Dhirubhai Ambani Institute of Information and Communication Technology

Gandhinagar, Gujarat

IT-314

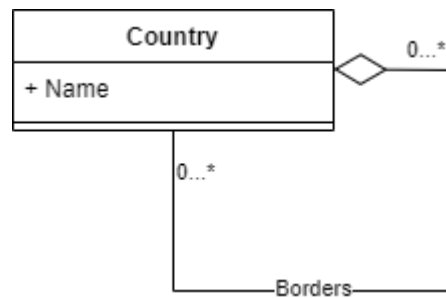# Software Engineering

(Prof. Saurabh Tiwari)
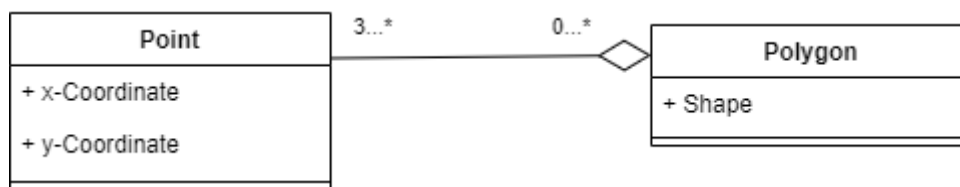
Dishant Patel – 202201260

Lab Group – 4

Question 1:

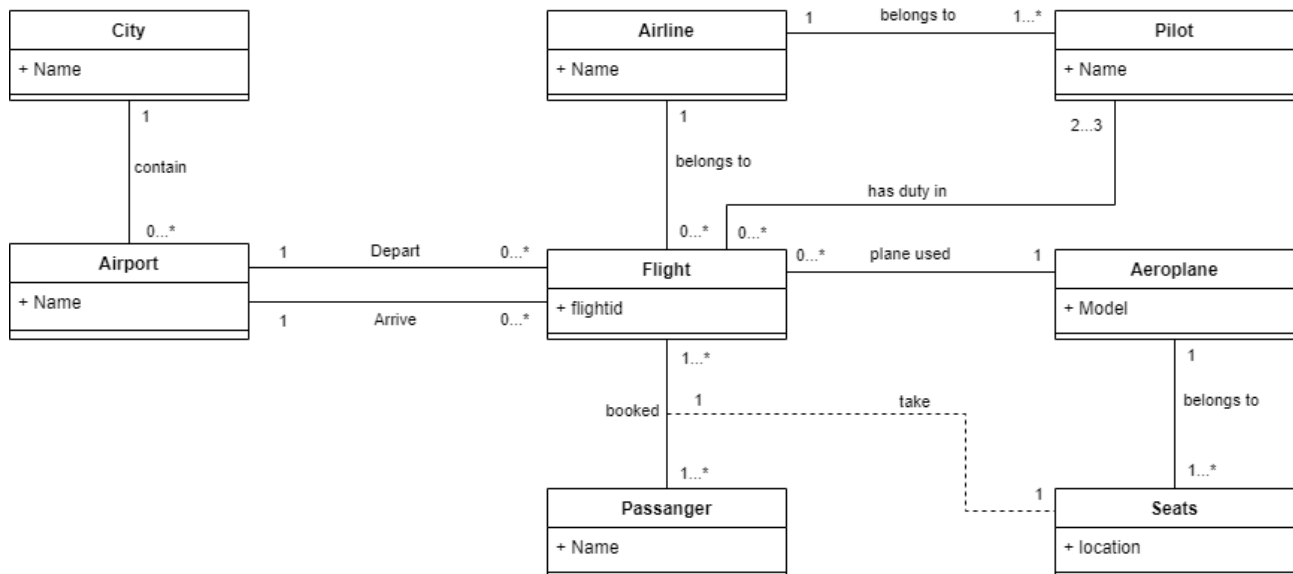| Country |
|---|
| + Name |

0...*

0...*

Borders

Question 2:

- At least **3 points** are required to construct a polygon.

- **Sharing Points:** If points can be shared between polygons, the minimum number of distinct points required to form a polygon still remains 3. For example, if we have 3 points forming a triangle, we can use these same 3 points to form multiple triangles or other polygons (such as overlapping triangles or more complex shapes).

- **Order Matters:** The points must be ordered correctly to define the shape of the polygon. The sequence in which the points are connected determines the edges of the polygon and how it is drawn.

Point
+ x-Coordinate
+ y-Coordinate

3...*   0...*

Polygon
+ Shape

Lab 4: Class Diagrams

Question 3:

Question 4: