

Ticket search project to order tickets using java. And manage Database using Sql queries

Start Screen:

Our cool ticket search engine

From: Any country Any city Any iata To: Any country Any city Any iata ☒ Two ways ticket

There: Search Back: Search

Flight number	From → To	Departure	Arrival	Prices	Economy seats left	Business seats left
MA00022	TLV → JFK	30.01.24 19:15	31.01.24 04:10	523.20-899.90	35	6
MA00111	CDG → TLV	31.01.24 01:05	31.01.24 05:25	333.30-555.50	51	6
MA00031	JFK → TLV	31.01.24 06:15	31.01.24 15:10	623.20-999.90	95	27
MA00061	DME → LED	31.01.24 09:00	31.01.24 10:10	80.35-133.60	206	56
MA00081	TLV → CDG	31.01.24 15:05	31.01.24 19:25	333.30-555.50	9	1
MA00066	LED → DME	31.01.24 19:00	31.01.24 20:10	80.35-133.60	52	13
MA00032	JFK → TLV	31.01.24 19:15	01.02.24 04:10	523.20-899.90	168	32
MA00116	CDG → TLV	01.02.24 01:05	01.02.24 05:25	333.30-555.50	65	13
MA00041	TLV → LGW	01.02.24 07:35	01.02.24 13:15	612.45-932.05	3	4
MA00086	TLV → CDG	01.02.24 15:05	01.02.24 19:25	333.30-555.50	140	22

Proceed with selected

When you launch the application, a start screen is displayed showing:

- all flights that are in the Database
- selection by country, city, IATA (airport code), date and time
- round trip ticket option selected
- search buttons to refine your selection
- buttons for entry and registration (for additional functions. You can buy a ticket without registration.
- button to check information about the purchased ticket by passport number (My flight)
- button to go to the next screen. If nothing is selected, you cannot move to the next screen.

when selecting a country, the cities of this country are shown

From: Great Britan Any city Any iata

Any city
London
Manchester

when selecting a city, the airports of this city, if the city is already selected in the second ticket, it is not shown

From:

Any iata

LGW

LHR

LTN

search there can be carried out from the current date

There:

<< <

Январь 2024

> >>

пн	вт	ср	чт	пт	сб	вс
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Сегодня: 30 янв. 2024 г.

Search back from date to there

There:

→ To	Departure ▲	Arrival	Prices	Economy seats left	Business seats left

Back:

<< <

Январь 2024

> >>

пн	вт	ср	чт	пт	сб	вс
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Сегодня: 30 янв. 2024 г.

when searching by time , flights within a 2 hour range are shown
You can search by time only for a specific date

There:

Flight number	From → To	Departure ▲	Arrival	Prices	Economy seats left	Business seats left
MA00106	LGW→ SVO	03.02.24 13:15	03.02.24 17:35	289.44-598.77	130	15

The selection can be sorted by departure and price. Only flights with seats (Business or Economy) are shown. Only flights with more than an hour before departure are shown. If no flights are selected, you cannot proceed to the next screen. If the round trip checkbox is checked, you must select both flights.

[my night](#)
[Log in](#)

Our cool ticket search engine

From:
Great Britan
London
Any iata
To:
Any country
Any city
Any iata
☐ Two ways ticket

There:

Flight number	From → To	Departure	Arrival	Prices ▼	Economy seats left	Business seats left
0T02JVR	LGW → AMS	24.05.24 07:47	24.05.24 08:13	1064.81-1490.73	125	34
OS70SHA	LGW → SHA	15.02.24 14:52	15.02.24 22:12	1010.57-1414.80	80	27
A7X2YXI	LTN → SVO	21.04.24 08:27	21.04.24 16:28	964.67-1350.54	207	53
XW6SZXR	LGW → DUB	07.09.24 23:06	07.09.24 23:47	950.09-1330.13	254	31
88J0SEY	LTN → ARN				135	58
OWKSW...	LTN → BHM				279	38
GZGY5XF	LGW → SJU				140	40
02EKPYP	LTN → CPT				109	31
B6JKE1R	LHR → DEL	12.06.24 19:49	13.06.24 02:25	696.68-975.35	18	2
MA00046	LGW → TLV	02.02.24 07:35	02.02.24 13:15	612.45-932.05	41	11

Warning
 ×

Flight not selected!

