



Figure 5.21 Class diagram for Exercise 5.12^a

a. Remember that where the multiplicity is one only, the '1' symbol may be omitted (see Chapter 4).

- a Does a customer have to have at least one account?
 - b Can a customer have both current and savings accounts?
 - c Is a deposit part of a transaction or a kind of transaction?
 - d How is a cash machine related to a branch?
- 5.13 Oscar's Films is a shop that rents out films on video and DVD. Oscar has a large number of customers and keeps a record of the name and address of everyone who hires a video or DVD. Regular customers can become members of the shop; this entitles them to certain privileges, such as being able to take out more films at one time. In the case of members, Oscar also keeps a record of their membership number, phone number and the types of film they like to watch. He also keeps records of all films and the copies he stocks of each.
- a Draw a class diagram to represent this information.
 - b Write a data dictionary description for Member.
- 5.14 Study the data dictionary definition below and answer the questions that follow it.

Order = orderHeader + {orderLine} + total
 orderHeader = customerDetails + (deliveryAddress)
 +dateRequired
 customerDetails = (title) + 1 {[firstName | initial]}₂ +
 surname + customerAddress + phone + (email)