

Assignment: Managing an airplane

As a developer you will often have to decide how an application should be implemented. This is usually based on a set of requirements. For this assignment you have complete freedom how you are going to design and implement the application, although you will have to adhere to the description below.

To get you started, the application should be able to manage an airplane with:

- ID (e.g. 101, 2398, etc.)
- Type of airplane (e.g. Boeing 747, Airbus A310, etc.)
- 6 flight attendants
- 2 to 4 pilots
- X business class seats for passengers, where X is supplied by the user and X should always be multiples of 2
- Y economy class seats for passengers, where Y is supplied by the user and Y should always be multiples of 3

After the Airplane-object has been created, a user should be able to assign persons to the available seats or 'roles' in the airplane:

- Passengers have a name and age
- Flight attendants have a name, age and whether they are a senior attendant
- Pilots have a name, age and whether they are a senior pilot

See the next page for an example of an airplane with 6 business class and 54 economy classes.

User interaction

It should be possible for a user of the application to:

- First create an airplane
- After creating an airplane, the user can:
 - Add pilots to the airplane
 - Add flight attendants to the airplane
 - Add and assign passengers to empty seats
 - See the pilots, flight attendants and passengers with their seats

Airplane

ID	12346					
Type	Dummy airplane - small					
Pilots	Fabio Stubbs (age 55, senior)		Wade Maldonado (age 34)		Alyssia Pott (60)	
Flight attendants	Ailsa Pearson (age 43, senior)		Emily-Jane Mckay (age 25)		Rowena Little (age 23)	
	Alyssia Potts (age 56, senior)		Enid Chamberlain (age 32)		Willem Connor (age 19)	
Business class seats	Seat 1A John Doe (age 35)			Seat 1B Jane Doe (age 33)		
	Seat 2A			Seat 2B		
	Seat 3A			Seat 3B Scrooge McDuck (age 64)		
Economy class seats	Seat 4A	Seat 4B	Seat 4C	Seat 4D	Seat 4E	Seat 4F
	Seat 5A	Seat 5B	Seat 5C	Seat 5D Aadam Black (age 22)	Seat 5E	Seat 5F Janet Black (age 20)
	Seat 6A Amy Holmes (age 27)	Seat 6B Sherlock Holmes (age 34)	Seat 6C	Seat 6D Elizabeth Hartley (age 18)	Seat 6E	Seat 6F
	Seat 7A	Seat 7B	Seat 7C	Seat 7D	Seat 7E	Seat 7F
	Seat 8A Steven Segal (age 65)	Seat 8B Chuck Norris (age 60)	Seat 8C Bruce Lee (age 59)	Seat 8D Jean Claude van Damme (age 60)	Seat 8E	Seat 8F Oliver Buchanan (age 53)
	Seat 9A: Heather Kline (age 23)	Seat 9B	Seat 9C Amanda Carrillo (age 67)	Seat 9D	Seat 9E	Seat 9F
	Seat 10A	Seat 10B	Seat 10C	Seat 10D	Seat 10E	Seat 10F
	Seat 11A	Seat 11B	Seat 11C	Seat 11D	Seat 11E	Seat 11F
	Seat 12A Daisy Duck (age 45)	Seat 12B Gladstone Gander (age 43)	Seat 12C Donald Duck (age 43)	Seat 12D Huey Duck (age 7)	Seat 12E Dewey Duck (age 7)	Seat 12F Louie Duck (age 7)