

UML Basics

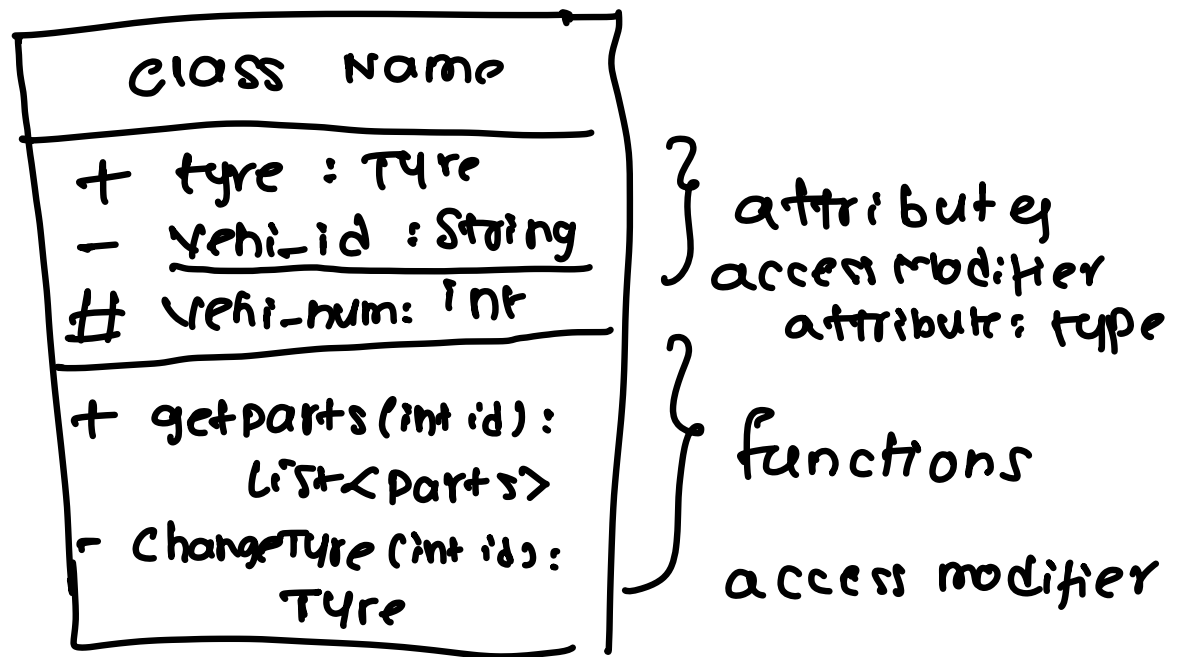
(Class Diagram)

Aggregation

Association

Composition

Class Diagram :



+ = public

- = private

= protected

FuncName
(attributes) :
returnType

if under-lined then static (vehi-id is static)

Relationships between the classes:

1) Association: (Bi-directional)

A — B (A can access B)
B can access A)

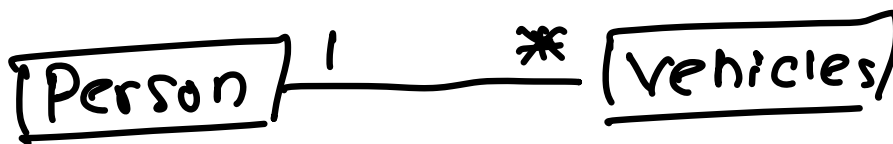
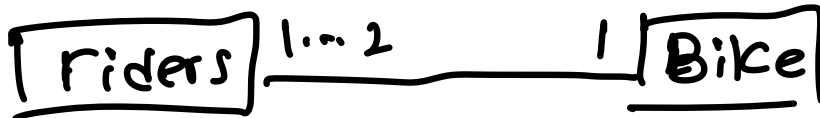
2) Uni-Directional Association:

A → B (A can access B)

B cannot access A)



