

between classes will be implemented. Interaction diagrams are revisited to incorporate the behaviour of new classes to add more detail concerning iteration, branching and other conditional behaviour.

Bibliography

Bennett, S., McRobb, S. and Farmer, R. (2002) *Object-Oriented Systems Analysis and Design Using UML* (2nd edition), McGraw-Hill, London.

Deitel, H.M. and Deitel, P.J. (2003) *Java: How to Program* (5th edition), Prentice Hall, Upper Saddle River, NJ.

Quick check questions

You can find the answers to these in the chapter.

- a Name four detailed design activities.
- b What is a navigable path?
- c What is meant by unidirectional navigability?
- d How might we implement a 1:1 unidirectional navigable path?
- e What is the format of an attribute's signature?
- f What is the format of an operation's signature?
- g How would you indicate the creation and the deletion of an object on a sequence diagram?

Exercises

- 10.1 An association relationship on a class diagram should be interpreted differently at analysis and design. Explain the difference.
- 10.2 Using the class diagram in Figure 10.12, draw a sequence diagram to capture the following behaviour.

:OrderUI sends a `priceOrder()` message to :Order; :Order sends a `getLineCost()` message to each :OrderLine; each :OrderLine sends a `getPrice()` message to the appropriate :Product, it then returns the `lineCost` which is the `price*numberOfItems`. Your answer should use an iteration clause.