The use case

What we do when identifying use cases is to divide up the system's functionality into chunks, into the main system activities. What dictates the split is what the user sees as the separate jobs or processes – the tasks he will do using the system. We are not attempting in the use case model to achieve a division of the system into logical software units; we are just attempting to capture the user's view of the system.

Identifying use cases from the actors. There are several ways of approaching use case identification. One is to identify the actors, the users of the system, and for each one, to establish how they use the system, what they use it to achieve. If we look at the interview in Chapter 2 we can see that Annie and Simon start off by talking about issuing bikes, one of the main jobs that make up Annie's working day. Issuing bikes therefore will be one of the use cases. Issuing bikes involves finding a suitable bike, calculating the hire charge, collecting the money, issuing a receipt and recording details of the customer and the hire transaction.

The interview moves on to discuss dealing with the return of a bike. Annie sees this as a separate job from issuing the bike, it is separated in time and involves a different set of procedures – checking the date and the condition of the bike and returning the deposit.

Annie tells us in the interview that a list of bikes is already held on the computer, but they do not seem to be able to use it to help them in their work. The bike list needs to be stored so that it can be used to answer queries about what bikes Wheels have, whether they are available or on hire, what their deposit and hire charges are and so on. Maintaining this bike list is another use case. Handling queries is seen by Annie as a separate job from issuing bikes. She often gets people coming into the shop or phoning just to check on the range of bikes available and get an idea of costs. This sometimes leads to a hire, but more often it does not. We can therefore identify 'Handle enquiries' as a separate use case.

It also emerges from the interview that no record is kept of customer details or of what bikes they have hired on previous occasions. This sort of information would be useful for marketing purposes and to simplify dealing with requests for the same bike (see the Problem Definition (Figure 2.6), the Problems and Requirements List (Figure 2.7) and the Interview Summary (Figure 2.8)). 'Maintain customer list' can therefore be identified as a use case.

Identifying use cases from scenarios. Another approach to identifying use cases is to start with the scenarios. We have already mentioned scenarios in Chapter 2 – a scenario describes a series of interactions between the user and the system in order to achieve a specified goal. A