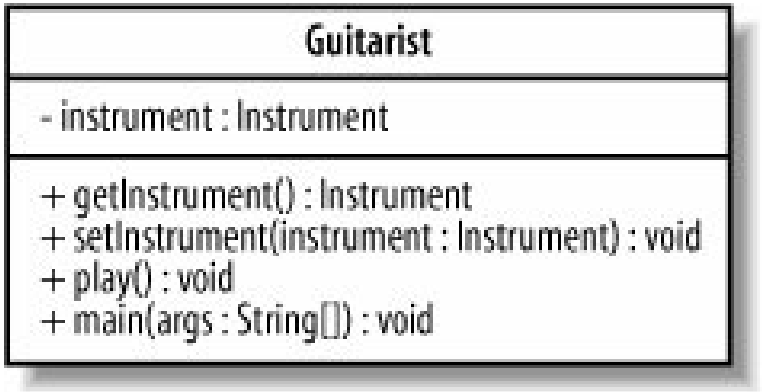
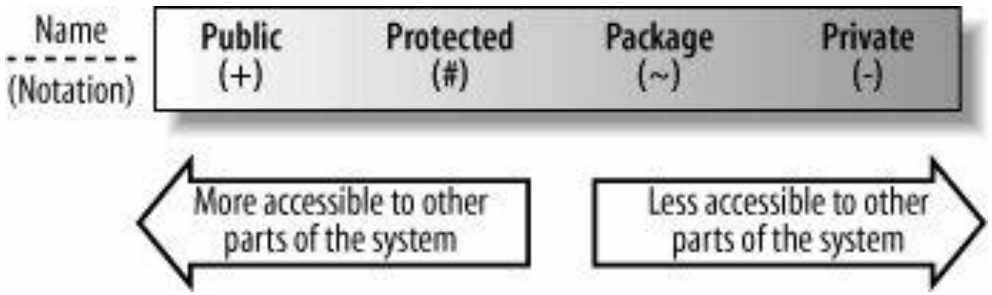
UML

Class Diagram

Class in UML


Guitarist
- instrument : Instrument
+ getInstrument() : Instrument
+ setInstrument(instrument : Instrument) : void
+ play() : void
+ main(args : String[]) : void


Name
(Notation)
Public
(+)
Protected
(#)
Package
(~)
Private
(-)
More accessible to other parts of the system
Less accessible to other parts of the system

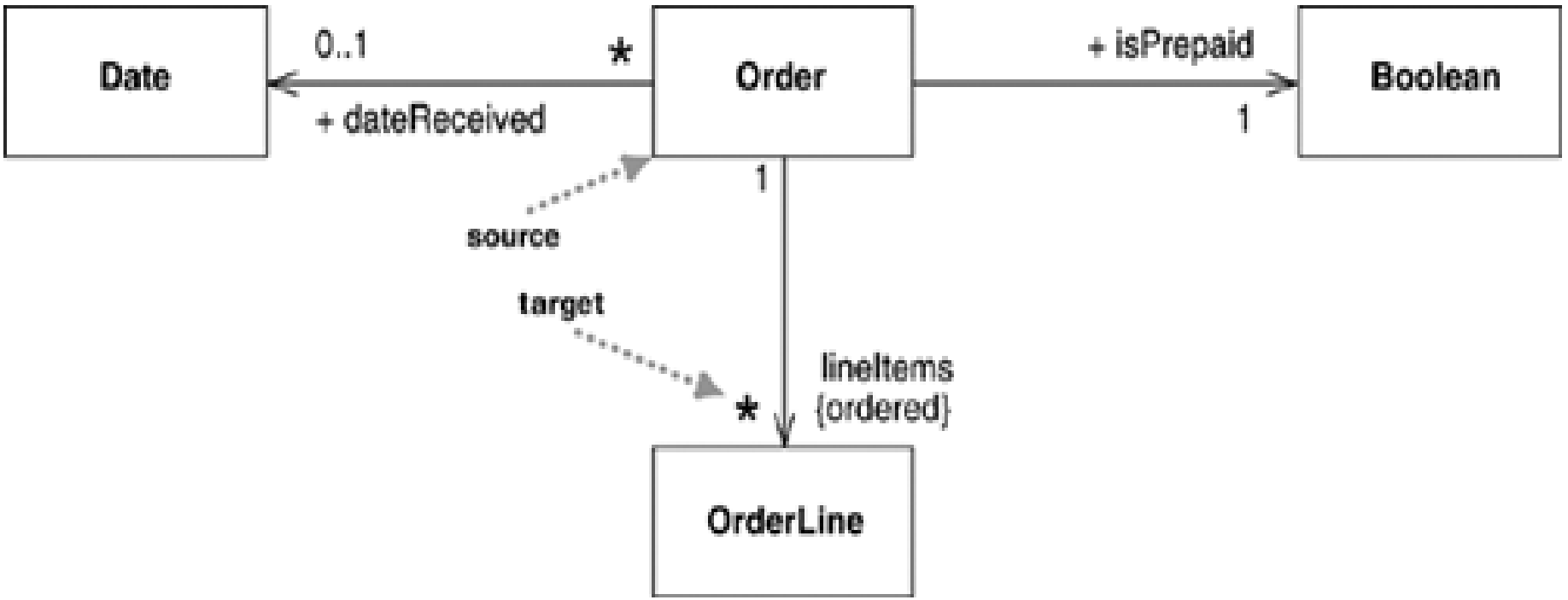
ClassName
Attribute
Attribute
Operation
Operation

