CHAPTER

4

Creating a Simple Project

In the first few chapters of this book, you've gotten a brief introduction to projects and project management, and taken a quick tour of the program. Maybe you're intimidated by all the commands you've seen on the ribbon, the shortcut menus, the status bar, and so on. And you've probably noticed just how many moving parts the Project window has. If you're wondering whether you need to master *all* of these things before you can do anything in Project, rest easy because you don't.

This chapter shows you just how easy building a project can be. It starts with creating a new Project file and creating a list of tasks for the work that has to be done. Then you'll learn how to tell Project how long tasks should take. After that, you'll do a little organizing: creating summary tasks to keep related tasks together. The next step is linking tasks to build a sequence of work, which results in a schedule that takes you from project start to finish. Finally, you'll add resources to tasks. And voilà—you have your first project schedule!

The rest of this book uses organizing and running a bike-ride fundraising event as a sample project. This chapter sticks to the charitable theme, but on a much smaller scale. Suppose you want to support your favorite charity by riding in its cycling fundraiser with a small team of your cycling compatriots. Your team goal is to raise $5,000, so you decide that you need to treat this undertaking as a project. In this chapter, you'll learn how to put together a simple schedule for your fundraising endeavor.

Creating a New Project File

To get this test drive going, you need a new Project file. Here's how to create a new Project file and set it up for your project:

1. **Launch Project. Then, in Backstage view (page 47), click the Blank Project icon on the right side of the screen (see Figure 4-1).**

   Project creates a new blank file, called something like Project1.

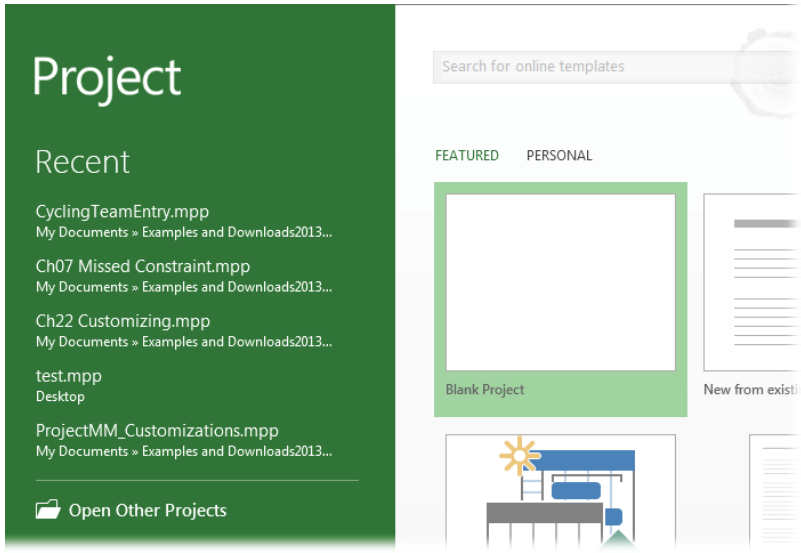

FIGURE 4-1
When you launch Project, on the left side of Backstage view, you'll see recent files you've opened. Click a filename to open that project. To create a new Project file, click the Blank Project icon on the right side of the screen.

TIP If Project is already running and you see the ribbon tabs (Task, Resource, and so on) instead of Backstage view, you can create a new blank Project file simply by pressing Ctrl+N, or by choosing File→New, and then, on the New page, clicking the Blank Project icon.

2. **To change your project's start date, in the Project tab's Properties section, click Project Information.**

   The Project Information dialog box opens.

3. **In the Start Date box, select the starting date, such as 2/10/2013, and then click OK.**

   Your project typically doesn't start the same day you build your project schedule, so change the project's start date to when you expect work to begin. Setting an accurate start date is important, since Project schedules new tasks to start as soon as possible—initially, the project start date.

For this sample project, the rest of the settings in the Project Information dialog box are fine. (You'll learn all about the Project Information dialog box in Chapter 5.)

You're ready to add the tasks for your project, as described in the next section.

Creating a Task List

The foundation of any schedule is the work that needs to be done to achieve the project's objectives and to deliver the desired results. Before you can do anything else, you need a list of the tasks to perform, from beginning the project to sweeping up the confetti at the end. This section describes how to build a list of individual tasks.

Creating Work Tasks

In this test drive, you'll create the first few tasks for the project—getting your team signed up for the fundraising event. After that, you can practice by filling in the rest of the tasks on your own.

