Microsoft®
Project 2016

FOR DUMMIES®

A Wiley Brand

Learn to:

- Manage costs and resources as you build a schedule from the ground up

- Set up your schedule to meet deadlines and stay on budget

- Keep all the members of the project team updated and informed

- Apply the project management tricks the professionals live by

Cynthia Snyder

Project 2016

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Published by: **John Wiley & Sons, Inc.,** 111 River Street, Hoboken, NJ 07030-5774, `www.wiley.com`

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Published simultaneously in Canada

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Introduction

*O*ver the years, project management has evolved from a discipline that began with index cards and yarn to one that now uses sophisticated analyses, techniques, projections, reporting, and time and money tracking. Project management software brings functionality to project management that makes planning and tracking the complex projects we undertake a little more manageable.

About This Book

Microsoft Office Project 2016, the most recent incarnation of the world's most popular project management software, offers a tremendous wealth of functionality to users. In the beginning, however, as with most software, mastering it can seem like a daunting process. It helps to understand how Project's features relate to what you do every day as a project manager.

In *Project 2016 For Dummies,* my goal is to help you explore Project 2016, providing information on relevant project management concepts while also offering specific procedures to build and track a Project schedule. More important, I offer advice on how to make all these features and procedures mesh with what you already know as a project manager to ease the transition to using Project 2016.

Here are some broad topics that I help you explore in this book. You can

- ✔ Start out in Project 2016 by entering tasks and dependencies, estimating durations, and working with views
- ✔ Work with resources, calendars, and costs
- ✔ Negotiate constraints, fine-tune the schedule, and set a baseline
- ✔ Gather data, analyze progress, take corrective actions, and report project status

Within this book, you may note that some web addresses break across two lines of text. If you're reading this book in print and want to visit one of these web pages, simply key in the web address exactly as it's noted in the text, pretending as though the line break doesn't exist. If you're reading this as

an e-book, you've got it easy — just click the web address to be taken directly to the web page.

Foolish Assumptions

I've made some assumptions about you, gentle reader. I figure that you're computer-literate and that you know how to use the mouse, the keyboard, software menus, and toolbars. I assume that you know how to use most common Windows functions (such as the Clipboard), as well as many basic software functions, such as selecting text and dragging and dropping items with the mouse.

I also assume that you have experience in managing projects. Whether you manage very large projects that are several years long or you have been a team lead on a project, the information in this book is more accessible if you have a background in project management.

I do *not* assume that you've used Project or any other project management software. If you're new to Project, you'll find what you need to get up to speed, including information on how Project works, finding your way around the Project interface, and building your first Project plan. If you've used an earlier version of Project, you'll find out about Project 2016 and all the new features it provides.

Icons Used in This Book

One picture is worth . . . well, you know. That's why *For Dummies* books use icons to provide visual clues to what's going on. Essentially, icons call your attention to bits of special information that may well make your life easier. The following icons are used in this book.

The Remember icon signals either a pertinent fact that relates to what you're reading at the time (but is also mentioned elsewhere in the book) or a reiteration of a particularly important piece of information that's, well, worth repeating.

Tips are the advice columns of computer books: They offer sage advice, a bit more information about topics under discussion that may be of interest, or ways to do things a bit more efficiently.

Warning icons spell trouble with a capital *T:* When you see a warning, read it. If you're not careful, you might do something at this point that could cause disaster.

Beyond the Book

In addition to the material in the print or e-book you're reading right now, this product also comes with some access-anywhere goodies on the web:

- ✔ **Cheat Sheet:** The cheat sheet has lots of shortcuts and other nifty tips and tricks. You can find the Cheat Sheet at `www.dummies.com/cheatsheet/project2016`.

- ✔ **Web Extras:** There is a web extra for every part in this book. Just follow the link to the Web Extras at `www.dummies.com/extras/project2016`.

- ✔ **Companion website:** This book is accompanied by a companion website that includes a project charter example and template, as well as several sample forms to help you plan and manage the schedule. To access this additional material, point your web browser to `www.dummies.com/go/project2016fd`.

