More precisely, an actor represents a particular way of using the system; a way of interacting with the system to achieve a use case goal. It is often referred to as the role someone plays in the use case. The actors in the use case diagram in Figure 3.2 are Administrator and Receptionist. The Receptionist issues the bike, the Administrator maintains the bike list and the customer list. Neither Administrator nor Receptionist are job titles within Wheels because we are not representing any particular person, rather we are representing anyone who is authorized to use the system to do a particular job. Each actor can represent several different people and several different job titles. For example, the Administrator can be Naresh, the head mechanic, or Annie, the shop manager, or even Mike the owner. Conversely, each person or job title can play several different roles. The Receptionist role will normally be played by Annie. However, on her day off, any of the mechanics or Mike can use the computer system as the Receptionist, i.e. they can play the role of Receptionist. Another way of thinking of it is that the users can be wearing different hats when they use the system; Naresh can use the system wearing the hat of an Administrator or a Receptionist.

Actors are identified during the requirements elicitation stage by asking such questions as:

- Who is involved in major system processes such as issuing bikes?
- Who will use the new system?
- Who supplies information to the system?
- Who will receive output from the system?

Actor descriptions. An actor description briefly describes the actor in terms of role and job title.

- *The Receptionist* uses the system to answer queries about bike availability and cost, to issue a bike for hire and to register a bike return. The Receptionist can be the shop manager (Annie), any of the mechanics or the owner (Mike).
- *The Administrator* uses the system to maintain lists of customers and bikes. The Administrator can be the head mechanic (Naresh), the shop manager (Annie) or the owner (Mike).

Use case relationships: communication association, include and extend

Communication association. In a use case diagram the line linking an actor to a use case is called a communication association (see