Object Oriented Programming

Lecture No. 6

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- Tiers are communicating through the interfaces.

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Presentation Tier

- *Presentation tier* displays contents to user, do prints etc.

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- In Server-Client systems is business tier mostly in server side, part is on client side.

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Three-tier design requirements

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  - Inherit class from the abstract one – this should implement all methods.

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    ```
    varAncestor:=New(PDescendant, Init);
    varAncestor:=New(PDescendant, Init(10));
    ```

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Destroying Objects & Destructors

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- Destructors are (almost) everytime *virtual*.

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Class Diagram

Class Diagrams shows class relations:

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Generalisation Construction

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- Shows inheritance.
- Is written as empty triangle arrow.
  - The arrow points to ancestor.

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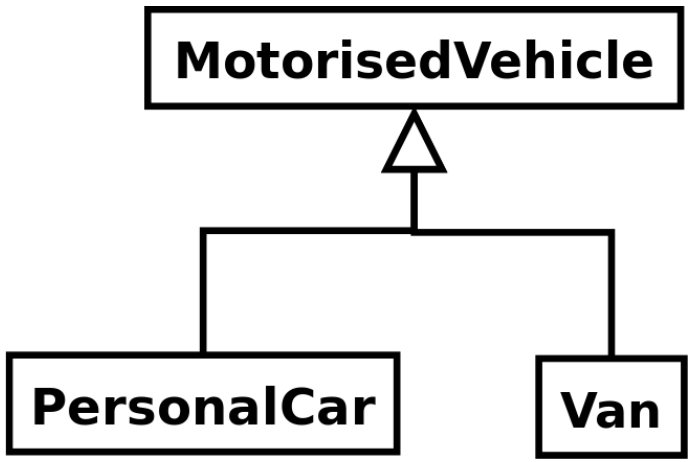

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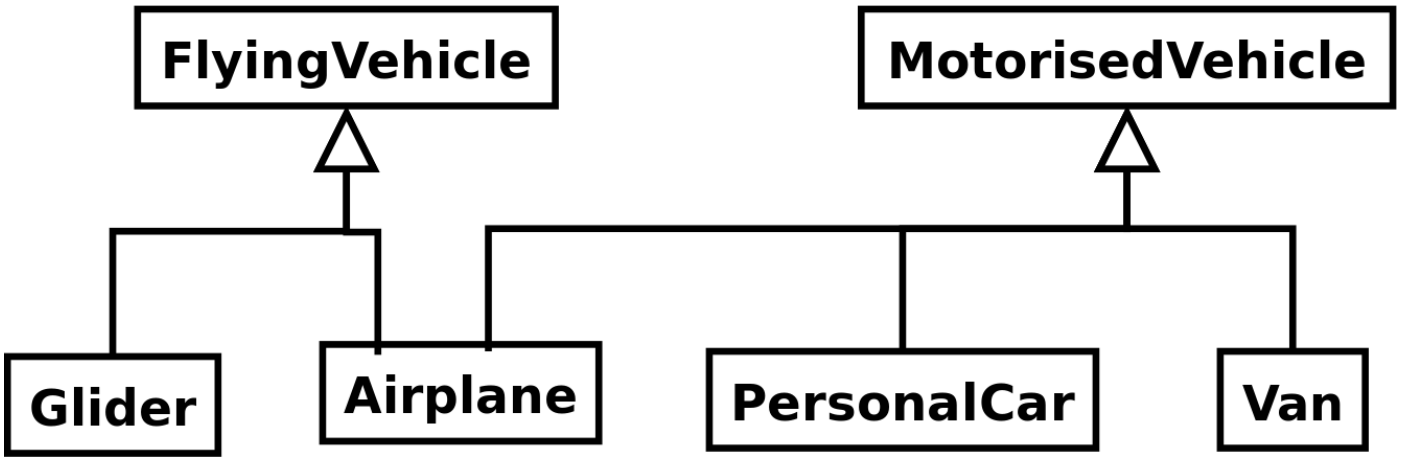

