AIRPLANE

Object Oriented Programming

ABSTRACT

Class diagram focused on seat management on an airplane.

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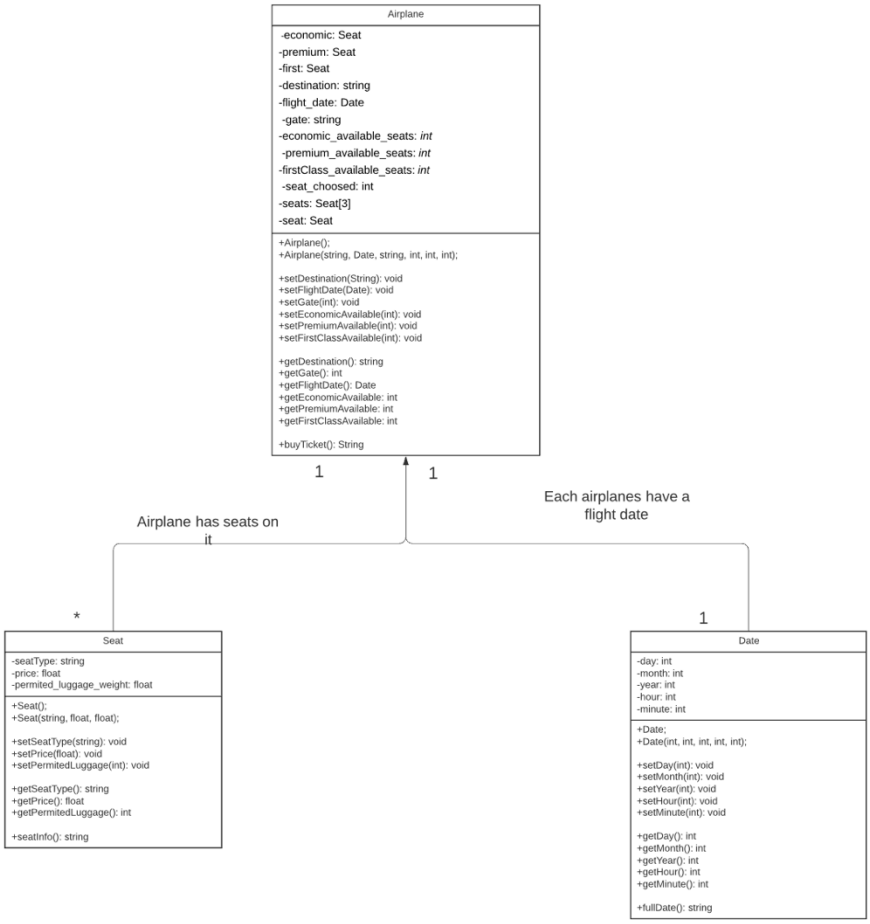
OBJECTIVE AND DIAGRAM

Design a class diagram that can manage the purchase of seats on an airplane, whether it is economy, premium and first-class seats.



CLASSES

Airplane: This class contains the number of seats available for each type of seat within the plane, the destination to which it will travel, the flight date, the door where the passengers will board and the method to buy a ticket which modifies the number of available seats .

Seat: This class contains the price of each type of aircraft with the ability to modify it, the weight of luggage allowed for each seat and the name of the type of seat. It has the "seatInfo" method, which returns the complete information about the seat.

Date: This class contains the day, month, year, hour, and minute. In order to be able to have the exact date of the flight. It has the "fullDate" method, which returns the complete date and formatted to be understandable on a purchase receipt.

USER INPUT TEST CASES

The tests are primarily focused on the type of input the program requests and the possible scenarios that could arise.

For reasons of time, all the inputs were taken as strings and if we need an integer number, we modify the value to be an integer by means of the "string" and "sstream" libraries.

The tests are as follows in all cases that require customer input:

- Number outside the available range.
- Empty input
- Input with random characters, which are not available options.