Chapter 1

Introducing Google SketchUp

I t would be interesting to determine the number of great ideas that started out as rough sketches on a restaurant napkin. If you've ever had a brilliant idea, you know that they don't always come at the most convenient times. When ideas come, you really need to quickly jot them down and sketch them out or you'll likely forget them before they can be captured.

Once an idea is captured on a napkin, a scrap of paper, or scratched into the nightstand, the next step is to flesh out the idea into something more substantial. That is where SketchUp comes in. SketchUp is a program that enables anyone, regardless of his or her drawing ability, to quickly and easily create a realistic 3-D drawing. Finally, you can throw away that folder full of napkins and paper scraps that is cluttering your desk.

Designing with SketchUp

SketchUp is quite unique compared to other graphics packages. It works similarly to sketching your ideas on a simple piece of paper, which makes it accessible to all users. I have sketched on my share of paper scraps, but it is easier to keep them organized in SketchUp than littering my study. My wife has learned not to throw out any papers that have odd scribbles on them no matter how strange, but I still end up losing the most important scraps unless I get them into my computer.

Because SketchUp is easy to use, you won't be spending all of your time learning how to use the software; instead you'll be able to start getting your idea into a project. From the very first couple of lines, you should feel right at home with the software. SketchUp is designed to be easy to use. To create a line, you simply click and drag with the mouse; the software automatically makes it straight and attaches it to other lines in the project. Lines can be made into surfaces that can be pushed and pulled to create 3-D objects. The simplicity of the software makes it extremely quick to recreate any of your 2-D sketches into 3-D objects.

SketchUp has the experience of years of designers packed into its design, and with these smarts it can often guess pretty closely what you're trying to do. It also automates many of the manual processes for you, leaving you free to play with the design.

SketchUp was initially embraced by the architecture and construction industries, but over time it has become an indispensable tool for product designers, interior designers, landscape and gardening designers, urban planners, film and theater directors, inventors, game designers, and many other professions where visualizing objects is key.

Understanding the Different Versions of SketchUp

What could be better than a unique graphics package like SketchUp? How about two versions of SketchUp; and better than that, one of those versions is free. Google SketchUp is available as a free download from the Google Web site.

For users who need a little more functionality, a professional version is also available. SketchUp Pro has all the features found in the standard version and includes many additional advanced features. There is a trial version of SketchUp Pro available that you can download and try out. You can find the trial version at `www.sketchup.com`.

Google SketchUp

Google SketchUp is the standard version of the software. It can be downloaded for free from the SketchUp Web site at `www.sketchup.com.` The current version is 7. This version includes the features for building, viewing, and modifying 3-D content. It also allows you to apply materials to objects and even upload your creation to Google Earth. Figure 1.1 shows a product description page, which can be accessed by going to `http://sketchup.google.com/product_suf.html`

ON the CD-ROM   **The standard version of Google SketchUp 7 is also available on the book's CD.**

FIGURE 1.1

Google SketchUp standard can be downloaded from the Web.

Google SketchUp Pro 7

The Pro version of SketchUp can be bought online. Making an online purchase gives you a license to use the software and gives you access to product support. The Pro package adds the ability to import and export SketchUp models to a number of different formats.

