



Advanced Java Programming

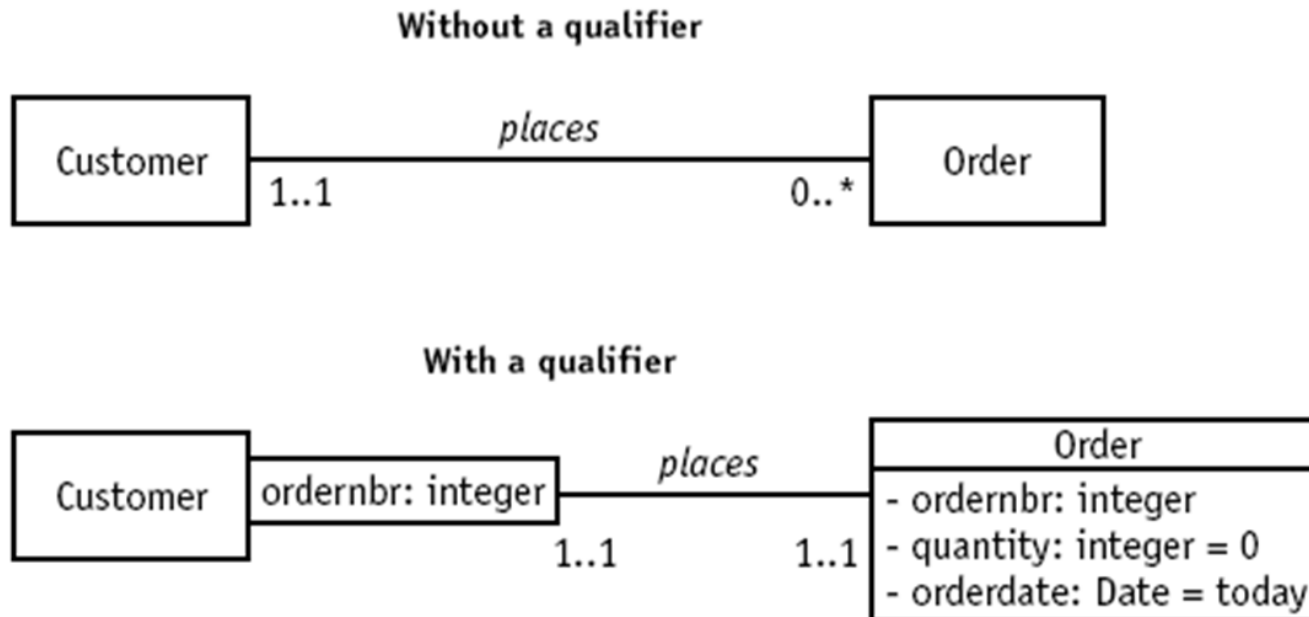
Review Java Concepts - Advanced Java Concepts

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Association

- * interaction between classes.
- * has multiplicity, qualifier, and role.

