

- She notices that the price of several of the items has increased
  - She updates the relevant prices on the system
  - She also updates the stock levels for those items that have been delivered.
- 3.4 Further investigation reveals extra information about the Cool Cuts system (see Exercise 3.3). When customers come to the till to pay for their haircut, they sometimes also buy hairdressing products (shampoo, conditioner etc.). The junior on the till enters the product code and the system looks up the price of the product. The use case 'Handle customer payments' (see Figure E.5 on page 354), therefore, sometimes involves looking on the system to find a product and its price. The use case 'Maintain product list' always involves doing this. Using «include» and «extend» relationships, amend the use case diagram in Figure E.5 to show this extra information.
- 3.5 On further investigation you find that sometimes customers come into Cool Cuts just to buy shampoo or conditioner. The diagram in Figure E.6 on page 354 assumes that customers always pay for hairdressing products in conjunction with paying for their haircut – it's a single transaction. However, these off-the-street customers want to pay for the products as a separate transaction. How would you alter the diagram in Figure E.6 to model this new information?
- 3.6 Mr Major, the town's only dentist, has a computer system to help him keep track of patients' appointments and dental treatment. Mr Major's receptionist makes appointments with patients either when they phone up or when they are back in the waiting room after treatment. Sometimes patients phone to cancel appointments or to change them. Mr Major keeps notes on the system about his patients' treatments – these are updated each time he sees a patient. The receptionist also makes out bills for patients and records payments on the system.
- a Draw a use case diagram of the dentist's system.
  - b One of the use cases in Figure E.8 on page 355 is 'Maintain appointments'. Write scenarios for this use case, recording sequences of events that might occur when:
    - i A patient phones up for an appointment on a specific date. The Receptionist tells her what times are available on that date and she picks one.