departure_airport_id	destination_airport_id
18	49	2023-10-06	14:40	2023-10-06	08:00	600	IA-TEX101	36	15	35
19	50	2023-10-07	10:30	2023-10-07	08:00	1,000	dallas-dubai100	3	1	2
20	51	2023-10-07	00:20	2023-10-07	10:20	1,200	dubai-dallas110	3	2	1
21	52	2023-10-07	09:00	2023-10-07	07:00	90	chi-cedar01	3	19	15
22	53	2023-10-07	16:00	2023-10-07	14:00	90	ced-chi05	16	15	19
23	54	2023-10-07	21:00	2023-10-07	00:00	400	dai - cal	4	1	31
24	55	2023-10-07	14:40	2023-10-07	08:00	600	IA-TEX101	36	15	35
25	56	2023-11-17	15:50	2023-11-17	10:15	435	CHI-CLN-N	20	19	31

3. Add passengers to this flight. What query did you use?

First, I've checked which fields we have in the table passenger. Previously added flight_id = 56.



Added 1 passenger:

INSERT INTO passenger (passenger_id, address, email, first_name, last_name, passport_number, phone_number, flight_flight_id)

VALUES (36, "221B Baker Street London", "sholmes@test.com", "Sherlock", "Holmes", "777666812", "2227771", 56)

```

INSERT INTO passenger (passenger_id, address, email, first_name, last_name, passport_number, phone_number, flight_flight_id)
VALUES (36, "221B Baker Street London", "sholmes@test.com", "Sherlock", "Holmes", "777666812", "2227771", 56)

```

passenger_id	address	email	first_name	last_name	passport_number	phone_number	flight_flight_id
8	1000 N 4th Street, TEST	john@test.ru	John	Doe	78998787	6414513308	5
24	1000 N 4th Street, TEST, MR#100	anna@test.ru	Anna	Smith	02538467	6414513308	56
29	1000 N 4th Street, TEST, MR#15	chibusi@test.ru	Chibusi	Kelvin	45687997	6414513308	6
30	1000 N 4th Street, TEST, MR#48	ahmadi2008@test.ru	Ali Mohammed	Ahmadi	45687997	6414513308	5
34	1000 N 4th Street, TEST	churn@test.ru	Chinedu	Urbanus	A20193885	23456789	33
35	[NULL]	[NULL]	John	Dogh	[NULL]	[NULL]	5
36	221B Baker Street London	sholmes@test.com	Sherlock	Holmes	777666812	2227771	56

Then added 3 passengers at time:

```

INSERT INTO passenger (passenger_id, address, email, first_name, last_name, passport_number, phone_number, flight_flight_id)
VALUES (37, "Bag End Hobbiton", "bbaggins@test.com", "Bilbo", "Baggins",
"777666813", "2227772", 56),
(38, "Number 4, Privet Drive, Little Whinging", "hpotter@test.com", "Harry", "Potter",
"777666814", "2227773", 56),
(39, "The Burrow, Devon, Little Whinging", "rweasley@test.com", "Ron", "Weasley",
"777666815", "2227774", 56)

```

```

INSERT INTO passenger (passenger_id, address, email, first_name, last_name, passport_number, phone_number, flight_flight_id)
VALUES (37, "Bag End Hobbiton", "bbaggins@test.com", "Bilbo", "Baggins", "777666813", "2227772", 56),
(38, "Number 4, Privet Drive, Little Whinging", "hpotter@test.com", "Harry", "Potter", "777666814", "2227773", 56),
(39, "The Burrow, Devon, Little Whinging", "rweasley@test.com", "Ron", "Weasley", "777666815", "2227774", 56)

```

passenger_id	address	email	first_name	last_name	passport_number	phone_number	flight_flight_id
29	1000 N 4th Street, TEST, MR#15	chibusi@test.ru	Chibusi	Kelvin	45687997	6414513308	6
30	1000 N 4th Street, TEST, MR#48	ahmadi2008@test.ru	Ali Mohammed	Ahmadi	45687997	6414513308	5
34	1000 N 4th Street, TEST	churn@test.ru	Chinedu	Urbanus	A20193885	23456789	33
35	[NULL]	[NULL]	John	Dogh	[NULL]	[NULL]	5
36	221B Baker Street London	sholmes@test.com	Sherlock	Holmes	777666812	2227771	56
37	Bag End Hobbiton	bbaggins@test.com	Bilbo	Baggins	777666813	2227772	56
38	Number 4, Privet Drive, Little Whinging	hpotter@test.com	Harry	Potter	777666814	2227773	56
39	The Burrow, Devon, Little Whinging	rweasley@test.com	Ron	Weasley	777666815	2227774	56

4. Search this flight and passengers on the UI. Does the UI work?

The UI works for all 4 passengers.

Checked on the UI – Flight ID = 56, Passenger ID = 36, 37, 38, 39 - everything works.

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id

56

Passenger Id

36

Search

Verified Successfully!