When choosing a round trip, the airports must match

My flight

Log in

Sign up

Our cool ticket search engine

From:

Great Britan

London

Any iata

To:

Any country

Any city

Any iata

☒ Two ways ticket

There:

...

Search

Back:

...

Search

Flight number	From → To	Departure	Arrival	Prices	Economy seats left	Business seats left
OT02JVR	LGW → AMS	24.05.24 07:47	24.05.24 08:13	1064.81-1490.73	125	
OS70SHA	LGW → SHA	15.02.24 14:52	15.02.24 22:12	1010.57-1414.80	80	
A7X2YXI	LTN → SVO	21.04.24 08:27	21.04.24 16:28	964.67-1350.54	207	
XW6SZXR	LGW → DUB	07.09.24 23:06	07.09.24 23:47	950.09-1330.13	254	31
8BJ0SEY	LTN → ARN	11.05.24 06:15	11.05.24 08:25	911.99-1276.79	135	58
OWKSW...	LTN → BHM	23.05.24 01:56	23.05.24 09:09	873.10-1222.34	279	38
GZGY5XF	LGW → SJU	14.06.24 04:54	14.06.24 12:23	802.48-1123.47	140	40
02EKPYP	LTN → CPT	03.04.24 23:00	04.04.24 11:25	746.93-1045.70	109	31
B6JKE1R	LHR → DEL	12.06.24 19:49	13.06.24 02:25	696.68-975.35	18	2
MA00046	LGW → TLV	02.02.24 07:35	02.02.24 13:15	612.45-932.05	41	11

To	Departure	Arrival	Prices	Economy seats left	Business seats left	
MA00061	DME → LED	31.01.24 09:00	31.01.24 10:10	80.35-133.60	206	56
MA00081	TLV → CDG	31.01.24 15:05	31.01.24 19:25	333.30-555.50	9	1
MA00066	LED → DME	31.01.24 19:00	31.01.24 20:10	80.35-133.60	52	13
MA00032	JFK → TLV	31.01.24 19:15	01.02.24 04:10	523.20-899.90	168	32
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MA00041	TLV → LGW	01.02.24 07:35	01.02.24 13:15	612.45-932.05	3	4
MA00086	TLV → CDG	01.02.24 15:05	01.02.24 19:25	333.30-555.50	140	22

Airports do not match!

OK

Proceed with selected

return date must be later than arrival there (+3 hours)

My flight

Log in

Sign up

Our cool ticket search engine

From:

Great Britan

London

Any iata

To:

Any country

Dublin

Any iata

☒ Two ways ticket

There:

...

Search

Back:

...

Search

Flight number	From → To	Departure	Arrival	Prices	Economy seats left	Business seats left
XW6SZXR	LGW → DUB	07.09.24 23:06	07.09.24 23:47	950.09-1330.13	254	31

Flight number	From → To	Departure	Arrival	Prices	Economy seats left	Business seats left
XW6SZXV	DUB → LGW	12.08.24 03:47	12.08.24 04:27	950.09-1330.13	42	9

Back before there!