Where to Go from Here

Take what you've learned in the project management school of hard knocks and jump into the world of Project 2016. When you do, you'll be rewarded with a wealth of tools and information that help you manage your projects much more efficiently.

Your first step might be to read the table of contents and find the sections of this book that you need — or simply turn to Chapter 1 and start reading.

Part I

Getting Started with Project 2016

In this part . . .

- ✔ Get familiar with the Ribbons and file tabs in Project 2016.
- ✔ See how to open a new project, enter tasks, and organize a project.
- ✔ Become skilled in working with summary tasks, milestones, and notes.
- ✔ Identify and arrange task dependencies to create a network diagram.
- ✔ Develop duration estimates for tasks.
- ✔ Customize Project views to meet your needs.

Chapter 1

Project Management, Project 2016, and You

W elcome to the world of computerized project management with Microsoft Project. If you've never used project management software, you're entering a brave new world.

Everything you used to do with handwritten to-do lists, word processors, and spreadsheets magically comes together in Project. However, this transition doesn't come in a moment, and you need a basic understanding of what project management software can do to get you up to speed. If you've used previous versions of Project, the overview in this chapter can refresh your memory and ease you into a few of the new Project 2016 features.

Even if you're a seasoned project manager, this chapter provides the foundation for how to work with Project.

Introducing Project Management

You probably handle projects day in and day out. Some are obvious, because your boss named them so that any fool would know that they're projects: Acme Drilling Project or Network Expansion IT Project, for example.

Others are less obvious, such as that presentation you need to put together for your director or that how-to guide on planting a vegetable garden in your backyard.

In this book, a project is defined as a unique venture undertaken to produce distinct deliverables, products, or outcomes. In the context of a project, a *deliverable* is a discrete component or item that meets the requirements of the project, such as a design document or a prototype. Projects have multiple variables; some are straightforward to define, and others aren't.

Using the information about variables in Table 1-1, you can say that *project management* is the practice of organizing, managing, and controlling project variables to meet the project outcomes and mission.

Table 1-1	Project Variables
Variable	*Description*
Defined	
Scope	The work needed to produce the deliverables, products, or outcomes for the project.
Time	The duration required to complete the project work.
Cost	The funds required to complete the project.
Resources	The people, equipment, material, supplies, and facilities needed to accomplish the project.
Undefined	
Change	The type, timing, number, and degree of modifications from a project baseline; can affect the project's scope, time, cost, or resources.
Risk	Uncertainty (associated with the scope, time, cost, resources, stakeholders, or environment) that can threaten the completion of any aspect of the project. Fortunately, risks can also present opportunities to accelerate the schedule or come in under budget.
Stakeholder	A person who can affect, or who is affected by, the project, either positively or negatively.
Environment	The location, culture, or organization in which the project occurs.

Defining project manager

Although understanding the role (let alone the usefulness) of certain managers isn't always easy, you can easily spot the value of a *project manager:*

This person creates the master plan for a project and ensures that it is implemented successfully. Along the way, the project manager uses technical, business, and professional skills to manage the completion of tasks and keep the schedule on track.

TIP

A truly professional project manager may have a degree in project management or a professional certification. For example, if you see the initials *PMP* beside a name, that person has been certified as a project management professional by the Project Management Institute, the leading global organization establishing project management standards and credentials, and offering educational and other types of resources in the field.

Identifying what a project manager does

A project manager isn't always the highest authority in a project. Often, that role belongs to whoever manages the project manager — including, possibly, members of senior management. Rather, the project manager is the person who ensures that aspects of the project are integrated and assumes hands-on responsibility for successes as well as failures.

TIP

In project management parlance, the person who champions (and funds) a project is the *project sponsor.* Although the project manager may work for the project sponsor, the project often also has a *customer* — outside the project manager's own company or within it — for whom the end product is produced.

The project manager manages these essential pieces of a project:

- ✔ **Scope:** Define and organize all work that needs to be done in order to meet the project mission and create deliverables.

- ✔ **Schedule:** This element, which you create by working with Project, includes the estimated steps and associated timing involved in reaching the project goal.

- ✔ **Resources:** Assign resources and track their activities on the project as well as resolve resource conflicts and build consensus. This part of the job also involves managing nonhuman resources such as materials and equipment.

