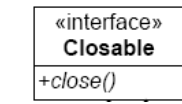
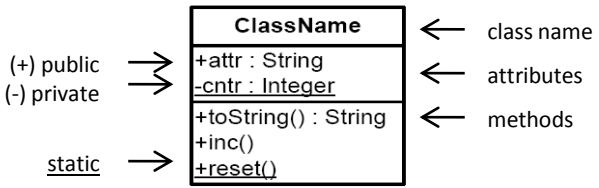
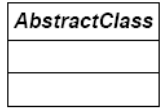


UML Class and Object Diagrams

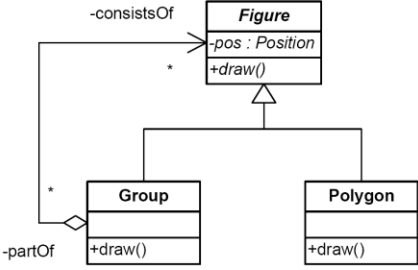
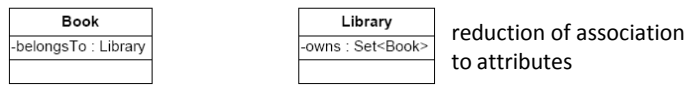
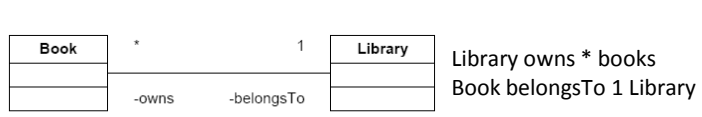
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interface declaration



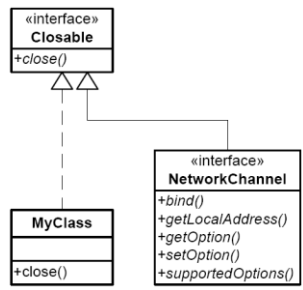
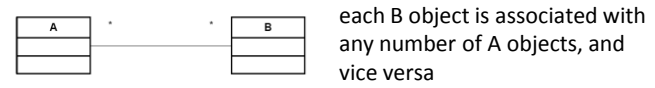
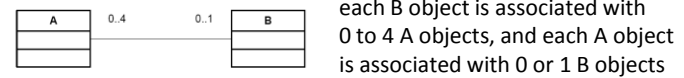
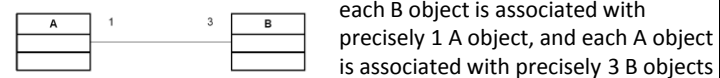
abstract class declaration
(name in italics)



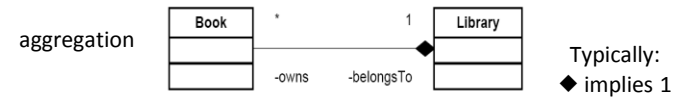
Recursive relationships:
Group consistsOf a set of Figures

Class inheritance:
Figure is superclass of Group and Polygon

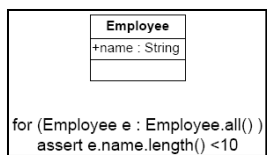
Navigability relationships:
Group references Figure



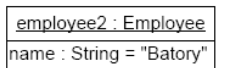
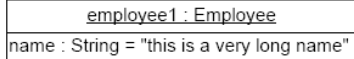
interface declarations and inheritance relationships



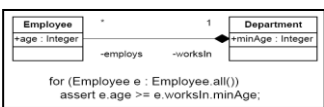
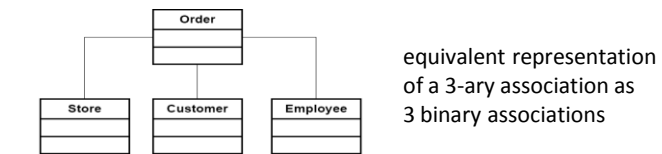
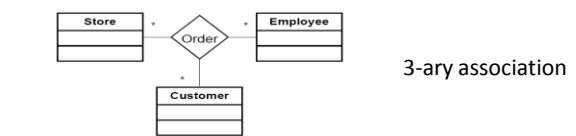
Typically:
◆ implies 1 and
◇ implies 0..1



model E

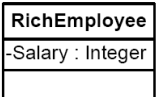
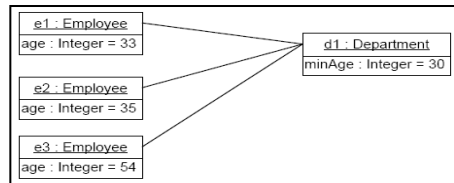


2 instances:
top does not conform to E
bottom does conform to E



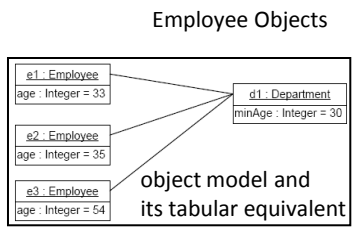
Model M

Object Model that conforms to M



Java constraint specification:
salary > 500K for all instances of RichEmployee

```
for (RichEmployee re : RichEmployees.all())
  assert re.salary > 500K;
```



ID	age	worksIn
e1	33	d1
e2	35	d1
e3	54	d1

ID	minAge	employs
d1	30	{e1, e2, e3}