OK

Proceed with selected

Seat selection screen

Please select your seats

1A Occupied

1A Business

1A Economy

1A Your selection

Mumbai - Dublin

1A	1B	1C	1D	1E	1F	1G	1H
2A	2B	2C	2D	2E	2F	2G	2H
3A	3B	3C	3D	3E	3F	3G	3H
4A	4B	4C	4D	4E	4F	4G	4H
5A	5B	5C	5D	5E	5F	5G	5H
6A	6B	6C	6D	6E	6F	6G	6H
7A	7B	7C	7D	7E	7F	7G	7H
8A	8B	8C	8D	8E	8F	8G	8H
9A	9B	9C	9D	9E	9F	9G	9H
10A	10B	10C	10D	10E	10F	10G	10H
11A	11B	11C	11D	11E	11F	11G	11H
12A	12B	12C	12D	12E	12F	12G	12H
13A	13B	13C	13D	13E	13F	13G	13H
14A	14B	14C	14D	14E	14F	14G	14H
15A	15B	15C	15D	15E	15F	15G	15H

Dublin - Mumbai

1A	1B	1C	1D	1E	1F
2A	2B	2C	2D	2E	2F
3A	3B	3C	3D	3E	3F
4A	4B	4C	4D	4E	4F
5A	5B	5C	5D	5E	5F
6A	6B	6C	6D	6E	6F
7A	7B	7C	7D	7E	7F
8A	8B	8C	8D	8E	8F
9A	9B	9C	9D	9E	9F
10A	10B	10C	10D	10E	10F
11A	11B	11C	11D	11E	11F
12A	12B	12C	12D	12E	12F
13A	13B	13C	13D	13E	13F
14A	14B	14C	14D	14E	14F
15A	15B	15C	15D	15E	15F

Your selection is empty
Total: 0

Back Next

SQL queries for admin to manage database from SQL

```
alter session set nls_date_format='DD/MM/YYYY hh24:mi';
```

-- adding/removing flights(admin can add flight only for existig airport)

```
INSERT INTO airports VALUES('VKO','Moscow','Russia');
```

```
INSERT INTO flights VALUES('ARTHNYS','VKO','TLV','23/02/2024 13:15','23/02/2024 17:15',450,670);
```

```
Select * from flights where flight_id='ARTHNYS';
```

```
DELETE flights Where flight_id='ARTHNYS';
```

--• managing the prices (increase price by 10% in econom)

```
UPDATE flights set Priceeconom=((Select priceeconom from flights Where flight_id='ARTHNYS')*1.1) Where flight_id='ARTHNYS';
```

```
Select * from flights where flight_id='ARTHNYS';
```

--• managing the countries (where each flight can take)

```
Select distinct country from airports;--Select all countries
```

```
Select * from airports where country='Poland';
```

```
Select iata from airports where country='Poland';
```

```
Select * from flights where airport_from='WAW';
```

```
Delete airports where country='Poland';--when admin delete country all flights with this country also deleted
```

--to create new country you should add atleast one airport in this country

```

INSERT INTO airports VALUES('WAW','Warsaw','Poland');
INSERT INTO Flights VALUES ('YX6055R' ,'WAW' ,'YWG','07/05/2024 21:58','08/05/2024
05:06',682.83,955.96);
INSERT INTO Flights VALUES ('W6E986R' ,'WAW' ,'SJU','19/06/2024 19:22','20/06/2024
07:48',900.56,1260.78);
INSERT INTO Flights VALUES ('7BHP9JR' ,'WAW' ,'HND','14/08/2024 01:08','14/08/2024
08:19',957.28,1340.19);
INSERT INTO Flights VALUES ('3UNFMVR' ,'WAW' ,'RNO','11/05/2024 00:41','11/05/2024
08:43',559.57,783.4);
INSERT INTO Flights VALUES ('GQHN39R' ,'WAW' ,'BOG','20/04/2024 23:33','21/04/2024
09:54',917.69,1284.77);
INSERT INTO Flights VALUES ('1GXF2QR' ,'WAW' ,'SFB','24/04/2024 00:57','24/04/2024
09:36',613.66,859.12);
INSERT INTO Flights VALUES ('O4GG2VR' ,'WAW' ,'SEA','08/08/2024 00:03','08/08/2024
14:30',628.94,880.52);
INSERT INTO Flights VALUES ('TO2GWDR' ,'WAW' ,'ORF','03/05/2024 09:05','03/05/2024
19:15',954.47,1336.26);
INSERT INTO Flights VALUES ('H4J2WMR' ,'WAW' ,'TXL','22/02/2024 06:13','22/02/2024
06:57',753.72,1055.21);

