# Flight Reservation System

BY

GHULAM MUHAMMAD (B19102038)

ALI AHMED KHAN (B19102014)

### What problems we are solving?

OUR SYSTEM PROVIDES A PLATFORM FOR ALL KINDS OF FUNCTIONALITIES REQUIRED IN AN AIRLINE RESERVATION SYTEM.

WE HAVE IMPLEMENTED THE METHODS IN A WAY THAT COMPLIMENTS THE USERS AS WELL AS THE SYSTEM ADMIN.

### DATABASE

SQLITE HAS BEEN IMPLEMENTED FOR DATA MANAGEMENT AND IT COMMUNICATED WITH THE PROGRAM TO PROVIDE BACK-END DATA SUPPORT.

### DATABASE TABLES

FLIGHTS: WHERE ALL THE INFORMATION OF FLIGHTS WILL BE SAVED

USERS: THIS WILL CARRY THE INFORMATION OF ALL SIGNED UP USERS

**BOOKINGS**: THIS GENERAL TABLE IS COMPRISED OF ALL THE BOOKINGS FROM SYSTEM USERS OR ANONYMOUS VISITORS.

CANCELLATIONS: THE FLIGHTS THAT ARE CANCELLED WILL RESIDE HERE

**NOTIFICATIONS**: ANY NOTIFICATION REGARDING THE CURRENT FLIGHT STATUS WILL BE ADDED BY ADMIN AND WILL STAY HERE.

#### UN SIGNED-IN USERS

BE DEFAULT WHEN THE PROGRAM STARTS THE VISITOR WILL SEE THE FOLLOWING OPTIONS.

See flights
 Log in
 Sign up
 Exit

Please choose any of the above:

#### SEE FLIGHTS

WHEN THIS OPTION WILL BE SELECTED, THE PROGRAM ASKS FOR THE INFORMATION FROM THE USER.

```
Enter Date of Departure (Date format: yyyy-MM-dd): 2021-09-03
Please Select an Origin:
1. Lahore
2. karachi
3. Islambad
4. New Delhi
please make a choice from 1 to 4
Fly From: 1
Please Select a Destination
1. karachi
please make a choice from 1 to 1
Fly To: 1
How many passengers? 1
Enter Type
B for Business
E for Economy
Your Choice: b
Active Flights from Lahore to karachi
   Flight ID
                       Time
1. 111
                       03:00:00
2 Go back
please make a choice between 1 and 2
Choice: 1
```

WHEN THIS OPTION WILL BE SELECTED, THE PROGRAM ASKS FOR THE INFORMATION FROM THE USER.

#### Travel info

```
Enter Date of Departure (Date format: yyyy-MM-dd): 2021-09-03
Please Select an Origin:
1. Lahore
2. karachi
Islambad
4. New Delhi
please make a choice from 1 to 4
Fly From: 1
Please Select a Destination
1. karachi
please make a choice from 1 to 1
Fly To: 1
How many passengers? 1
Enter Type
B for Business
E for Economy
Your Choice: b
Active Flights from Lahore to karachi
    Flight ID
                       Time
1. 111
                       03:00:00
2 Go back
please make a choice between 1 and 2
Choice: 1
```

#### Passenger Info

```
Active Flights from New Delhi to New Boston
    Flight ID
                        Time
1. 567
                        21:50:00
2 Go back
please make a choice between 1 and 2
Choice: 1
Information for passenger 1
Full Name: Ali Ahmed Khan
cnic should be separated by "-"
CNIC Number: 45222-1234567-1
Calculated Bill PKR: 85000.0
Booked Successfully!

    See flights

2. Log in
3. Sign up
4. Exit
Please choose any of the above:
```

### **BOOKING TABLE**

WHEN THE UN-SIGNED USER MAKES A BOOKING, THAT BOOKING WILL GO IN THE DATABASE AS AN ANONYMOUS BOOKING.

LOG IN

WHEN THE USER CHOOSES LOG-IN.

