

10 Designing objects and classes

Learning outcomes

The material and exercises in this chapter will enable you to:

- Explain the role of boundary, control and entity classes
- Understand the need for collection classes
- Specify the implementation of relationships between classes
- Specify the visibility of attributes and operations
- Specify attribute and operation signatures in full
- Add detailed design information to interaction diagrams.

Key words you will find in the glossary:

- asynchronous message
- concurrent processing
- constraint
- multiobject
- navigability
- package
- private
- protected
- public
- single-threaded
- synchronous message
- transient object

Introduction

Detailed design activities include the detailed specifications of classes, their relationships and interactions. The models should contain sufficient information to allow them to be used as a program specification.

In this chapter we revisit many of the topics described earlier in the book and discuss them from the design perspective. We revisit class diagrams to discuss extra classes that we might consider