

Figure 7.15 State diagram for an estate agent's property

short beeps. Draw a state diagram to represent the behaviour of the simple microwave oven.

7.4 Newsagent's customer.

A newsagent has customers who place regular orders for papers to be delivered and who are billed monthly. If the customer does not pay the bill within four weeks, the newsagent sends a reminder. If the bill is still unpaid after a further two weeks, the newsagent stops deliveries to the customer. Customers can change or cancel their orders, but only if they have paid all bills to date. Draw a state diagram to represent the behaviour of a customer in the newsagent's system.

7.5 Tea and coffee machine.

A tea and coffee machine in an office is initially idle, until a user inserts 50p. At this point the user can press the tea button to select tea, which the machine then dispenses, or the user can insert a further 20p. When 70p has been inserted, the user can press the coffee button to select coffee, which the machine dispenses, before returning to the idle state. The machine may break at any time. Draw a state diagram to represent the behaviour of the tea and coffee machine.

7.6 Internet book order.

Figure 7.16 is a state diagram of an order in an Internet book shop system. Study the diagram and then answer the questions below.

a How does the event 'user selects book' affect the state of an Internet Book Order object?