NOTE If you want to jump ahead and see the finished schedule, you can download the sample project *CyclingTeamEntry.mpp* from this book's Missing CD page at *www.missingmanuals.com/cds*.

Here are the steps for adding tasks to your project:

1. **Click the first cell in the Task Name column on the left side of the screen, type *Research entry requirements*, and then press Enter.**

   Project automatically selects the blank Task Name cell below the one you just filled in.

   The Task Name cell is the only one you *have* to fill in. Because Project initially creates new tasks as manually scheduled, it leaves the Duration cell for your first task blank. The icon in the Task Mode cell (a pushpin with a question mark next to it) indicates that more information is needed. (You'll fill that in later.)

TIP Your project schedule will be easier to understand if the task names you use describe the work that the tasks represent. Start with a verb that identifies the work to be performed, and then add a noun for the item the work is performed *on*—for example, "Submit entry form."

2. **In the selected Task Name cell, type the next task's name, and then press Enter to add the following tasks:**

   - Line up team members
   - Submit entry form
   - Receive fundraising materials
   - Fill out online team profile

Figure 4-2 shows what the task list looks like when you're done.

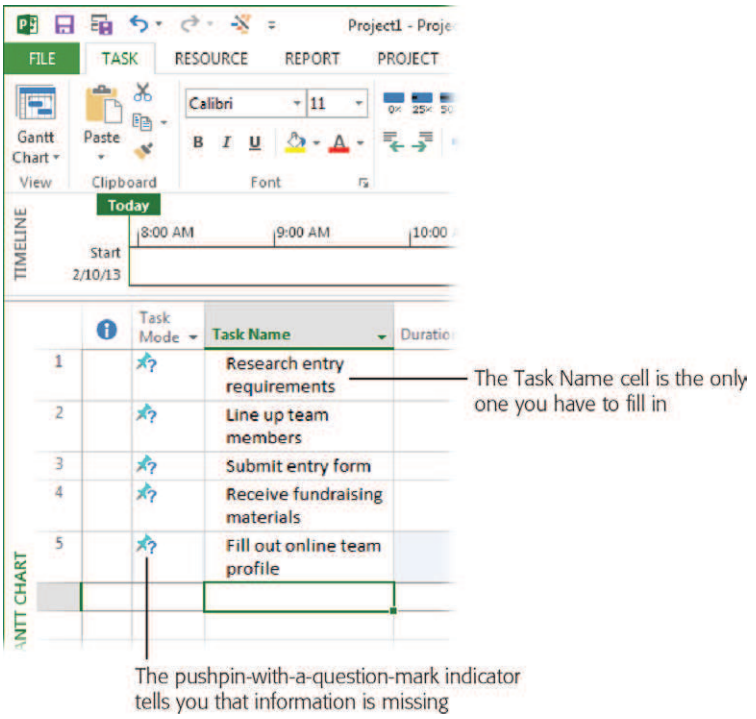

FIGURE 4-2

Because Project initially sets tasks to Manually Scheduled mode, you don't have to fill in the Duration field. The pushpin-and-question-mark icon in the Task Mode cell tells you that information about the task is missing. When you're ready to fill in how long a task should take, simply type the duration in the Duration cell.

Defining How Long Tasks Should Take

Estimating how long tasks should take can be the most difficult part of scheduling. You need to look into your crystal ball and give your best guess—er, informed estimate—of each task's duration. You can find entire books on this subject alone, but Chapter 7 provides a brief introduction to estimating. For now, you'll simply fill in a few task durations in the test-drive project. Here's how:

1. **Click the Duration cell for the "Research entry requirements" task.**

   Manually scheduled tasks don't need to have a duration initially. However, to complete your schedule, every task needs a duration. Project sets the duration of Auto Scheduled tasks to one day unless you fill in a different value.

2. **Enter the duration (the length of working time from start to finish) you think it will take to complete this task (Figure 4-3).**

   You can enter durations in minutes (m), hours (h), days (d), weeks (w), or months (mo). Type the number followed by the abbreviation for the unit you want to use. For example, type *3d* for 3 days or *6h* for 6 hours.