The Pro version also ships with LayOut, a separate software package that lets you combine 3-D models with 2-D images to create interactive presentations. These finished presentations can be exported as PDF files for distribution on the Web.
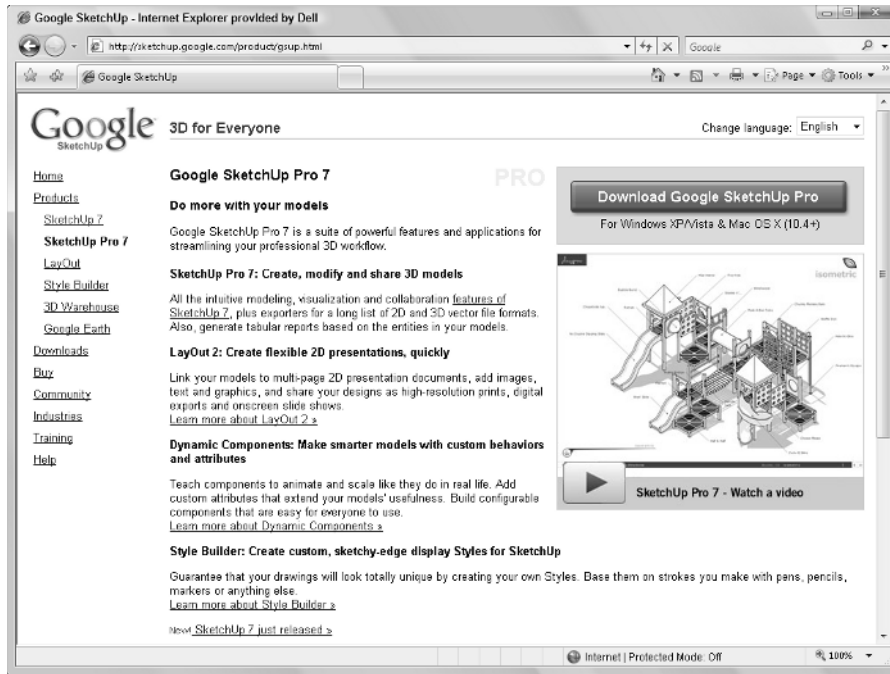
CROSS-REF **More information on LayOut is covered in Chapters 24 and 25.**

Google SketchUp Pro 7 trial versions

If you want to try the Pro version, a trial version is available on this book's CD, or you can download it from the SketchUp Web site at http://sketchup.google.com/product_sup.html, as shown in Figure 1.2. The trial version works for eight hours after being installed.

FIGURE 1.2

An eight-hour trial version of Google SketchUp Pro is available on the Web.

Getting Help

There are several help resources available for learning SketchUp. This book is intended to be not only a complete reference, but a resource that offers multiple examples and step-by-step tutorials to help you get up to speed with the software.

Many additional help features are available including the Learn panel in the Welcome dialog box, the Help Center, the online Help pages, and several online videos.

Learn panel

The Learn panel in the Welcome to SketchUp dialog box, shown in Figure 1.3, is a panel that shows simple videos of specific SketchUp tasks. Once a video is done, you can replay the video or connect online to view more videos.
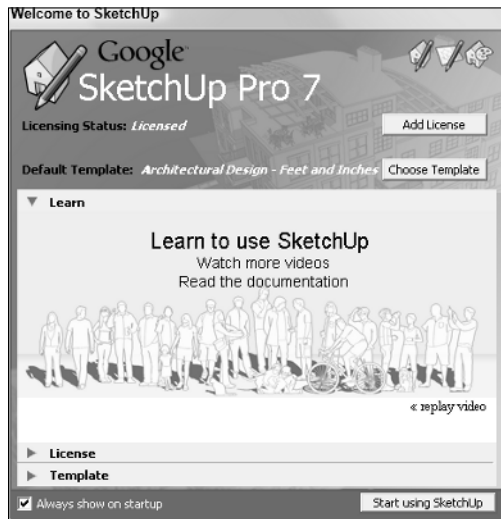
There is also an Always show on startup check box at the bottom of the dialog box that you can disable to hide this dialog box when starting up.

> **TIP** Because there aren't a ton of video clips to watch, I suggest you scroll through them once and then disable the Always show on startup option so this dialog box doesn't get in your way.

FIGURE 1.3

The Learn panel in the Welcome dialog box is a good place to start when learning to use SketchUp.

You can close the Welcome dialog box by clicking the Start Using SketchUp button in the lower-right corner of the dialog box. If you ever want to revisit this dialog box, you can open it again by choosing Help➪Welcome to SketchUp.

