IT-313
Lab Assignment : 4

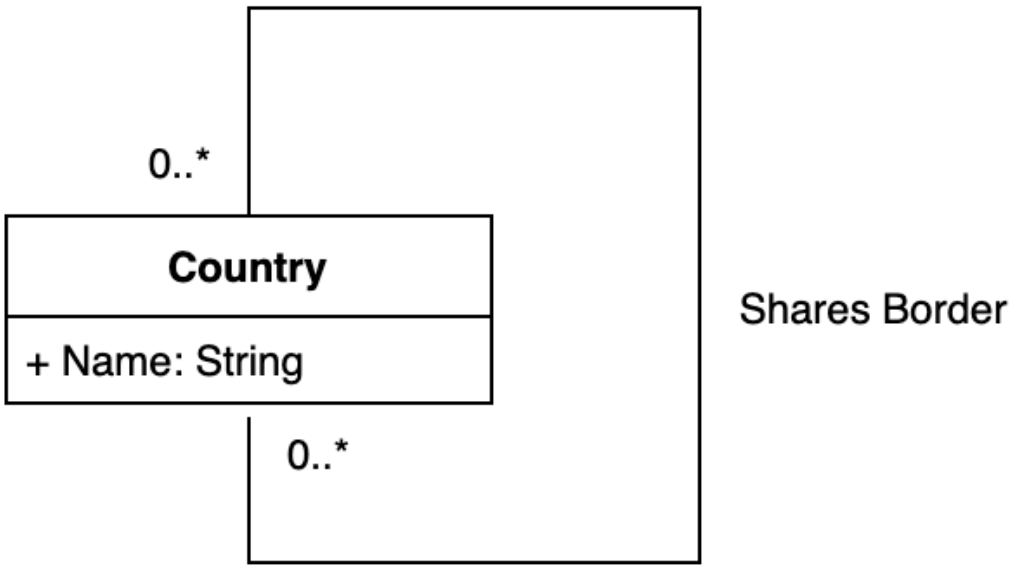
Title: Class Modeling

Student Name: Devang Vaghani

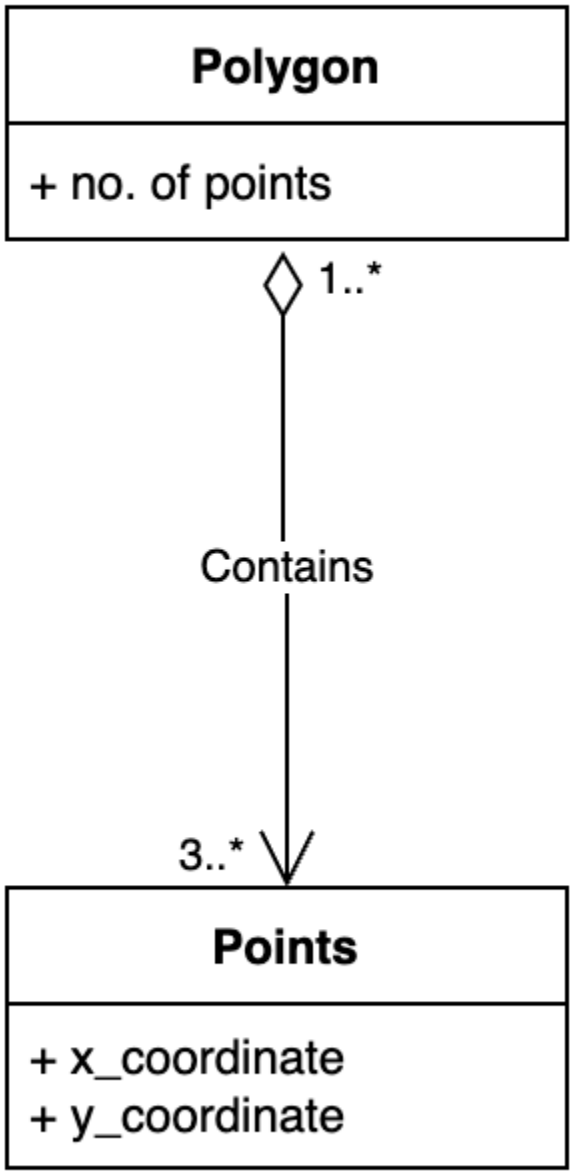
Student ID: 202201208

Lab Group: 3

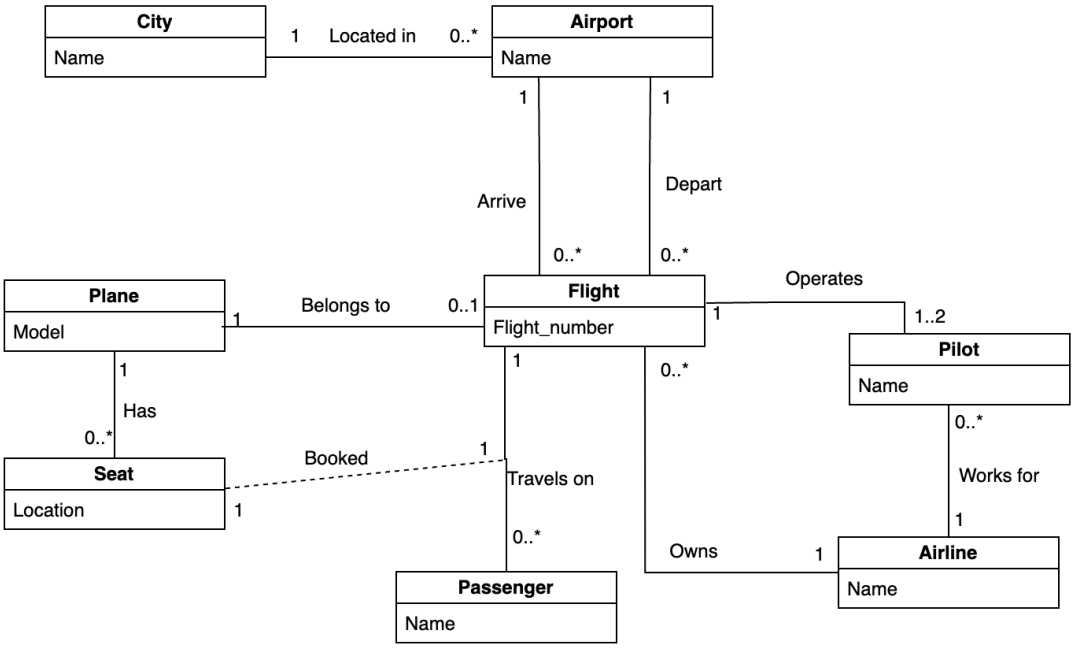
Question 1:



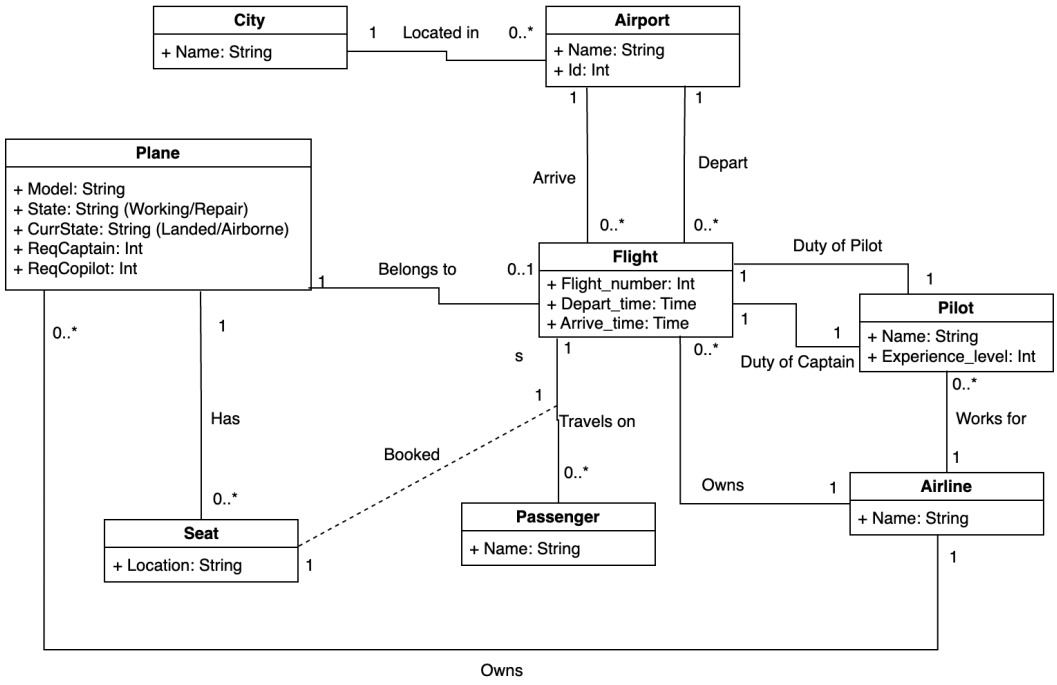
Question 2:


Polygon
+ no. of points
1..*
Contains
3..*
Points
+ x_coordinate
+ y_coordinate

Question 3:


City
Name
1
Located in
0..*
Airport
Name
1
1
Arrive
Depart
0..*
0..*
Plane
Model
1
Belongs to
0..1
Flight
Flight_number
1
Operates
1..2
Pilot
Name
1
Has
0..*
1
0..*
0..*
Works for
1
Seat
Location
1
Booked
1
Travels on
0..*
Owns
1
Airline
Name
Passenger
Name

Question 4:


City
+ Name: String
1
Located in
0..*
Airport
+ Name: String
+ Id: Int
1
1
Arrive
Depart
0..*
0..*
Plane
+ Model: String
+ State: String (Working/Repair)
+ CurrState: String (Landed/Airborne)
+ ReqCaptain: Int
+ ReqCopilot: Int
1
Belongs to
0..1
Flight
+ Flight_number: Int
+ Depart_time: Time
+ Arrive_time: Time
Duty of Pilot
1
1
Pilot
+ Name: String
+ Experience_level: Int
1
1
Duty of Captain
0..*
0..*
1
s
1
Has
1
Travels on
Works for
Booked
0..*
1
0..*
Owns
1
Airline
+ Name: String
Seat
+ Location: String
1
Passenger
+ Name: String
1
Owns