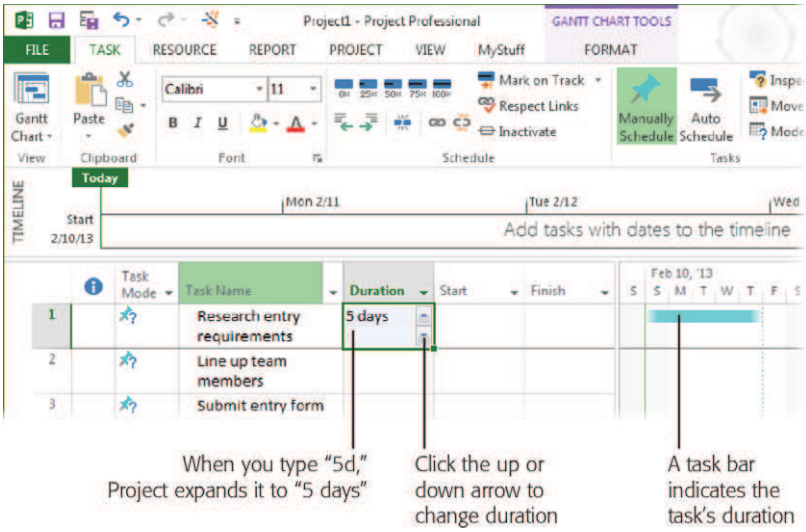

FIGURE 4-3

When you type durations like 3d, 2w, or 8h, Project replaces the abbreviated units with more complete text. For example, when you type d, Project substitutes "days." When you click a Duration cell, arrow buttons appear that you can click to increase or decrease the duration by one unit.

3. **Repeat step 2 for each task in your task list.**

   When you fill in a duration, you'll see a task bar appear on the right side of the screen; its length represents the task's duration. In Figure 4-3, the ends of the task bar are faded, because the task doesn't have a start or finish date yet. You'll see how to define task dates on page 76.

Adding Milestones

Milestones are markers you can use to indicate progress in your project. They're perfect for identifying crucial decisions that affect the project, like a go/no-go decision, or the completion of a significant portion of the project, like your team's profile being published on the charity's donation website. Completing a milestone is like crossing off an item on your to-do list. Because milestones usually mark some type of goal, they're set to zero duration. (For more about milestones, see page 133.)

Here's how you add a milestone:

1. **Click the blank Task Name cell below the "Fill out online team profile" task. Then, in the Task tab's Insert section, click Milestone.**

   Project names the task <New Milestone> and puts "0 days" in the Duration cell. On the right side of the screen, the task bar symbol is a diamond, as shown in Figure 4-4. (Don't worry about the milestone's date just yet.)

2. **In the Task Name cell, type *Team signup complete*.**

   You'll learn more about task naming in Chapter 6. A good way to differentiate milestones from work tasks is to name the milestone based on what was accomplished.

As you practice adding more tasks to your Project file, be sure to add milestones to mark the end of each portion of the project.

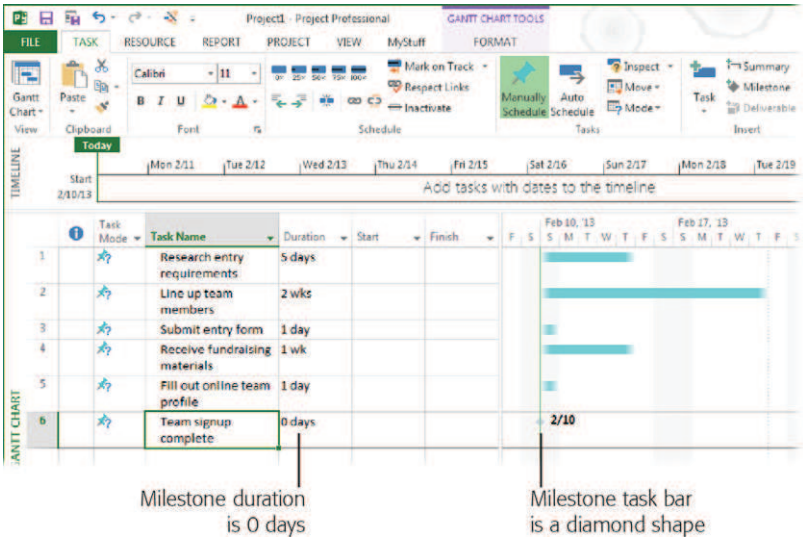

FIGURE 4-4
The milestone's Duration cell reads "0 days" because most milestones don't include any work. Because milestones have zero duration and work, you can add as many as you want without increasing the duration of the project.