- ✔ **Cost:** Estimate project costs and apply those estimates across the schedule to create a time-phased budget.

- ✔ **Communication:** Notify appropriate *stakeholders* (everyone who has a legitimate stake in its success) of the project status.

Creating a logical balance of the defined variables of scope, time, cost, and resources is at the core of a good project manager's job throughout the life of a project. Managing a project requires overseeing all its variables to ensure that the project goals are accomplished on time, within the limits of the budget, and using the assigned resources while also addressing risks, managing change, and satisfying stakeholders. Sound easy? Maybe not. However, one thing is certain: Having software to help organize and structure the work makes managing the project less daunting. That's where Project 2016 can help.

Introducing Project 2016

Project 2016, which is a scheduling tool, helps you organize, manage, and control defined variables, as identified in the preceding section. Project can also help you manage the undefined variables as well. In this book, I show you how to use Project to organize and manage your work, create realistic schedules, and optimize your use of resources.

Take a moment to look at some of the wonderful ways in which Project can help you organize, manage, and control your project. Now that you have, or your company has, bought Project (and this book) and you're investing your time to understand how to use it, you can enjoy these benefits:

- ✔ **Use built-in templates to get a head start on your project.** Project *templates* are prebuilt plans for a typical business project, such as commercial construction, an engineering project, a new product rollout, software development, or an office move.

- ✔ **Organize your project by phase, deliverable, geography, or any other method.** The outline format allows you to progressively elaborate the information in greater granularity depending on how detailed you want your plan to be.

- ✔ **Determine costs by your chosen method.** Examples are time period, resource type, deliverable, or cost type.

- ✔ **Organize resources by resource type.** Level your resources to avoid overallocation, or determine the impact on the duration of a task based on a change in resources.

- ✔ **Calculate costs and timing based on your input.** You can quickly calculate what-if scenarios to solve resource conflicts, maintain costs within your budget, or meet a deliverable deadline.

✔ **Use views and reports with the click of a button.** A wealth of information is now available to you — and those you report to. You no longer have to manually build a report on total costs to date to meet a last-minute request from your boss.

✔ **Manage complex algorithms** (that you couldn't even begin to figure out on your own) to complete such tasks as leveling resource assignments to solve resource conflicts, filtering tasks by various criteria, modeling what-if scenarios, and calculating the dollar value of work performed to date.

No matter how cool the tool, you have to take the time to enter meaningful data. Great software doesn't ensure great outcomes; it only makes them easier to achieve.

Getting to Know You

The file you create in Project is a Project *schedule model.* It's a model because it models what you think will happen given what you know at the time. However, for ease of reference, I just refer to it as a schedule. The schedule has a plethora of data about various aspects of your project as well as graphical representations of that information.

Some people refer to the project schedule as the project plan. In reality, the project plan *contains* the project schedule — plus information such as the budget, work breakdown structure, project life cycle, risk management plan, and many other ingredients necessary to effectively manage a project.

When you first open Project 2016, you see several options for starting a new project, as shown in Figure 1-1.

You can open a blank project, create a new project from an existing project, or create a new project by importing information from Microsoft Excel or SharePoint. You can also take advantage of premade templates for common project types, such as these examples:

✔ Agile project management

✔ Software development

✔ New product launch

✔ Residential construction
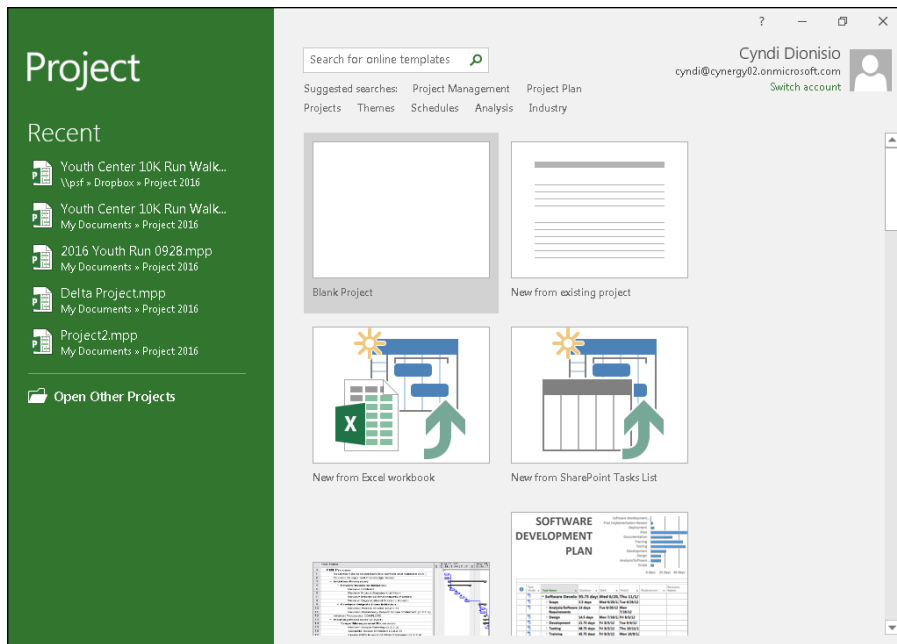
If you don't see the template you need, you can search for online templates by entering keywords in the search box at the top of the page. For purposes of this discussion, I assume that you're starting with a new, blank project.

When you open a new project, you see the Quick Access toolbar, a few file tabs, the Ribbon, the Timeline, a pane with a sheet and a chart, and the status bar, as shown in Figure 1-2.

In Figure 1-2, you see Gantt Chart view. (I discuss views in Chapter 6.) For now, here's an overview of the major elements in Project (refer to Figure 1-2):

- ✔ **Quick Access toolbar:** The Quick Access toolbar, above and to the left of the Ribbon, is onscreen at all times and in all views.

- ✔ **File tab:** The file tabs organize commands based on a particular type of activity. For example, if you're working with resources, you'll likely find the command or setting you want on the Resource tab.

- ✔ **Ribbon:** The Ribbon provides easy access to the most commonly used tools and commands. When you change tabs, the available tools on the Ribbon change.

- ✔ **Group:** A *group* is a set of related commands or choices on the Ribbon. For example, to format text in a cell on the sheet, first find the formatting information you need in the Font group on the Task tab of the Ribbon.

Quick Access Toolbar   Tool Group   Timeline
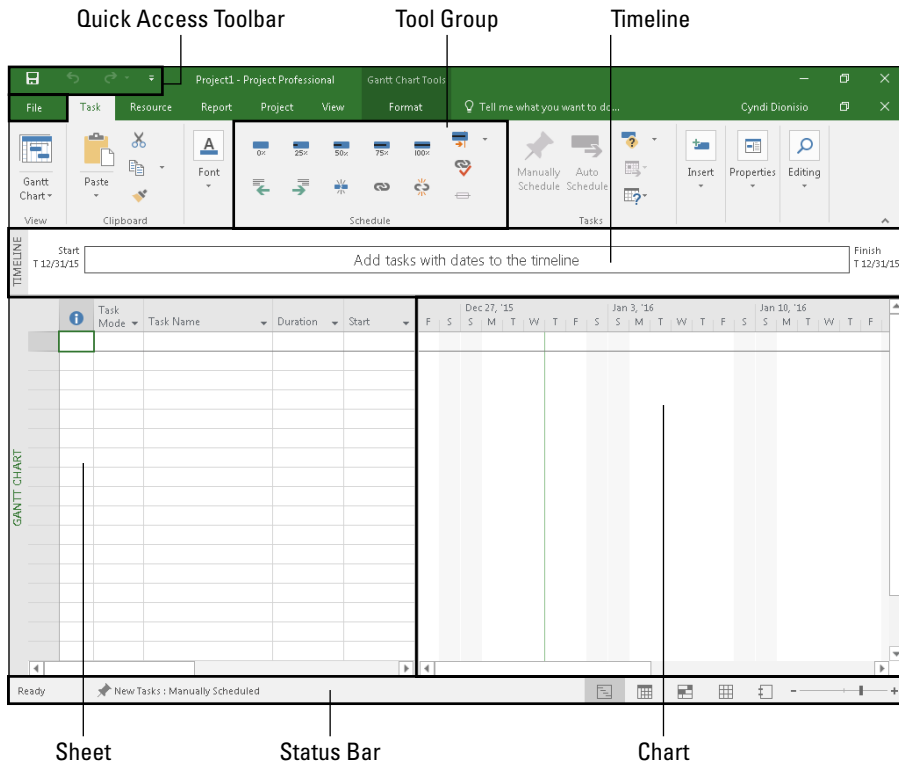
Figure 1-2:
A blank
project.