ClassName
Attribute
Attribute

ClassName
Operation
Operation

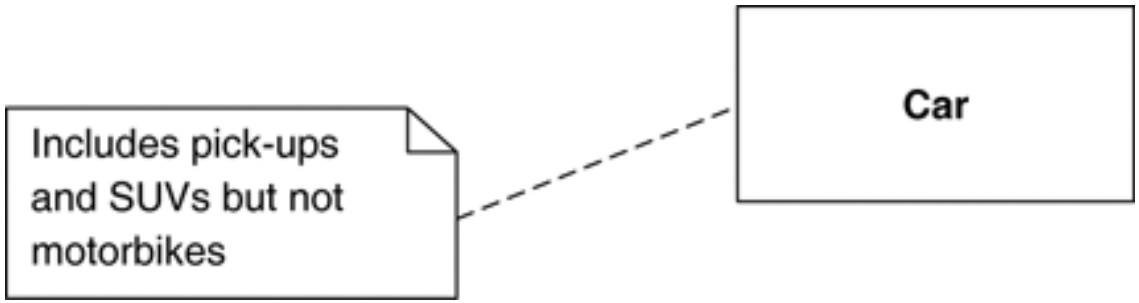
ClassName

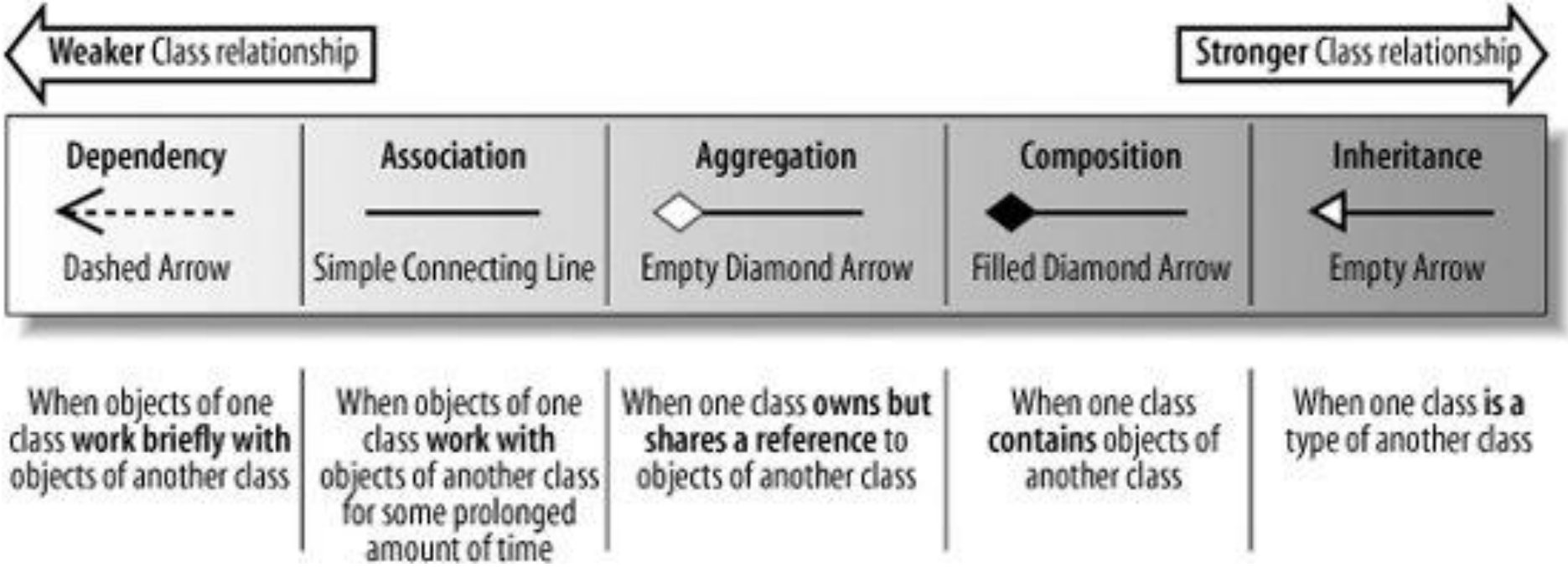
Class Diagram



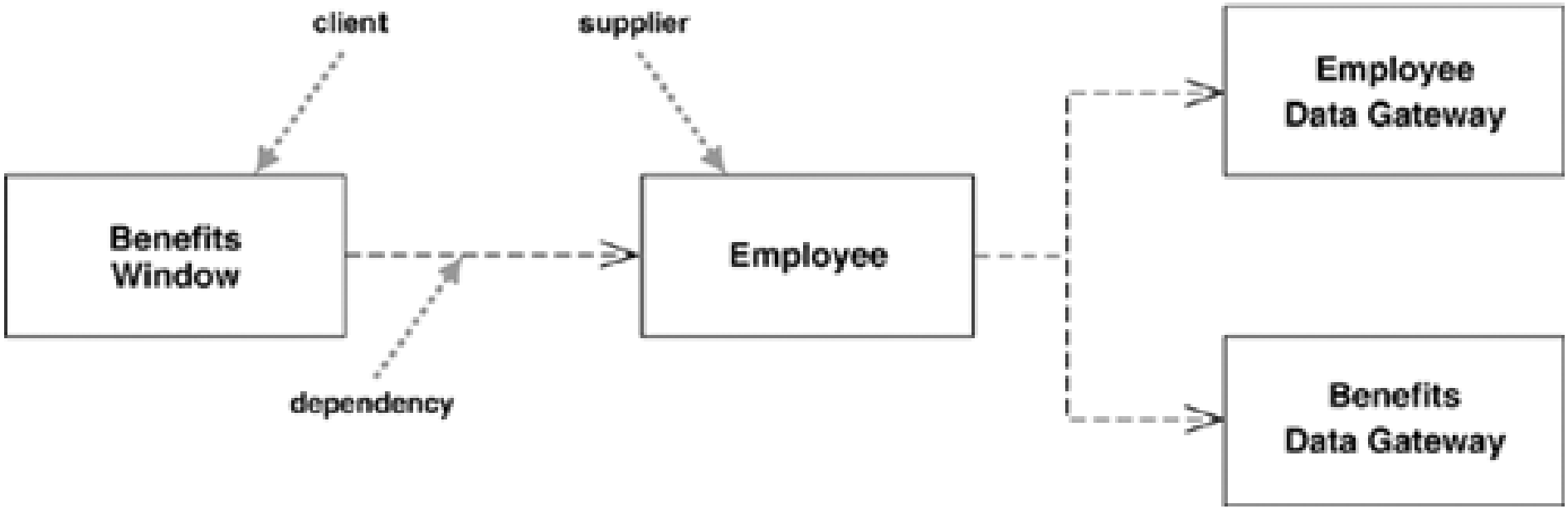
Class Diagram

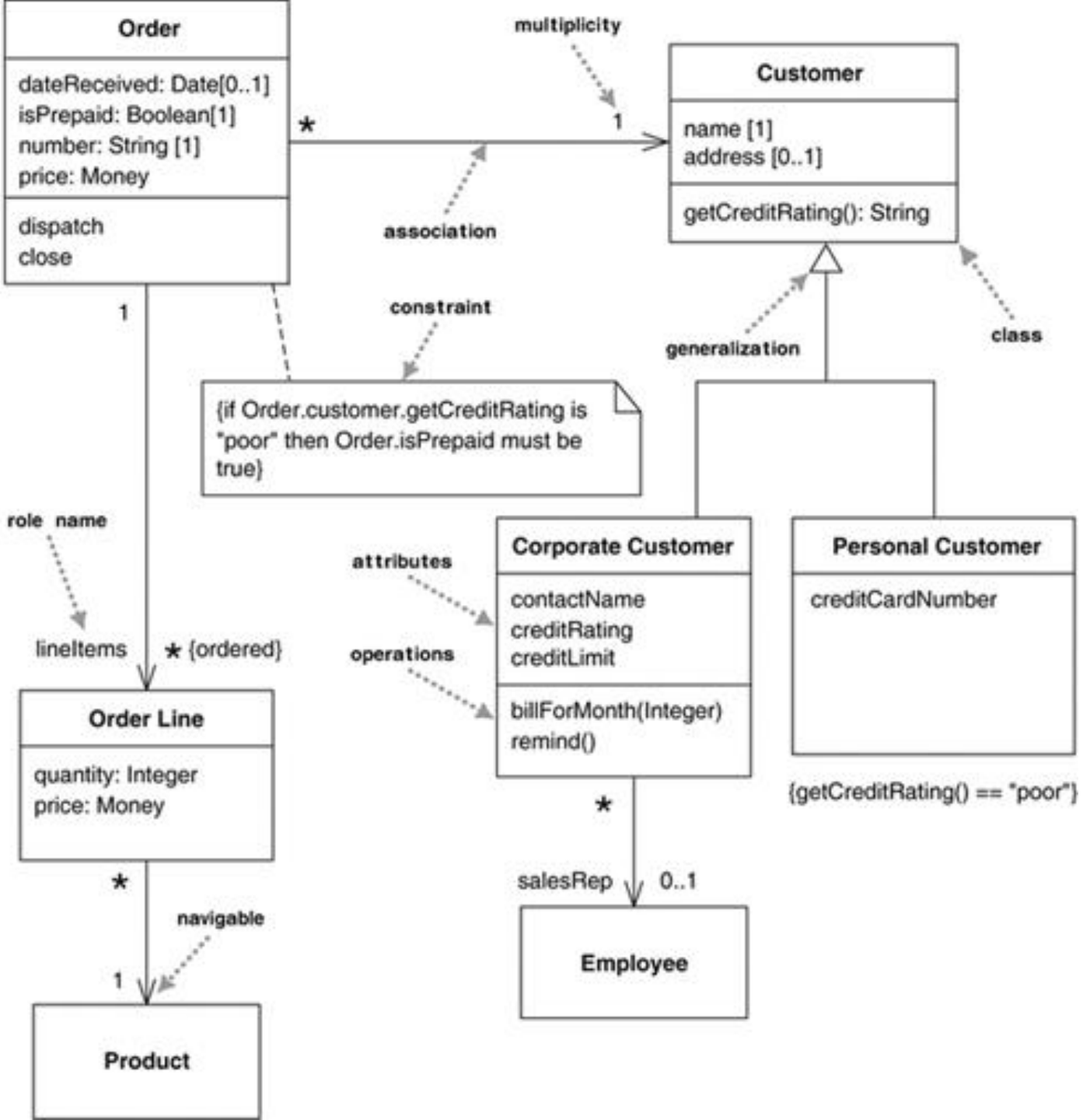
Comments and Relationships



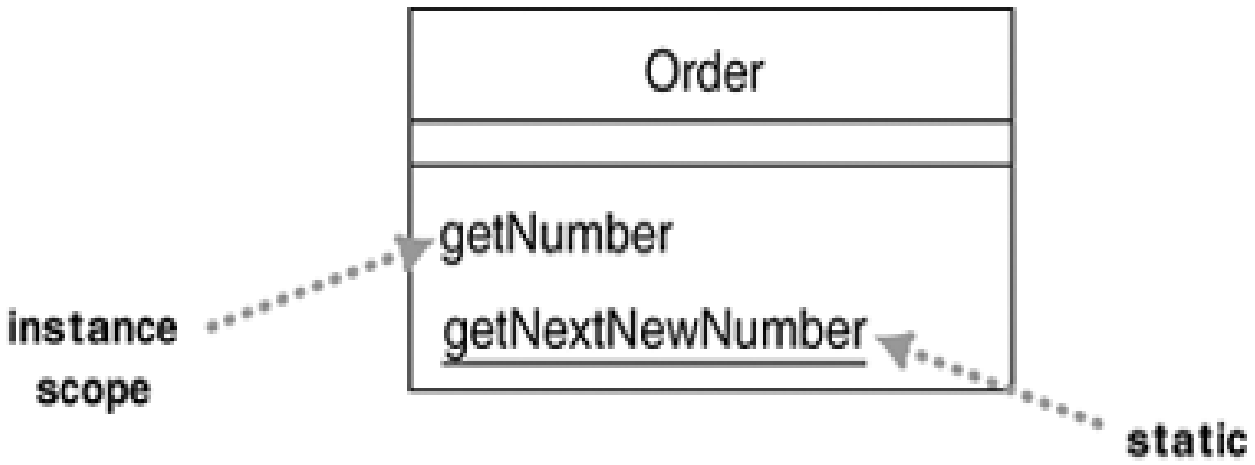


Dependency