Organizing Work

When all you have is a long list of tasks, you can lose sight of the project's big picture. Organizing related tasks makes major portions of the project and the overall schedule easier to grasp. By creating *summary tasks* to keep related subtasks together, you turn your long task list into what looks like an outline. (Chapter 7 provides a detailed description of how to break work down and group it into related chunks.)

Here's how to organize a few related tasks under one summary task:

1. **Drag over the Task Name cells of all the tasks you've added so far to select them. Then in the Task tab's Insert section, click Summary.**

   Project inserts a new summary task above the selected tasks, named <New Summary Task>. The program indents the selected tasks to make them subtasks, as shown in Figure 4-5. You can see that the summary task is set to Auto Scheduled, which means Project calculates the values for the task from the earliest start date to the latest finish date of its subtasks. It also sets the summary task's

start date to the project start date. If you type a value in the summary task's Duration cell, Project changes the task to Manually Scheduled mode.

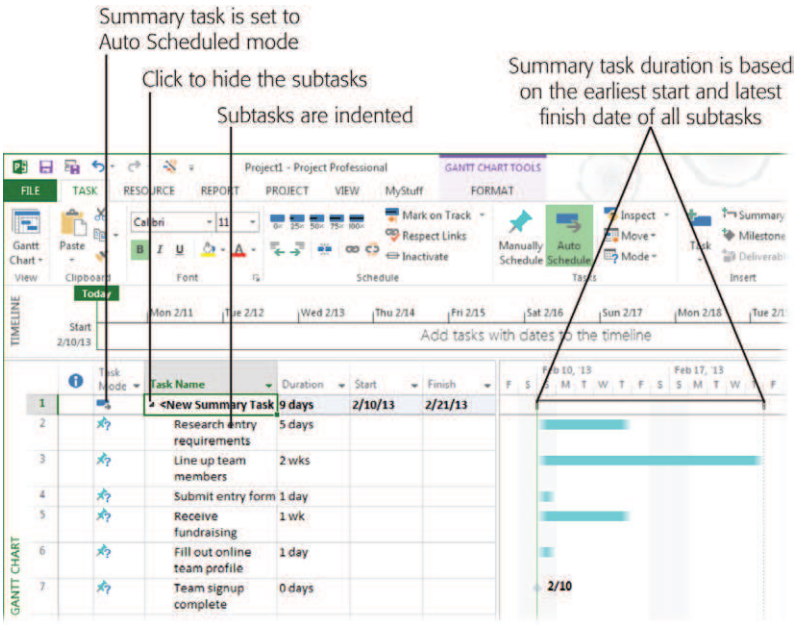

FIGURE 4-5
Summary tasks help organize work into logical chunks and make the big-picture view emerge from the details. What's more, Project calculates the dates, duration, and other values for summary tasks from the totals of their subordinate tasks.

2. **Type a name for the summary task, like *Sign up cycling team*, and press Enter.**

   When Project inserts the new summary task, it selects the Task Name cell, so you can immediately type the summary task's name.

3. **To create a summary task and subtasks at the same time, click anywhere in a blank row in the task list and then, in the Task tab's Insert section, click Summary.**

   Project inserts a new summary task with one subtask, named <New Summary Task> and <New Task>, respectively.

4. **In the <New Summary Task> cell, type *Raise money*, and then press Enter. In the <New Task> cell, type *Send donation requests*, and then press Enter.**

   Project selects the next cell in the Task Name column.

5. **In the next two blank Task Name cells, add the following tasks:**

   - Send donation reminders
   - Send thank-you messages for donations

   Just like the "Send donation requests" task you created in the previous step, these new tasks are subtasks of the "Raise money" summary task.

TIP To move tasks inward or outward in the outline at any time, select the tasks and then, in the Task tab's Schedule section, click Indent Task or Outdent Task. Indent Task is a green arrow pointing to the right; Outdent Task is a green arrow pointing to the left. (*Outdent* is Microsoft-ese for the opposite of indent. That is, outdenting moves a task out to the next higher level in the outline.)

All the tasks you've created so far start on the same day, which isn't the way work will actually occur. The next section gets your project tasks into the right order.

Putting Tasks in the Right Order

Albert Einstein said, "The only reason for time is so that everything doesn't happen at once." The people who work on your project can't do everything at once, so you have to obey the rules of time and put tasks into a sequence. In Project, a relationship between two tasks is known as a *task dependency* or a *task link*. Defining the dependencies between tasks helps you determine which tasks start when, as well as when the project might finish.

