Airline Ticket Booking System

Dylan Herthoge, Jonathon Mangan, Phoebe Spratt

Group 34

Project Description:

We are designing an airline ticket booking system, which will be a command line application with text based interaction. We have designed a program that has a DataBase class, which will save all data from the program. The data will be saved as text files and will be updated when closing the application.

Design Process:

In order to come up with the design for our system, we broke down each line in the guidelines and highlighted nouns and verbs to come up with ideas for classes, variables, and methods. After this, we declared classes and assigned them variables and methods, then created and revised our UML diagram. Once we were satisfied with our UML diagram, we split up the skeleton code and wrote it individually.

Class hierarchies and Relationships

* Menu - aggregates Airline and Passenger
  + PassengerMenu extends Menu - aggregates Passenger and Flight
    - PassengerReviewMenu extends PassengerMenu - aggregates Review
  + AirlineMenu extends Menu - aggregates Airline
    - AirlineReviewMenu extends AirlineMenu - aggregates Review
* Airline - aggregates Flight
* Flight - aggregates Ticket and Passenger
* Passenger - aggregates PassengerFlightNeeds
* Database
* Review
* Ticket
* PassengerFlightNeeds

Data structures and files used

In order to maintain persistence, we are using 5 different text files to store objects when the system is shut down. The files used are

* passengers.txt
* airlines.txt
* tickets.txt
* reviews.txt
* flights.txt

UML Diagram