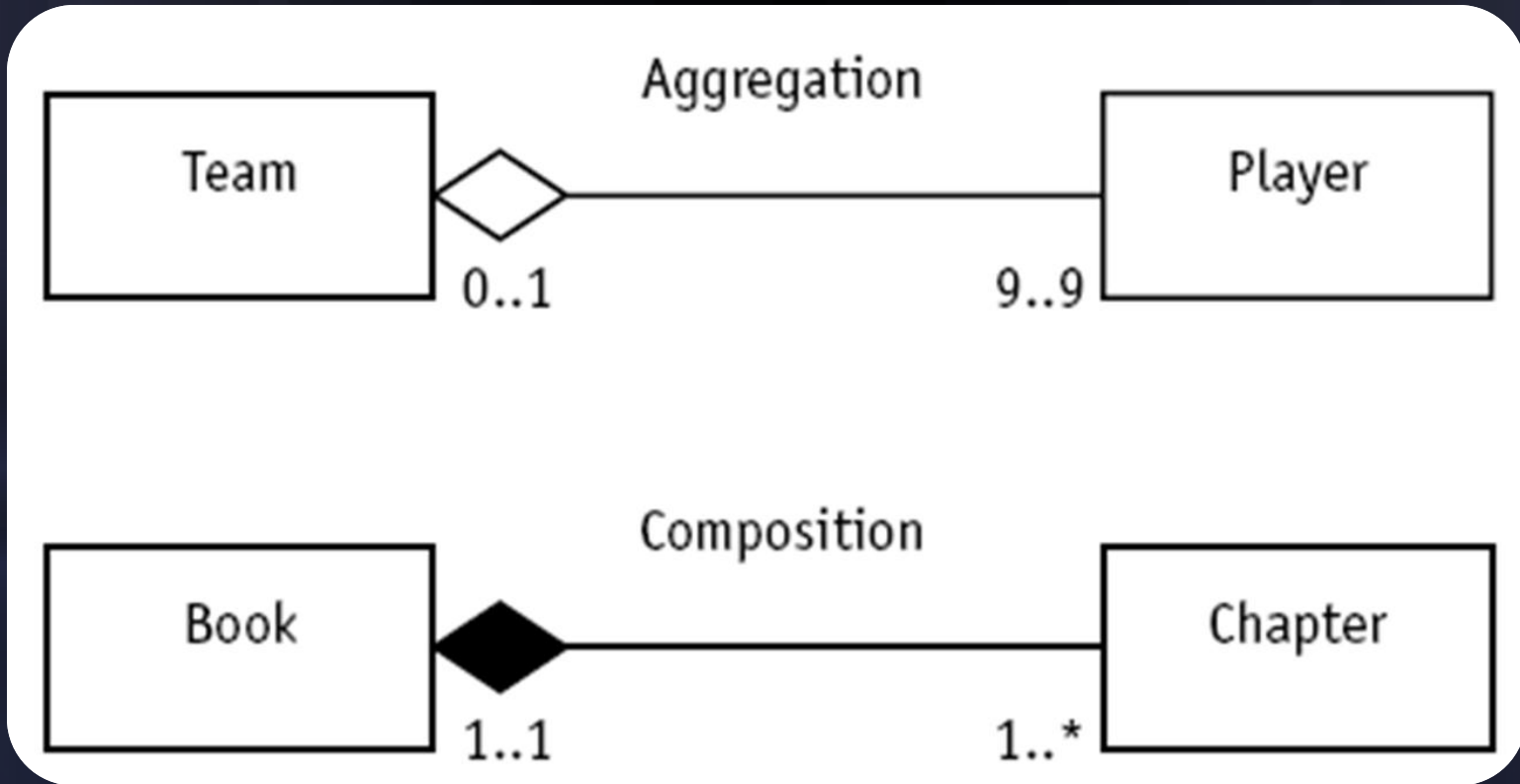


“The Customer uses the ordernbr to look up an Order.”

“One type of object uses the qualifier to access the other (qualified) type of object.”

Aggregation & Composition

- * Aggregation (part-of) : classes is part-of another class.
- * Composition : classes is composition of another class.



Encapsulation

- * is a technique to hide class properties by setting class properties to private and using accessor methods for accessing values (information hiding).
- * Benefit : can set access privileges for class to read-only, write-only, and read-and-write (Javabeans).
- * Class itself has full control of property values.

Static Initializers

- * Set of statements which will be executed only a time when class is being loaded by JVM.

- * syntax :

```
static {  
    [statement]  
}
```

Instance Initializers

- * Set of statements which will be executed when we do instantiation.
- * Called before constructor call.
- * Syntax :

```
{  
    [statement]  
}
```

Interface

- * Interfaces are extreme abstract classes, they only define methods and/or constants

- * Example :

```
interface Comparable {  
    public int compareTo(Object o); // public is optional }  
class Dog implements Comparable {  
    public int compareTo(Object o) { return 0; }  
}
```

- * A class may implement many interfaces, but extend only one other class (either abstract or not)
- * Marker interfaces don't define any methods, eg Cloneable

Next Chapter

- * Continue reading about Polymorphism