Customer Info

ID	First Name	Last Name	Phone Number	Passport Number	Email
36	Sherlock	Holmes	2227771	777666812	sholmes@test.com

Flight Info

Flight Number	From	To	Departure	Arrival	Flight Charge	Aircraft
CHI-CLN-N	Chicago Airport	California Airport	2023-11-17 10:15	2023-11-17 15:50	435.0	Airbus A340

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id

56

Passenger Id

37

Search

Verified Successfully!

Customer Info

ID	First Name	Last Name	Phone Number	Passport Number	Email
37	Bilbo	Baggins	2227772	777666813	bbaggins@test.com

Flight Info

Flight Number	From	To	Departure	Arrival	Flight Charge	Aircraft
CHI-CLN-N	Chicago Airport	California Airport	2023-11-17 10:15	2023-11-17 15:50	435.0	Airbus A340

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id

56

Passenger Id

38

Search

Verified Successfully!

Customer Info

ID	First Name	Last Name	Phone Number	Passport Number	Email
38	Harry	Potter	2227773	777666814	hpotter@test.com

Flight Info

Flight Number	From	To	Departure	Arrival	Flight Charge	Aircraft
CHI-CLN-N	Chicago Airport	California Airport	2023-11-17 10:15	2023-11-17 15:50	435.0	Airbus A340

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id	Passenger Id	
<input type="text" value="56"/>	<input type="text" value="39"/>	<input type="button" value="Search"/>

Verified Successfully!

Customer Info

ID	First Name	Last Name	Phone Number	Passport Number	Email
39	Ron	Weasley	2227774	777666815	rweasley@test.com

Flight Info

Flight Number	From	To	Departure	Arrival	Flight Charge	Aircraft
CHI-CLN-N	Chicago Airport	California Airport	2023-11-17 10:15	2023-11-17 15:50	435.0	Airbus A340

5. Now move one of the passengers to another flight. What query did you use? Is it possible to find this passenger with the old flight number? With the new one?

Executed this one (5) before number 3. So used existing passenger, not newly added. I hope it's not a problem :)

We have One-to-Many relationship (passenger - flight). Thus, we should update information about the passenger. I've choose passenger with passenger_id = 24.

Before:

passenger 1 X

select * from passenger p

	passenger_id	abc addre	abc email	abc first_name	abc last_name	abc passport_numbe	abc phone_number	flight_flight_id
1	8	1000 N 4th S	john@test.ru	John	Doe	78998787	6414513308	5
2	24	1000 N 4th S	anna@test.ru	Anna	Smith	02538467	6414513308	5
3	29	1000 N 4th S	chibusi@test.ru	Chibusi	Kelvin	45687997	6414513308	6
4	30	1000 N 4th S	ahmadi2008@test.ru	Ali Mohammed	Ahmadi	45687997	6414513308	5
5	34	1000 N 4th S	churn@test.ru	Chinedu	Urbanus	A20193885	23456789	33
6	35	[NULL]	[NULL]	John	Dogh	[NULL]	[NULL]	5

UPDATE passenger **SET** flight_flight_id = 56

WHERE passenger_id = 24

Result:

UPDATE passenger SET flight_flight_id = 56
WHERE passenger_id = 24

passenger 1 X

select * from passenger p

	passenger_id	abc address	abc email	abc first_name	abc last_name	abc passport_numbe	abc phone_number	flight_flight_id
1	8	1000 N 4th Street, TES	john@test.ru	John	Doe	78998787	6414513308	5
2	24	1000 N 4th Street, TES	anna@test.ru	Anna	Smith	02538467	6414513308	56
3	29	1000 N 4th Street, TES	chibusi@test.ru	Chibusi	Kelvin	45687997	6414513308	6
4	30	1000 N 4th Street, TES	ahmadi2008@test.ru	Ali Mohammed	Ahmadi	45687997	6414513308	5
5	34	1000 N 4th Street, TES	churn@test.ru	Chinedu	Urbanus	A20193885	23456789	33
6	35	[NULL]	[NULL]	John	Dogh	[NULL]	[NULL]	5

Checked on the UI – Flight ID = 56 (the new one), Passenger ID = 24 - everything works:

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id	Passenger Id	Search
<input type="text" value="56"/>	<input type="text" value="24"/>	

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id	Passenger Id	Search
<input type="text"/>	<input type="text"/>	

Verified Successfully!

Customer Info

ID	First Name	Last Name	Phone Number	Passport Number	Email
24	Anna	Smith	6414513308	02538467	anna@test.ru

Flight Info

Flight Number	From	To	Departure	Arrival	Flight Charge	Aircraft
CHI-CLN-N	Chicago Airport	California Airport	2023-11-17 10:15	2023-11-17 15:50	435.0	Airbus A340

Checked on the UI – Flight ID = 5 (the old one), Passenger ID = 24 – not possible to find this passenger.

Verify Booking

In order to verify your ticket please provide your Flight Id and Passenger Id below.

Flight Id	Passenger Id	Search
<input type="text" value="5"/>	<input type="text" value="24"/>	

Passenger 24 was Not Found