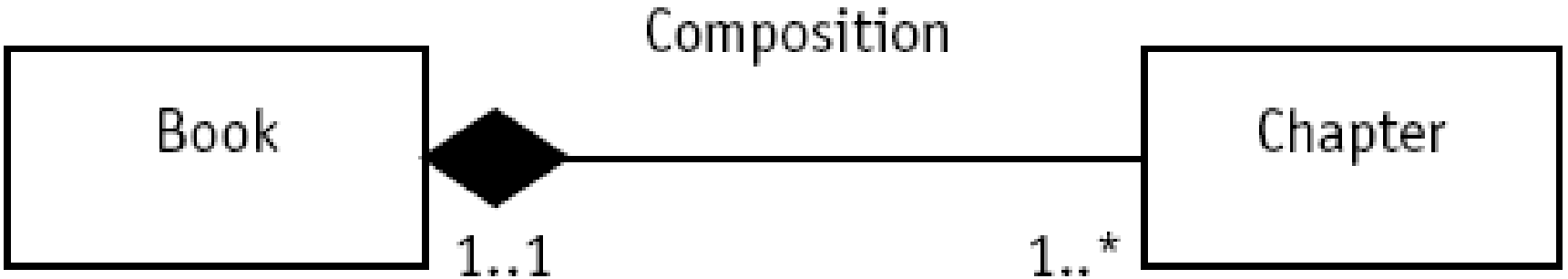

client
supplier
Employee
Data Gateway
Benefits
Window
Employee
dependency
Benefits
Data Gateway


Order
dateReceived: Date[0..1]
isPrepaid: Boolean[1]
number: String [1]
price: Money
dispatch
close
multiplicity
1
*
Customer
name [1]
address [0..1]
getCreditRating(): String
association
1
constraint
generalization
class
{if Order.customer.getCreditRating is "poor" then Order.isPrepaid must be true}
role name
lineItems
* {ordered}
Order Line
quantity: Integer
price: Money
*
navigable
1
Product
attributes
operations
Corporate Customer
contactName
creditRating
creditLimit
billForMonth(Integer)
remind()
Personal Customer
creditCardNumber
{getCreditRating() == "poor"}
*
salesRep
0..1
Employee

