

- ii A patient phones up for an appointment and is offered a choice of available date and time slots. She picks one.
  - iii A patient comes into the waiting room after having a filling. He wants to make another appointment. The Receptionist offers him a list of possible slots. None are suitable so he doesn't make an appointment.
- 3.7 In the Dentist's system (see Exercise 3.6) you discover that sometimes patients phone up to talk to the receptionist about their treatment or to complain of toothache. In these cases the receptionist adds comments to the patient's notes and advises Mr Major that she has done so. You also discover that on the receptionist's day off Mr Major makes the appointments. How would you amend the diagram in Figure E.8 on page 355 to model this new information?
- 3.8 Your local railway station is going to install automatic ticket dispensing machines. Each machine will be able to give passengers up-to-date train timetable and ticket price information. The machines must also issue tickets and transfer statistics about ticket sales to a central computer system. Railway staff must be able to update ticket prices and timetable information.
- Draw a use case diagram to model what the ticket machines must do.
- 3.9 Quick Bites is a fast food restaurant. They use a computer system to deal with taking customer orders, assembling the order and then paying for it. Customers find a table and a waiter takes their order. The waiter goes to the nearest till and keys in the order using a touch screen with icons on it showing possible food combinations. The table number is used to identify the order. In the kitchens a cook reads the order on his screen, assembles the meal on a tray, and prints a chit with the table number on it plus the details of the order. The tray is put in the food lift and the cook presses a key to indicate that the order is ready. A large screen in the restaurant displays a list of orders that are ready, identified by table number. The waiter collects the tray from the food lift and takes it to the customer. He also removes the order from the large order screen. When customers have finished their meal the waiter keys the table number into the system and the bill is printed. The waiter takes the customer's payment and records the bill as paid.

Draw a use case diagram of this system.