




JAVA BASICS

Training Assignments

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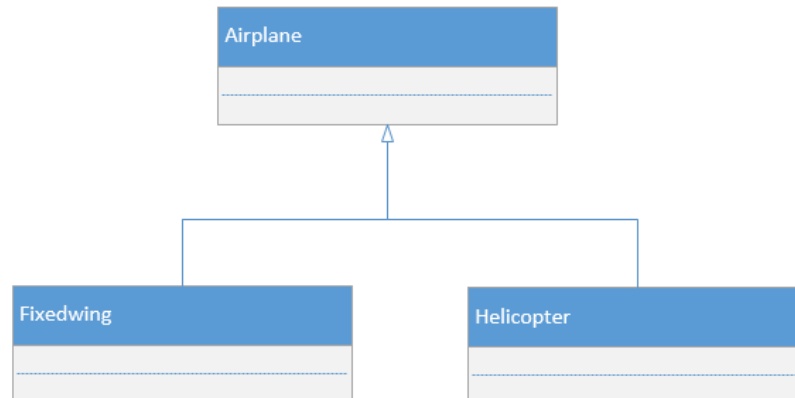
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	CODE:	JPL.L.A302
	TYPE:	MEDIUM
	LOC:	
	DURATION:	90 MINUTES

Problem Descriptions:

For the class hierarchy is as follows, the trainee let's create the classes install this class diagram to be able to relationship between it.



- » The **Fixedwings** class contains the information about fixed wing airplanes. Each fixed wing airplane has its **ID, Model, Plane Type, Cruise Speed, Empty Weight, Max Takeoff Weight, Min Needed Runway Size** and **Fly()** method ("fixed wing")
- » The **Helicopters** class contains the information about helicopters. Each helicopter has its, **ID, Model, Cruise Speed, Empty Weight, Max Takeoff Weight, Range** and **Fly()** method ("rotated wing")
- » The **Airports** class contains the information about **ID, Name, Runway Size, Max Fixedwing Parking Place, List of Fixedwing Airplane ID, Max Rotated Wing Parking Place, List of Helicopter ID**.

Business rules:

- » ID is a string of 7 characters, started by "FW" for fixed wing airplane, "RW" for helicopter and "AP" for airport, followed by 5 digits. ID is unique.
- » The model size is maximum 40 characters.
- » Three fixed wing airplane type are CAG (Cargo), LGR (Long range) and PRV (Private).
- » If a fixed wing airplane is parked in an airport, its min runway size does not excess the airport runway size.
- » The max takeoff weight of helicopter does not excess 1.5 times of its empty weight.

Software Requirements:

- » Allows users to create an airport.
- » The program has the function to add to an airport one or more fixed wing airplane(s) which currently does not participate to an airport and which has the min needed runway size shorter than the airport runway size.
- » The program has the function to remove one or more fixed wing airplane(s) from an airport.

- » The program has the function to add to an airport one or more helicopter(s) which currently does not participate to an airport.
- » The program has the function to remove one or more helicopter(s) from an airport having.

User Interface Requirement:

The program has a screen console for above function requirment.

Each unsuccessful action will be informed to user by an error message.

Technical Requirements:

- » Write on console application, comply with naming conventions
- » Must create a project called AccountName_JPL.L.A302