

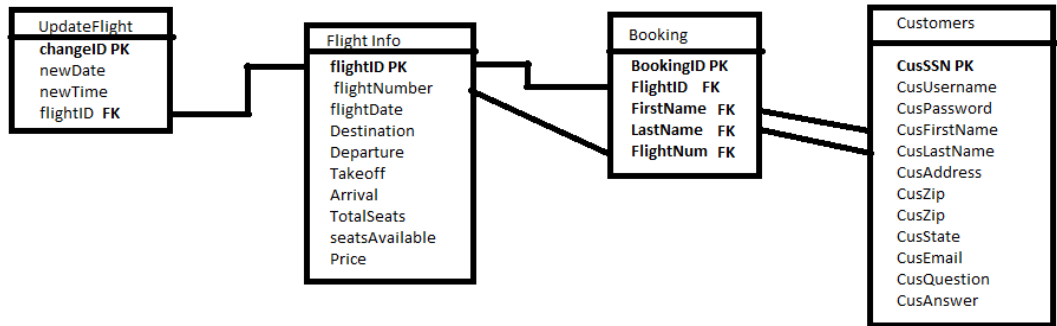
## Java Air

### Functionality and Requirements Specifications

1. Upon starting the Java Air flight search application, the user will be shown a *splash screen* with a *main menu*. This main menu gives two options - the option to *Register* or *Log In*.
2. There will also be an option for a *password retrieval*. The password retrieval screen is for existing *users*, and will ask for the user's *Username* and *Security Question*. If Username is correct, the system will display the security question for the user. If both the Username and answer is correct, the password will be shown to the user.
3. On the Registration Screen, the user is prompted for the following, and it is stored in the database.:
  - a. First Name
  - b. Last Name
  - c. Address
  - d. Zip
  - e. State
  - f. Username
  - g. Password
  - h. Email
  - i. SSN
  - j. Security Question (for password retrieval)
  - k. Answer for Security Question (for password retrieval)
4. Following registration, the user can log in. Users are registered as customers by default, but the option to log in as admin exists and can be toggled.

5. On the log in screen, the user is prompted for their username and password and their inputs are validated against our database that is connected to the application. If correct, the user is logged in.
6. From here, the user will be able to search for flights. They will be able to search by the departure city, destination city, date of the flight, and time of the flight departure.
7. The system will return results for available flights, displaying their departure city, destination city, date of the flight, departure time, arrival time, total seats available, seats left, and price of the flight.
8. The user will be able to select their desired flight to their account, but will not be able to book the same flight more than once.
9. If a user tries to book two separate flights of conflicting times and dates, the application will warn the user of the conflict and will not allow them to book the conflicting flight.
10. The application will keep track of the number of passengers booked for each flight, and if the total seats available is 0, the application shall not let the user book the flight.
11. In the user's account, they can:
  - a. Delete flight from account
  - b. View previously booked flights
12. If the user is logged in as an admin, they have the following additional privileges:
  - a. Ability to add additional flights to accounts
  - b. Update flights in accounts
  - c. Delete flights from accounts
13. Regardless of user status, all users will be able to return to the main menu, as well as the option to log out at all times.

# Database Model



# UML Class Diagram

