IT - 314 SOFTWARE ENGINEERING LAB-4

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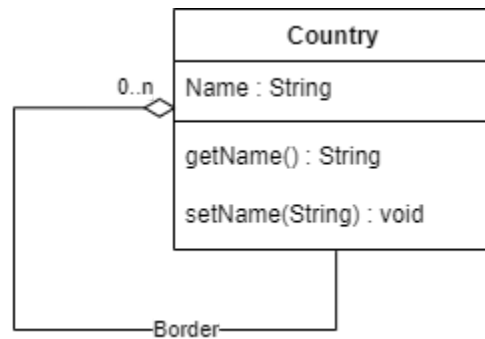
CLASS DIAGRAM

QUESTION-1

Q.1 Prepare a class diagram for the following object diagram that shows a portion of Europe.

Spain: Country	Borders	France: Country	Borders	Belgium: Country
Name = Spain		Name = France		Name = Belgium

Figure-1

Country
0..n   Name : String
getName() : String
setName(String) : void

Border

QUESTION-2

Q.2 Prepare a class diagram for object diagram given in Figure -2. Explain your multiplicity decisions. What is the smallest number of points required to construct a polygon? Does it make a difference whether or not point may be shared between polygons? Your answer should address the fact that points are ordered.
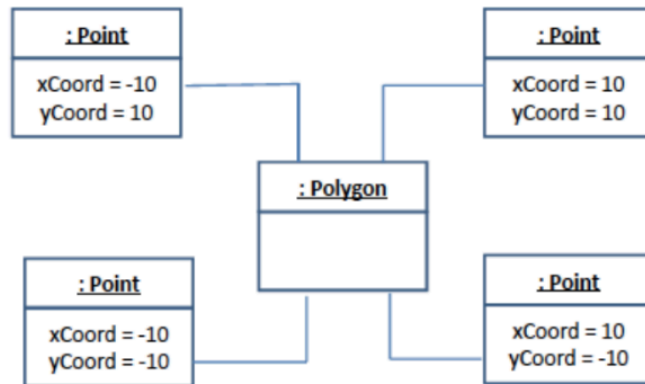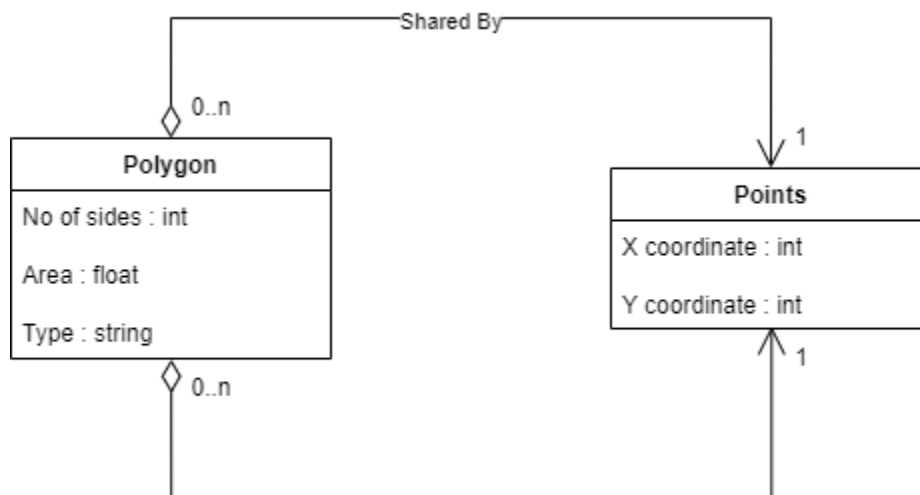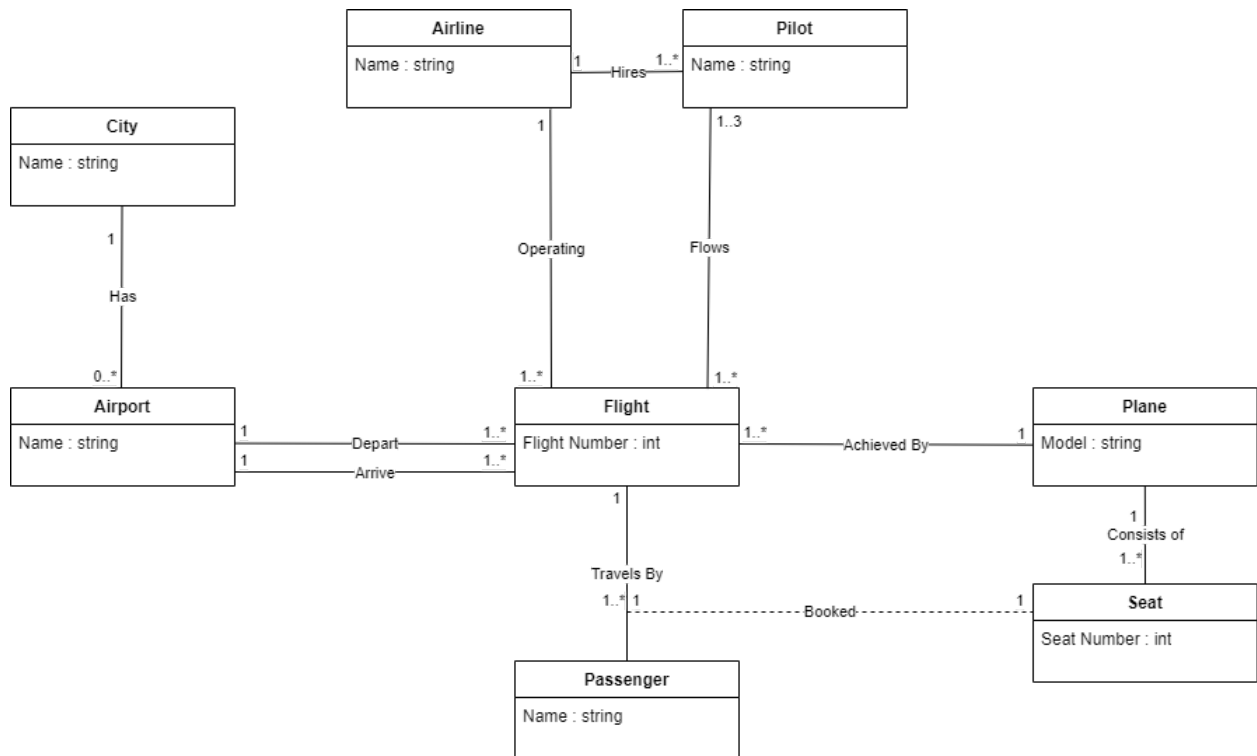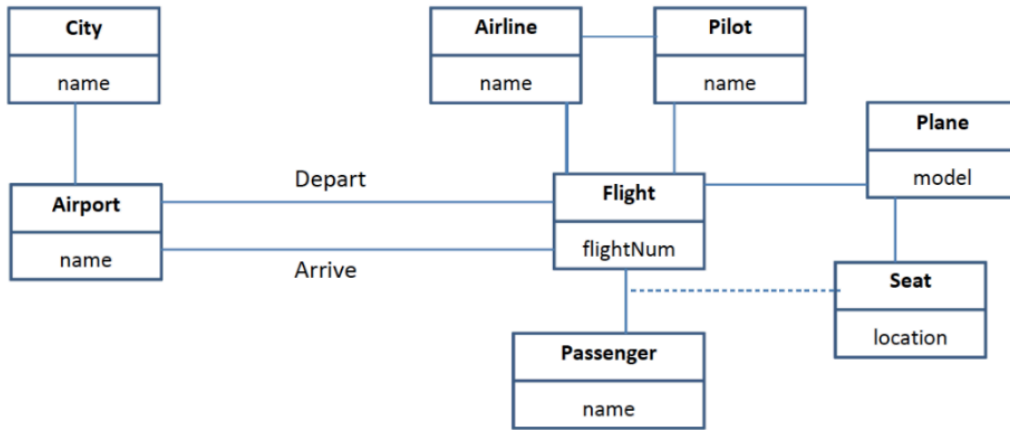
: Point	
xCoord = -10	
yCoord = 10	

: Point	
xCoord = 10	
yCoord = 10	

: Polygon	

: Point	
xCoord = -10	
yCoord = -10	

: Point	
xCoord = 10	
yCoord = -10	

Figure - 2

Shared By

0..n

Polygon	
No of sides : int	
Area : float	
Type : string	

1

Points	
X coordinate : int	
Y coordinate : int	

0..n

1

QUESTION-3

Q.3 Figure 3 is a partially completed class diagram of an air transportation system. Add multiplicities in the diagram. Also add association names to unlevelled associations.

QUESTION-4