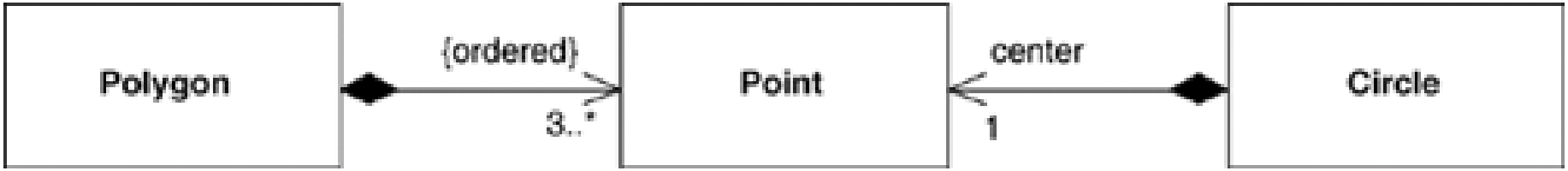
Notation



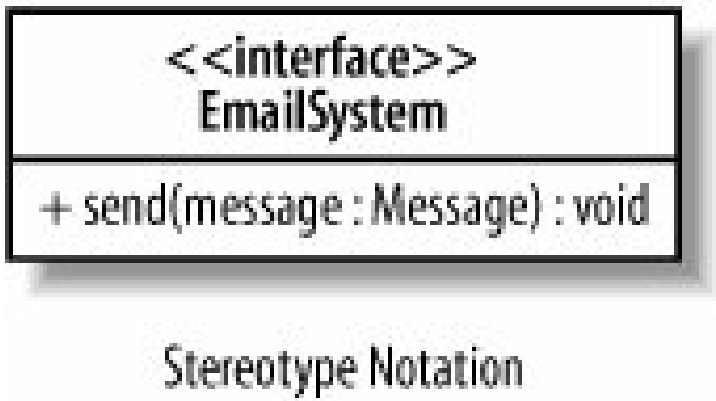
Aggregation & Composition



Aggregation & Composition

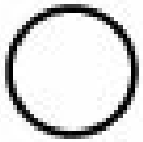