```

--• managing the number of seats in each airplane

```

SELECT count(seat) from seats group by flight_id;

```

--• adding the number of seats for each flight

```

SELECT seat from seats where flight_id='02EKPYM';
INSERT INTO seats VALUES ('02EKPYM' , '30A' , null , 0 , 'Economy');
SELECT count(seat) from seats where flight_id='02EKPYM';
Delete Seats where flight_id='02EKPYM' and seat='30A';

```

--• at least 10 countries are required.

```

Select count (distinct country) from airports;

```

-- delete invalid bookings:(booking is valid for 24 hours)

```

DELETE FROM Administrator.Bookings WHERE BookingDate + 1 < SYSDATE;

```

--Select all flights with seats and more than 1 hour departure time

```

SELECT fl.flight_id,airport_from,airport_to, to_char(Departure, 'dd.mm.yy hh24:mi'),
to_char(Arrival, 'dd.mm.yy hh24:mi'),
PriceEconom,PriceBusiness, s_economy.seats_left_economy,
s_business.seats_left_business
FROM Administrator.flights fl,
(SELECT flight_id, (count(seat) - count(booked)) AS seats_left_Business
FROM Administrator.seats WHERE TicketClass= 'Business' GROUP BY flight_id)
s_business,

```

```

        (SELECT flight_id, (count(seat) - count(booked)) AS seats_left_Economy
        FROM Administrator.seats WHERE TicketClass= 'Economy' GROUP BY flight_id)
s_economy
WHERE fl.flight_id=s_economy.flight_id and fl.flight_id=s_business.flight_id and
        (seats_left_business > 0 OR seats_left_economy > 0) AND
        Departure > (SElect SYSDATE + 1/24 from dual);

```

--Select flight by flight_id with seats and more than 1 hour departure time

```

SELECT fl.flight_id,airport_from,airport_to, to_char(Departure, 'dd.mm.yy hh24:mi'),
to_char(Arrival, 'dd.mm.yy hh24:mi'),
        PriceEconom,PriceBusiness, s_economy.seats_left_economy,
s_business.seats_left_business
FROM Administrator.flights fl,
        (SELECT flight_id, (count(seat) - count(booked)) AS seats_left_Business
        FROM Administrator.seats WHERE TicketClass= 'Business' GROUP BY flight_id)
s_business,
        (SELECT flight_id, (count(seat) - count(booked)) AS seats_left_Economy
        FROM Administrator.seats WHERE TicketClass= 'Economy' GROUP BY flight_id)
s_economy
WHERE fl.flight_id=s_economy.flight_id and fl.flight_id=s_business.flight_id and
        (seats_left_business > 0 OR seats_left_economy > 0) AND
        Departure > (SElect SYSDATE + 1/24 from dual) and fl.flight_id='3U9QSVG';

```

--insert new booking into bookings:

```

INSERT INTO Administrator.Bookings VALUES (43255, 1499.76,
TO_DATE('2024-01-28', 'YYYY-MM-DD'))

