

Tutorial 2:

Customizing Microsoft Windows 7

A Guide to this Instructor's Manual:

We have designed this Instructor's Manual to supplement and enhance your teaching experience through classroom activities and a cohesive tutorial summary.

This document is organized chronologically, using the same heading in <u>blue</u> that you see in the textbook. Under each heading you will find (in order): Lecture Notes that summarize the section, Figures and Boxes found in the section (if any), Teacher Tips, Classroom Activities, and Lab Activities. Pay special attention to teaching tips, and activities geared towards quizzing your students, enhancing their critical thinking skills, and encouraging experimentation within the software.

In addition to this Instructor's Manual, our Instructor's Resources CD also contains PowerPoint Presentations, Test Banks, and other supplements to aid in your teaching experience.

For your students:

Our latest online feature, CourseCasts, is a library of weekly podcasts designed to keep your students up to date with the latest in technology news. Direct your students to http://coursecasts.course.com, where they can download the most recent CourseCast onto their mp3 player. Ken Baldauf, host of CourseCasts, is a faculty member of the Florida State University Computer Science Department, where he is responsible for teaching technology classes to thousands of FSU students each year. Ken is an expert in the latest technology and sorts through and aggregates the most pertinent news and information for CourseCasts so your students can spend their time enjoying technology, rather than trying to figure it out. Open or close your lecture with a discussion based on the latest CourseCast.

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Tutorial Objectives

Students will have mastered the material in this tutorial when they can:

- Select a desktop theme, desktop background, and window colors
- Examine mouse properties
- Use the ClearType Text Tuner
- Choose special visual effects
- Customize the Start menu

- Customize the taskbar and notification area
- Create and customize taskbar toolbars
- Adjust resolution, color depth, and refresh rate
- Adjust DPI scaling settings
- Evaluate power management features

WIN 80 Setting up Your Computer

LECTURE NOTES

• Show how to set up a computer.

TEACHER TIP

Explain to students that when they switch their computers to Web style, they enable single-click activation.

Point out to students that if Windows does not display a Computer icon, they can open the Start menu, right click Computer, and then click Show on Desktop.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - True/False: All icons must be double-clicked. (Answer: False)
 - True/False: When you switch your computer to Web style, it enables single-click activation. (Answer: True)
- 2. Group Activity: Have students open up their computers, display the Computer icon, if it is not already, and enable single-click activation.

WIN 80 Customizing the Graphical User Interface

LECTURE NOTES

• Show how to customize the graphical user interface.

BOXES

- TIP: You can save a PowerPoint slide as a GIF, JPEG, PNG, or TIFF image. (WIN 83)
- TIP: If you choose and apply an unsaved theme, then you can right-click the theme, and save the theme under another name. (WIN 85)
- REFERENCE: Customizing a Theme's Desktop Background (WIN 85)
- TIP: If you point to a color, Windows 7 displays a ToolTip with the name of the color. (WIN 86)
- REFERENCE: Adjusting Window Color Settings (WIN 88)
- INSIGHT: Enhance an Office's Security with a Screen Saver (WIN 88)
- REFERENCE: Saving a Theme and Creating a Theme Pack (WN 89)

FIGURES

• Figure 2-1, Figure 2-2, Figure 2-3, Figure 2-4, Figure 2-5, Figure 2-6

TEACHER TIP

Point out to students that Windows 7 provides users a variety of customizing options.

Explain to students that Windows 7 provides three types of themes—Aero themes, basic themes, and high-contrast themes.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - A ______ is an image represented by a pattern of pixels, or picture elements. (Answer C)
 - A. figure
 - B. pixel
 - C. bitmapped graphic
 - D. file extension
 - True/False: PNG stands for Portable Network Graphic. (Answer: True)
- 2. Critical Thinking:
 - What are the differences between Windows Aero theme, basic theme and high-contrast theme? Which theme do students have experience with? Which theme do they prefer and why?

LAB ACTIVITY

Have students experiment with the themes, color schemes, taskbar colors, customizing the elements of the graphical user interface, and the desktop. Have them evaluate their choices. Should they consider the place of employment or school setting when customizing? When they are finished, have them share their customized themes with the class.