3) Multiplicity:



n 2

Exactly 'n' number

 *

* = Any Number

 2...3

2...3 = can range
between 2 and
3

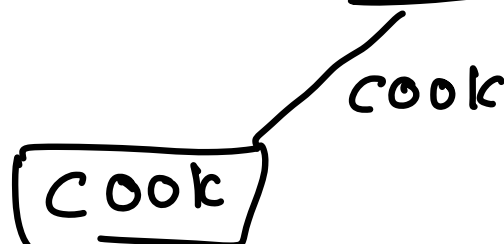
 1...*

1...* = 1 to Any

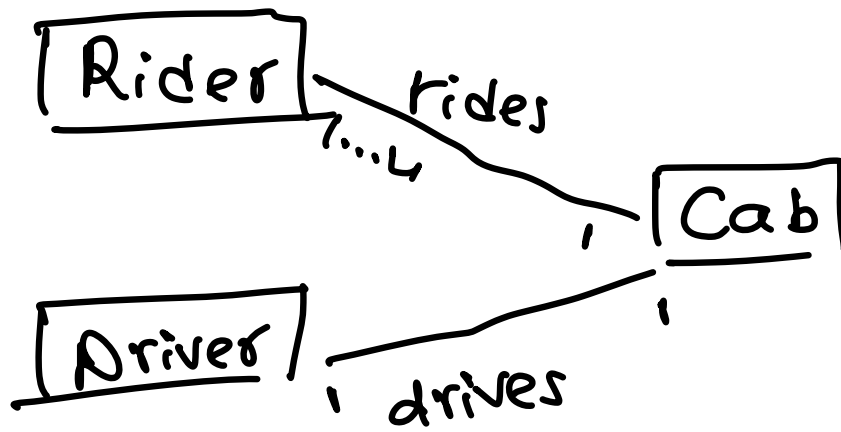
4) Mentioning Texts in Association



guest eats food
Cook cooks food



Uni - Directional



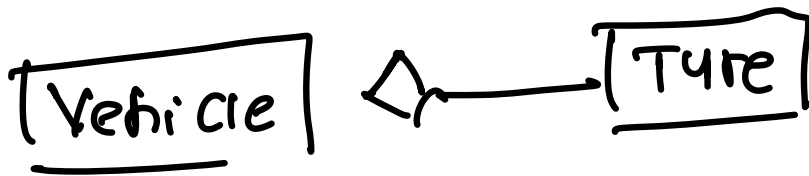
HAS-A-RELATIONSHIP: \rightarrow B can exist without A

1) Aggregation (A \triangleleft B) (Weak)

2) Composition (A \blacklozenge B) (Strong)

B cannot exist without A

1) AGGREGATION:



Tyre can exist independently
(Weak relationship)

2) Composition:



Eye cannot exist without Body
(Strong relationship)

B is part of A

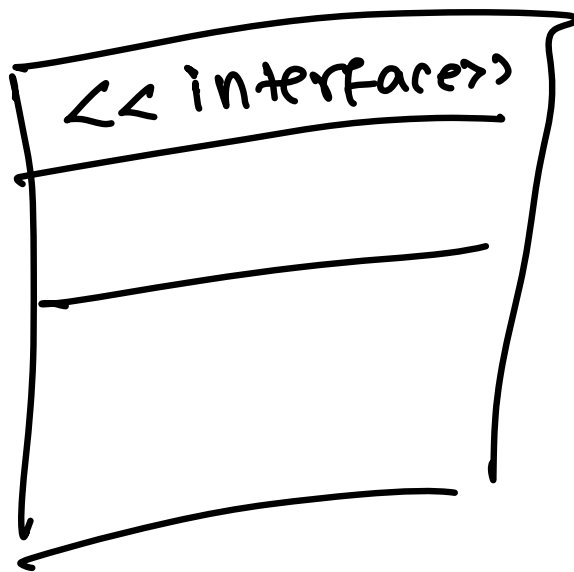
INHERITANCE:

A \longrightarrow B (A extends B)

Interface or abstract class:

A $\cdots \triangleright$ B (A implements B)

Interface:



<< >> $\hat{=}$ interface

A $--- \triangleright$ B B is an interface.