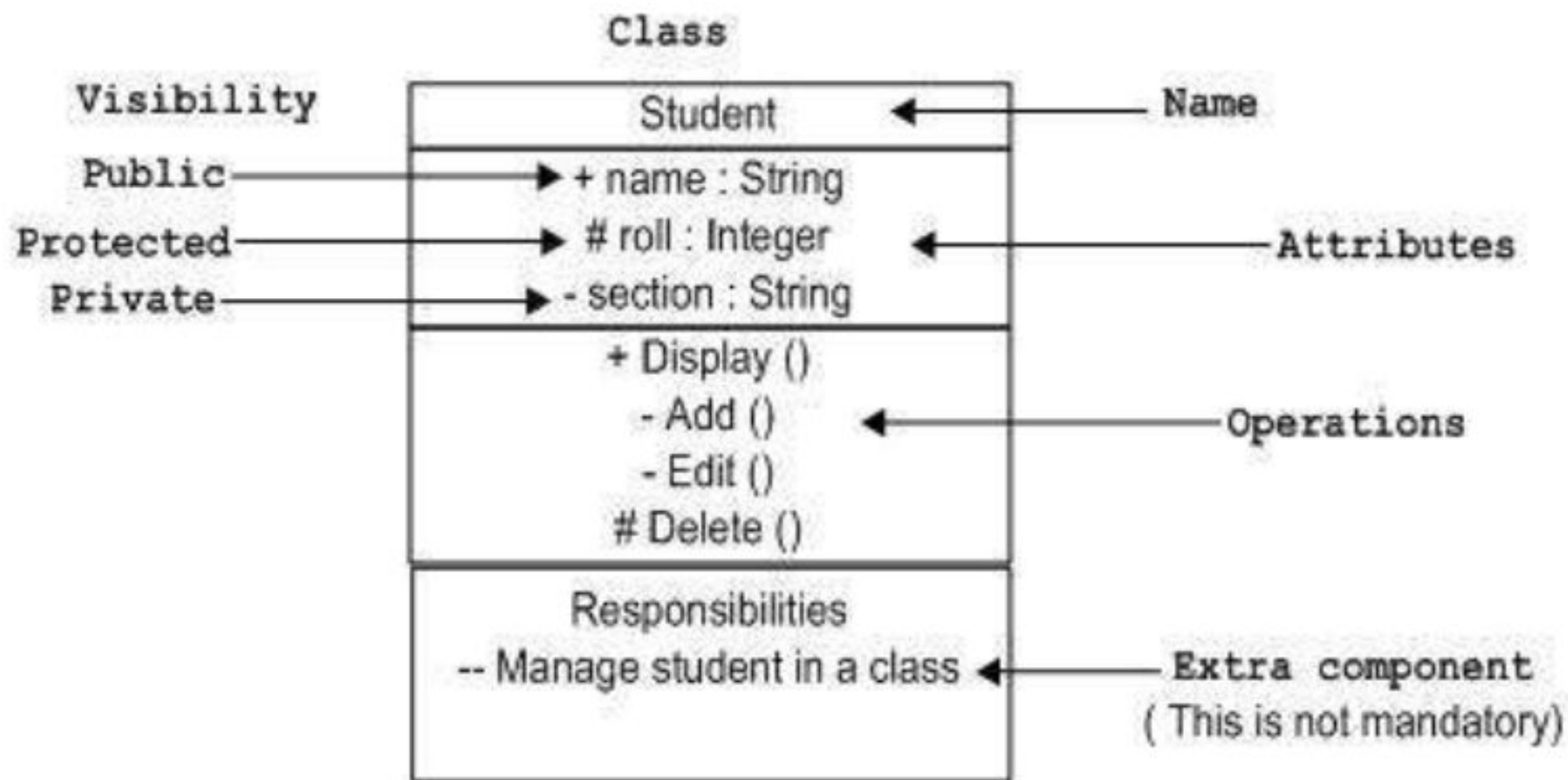


UML CLASS RELATIONSHIPS



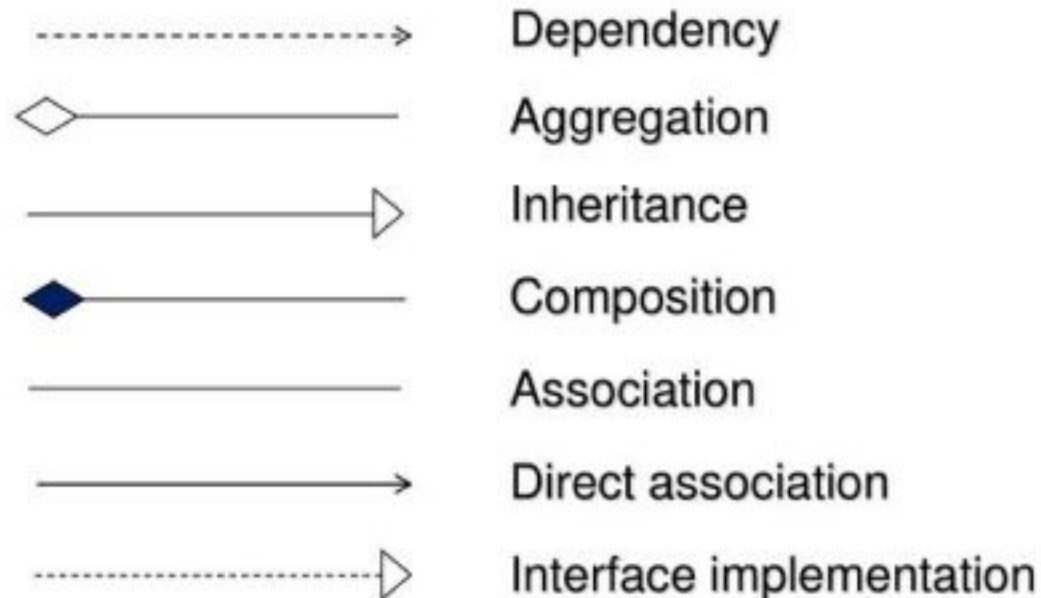
UML Class Relationships



UML Class Relationships

UML Class Diagram: Relationships

- Relationships among classes using arrows.



UML Class Relationships



UML Class Relationships

this class is associated with ———— this class

