

CS61 Database Homework: 6, Testing

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1 Interface

My name, database name and “CS61-Spring 2015” is on the top. The ATA title and logo is below it.

Login and password field is below the title and logo. I stored password in database and wrong password would lead to a error page on which you can choose to return the login page and re-enter the login information.

2 Airline Customer

I inserted 90 flights and more than 500 users into the database. To test the capabilities for the customer. You can use

MARY.SMITH@sakilacustomer.org

1111

to login. If you type wrong password, like 1112, then there will be an error.

To find a schedule, click booking flights and select departure and arrival city. Since we have a limited number of flights, not all routines are covered. I manually input 6 different flights between San Diego and Philadelphia for testing purpose. You can choose San Diego as departure city and Philadelphia as arrival city. Then submit it. You will see there are 4 available flights prompt up.

To book a flight, just click book this flight. Then it will forward you to future flights and update available seats correspondingly.

To cancel a flight, click Cancel Flights on the top. Then it will show all the flights you have booked (since we don't care time. And I have inserted some booking already). Then click cancel this flight. It will forward you to future flights and update available seats correspondingly.

'Past flights' and 'Future flights' on the top will retrieve past and future flights booked for this customer, respectively.

You can click 'Logout' on top to logout and it will return to the main page.

3 Airline Employee

I have inserted about 50 users as employee. You can use

EDUARDO.HIATT@sakilacustomer.org

1111

to login as an employee. Similarly, if you input wrong password there will be an error.

To retrieve passenger list, click 'Passenger List'. It will prompt all the flights that have at least one ticket booked. Then choose one flight and click 'Get passenger list' then it will retrieve all passengers who have booked this flight.

To get top 5 most booked flights, click 'Popular Flights' on top. Then choose a date range. Noted that I have inserted some flights and booking between May 1st, 2015 and May 31st, 2015 so if you choose within this range it will get the most reasonable results. Then click submit and the most 5 booked flights will be displayed associated with its booked seats number.

4 General requirements

I separated customer and employee when logging in. The system can search flight schedules and track plane capacity. I adopt the Southwest AirlinesTM model of no reserved seating. The assignment is just a count.

The system can identify overbook. I specifically inserted a flight that has 0 available seat from San Diego to Dallas. To test this overbooking mechanism, login as customer and book the flight from San Diego to Dallas. Then you will find you cannot book this flight due to the overbooking prevention mechanism and there will be any change in database.