Association Construction

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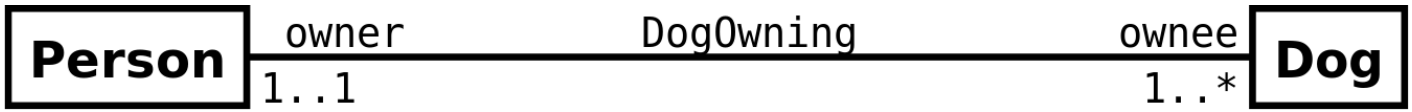
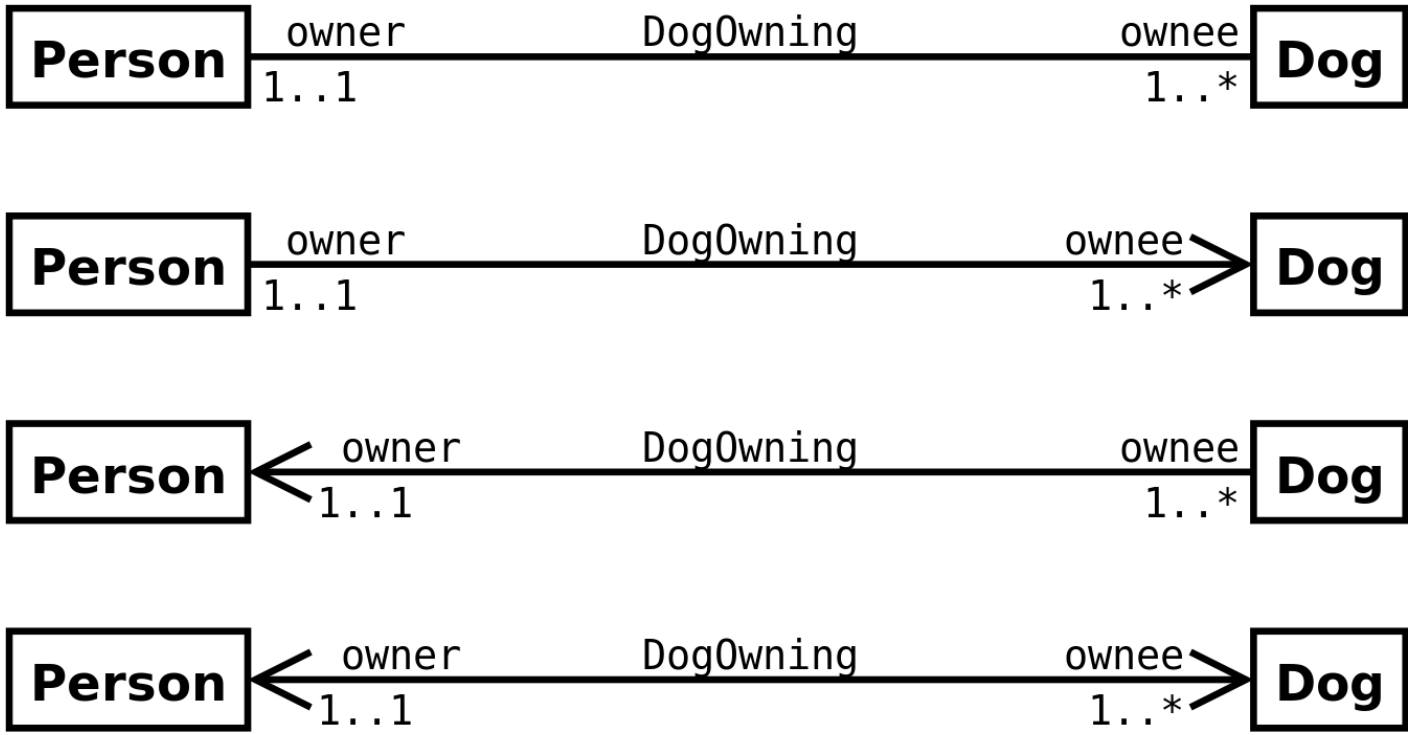


- Name of association relation – `DogOwning`.
- Role of both classes in the association relation – `owner`, `ownee`.
- Cardinality (multiplicity) of the relation.

