

CS166 Final Project Phase 3

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This project implements a few functionalities one might find in a airline management system.

1. Examples

All queries and updates must be selected using the main menu in the terminal. To choose an option, enter a number 1-10.

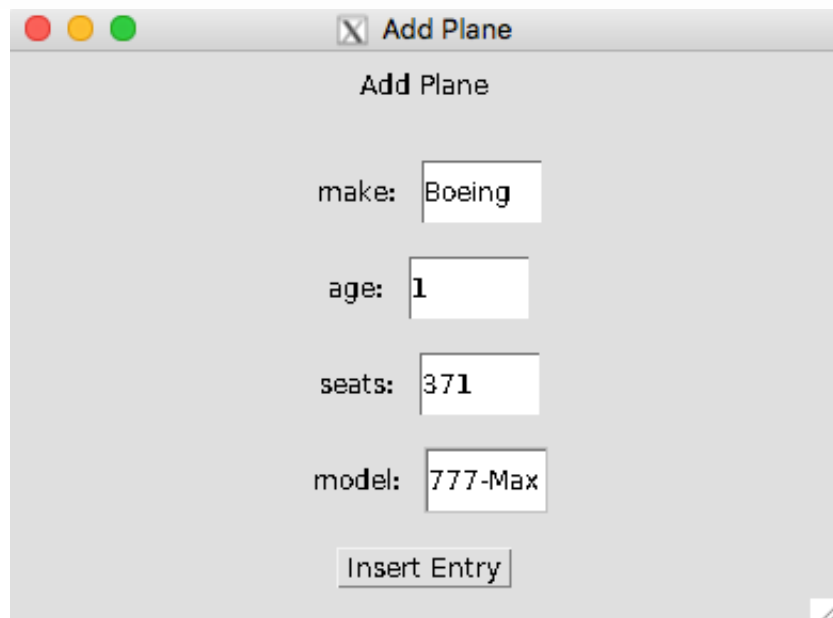
```
(1)
(2)
Connecting to database...Connection URL: jdbc:postgresql://localhost:5025/byi006_DB

Done
MAIN MENU
-----
1. Add Plane
2. Add Pilot
3. Add Flight
4. Add Technician
5. Book Flight
6. List number of available seats for a given flight.
7. List total number of repairs per plane in descending order
8. List total number of repairs per year in ascending order
9. Find total number of passengers with a given status
10. < EXIT
Please make your choice: █
```

After choosing an option from the terminal, a window will be created for you to interact with. The contents of the window will vary depending on what option you choose.

Inserting Data

This is an example of a window where users will perform queries:



A dialog box titled "Add Plane" with a close button (X) in the top right corner. It contains four text input fields with labels "make:", "age:", "seats:", and "model:". The "make:" field contains "Boeing", the "age:" field contains "1", the "seats:" field contains "371", and the "model:" field contains "777-Max". Below the fields is an "Insert Entry" button.

Add Plane

make: Boeing

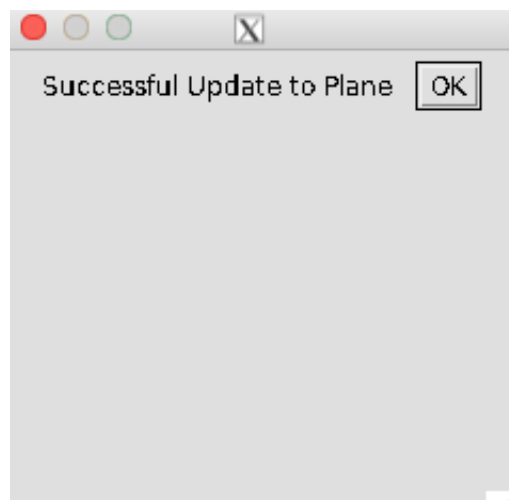
age: 1

seats: 371

model: 777-Max

Insert Entry

After pressing the **Insert Entry** button, the following alert will appear:



An alert dialog box with a close button (X) in the top right corner. It contains the text "Successful Update to Plane" and an "OK" button.

