Chapter Exercises

Questions

1. What five questions typically are used in fact-finding? What other question does the Zachman Framework include? Is the additional question important?
2. What is a system requirement, and how are system requirements classified?
3. What are JAD and RAD, and how do they differ from traditional fact-finding methods? What are the main advantages of team-based methods?
4. What is total cost of ownership (TCO)? What costs often are underestimated?
5. Provide three examples each of closed-ended, open-ended, and range-of-response questions.
6. What are three types of sampling? Which one would you use to analyze data input errors?
7. What is the Hawthorne Effect? Have you ever experienced it? When and where?
8. What is a functional decomposition diagram (FDD) and why would you use one? Explain how to create an FDD.
9. What are agile methods? Are they better than traditional methods? Why or why not?
10. To what three different audiences might you have to give a presentation? How would the presentation differ for each? Which one would be the most challenging for you?

Discussion Topics

1. A group meeting sometimes is suggested as a useful compromise between interviews and questionnaires. In a group meeting, a systems analyst meets with a number of users at one time. Discuss the advantages and disadvantages of group meetings.
2. JAD requires strong interpersonal and communication skills on the part of the systems analyst. Are those skills different from the ones that an analyst needs when conducting one-to-one interviews? Explain your answer.
3. Agile methods use rapid development cycles to iteratively produce running versions of the system. How would these shorter cycles affect the ability of the analyst to manage system's requirements?
4. Research the Internet, magazines, or textbooks to find examples of visual aids, including a bar chart, pie chart, line chart, table, diagram, and bulleted list. How effective was each example? Find at least one example that you could improve. Explain your choice.
5. Review Part A of the Systems Analyst's Toolkit, and then attend a speech or presentation and analyze its effectiveness. Consider the speaker's delivery and how he or she organized the material, used visual aids, and handled audience questions. Was the speech or presentation effective? How could it have been improved?

Projects

1. Design a questionnaire to learn what students think of the registration process at your school. Apply the guidelines you learned in this chapter.
2. Use Adobe Online Forms or Microsoft Word to design a simple fill-in form with at least five fields.
3. Create a functional decomposition diagram similar to the one in Figure 4-8 but showing your school instead of the library example.
4. Use the Internet to find a site that contains current IT industry news, information, and links. Write a brief description of what you liked and didn't like.
5. Research TCO in the context of migrating software systems to the cloud. Identify some of the benefits and shortcomings of the cloud computing environment for a traditional information system.