Quick Reference Card

The Quick Reference Card, shown in Figure 1.4, can be accessed from the Additional Resources tab in the Learning Center dialog box, from Help➪Quick Reference Card, or by double-clicking the QuickReferenceCard.pdf file located in the Resource folder where SketchUp is installed. Selecting any of these links or menus opens the Quick Reference Card within Adobe Reader where you can print it.
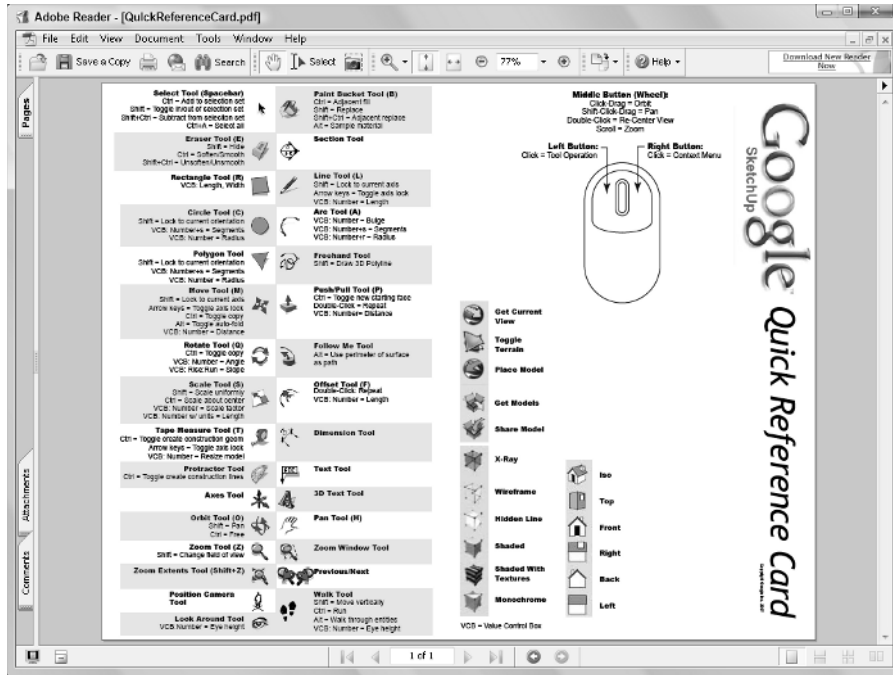
The Quick Reference Card shows the names of all the various tool icons and explains how the Ctrl, Alt, and Shift keys can be used with each tool. It also shows how the three-button mouse can be used to navigate the current scene. The real benefit of the Quick Reference Card is when it is printed and posted next to your computer for quick reference.

> **TIP** There is also a Quick Reference Card for LayOut 2, which is located in the LayOut folder where SketchUp 7 is installed.

The Quick Reference Card gives each tool icon a name and shows you how to navigate with the mouse.

Help Center

Choosing Help ➪ Help Center opens the SketchUp Help pages within a web browser. The Help pages are organized by categories that are listed in a panel to the left. The Help pages also make extensive use of blue links to jump to corresponding Help pages. Using the browser's navigation arrows, you can move forward and backward through the visited pages. You can also bookmark specific pages.

One of the drawbacks of the Help pages is that there isn't a way to search all categories for information. You can use the browser's search feature to search within the current page, but that is the extent of the search capability. You can do a search through multiple categories using the Help Center.