Successful Update to Plane OK

Querying Data

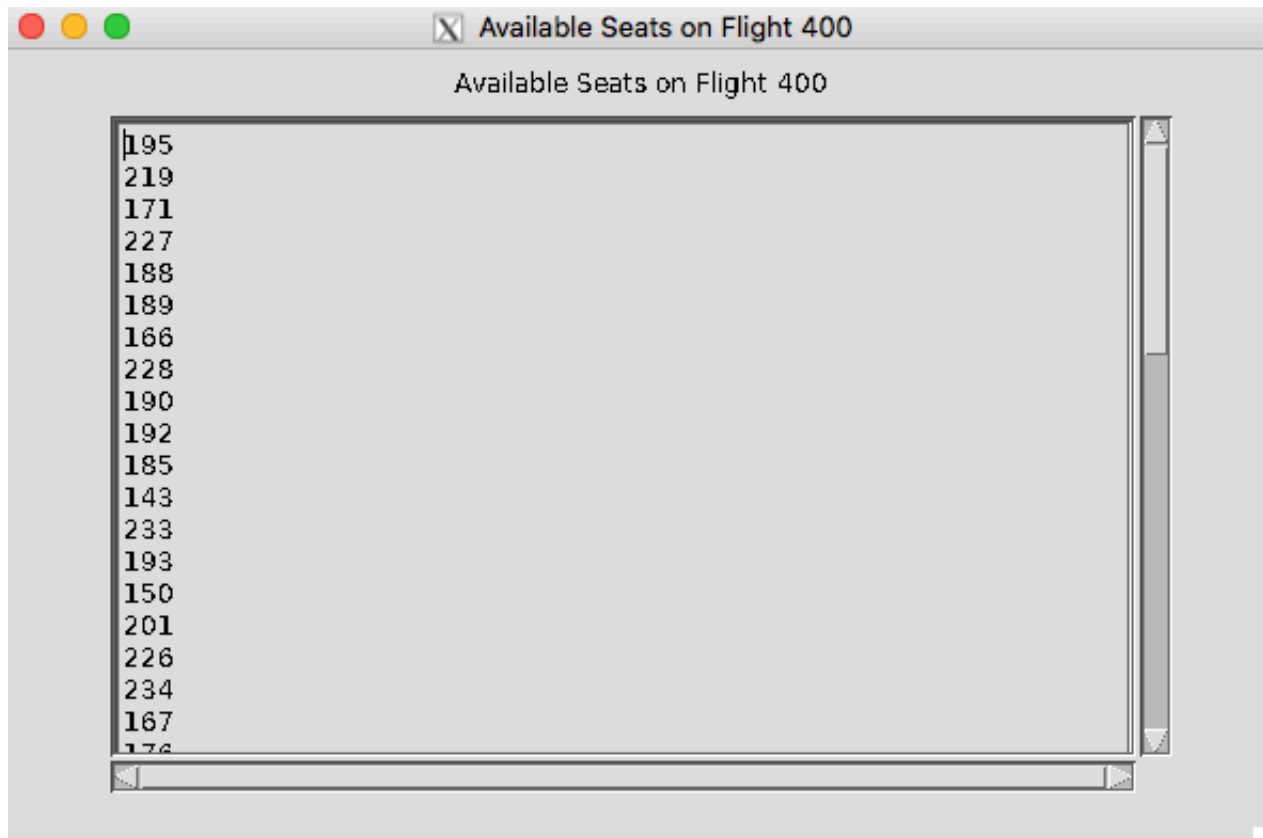


A dialog box titled "Get Seats" with a close button (X) in the top right corner. It contains a text input field with the label "flight number:" and the value "400". Below the field is a "Start Query" button.

Get Seats

flight number: 400

Start Query



The two windows above show how to execute a query and see the results. The first window to appear is an input window. After inputting the required parameters, another window will appear to show the results.

2. Deploying

Dependencies

1. Java (and java.awt)
2. Postgres

Note: For remote connections, enable X Forwarding

Start the Application

```
# Clone the git repo
git clone https://github.com/bypie5/CS166_final_project.git
cd CS166_final_project

# Deploy postgresql server
cd code/postgresql
source ./createPostgreSQL.sh
source ./startPostgreSQL.sh
```

```
# Start java application
cd ../java
./compile.sh

# ex: source ./run.sh byi006_DB 5025 byi006
source ./run.sh $USER"_DB" $PGPORT $USER
```