this class is dependent upon - - - > this class

this class inherits from ———— ▷ this class

this class has ———— ○ this interface

this class is a realisation of - - - ▷ this class

you can navigate from this class to ———— > this class

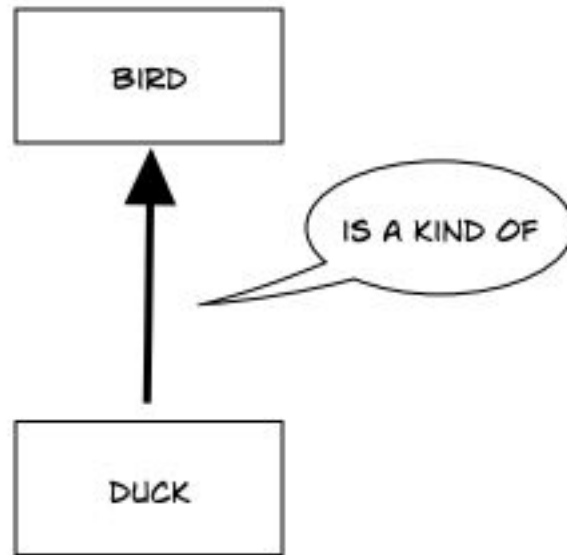
these classes compose without belonging to ———— ◇ this class