The Help Center also offers answers and help using a question-and-answer format. There is also a search feature for finding help to specific questions. The Help Center also includes an online version of the SketchUp Help pages complete with Table of Contents, Index, and Search features, as shown in Figure 1.5. There is also access to SketchUp Support, which requires a valid license number to access, and links to the SketchUp Forum.
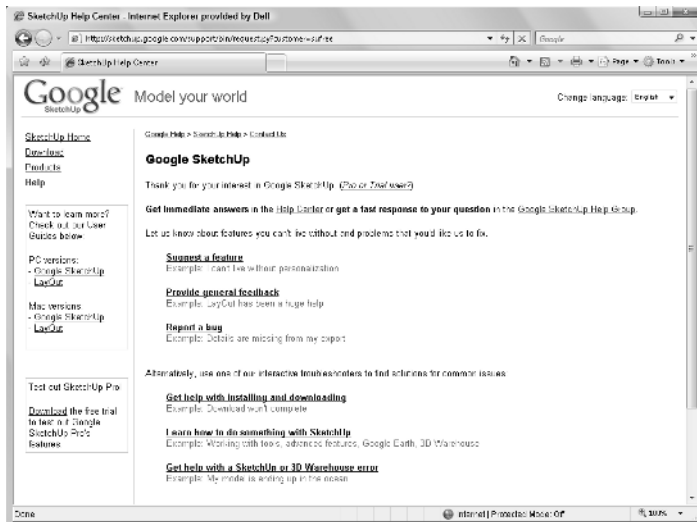
The Online Help Pages include the ability to search for specific features.

You can provide feedback to the SketchUp team using the Help ➪ Contact Us menu. This menu opens a Web browser and takes you to an online Web page, shown in Figure 1.6, where you can take a product survey, provide feedback, or report a bug.

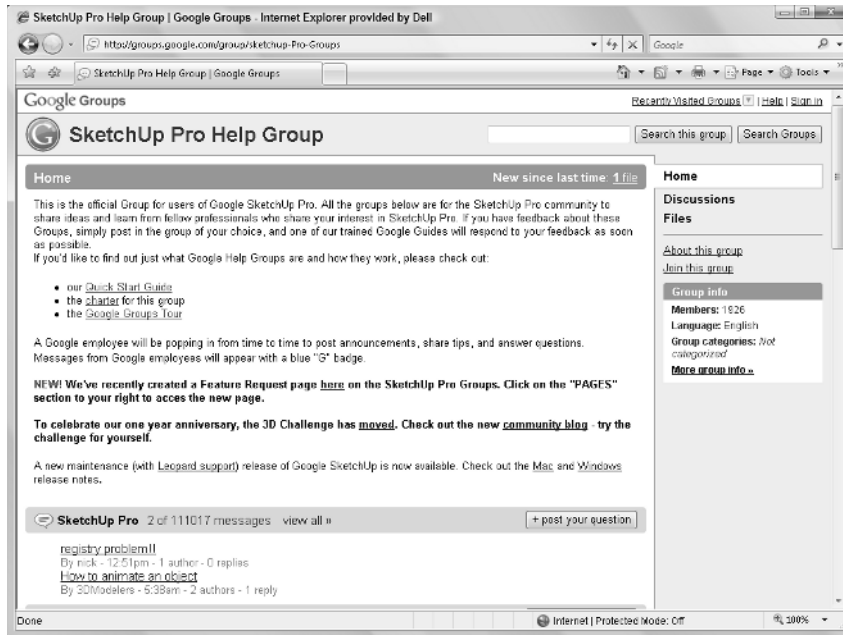You can contact the SketchUp team online to report problems or provide feedback.

The SketchUp forum

If you have a specific question, the online forum can be searched. This forum lets you post questions for experienced users that can help you if you get stuck. There are separate Help Groups for SketchUp and SketchUp Pro, as shown in Figure 1.7.

