8 Activity diagrams

Learning outcomes

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

- Explain the role and purpose of activity diagrams in object-oriented systems development

- Draw a simple activity diagram

- Use activity diagrams to analyse business workflows, use cases and operations on classes.

Key words that you will find in the glossary:

- activity
- guard
- object flow
- synchronization bar
- fork
- join
- swimlane

Introduction

As we have seen in Chapter 3, the functionality of the system is initially represented through use cases, which describe the main activities of the system from the perspective of the user. System functionality is also specified in the operations on each class in the class diagram (see Chapters 5 and 6); the interaction diagrams (Chapter 6) specify the inter-object message passing required to achieve a particular task, and state diagrams (Chapter 7) model all possible behaviours of the objects of a class.

In this chapter we look at activity diagrams, which are used to model the details of complex processes. Activity diagrams are similar to state diagrams in that they are concerned with states and