```

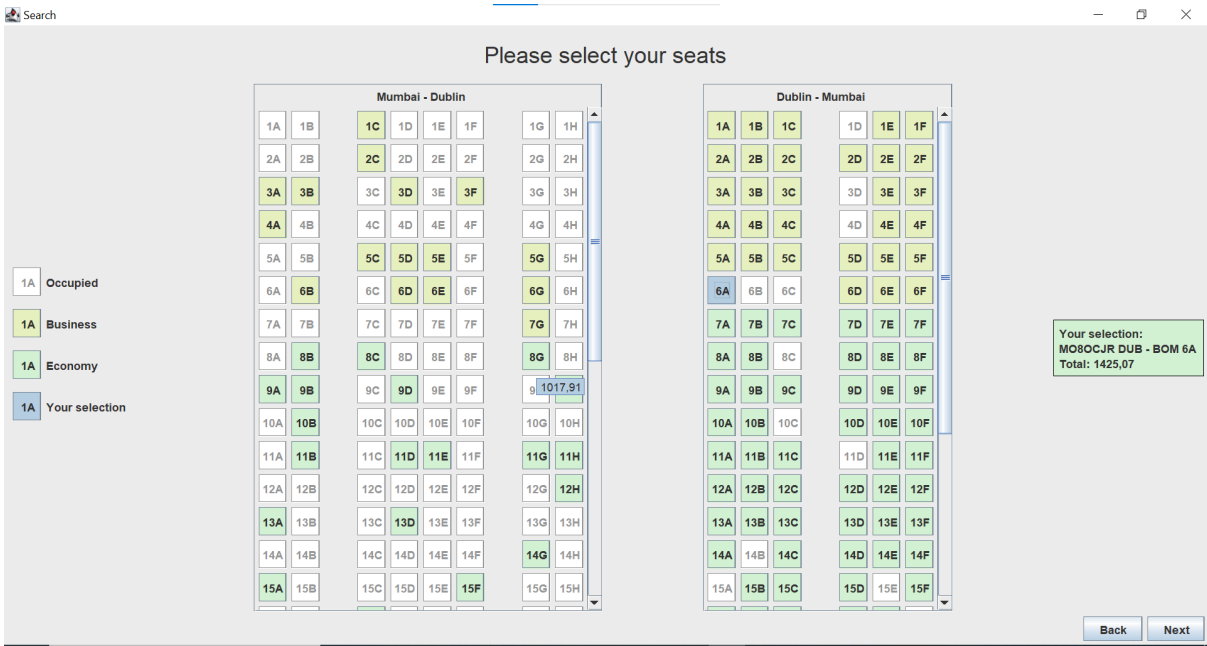
-- insert pasenger

```

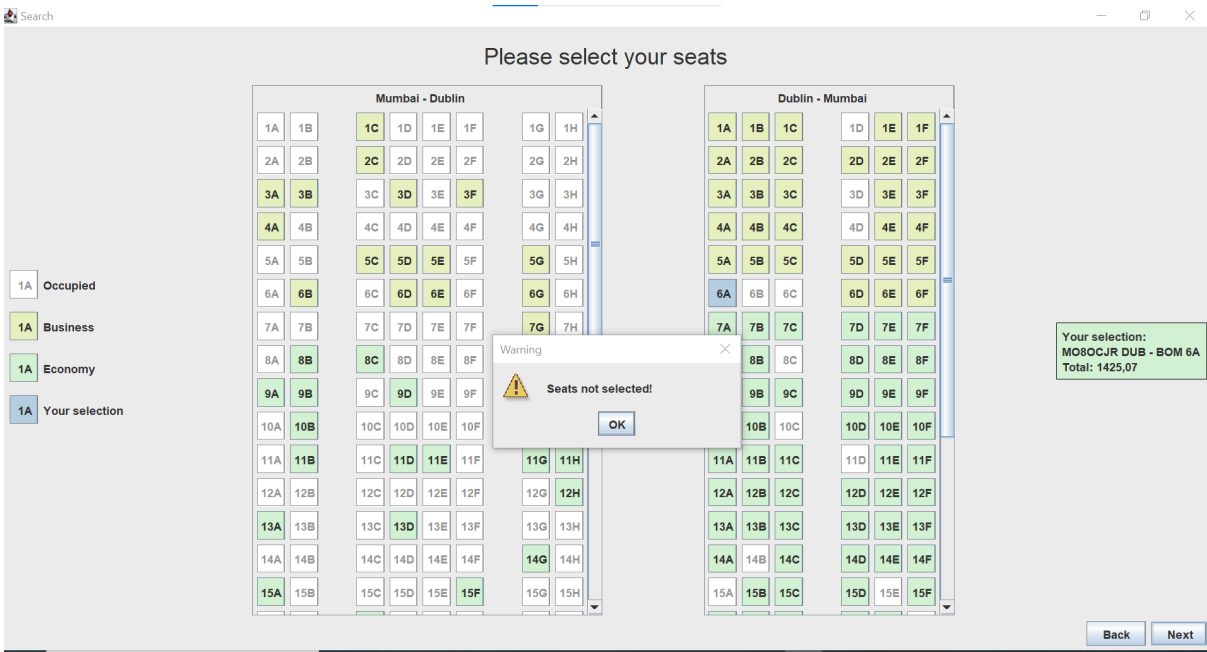
INSERT INTO Administrator.PASSENGERS VALUES ('13258','iii','uuu','7G','TQUISY3')