FIGURE 1.7

The SketchUp help groups provide a community forum for getting answers from experienced users.
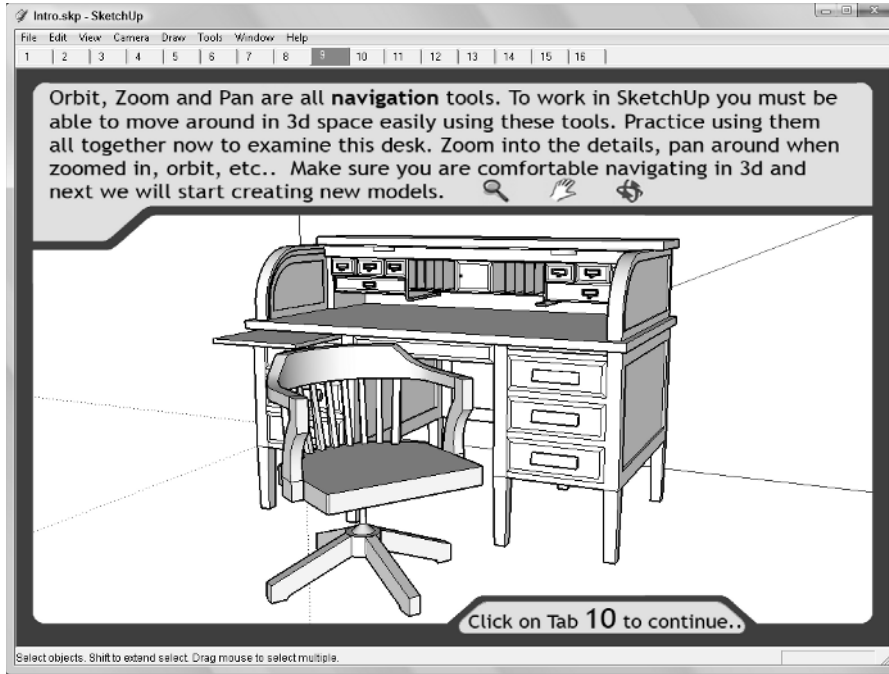

Self-Paced Tutorials

If you learn best by doing, then you're probably a visual learner and you'll love the tutorial examples sprinkled throughout this book. The SketchUp Help Center also has some basic tutorials.

The Introduction tutorial, shown in Figure 1.8, uses 16 pages to explain how to navigate the scene, how to draw, and how to push/pull rectangles. You can navigate the tutorial pages by clicking the tabs located at the top of the interface.

The Self-Paced Tutorials provide a step-by-step guide to specific aspects of the software.

Help Center also has links where you can download and install several additional tutorials from the SketchUp Web site at `http://sketchup.google.com`. Each of these tutorials is saved as an SKP file.

Accessing other tutorials

If you search for tutorials in the 3D Warehouse, you'll find a huge number of links to step-by-step tutorials produced by existing SketchUp users. These tutorials walk you through a diverse number of tasks and show you how to model everything from airplanes and teddy bears to submarines and chess sets.

CROSS-REF **To learn how to search for items within the 3D Warehouse, see Chapter 15.**

Viewing the video tutorials

Help Center also includes many video tutorials. These tutorials open a Web browser with a page of videos on the SketchUp Web site, as shown in Figure 1.9. The page contains three categories of

video tutorials; the first covers features new to SketchUp 7, the second covers modeling for Google Earth, and the third covers videos for the previous edition of SketchUp. Each category has multiple videos and each video can be streamed or downloaded.

NOTE **If you download the latest videos for viewing locally on your system, you need to also download and install the EnSharpen codec in order to view the videos.**

FIGURE 1.9

The online video tutorials explain and show you different aspects of the software.

Instructor window

When learning the various SketchUp tools, the Instructor window can be helpful. It is accessed using the Window⇨Instructor menu. This window, shown in Figure 1.10, explains all the details about the current tool. If a different tool is selected, then the Instructor window is updated to show the features of the new tool.

For each tool, the Instructor window shows how to use the tool, explains any modifier keys, such as Shift, Ctrl, and Alt, and includes links for getting more information on advanced operations.

The Instructor window includes detailed information about the selected tool.

Summary

This chapter serves as a brief introduction to the SketchUp software, but if you have this book, then you are probably already sold on the software and have a desire to learn how to use it.

This chapter covered the following topics:

- How SketchUp is unique
- Available versions
- Help resources

The next chapter looks at the SketchUp interface, how the software works, and how to use the various buttons.