WIN 90 Changing Mouse Properties

LECTURE NOTES

• Show how to change mouse properties.

BOXES

- REFERENCE: Changing Mouse Properties (WIN 96)
- REFERENCE: Using the ClearType Text Tuner (WIN 100)
- TIP: You can also use the Windows+Break keyboard shortcut to open the System window. (WIN 102)
- PROSKILLS: Problem Solving: Balancing Appearance and Performance (WIN 104)
- REFERENCE: Adjusting Visual Effects (WIN 105)

FIGURES

• Figure 2-7, Figure 2-8, Figure 2-9, Figure 2-10, Figure 2-11, Figure 2-12, Figure 2-13, Figure 2-14, Figure 2-15, Figure 2-16, Figure 2-17, Figure 2-18, Figure 2-19, Figure 2-20

TEACHER TIP

Explain to students that when they customize their mouse properties, they can work more effectively and make the mouse more accessible and easier to use.

Point out to students that a Snap To option moves the mouse pointer to the default button in a dialog box.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - True/False: The mouse pointer disappears when you start typing and reappears when you move the mouse. (Answer: True)
 - A(n) ______ is a mouse pointer shape that does not change. (Answer: B)
 - A. animated cursor
 - B. static cursor
 - C. mouse pointer scheme
 - D. keyboard
- 2. Group Activity: Have students work at their own computers and select a mouse pointer scheme for their mouse. First they should choose one of the two available mouse pointers: a static cursor, or an animated cursor. Once they have decided, have them apply a mouse pointer scheme, which consists of a set of pointer shapes for common mouse operations. Have them share their selections with the rest of the class.

LAB ACTIVITY

Have students customize their mouse by modifying the mouse button configuration, its double-click speed, its pointer speed, its pointer shapes, and its wheel scrolling capabilities. Once they have applied or changed these settings, have them test out their choices. Do they like what they chose? Do they want to modify a choice? Have them share their preferences with the rest of the class.

WIN 108 Customizing the Start Menu

LECTURE NOTES

• Show how to customize the Start Menu

BOXES

- TIP: you can also right-click the background of an open Start menu and select Properties. (WIN 109)
- REFERENCE: Customizing the Start Menu (WIN 112)

FIGURES

• Figure 2-21, Figure 2-22, Figure 2-23, Figure 2-24

TEACHER TIP

Explain to students that the Start menu is the central place for locating all property installed applications, games, and utilities.

Point out to students that because the Start menu provides them with access to all the software installed on their computers, it is important for them to be familiar with all the options for customizing it.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - True/False: By default, Windows 7 stores and displays a list of recently opened programs in the start menu. (Answer: True)
 - True/False: Windows 7 temporarily highlights newly installed programs on the Start menu in a different color. (Answer: True)

2. Group Activity: Ask students to customize their Start menu. This should include customizing their computer's privacy options, power action button, start menu items, icon size, and context menu settings.

WIN 112 Customizing the Taskbar and Notification Area

LECTURE NOTES

• Demonstrate how to customize the taskbar and notification area.

BOXES

- INSIGHT: Multitasking with the Taskbar (WIN 113)
- TIP: You can also lock and unlock the taskbar directly from the Taskbar shortcut menu. (WIN 114)
- PROSKILLS: Problem Solving: Using the Notification Area to Stay on Top of Potential Problems (WIN 116)
- REFERENCE: Customizing the Taskbar (WIN 118)
- REFERENCE: Displaying and Creating Taskbar Toolbars (WIN 122)

FIGURES

• Figure 2-25, Figure 2-26, Figure 2-27, Figure 2-28, Figure 2-29

TEACHER TIP

Point out to students that by default, the taskbar is locked so they cannot move or resize it.

Explain to students that although the taskbar is always visible, they can hide it to display more of the desktop or the window where they are working.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - True/False: To move or resize the taskbar, it must be unlocked. (Answer: True)
 - True/False: By default, Windows 7 automatically groups taskbar buttons for windows opened with the same program. (Answer: True)
- 2. Critical Thinking: Have students break off into groups of three and have them discuss how they might customize a taskbar on a computer that is primarily used for PowerPoint presentations, video presentations, slide shows, and graphic illustrations. What decisions were made and why? Have the groups share their findings with the rest of the class.