Interface notation



Stereotype Notation

Or

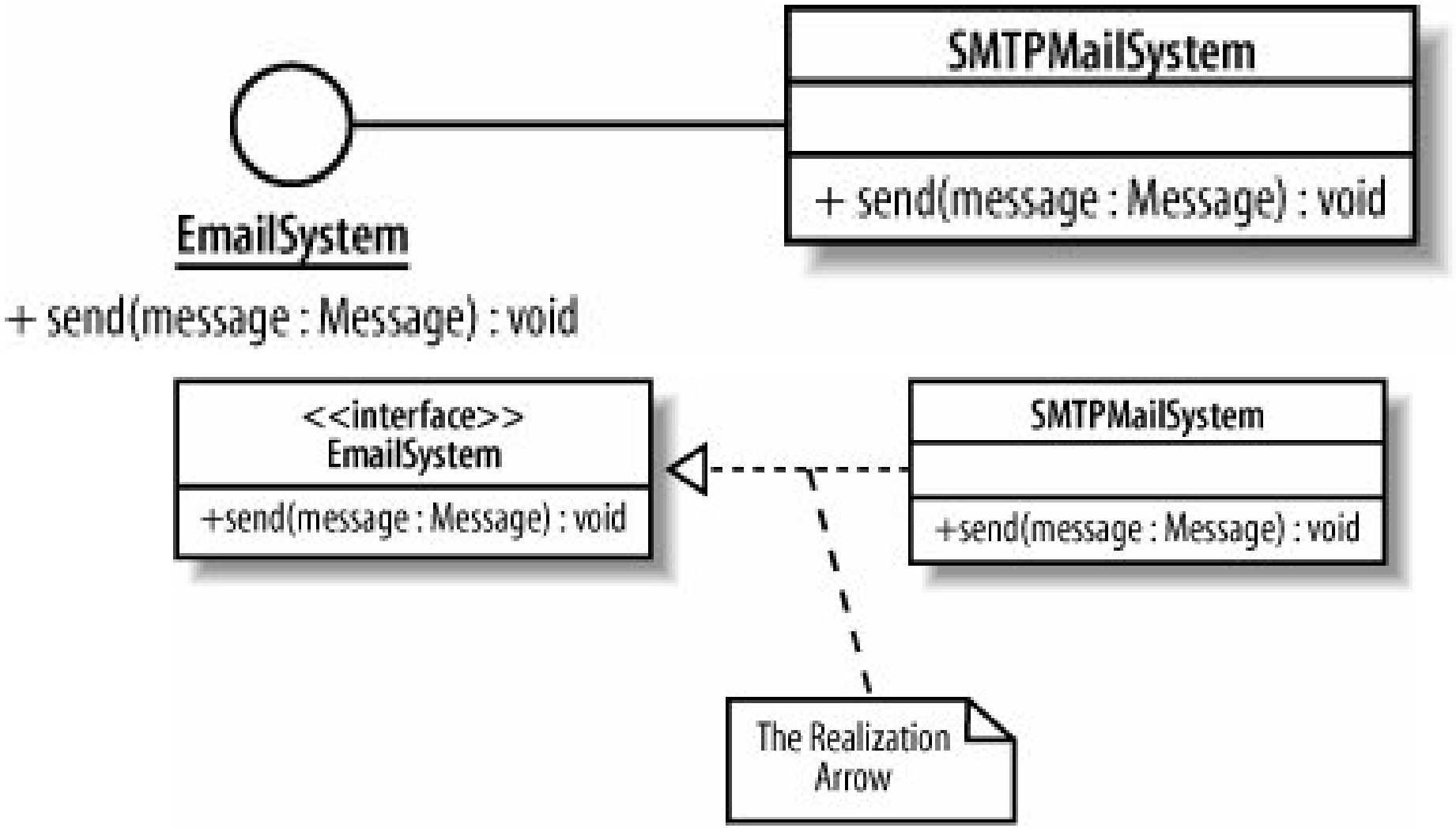


EmailSystem

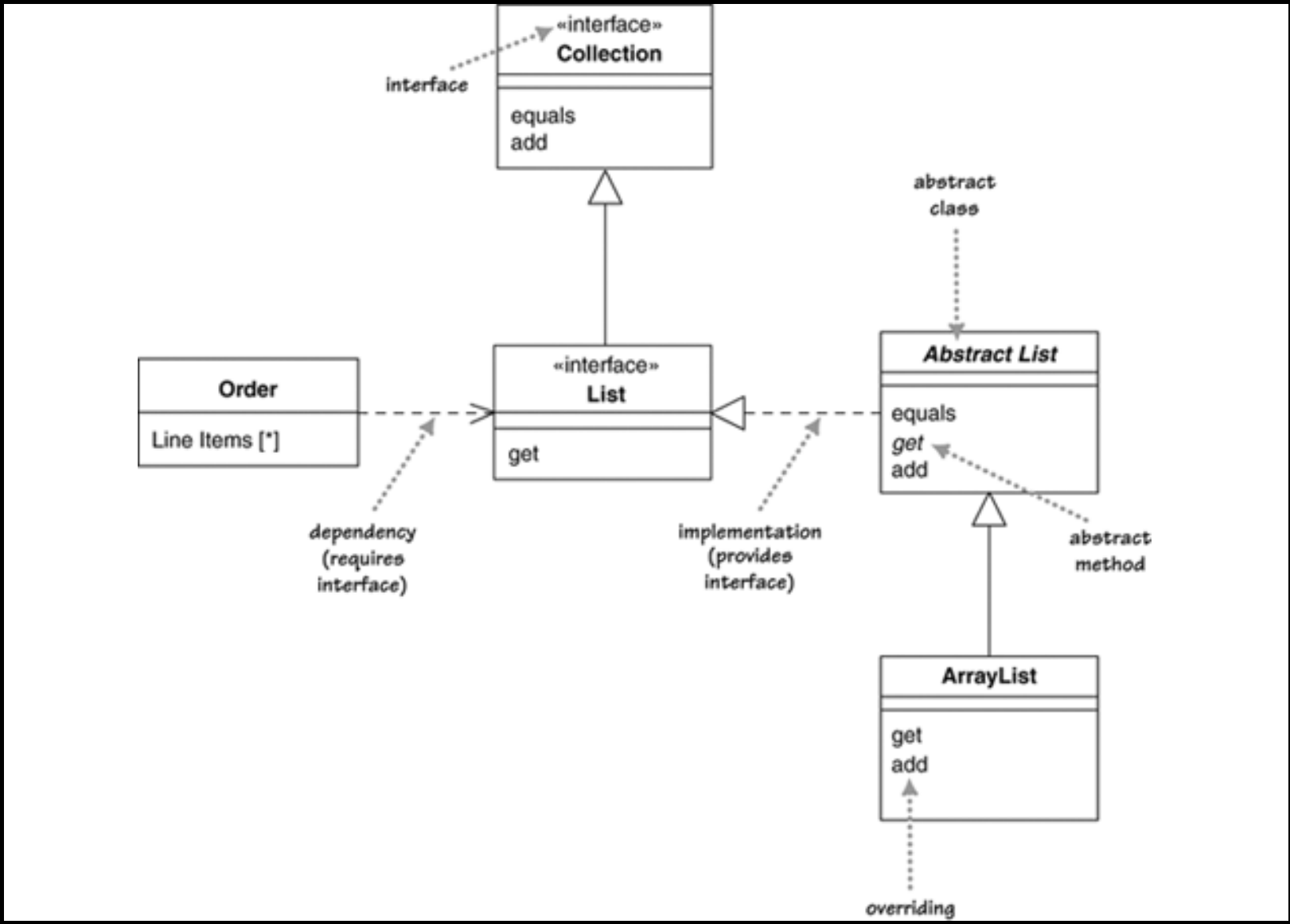
+ send(message : Message) : void

"Ball" Notation

