«Actor» Receptionist

Figure 3.16 Receptionist as actor drawn as a stereotyped class

A stereotype is a specialized use of a modelling element. A stereotype is usually identified by a label inside a pair of guillemets « » such as «include» and «extend». The relationships «include» and «extend» are stereotyped association relationships. This means that they are relationships used in a highly specific way. Sometimes you will see «communication» added to a normal association link between an actor and a use case. This is not strictly necessary as the relationship between an actor and a use case can only be a communication association. However, associations between use cases can be «include» or «extend» relationships and so must be labelled.

Strictly speaking the actor icon is a stereotyped class. Instead of using the stick figure to model an actor such as the Receptionist, we could equally well use the UML class icon and label it as an actor stereotype (see Figure 3.16).

Subsystems and packages. If we are modelling large systems we very soon get to the stage, when drawing the use case diagram, where we can no longer fit all of our use cases on one screen. UML has a grouping notation known as a package to cope with this. Packages are simply a convenient notation for managing our models, they do not represent anything in the system, but are used to group elements that do represent things in the system. We can use packages to group any set of modelling elements: classes, use cases or an entire set of models, e.g. the use case model, the object model, and the interaction diagrams relating to a subsystem. We can use packages simply as a way of managing models that get too big by grouping elements in convenient bundles, or we can use packages to represent specific logical units, e.g. a subsystem or a collaboration (see below). For example, a mail ordering system might be split into three subsystems: customer order processing, accounting and stock control. We would then place all the model elements relating to customer order processing into a customer order processing package, those to do with accounting in an accounting package, those to do with stock control into a stock control package (see Figure 3.17). Packages are discussed in more detail in Chapter 5.