To link the tasks for your cycling team, do the following:

1. **Select the tasks related to signing up the team ("Research entry requirements" through "Team signup complete").**

   You can select tasks in any number of ways. You can drag your mouse over the several rows to select the tasks. (You can drag over any cells in the rows.) To select individual tasks, Ctrl-click anywhere in each individual task's row. To select adjacent tasks, click the first task, and then Shift-click the last task.

   No matter which method you use, Project highlights the selected tasks.

2. **To create links between the selected tasks, in the Task tab's Schedule section, click the Link Tasks icon, which looks like links of chain (shown in Figure 4-6).**

   The tasks automatically cascade with Finish-to-Start dependencies (page 177) so one occurs after the other. If you want to remove the dependencies, simply click Unlink Tasks, which looks like a broken link.

3. **Select all the subtasks under the "Raise money" summary task, and link them as explained in the previous step.**

   Sending reminders and thank-you messages occur at the same time, so in the next step, you'll modify a task dependency to show those tasks starting at the same time.

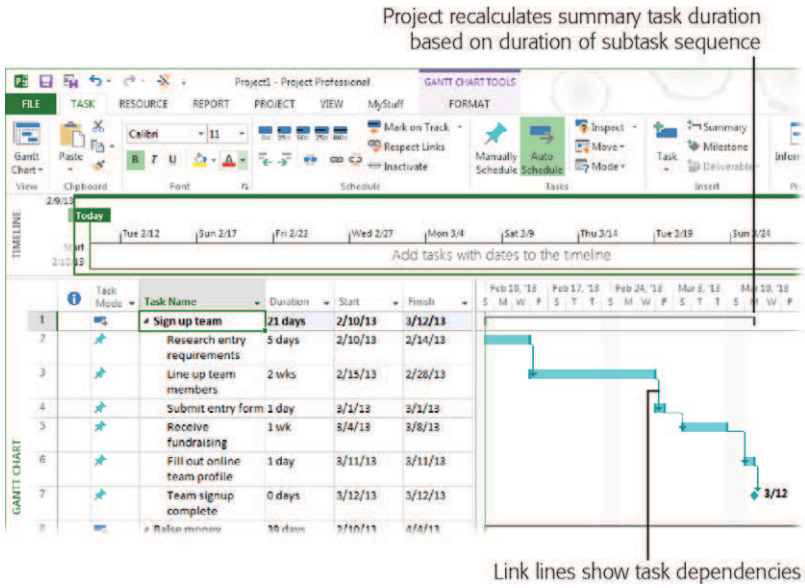

FIGURE 4-6
Task dependencies define the sequence of work. Moreover, as you establish dependencies, Project takes care of changing start dates, finish dates, and summary task duration.

NOTE If a summary task is manually scheduled, it'll have two task bars, because Project keeps track of the duration you specify for the summary task (the task bar looks like a horizontal bracket), as well as the duration of all its subtasks (a solid task bar as described on page 63). That way, you can see whether your estimate for the summary task duration is long enough for all the subtasks.

4. **Click the "Send thank-you messages for donations" Task Name cell, and then, in the Task tab's Properties section, click Information.**

   The Task Information dialog box opens.

5. **Click the Predecessors tab.**

   Predecessors determine when the selected task starts or finishes. The Predecessor tab's table shows the predecessors linked to the selected task. The Type cell shows the type of task dependency; in this example, it's Finish-to-Start (FS).

6. **Click the first Type cell (the one that reads "Finish-to-Start (FS)" in this example), click the down arrow that appears, and then choose Start-to-Start (SS). Then click OK.**

   The two tasks now start on the same day, as shown in Figure 4-7.

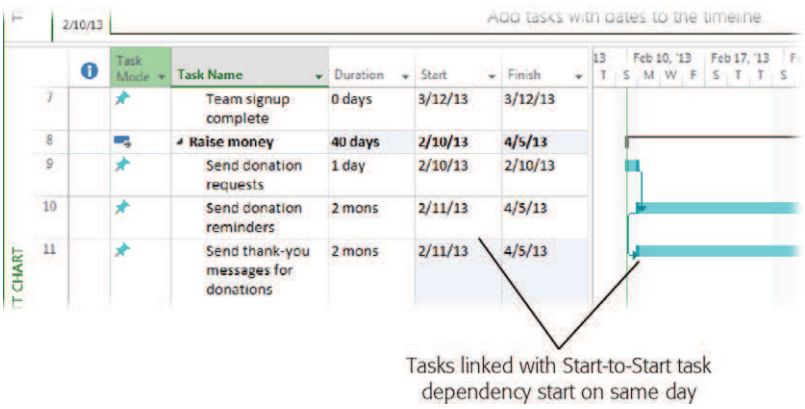

FIGURE 4-7
Link lines between the task bars are drawn based on the type of task dependency. Here, the Start-to-Start link line is drawn from the start of the first task to the start of the second task.