Please choose any of the above: 2 Username: aleebangash23

Password: Coolboy69

WELCOME Alibangash

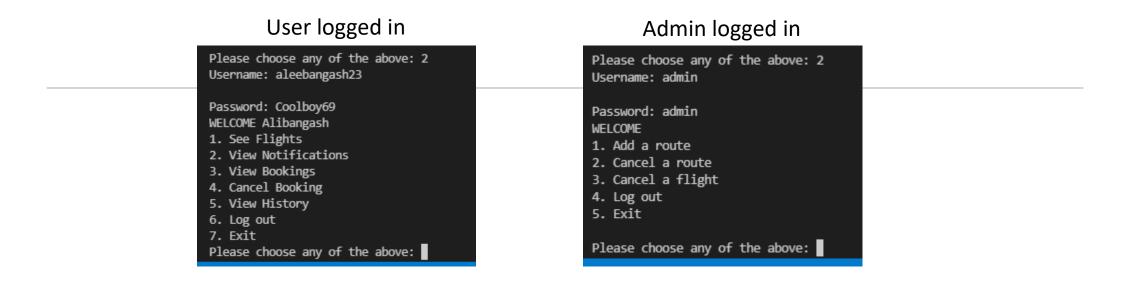
- 1. See Flights
- 2. View Notifications
- 3. View Bookings
- Cancel Booking
- 5. View History
- 6. Log out
- 7. Exit

Please choose any of the above:

#### ADMIN AND USER LOG IN

OUR USERS DATABASE HAS A COLUMN WHICH TELLS WHETHER THE USER IS AN ADMIN OR USER.

SO WHEN USERNAME AND PASSWORD WILL BE OF ADMIN THE ADMIN WILL BE LOGGED IN WHEN USERNAME AND PASSWORD WILL BE OF USER THE USER WILL BE LOGGED IN.



#### SEE FLIGHTS:

WORKS EXACTLY THE SAME AS PREVIOUS, IT WILL TAKE THE FLIGHT INFORMATION, THEN PASSENGER'S INFORMATION AND THEN WILL PROMPT USER TO BOOK, ONCE BOOKING IS MADE, THE BOOKING TABLE IN THE DATABASE WILL BE POPULATED WITH THE INFORMATION THAT USER PROVIDED.

#### **VIEW NOTIFICATIONS:**

THIS WILL QUERY THE NOTIFICATIONS DATABASE WHERE THE

USER COLUMN = CURRENT LOGGED IN USER AND WILL PICK OUT ALL THE NOTIFICATIONS CURRENTLY PRESENT.

#### **VIEW BOOKINGS:**

THIS FUNCTION WILL DISPLAY ALL THE BOOKINGS THAT THIS LOGGED IN USER HAS MADE.

#### **CANCEL BOOKINGS:**

YOU CAN CANCEL YOUR BOOKINGS FROM HERE AS WELL.

#### **VIEW HISTORY:**

ALL THE TRAVEL HISTORY OF CURRENTLY LOGGED IN USER WILL BE SHOWN AFTER THIS METHOD IS CALLED.

#### LOGOUT:

LOGGED IN USER WILL LOG OUT AND WILL SEE THE DEFAULT WINDOW SHOWN AT THE STARTING OF THE PROGRAM.

EXIT:

EXITS THE SYSTEM FROM ANY POINT IN PROGRAM FLOW.

#### ADD A ROUTE:

THIS OPTION ENABLES THE ADMIN TO ADD A ROUTE IN FLIGHTS TABLE.

#### **CANCEL A ROUTE:**

IF THE ROUTE HAS TO GET CANCELLED DUE TO SOME REASONS, ADMIN CAN DO IT FROM THIS OPTION.

WHEN THE ROUTE WILL BE CANCELLED, ALL THE FLIGHTS ON THAT ROUTE WILL KEEP OPERATING UNTIL THE MOST LATEST BOOKING ON THAT ROUTE GETS SERVED.

#### **CANCEL A FLIGHT:**

ADMIN HAS THE RIGHT TO CANCEL A FLIGHT, AND GIVE A COMPREHENSIVE REASON FOR IT WHICH WILL BE SHOWN AS NOTIFICATIONS TO ALL THE PASSENGERS THAT HAVE BOOKED THAT FLIGHT.

#### LOG OUT:

ADMIN WILL LOGOUT AND THE PROGRAM GOES TO THE POINT OF STARTING.

EXIT:

EXITS THE SYSTEM FROM ANY POINT IN PROGRAM FLOW.

## THANK YOU!