Chip enters Anna’s office one day and says, “I think the project will be a good one, even though it’s taking some long hours to get started.”

Anna looks up from her screen and smiles. “I like what you’ve done in getting us organized,” she says. “I hadn’t realized Microsoft Visio and Visible Analyst could help us with project management this much. I’ve decided to do a PERT diagram for the data-gathering portion of the project. It should help us plan our time and work as a team on parallel activities.”

“Can I take a look at the PERT diagram?” asks Chip.

Anna shows him a screen with a PERT diagram on it (see Figure E3.1) and remarks, “This will help immensely. It is much easier than planning haphazardly.”

“I notice that you have Gather Reports, Gather Records and Data Capture Forms, and Gather Qualitative Documents as parallel tasks,” notes Chip, gazing at the screen.

“Yes,” replies Anna. “I thought that we would split up the time that it takes to gather the information. We can also divide up the task of analyzing what we have learned.”

“I notice that you have a rather large number of days allocated for interviewing the users,” notes Chip.

“Yes,” replies Anna. “This activity also includes creating questions, sequencing them, and other tasks, such as taking notes of the office environment and analyzing them. I’ve also assumed a standard of six productive hours per day.”

“After we interview the users, we will want to create a problem definition for the system, listing the issues and objectives,” continues Anna. “Once this is finished, we’ll have the users review it and assign weights. When this is complete, the next step is to create a list of user requirements.”

“Sounds like a good plan,” Chip remarks after a thoughtful pause. “Should we get started with a question list?”

Anna glances at her watch. “Not now, it’s getting late. I think we’ve made a lot of progress in setting up our project. Let’s call it a day, or should I say evening? Remember, I got us tickets for the football game.”

Chip replies, “I haven’t forgotten. Let me get my coat, and we’ll walk over to the stadium together.”

Walking across campus later, Chip says, “I’m excited. It’s my first game here at CPU. What’s the team mascot, anyway?”

“Chipmunks, of course,” says Anna.

“And the team colors?” Chip asks, as they enter the stadium.

“Blue and white,” Anna replies.

“Oh, that’s why everyone’s yelling, ‘Go Big Blue!’” Chip says, listening to the roar of the crowd.

“Precisely,” says Anna.

---

**FIGURE E3.1**

A PERT diagram for Central Pacific University that is used for gathering information.

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- A Gather reports
- B Gather records and data capture forms
- C Gather qualitative documents
- D Analyze reports
- E Understand corporate culture
- F Analyze records and forms
- G Interview users
- H Administer questionnaires
- I Summarize interviews
- J Summarize survey results
- K Prototype system
Exercises

E-1. Use Microsoft Visio or Visible Analyst to view the Gathering Information PERT diagram.
E-2. List all paths and calculate and determine the critical path for the Gathering Information PERT diagram.
E-3. Use Microsoft Visio or Visible Analyst to create the PERT diagram shown in Figure E3.2. It represents the activities involved in interviewing the users and observing their offices.
E-4. List all paths and calculate and determine the critical path for the Interviewing Users PERT diagram.
E-5. Use Visio or Visible Analyst to create a PERT diagram for creating system prototypes. The activity information is shown in Figure E3.3.
E-6. Create the problem definition for the CPU case. Read the interview with Hy Perteks in the CPU case found in Chapter 4 as well as the interviews found on the support website for Systems Analysis and Design. Go to www.pearsonhighered.com/kendall and click the CPU Student Exercise link for the 9th edition text. Then click the first link, CPU Interviews. You will need to read all five additional interviews. There is a Next link in the lower-right corner of the web page to go to the next interview.
E-7. Write user requirements for the CPU case.
E-8. Design a test plan for the requirements created in Exercise E-7.

The exercises preceded by a www icon indicate value-added material is available from www.pearsonhighered.com/kendall. Students can download a sample Microsoft Visio, Visible Analyst, Microsoft Project, or Microsoft Access file that can be used to complete the exercises.

### Figure E3.2
A PERT diagram for Central Pacific University that is used for the interviewing users phase.

### Figure E3.3
A list of activities and estimated duration times for the CPU project.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Predecessor</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Determine overall prototype screens and reports</td>
<td>None</td>
<td>2</td>
</tr>
<tr>
<td>B Determine report and screen contents</td>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>C Create report prototypes</td>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>D Create screen prototypes</td>
<td>B</td>
<td>4</td>
</tr>
<tr>
<td>E Obtain report prototype feedback</td>
<td>C</td>
<td>1</td>
</tr>
<tr>
<td>F Obtain screen prototype feedback</td>
<td>D</td>
<td>2</td>
</tr>
<tr>
<td>G Modify report prototypes</td>
<td>E</td>
<td>2</td>
</tr>
<tr>
<td>H Modify screen prototypes</td>
<td>F</td>
<td>4</td>
</tr>
<tr>
<td>I Obtain final approval</td>
<td>G, H</td>
<td>2</td>
</tr>
</tbody>
</table>