## 11 The code

## Learning outcomes

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

- Understand a simple Java program
- Understand how a class diagram maps onto a Java implementation
- Understand how a sequence diagram maps onto a Java implementation
- Follow the sequence of execution in a simple Java program.

## Key words that you will find in the glossary:

- class declaration
- compiler
- constructor
- front end
- get method

- member variable
- method call
- reverse engineer
- self-referencing
- set method

## Introduction

In this chapter we discuss the code written to implement the Wheels system. The object of this chapter is not to give you a crash course in programming, but to demonstrate how some of the models we have developed throughout the book map onto the code. We do not attempt to explain every instruction in the code – that is beyond the scope of the book. The code is discussed in terms of how it relates to the class diagram and how it relates to the sequence diagram. For the class diagram we indicate which lines of code implement the classes, attributes, methods and relationships. We use the sequence diagram as a road map to guide us through the sequence in which the programming instructions are executed. Otherwise the discussion of the code is limited to an explanation of significant features that were not present in earlier models.