```

when you hover the price is shown, when you select the total cost in the window on the right



You must select at least 1 ticket on each flight



when pressing the next button

Search

Please select your seats

1A Occupied

1A Business

1A Economy

1A Your selection

Mumbai - Dublin

1A	1B	1C	1D	1E	1F	1G	1H
2A	2B	2C	2D	2E	2F	2G	2H
3A	3B	3C	3D	3E	3F	3G	3H
4A	4B	4C	4D	4E	4F	4G	4H
5A	5B	5C	5D	5E	5F	5G	5H
6A	6B	6C	6D	6E	6F		
7A	7B	7C	7D	7E	7F		
8A	8B	8C	8D	8E	8F		
9A	9B	9C	9D	9E	9F	9G	9H
10A	10B	10C	10D	10E	10F	10G	10H
11A	11B	11C	11D	11E	11F	11G	11H
12A	12B	12C	12D	12E	12F	12G	12H
13A	13B	13C	13D	13E	13F	13G	13H
14A	14B	14C	14D	14E	14F	14G	14H
15A	15B	15C	15D	15E	15F	15G	15H

Dublin - Mumbai

1A	1B	1C	1D	1E	1F
2A	2B	2C	2D	2E	2F
3A	3B	3C	3D	3E	3F
4A	4B	4C	4D	4E	4F
5A	5B	5C	5D	5E	5F
6A	6B	6C	6D	6E	6F
7A	7B	7C	7D	7E	7F
8A	8B	8C	8D	8E	8F
9A	9B	9C	9D	9E	9F
10A	10B	10C	10D	10E	10F
11A	11B	11C	11D	11E	11F
12A	12B	12C	12D	12E	12F
13A	13B	13C	13D	13E	13F
14A	14B	14C	14D	14E	14F
15A	15B	15C	15D	15E	15F

Success

Your seats are successfully booked.
Your booking number is 73254

OK

Your selection:
MO8OCJQ BOM - DUB 7G
MO8OCJR DUB - BOM 6A
Total: 2850,14

Back

Next

On the next screen you need to enter passenger information
First and last name without numbers. Passport of at least 5 characters.

Search

Please enter passenger information

MO8OCJQ Mumbai - Dublin (BOM - DUB)

7G First name: Last name: Passport:

MO8OCJR Dublin - Mumbai (DUB - BOM)

6A First name: Last name: Passport:

Back

Next

By pressing the back button you can [cancel your reservation](#)

Please enter passenger information

MO8C DUB)

7G First name: Passport:

MO8C BOM)

6A First name: Last name: Passport:

Confirmation

Are you sure?
Your booking will be canceled.

Yes No

By clicking the next button we go to the [payment page](#)

Payment details

Please check your order and enter your credit card details

Your order

Booking 73254
MO8OCJQ 7G 1425.07
MO8OCJR 6A 1425.07
Total: 2850,14

Credit card details

Save my data: ☐ [I have an account](#)

Card number:

Name on card:

Expires: / CVV:

When entering card data, there are the following checks:

number - 16 digits

Name only letters

Date with 2 digits: month 1-12, year at least 24

cvv 3 characters

You can save the data in your account or cancel or save the reservation