1. Starting with some of the principles outlined in Chapter 4, provide a usability specification for an electronic meetings diary or calendar. First identify some of the tasks that would be performed by a user trying to keep track of future meetings, and then complete the usability specification assuming that the electronic system will be replacing a paper-based system. What assumptions do you have to make about the user and the electronic diary in order to create a reasonable usability specification?
2. Can you think of any instances in which the ‘noun–verb’ guideline for operations, as suggested in the Apple human interface guidelines for the Desktop Interface, would be violated? Suggest other abstract guidelines or principles besides consistency which support your example. (Hint: Think about moving files around on the Desktop.)
3. Can you think of any instances in which the user control guideline suggested by Apple is not followed? (Hint: Think about the use of dialogue boxes.)
4. Find a book on guidelines. List the guidelines that are provided and classify them in terms of the activity in the software life cycle to which they would most likely apply.
5. Whatis the distinction between aprocess-oriented and a structure-oriented design rationale technique? Would you classify psychological design rationale as process- or structure-oriented? Why?
6. Do a keystroke level analysis for opening up an application in a visual desktop interface using a mouse as the pointing device, comparing at least two different methods for performing the task. Repeat the exercise using a trackball. Discuss how the analysis would differ for various positions of the trackball relative to the keyboard and for other pointing devices.
7. One of the assumptions underlying the programmable user model approach is that it is possible to provide an algorithm to describe the user’s behaviour in interacting with a system. Taking this position to the extreme, choose some common task with a familiar interactive system (e.g. creating a column of numbers in a spreadsheet and calculating their sum, or any other task you can think of) and describe the algorithm needed by the user to accomplish this task. Write the description in pseudocode. Does this exercise suggest any improvements in the system?