NOTE Relationships between tasks come in several flavors, with the most common being Finish-to-Start, as illustrated in the previous steps. See page 178 to learn about the other types of task dependencies.

Switching Tasks to Auto Scheduled Mode

So far, the work tasks in your project (but not the summary tasks) have been set to Manually Scheduled mode. If you want Project to calculate your schedule for you (see page 64), you need to switch some or all of your tasks to Auto Scheduled mode. That way, Project can take care of recalculating start dates, finish dates, and durations as you add more details to your plan.

Here's how to change the tasks in the sample project to Auto Scheduled mode:

1. **Click the Task Mode cell for the first summary task (which is already set to Auto Scheduled mode).**

   A down arrow appears, which you can click if you want to choose either Manually Scheduled or Auto Scheduled from a drop-down menu. In addition, a *fill handle* (a green square), appears at the bottom right of the cell.

2. **Position your cursor over the fill handle. When it changes to a + sign, drag over the Task Mode cells of all the tasks in the list.**

   The icons in the Task Mode cells change to indicate that the tasks are Auto Scheduled.

Assigning People and Other Resources

People and their availability (when folks are scheduled to work, and when they're taking vacation) ultimately control when tasks get done and how long the project takes. In Project, *resources* are any people, equipment, or materials needed to complete tasks in your project. Chapters 8 and 9 provide the full scoop on how to create and manage all types of project resources. This section provides a quick introduction to adding people to your project as resources and assigning them to tasks.

Add People to Your Project

Work could still be up for grabs when you create your schedule. Even if you don't know resource names, you probably know what skills are required to do the work. You can use a person's name if you have a lucky team member lined up, or fill in generic names when all you know is the type of work or skill required.

Project's Resource Sheet view is specifically for listing resources. Here's how to display it and fill it in:

1. **In the View tab's Resource Views section, click Resource Sheet.**

   A new spreadsheet-like view appears with fields for recording information about your resources.

2. **To add yourself as a resource, click the first Resource Name cell, type your name (in Figure 4-8, it's Chris), and then press Enter.**

   Project selects the next Resource Name cell.

3. **Repeat step 2 for the colleagues you've corralled into cycling.**

   If you don't know who else will work on your project, then in the Resource Name cell, type a name that indicates the skill required of the resource, like Rider2, Rider3, and Rider4 in Figure 4-8.

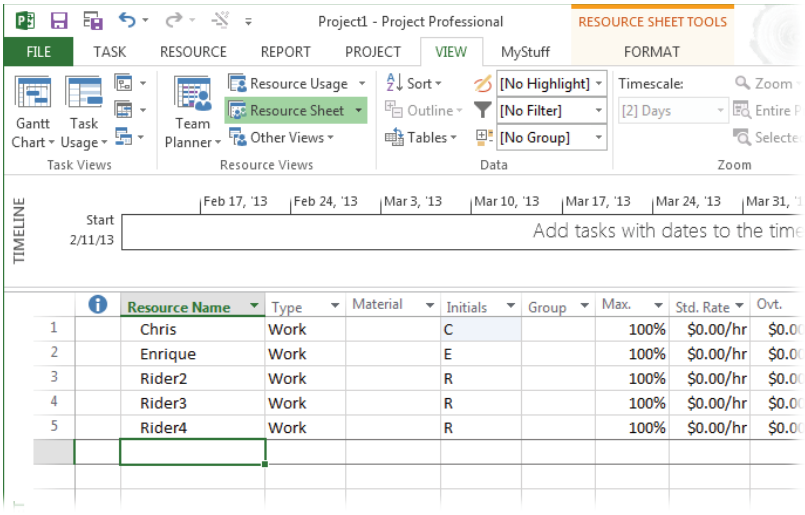

FIGURE 4-8

Resource Sheet view captures information about the people, equipment, and/or materials required for your project, including costs and work schedules. For now, just enter the names of the resources. (Chapter 8 covers resource creation in intricate detail.)