these classes compose and are contained by ———— ◆ this class

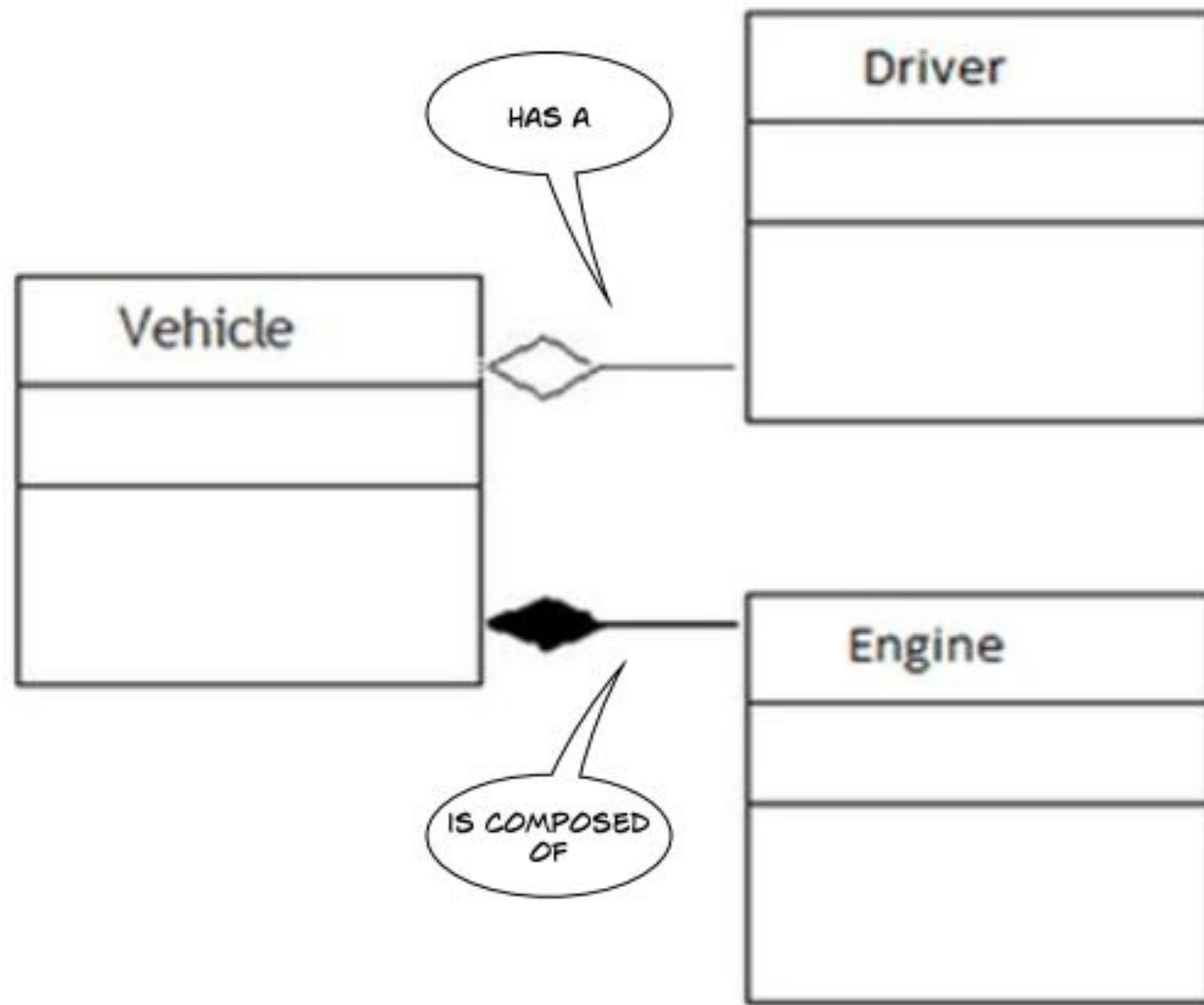
this object sends a synchronous message to ———— ► this object