Sheet   Status Bar   Chart

- ✔ **Timeline:** The Timeline provides an overview of the entire project — a graphical view of the project from start to finish. You have the option of showing the Timeline or hiding it.

- ✔ **Sheet:** Similar to a spreadsheet, the sheet displays the data in the project. The default fields change depending on the file tab you're working in. You can customize the columns and fields in the sheet to meet your needs.

- ✔ **Chart:** The *chart* is a graphical depiction of the information on the sheet. Depending on the view or file tab you see, you might also see a bar chart depicting the duration of a task or a resource histogram showing resource usage.

- ✔ **Status bar:** The status bar, at the bottom of the Project window, has information on views and zoom level on the right, and information on how newly entered tasks are scheduled on the left.

Navigating file tabs and the Ribbon

Each of the seven file tabs in Project shows different options on the Ribbon. In this section, I provide an overview of each file tab and of the Ribbon and the Quick Access toolbar. I elaborate on various functions and commands on the Ribbon in later chapters.

The first tab on the left, the File tab, stands out in bright green. After you click this tab, you see the menu bar down the left side, as shown in Figure 1-3.
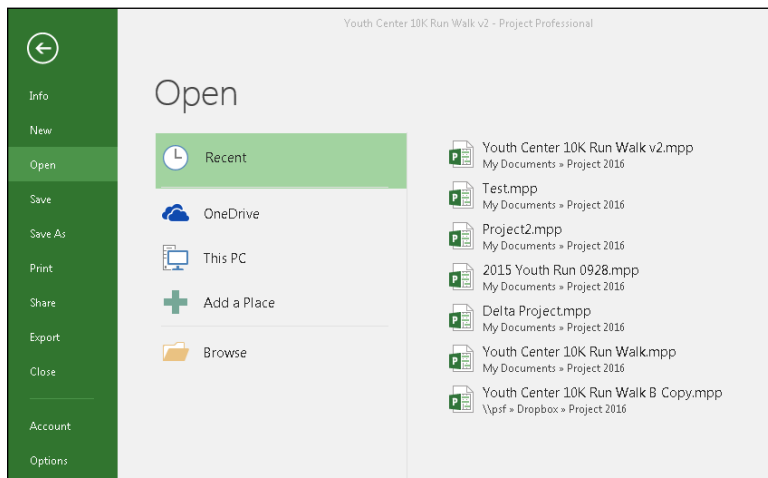
Figure 1-3:
The File tab menu.

The File tab puts you into Backstage view, where you find choices for working with files and changing options. For example, you can create a new project, open an existing project, save your current project, or print your current project. From Backstage view, you can also share, export, or close your current project. If you're feeling adventurous, you can even customize the Ribbon and the Quick Access toolbar.

The Task file tab is where you spend a lot of your time in Project. As you can see in Figure 1-4, on the far left side of the Task file tab is the View. The default view is Gantt Chart view. It shows the task information and the chart that displays a bar chart representing the duration of each task.
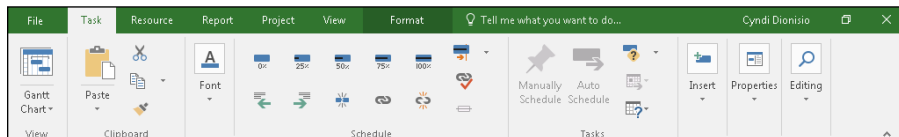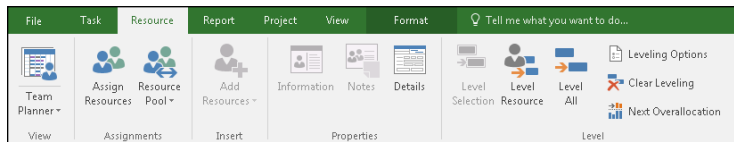
Figure 1-4:
The Task file tab.