Assign Resources to Tasks

At this point, you have a list of all the people who are pitching in. If you handed them your schedule now and told them to get to work, you'd have a free-for-all on your hands. To get the work done on time with a minimum of chaos, all team members need to know which tasks are theirs to do. Here's how to assign your project's resources to tasks:

1. **In the View tab's Task Views section, click the top half of the Gantt Chart button (where the chart icon is).**

   Project switches to Gantt Chart view. The table on the left side of this view lists tasks with fields for details, such as Duration, Start, Finish, Predecessors, and Resource Names. The right side is the Gantt Chart timescale.

   Make sure you can see the Resource Names column. If necessary, adjust the Gantt Chart's two panes to display it: Position the mouse pointer over the vertical bar between the panes. When the pointer changes to double arrows, drag the divider bar to the right until the Resource Names column is visible.

2. **Click the Resource Names field for the "Research entry requirements" task.**

   Project displays a box around the cell and displays a down arrow for the resource drop-down list.

NOTE Summary tasks don't get resource assignments, because the resources are already assigned to the individual tasks that belong to summary tasks. Likewise, don't assign resources to milestones, because their zero duration means there's no work to perform.

3. **To select a name, click the down arrow, turn on the checkbox for a name in the list, and then press Enter.**

   The name you selected appears in the task's Resource Names cell. It also shows up in the timescale next to the task's task bar (Figure 4-9). For other ways to assign resources to tasks, see page 228.

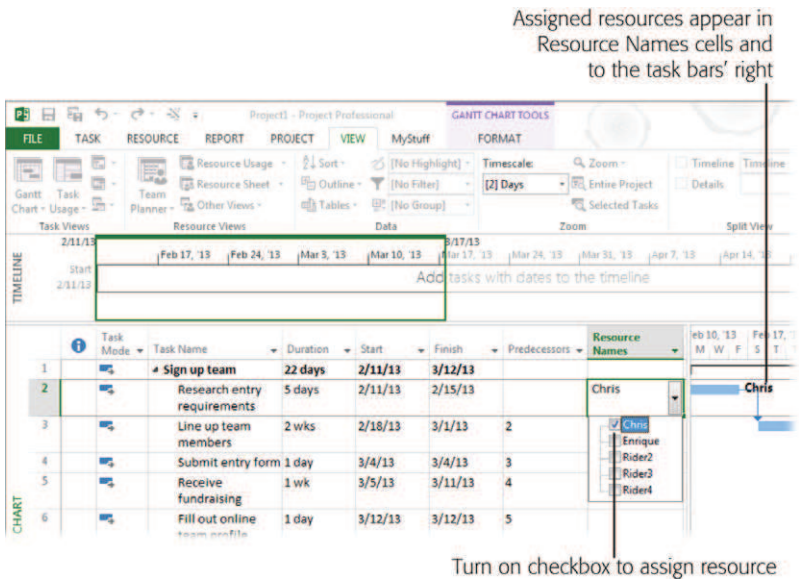

FIGURE 4-9
In addition to adding the name to the Resource Names cell, Project places the person's name (here, it's Chris) next to the task bar in the Gantt Chart timescale.

4. **Repeat steps 2 and 3 until you've assigned resources to all the tasks.**

   Or not. If you don't know who to assign and can't determine a generic resource, then leave the Resource Names field blank. You can come back and assign resources later.

NOTE After you assign resources to tasks in the sample project, you'll probably notice red icons in the Indicators column (the icon looks like a person). That icon represents a resource overallocation. You'll learn how to balance resource workloads to eliminate resource overallocations in Chapter 11.

You're now ready to proceed to the last step of the test drive.

Saving Your Project

The final step is saving your hard work so you can come back to it later:

1. **Choose File→Save As.**

   Backstage view's Save As screen appears.

2. **In the "Save and Sync" list, click Computer. Then, on the right side of the screen, click Browse.**

   The Save As dialog box opens.

3. **Navigate to the folder where you want to store the file. In the "File name" field, type a name, and then click Save.**

   Project saves the file in the location you specified.

As you work on your project, remember to save early and save often. Pressing Ctrl+S to save a Project file is so fast that you can make it a habit in no time. Chapter 5 explains other ways to save projects (page 92).

Congratulations! You've created your first project.