this object sends an asynchronous message to ———— ◄ this object

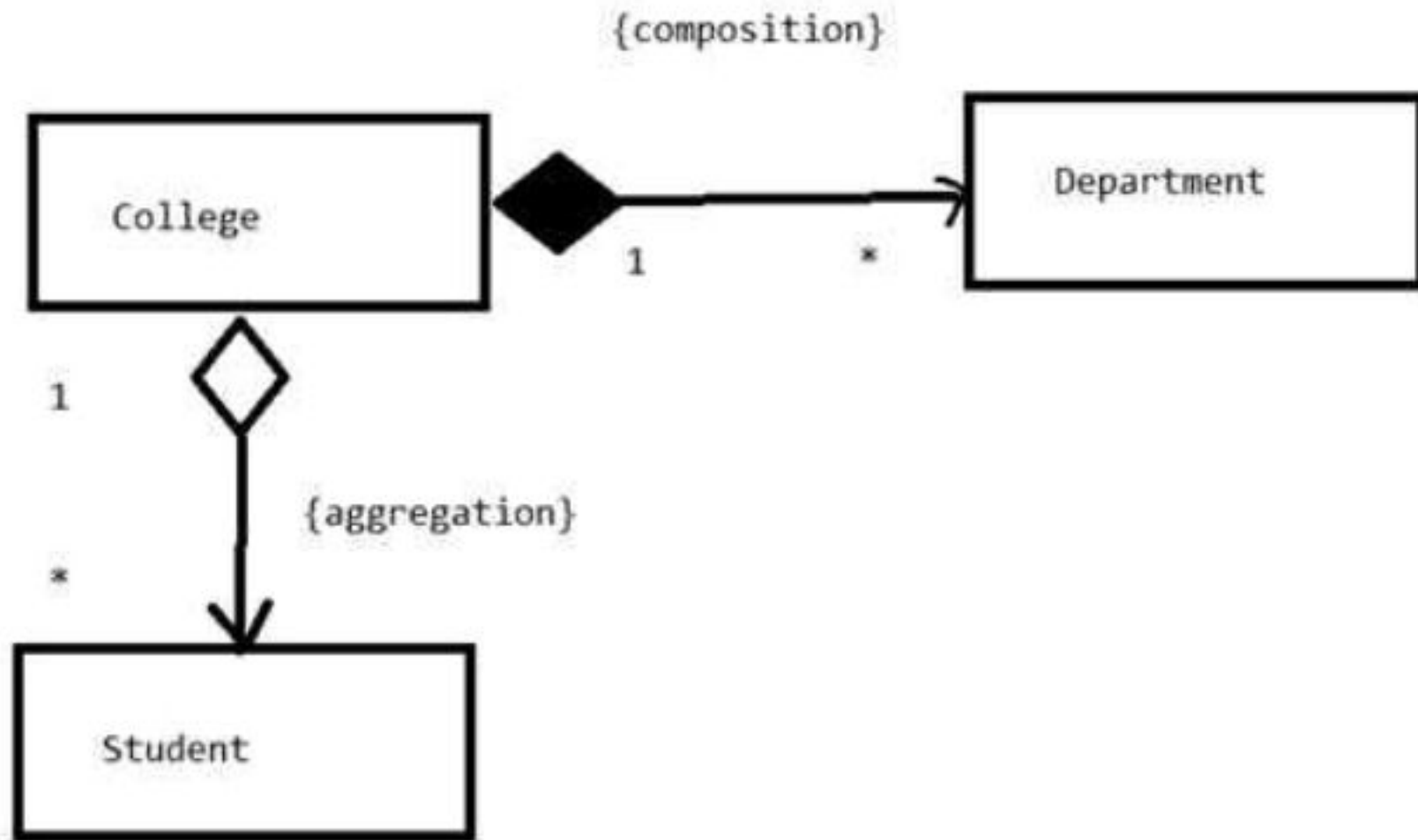
Inheritance



Composition and Aggregation



Composition and Aggregation

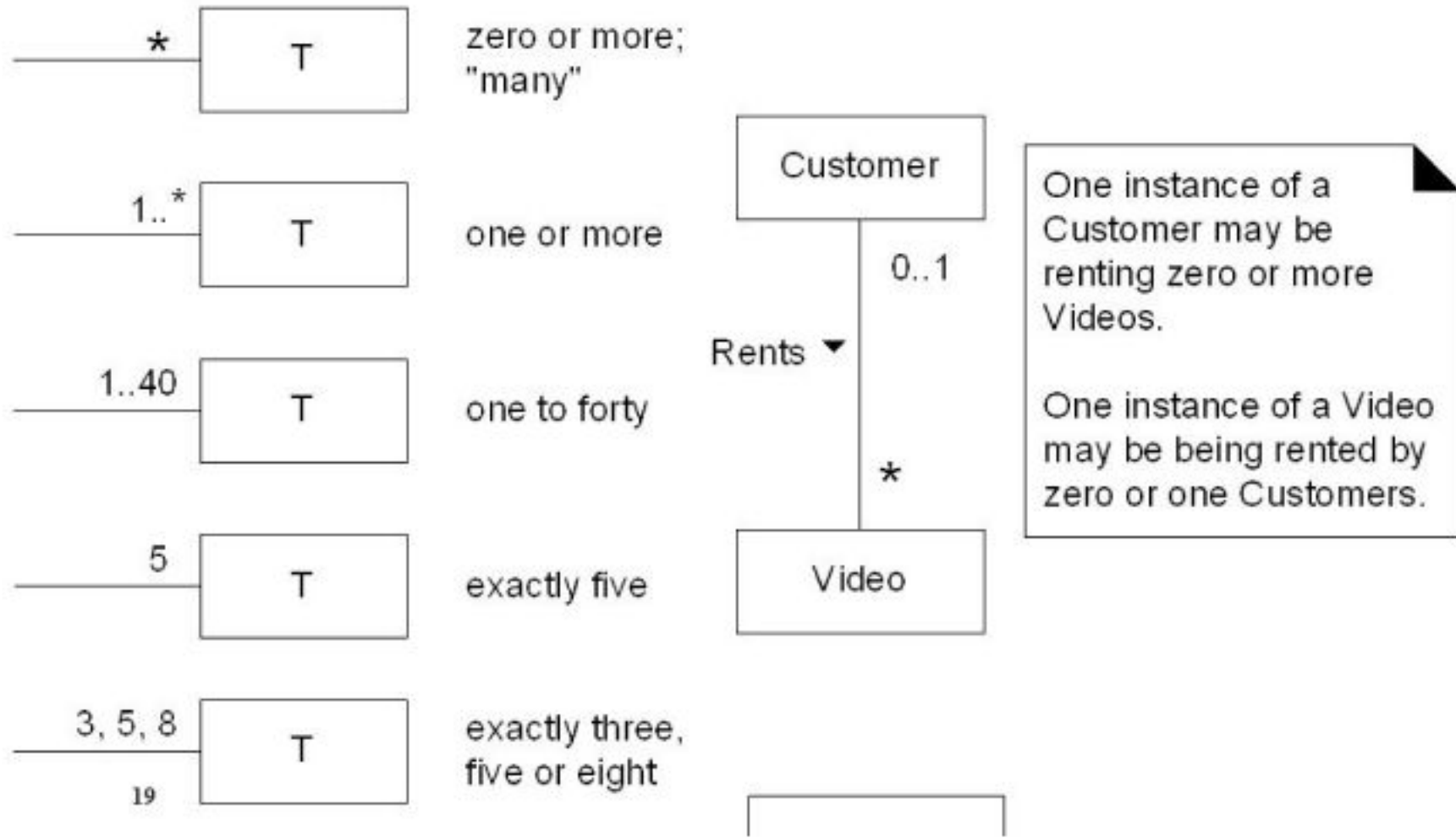


Multiplicity

Adornment	Semantics
0..1	Zero or 1
1	Exactly 1
0..*	Zero or more
*	Zero or more
1..*	1 or more
1..6	1 to 6
1..3,7..10,15, 19..*	1 to 3 <i>or</i> 7 to 10 <i>or</i> 15 exactly <i>or</i> 19 to many

Multiplicity

UML: Multiplicity



// Methods

Check Point: Methods





1. task description

4. task description

2. task description

5. task description

3. task description

6. task description

Check Point: Tasks