In addition to Gantt Chart, you can choose these views:

Calendar	Network Diagram
Resource Sheet	Resource Usage
Resource Form	Resource Graph
Task Usage	Task Form
Task Sheet	Team Planner
Timeline	Tracking Gantt

You may recognize some of the groups of commands on the Task file tab. For example, the Clipboard and Font groups are standard in many Windows applications. Other groups, such as Schedule and Tasks, are specific to a particular view — in this case, Gantt Chart view. Look for the deep green Gantt Chart Tools Format tab when you see the Task file tab in Gantt Chart view. In other views, you see different tools above the Format tab.

The Resource file tab, shown in Figure 1-5, helps you organize resources, such as adding, assigning, and leveling resources across tasks. In Project, resources include people, equipment, material, locations, and supplies. You can assign costs and calendars to resources. (I talk more about resources in Chapter 7.)

Figure 1-5: The Resource file tab.

The Report file tab, shown in Figure 1-6, is new in Project 2016. You can create reports on resources, costs, or progress, or put them all together in a dashboard report. You can create a report that compares your current status to previous versions of your project. I tell you all about reports, including how to customize and export your reports, in Chapter 18.


Figure 1-6: The Report file tab.
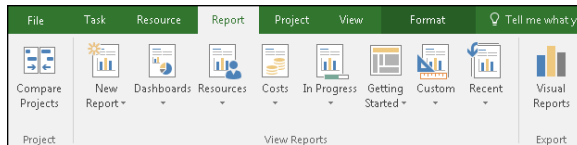
On the Project file tab, you find commands to help you manage your project as a whole, rather than by task or resource. For example, you can enter or change the project start and finish dates and the baseline. If you need to change working time or add a subproject, this is the place to do it. Figure 1-7 shows the Project file tab.
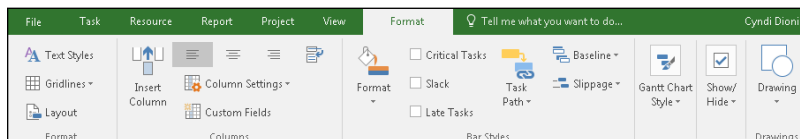
Figure 1-7:
The Project file tab.
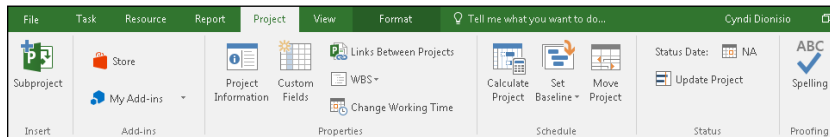
The View file tab lets you see some standard views. Examples are Task views, such as Gantt Chart, and Resource views, such as Resource Usage or Team Planner. You can use the View file tab to look at information sorted by date or a specific period. You can see the View file tab in Figure 1-8.

Figure 1-8:
The View file tab.
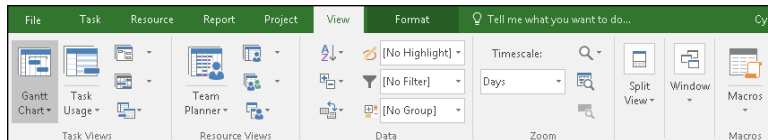
The Format file tab has commands that help you present your schedule, such as font styles, page breaks, and column settings. You can see the options in Figure 1-9.

Figure 1-9:
The Format file tab.

TIP

You can either show or hide the Ribbon to produce more real estate on your screen. The pushpin to the far right of the Ribbon pins it to your display, keeping it open and visible (as shown in Figure 1-10). The upward-facing arrow (^) on the far-right side hides the Ribbon. If your Ribbon is closed, click on any tab, look in the lower-right corner of the Ribbon and you will see a pushpin. Click on the pushpin to keep your Ribbon open. You can also press Ctrl+F1 to show or hide the Ribbon.