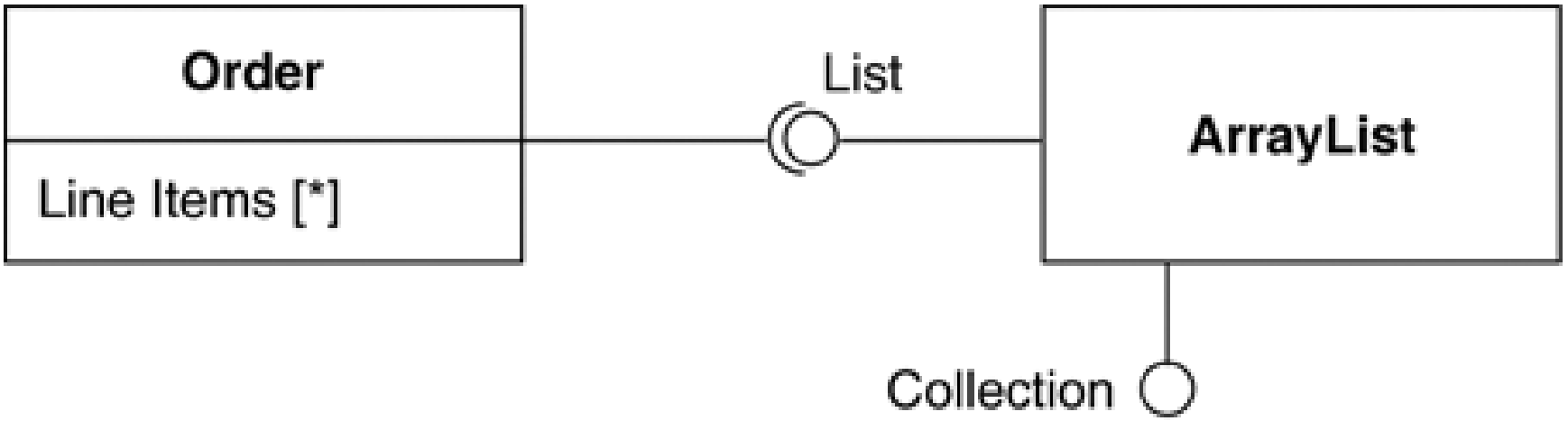
Class implementing Interface

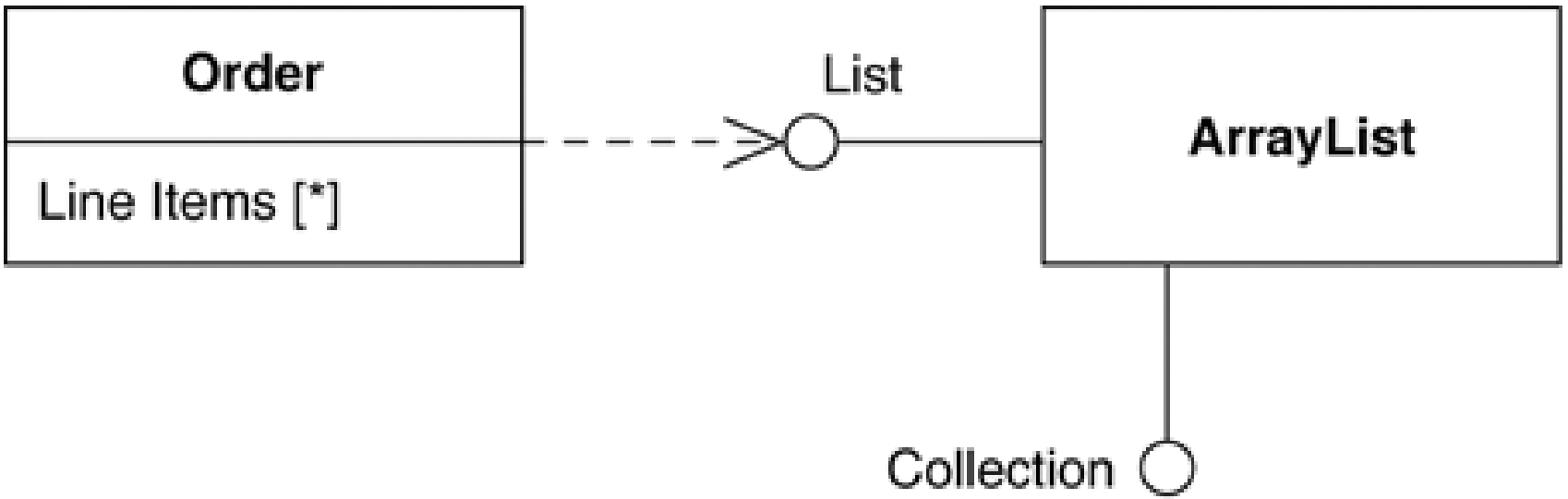


Interface & Abstract classes

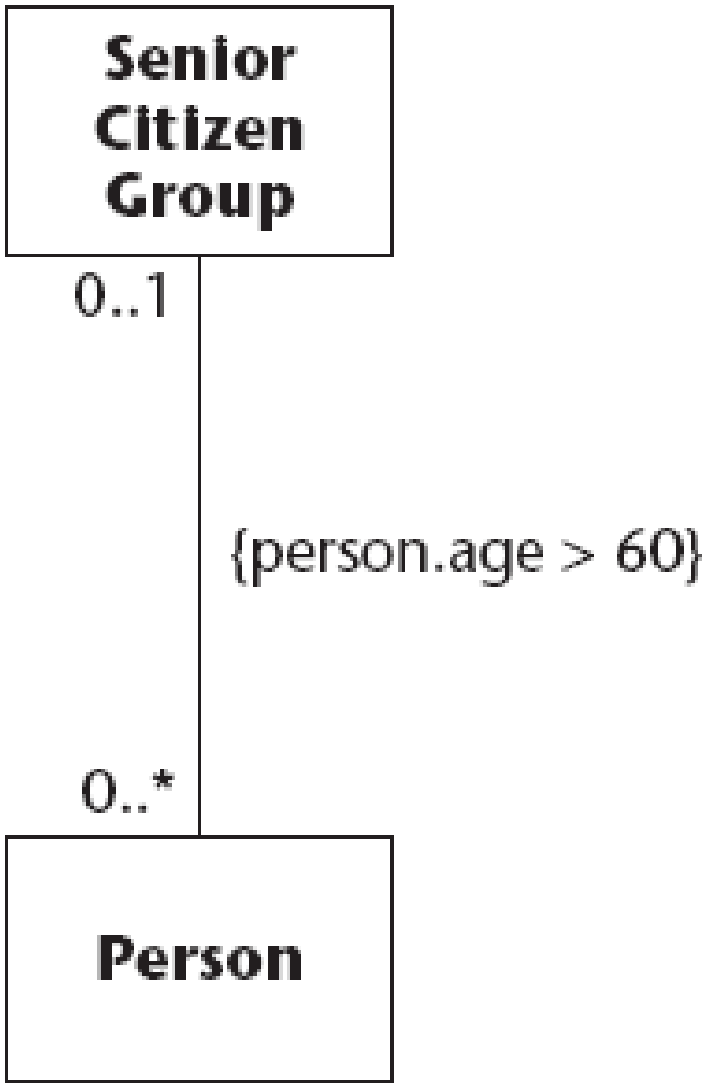


Interface


Order
Line Items [*]
List
ArrayList
Collection


Order
Line Items [*]
List
ArrayList
Collection

Constraints



The End

"Out of intense complexities, intense simplicities emerge."

—Winston Churchill