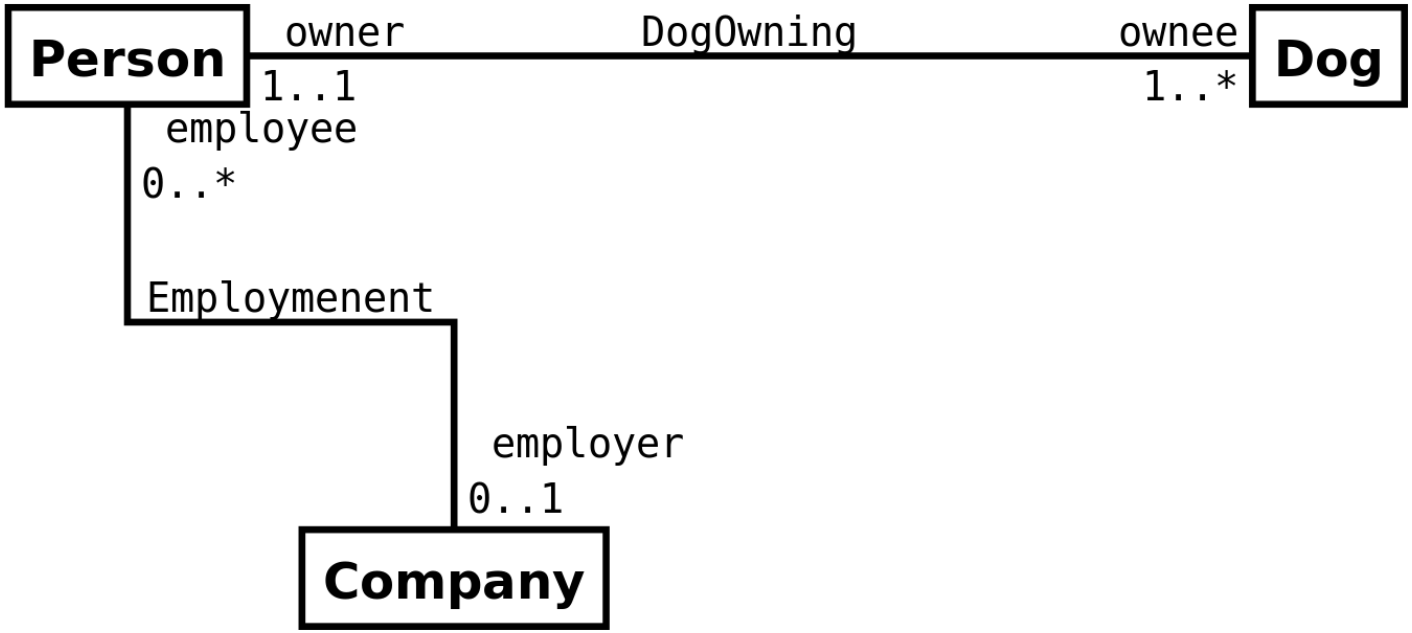
Association Direction



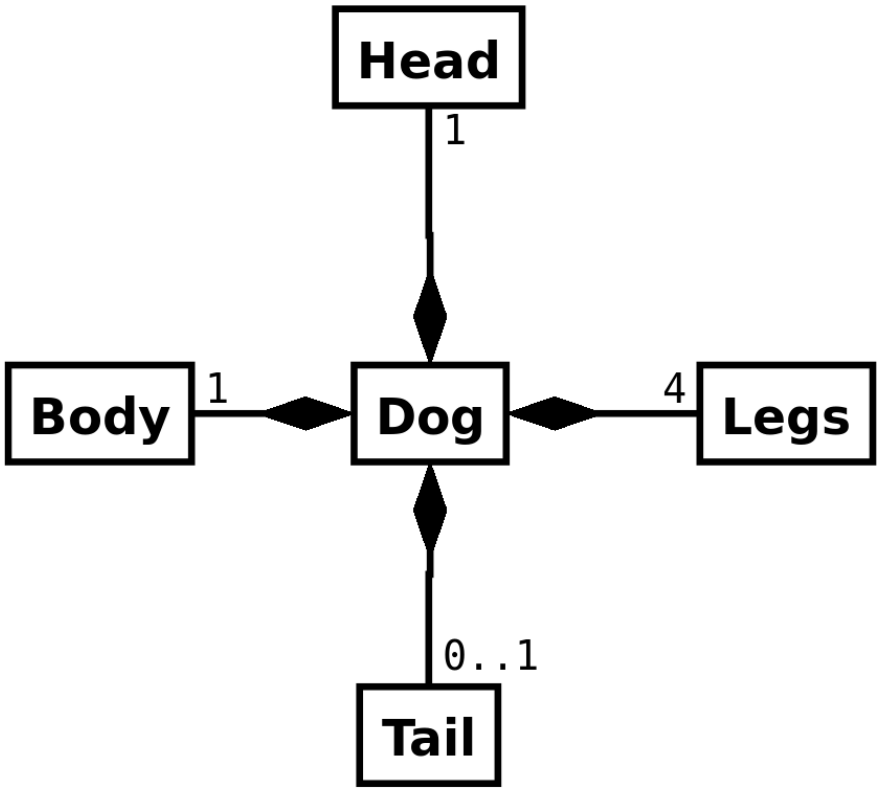
- Arrow shows in which direction is it easy to find other participant(s) of the relation.

Association with Multiple Classes

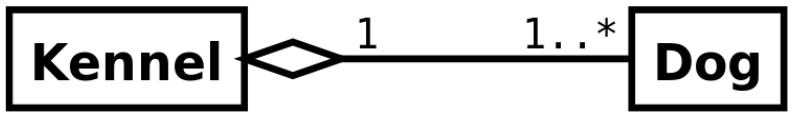
- Class can be associated with more classes.
- It has multiple roled.



Composition



Aggregation



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