WIN 126 Adjusting Your Video Display Settings

LECTURE NOTES

• Show how to adjust video display settings.

BOXES

- TIP: A change in resolution affects all other users of the same computer. (WIN 129)
- REFERENCE: Changing the Screen Resolution (WIN 129)
- TIP: If your computer supports Windows aero, then you will need to keep your color depth setting at 32 bits. (WIN 131)
- REFERENCE: Changing the Color Depth Setting (WIN 131)
- PROSKILS: Decision Making: Purchasing a Computer with Dedicated Graphics Memory (WIN 132)
- REFERENCE: Checking Video Display Settings (WIN 134)
- TIP: You can click Display in the Address bar to access the DPI scaling settings. (WIN 135)
- REFERENCE: Adjusting the DPI Setting (WIN 137)
- INSIGHT: Using Accessibility Features (WIN 137)

FIGURES

• Figure 2-30, Figure 2-31, Figure 2-32, Figure 2-33, Figure 2-34, Figure 2-35, Figure 2-36, Figure 2-37, Figure 2-38

TEACHER TIP

Explain to students that one of the most important characteristics of their monitors is its resolution, which refers to the sharpness of the image that appears on their monitor.

Point out to students that the native resolution is the best resolution for their monitor and is set by the manufacturer.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - True/False: A higher resolution means that the video display adapter displays more pixels. (Answer: True)
 - The ______ of an image is a calculated value derived from the screen resolution by dividing the number of pixels across the monitor by the number of pixels from top to bottom. (Answer: A)
 - A. aspect ratio
 - B. native resolution
 - C. video display
 - D. screen resolution
- 2. Group Activity: Have students work in pairs and have them adjust the video display settings for their monitors. They can adjust the resolution, color depth, and refresh rate.

WIN 138 Using Power Management

LECTURE NOTES

• Demonstrate how to use power management.

BOXES

- TIP: Your computer's manufacturer may provide additional power plans. (WIN 138)
- INSIGHT: Strategy for Identifying a Monitor's Power State (WIN 143)
- TIP: Mobile users can find more information by searching for "Conserving battery power" in Help and Support. (WIN 143)
- REFERENCE: Managing Power Management Settings (WIN 144)

FIGURES

• Figure 2-39, Figure 2-40, Figure 2-41, Figure 2-42, Figure 2-43

TEACHER TIP

Point out to students that Windows 7 supports Advanced Configuration and Power Interface (ACPI), which is a set of power-management specifications developed by Microsoft, Intel, and Toshiba that allow the operating system to control the amount of power that each device receives.

Explain to students that Windows 7 has three power plans, balanced, power saver, and high performance, to choose from.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - True/False: Balanced is the recommended power plan for both desktop and mobile computers. (Answer: True)
 - The _____ plan conserves power and maximizes battery life on mobile computers, even though it results in reduced performance. (Answer: D)
 - A. balanced
 - B. power management
 - C. high performance
 - D. power saver
- 2. Critical Discussion: Have students discuss Windows 7 three power plans: balanced, power saver, and high performance. Which power plan would be best suited when taking your mobile computer on the go? When it is being used at home? When you are multi-tasking or using it for presentations? Have students share their thoughts and why they chose the plan they did.

WIN 145 Restoring Your Computer's Settings

LECTURE NOTES

• Discuss how to restore your computer.

TEACHER TIP

Explain to students how to restore the computer to its original settings.

Point out to students that there is a difference in restoring their computers to its original settings and restoring it to its original state.

CLASSROOM ACTIVITIES

- 1. Quick Quiz:
 - True/False: After restoring your computer, you can log off the computer or turn it off. (Answer: True)
 - True/False: You can remove the CPU Meter gadget from the desktop. (Answer: True)
- 2. Class Discussion: Have students discuss why they might need to restore their computers to their original settings. What problems might they incur when restoring their computers?

End of Tutorial Material

- **Review Assignments:** Review Assignments provide students with additional practice of the skills they learned in the tutorial using the same tutorial case, with which they are already familiar.
- Case Problems: A typical NP tutorial has four Case Problems following the Review Assignments. Short tutorials can have fewer Case Problems (or none at all); other tutorials may have five Case Problems. The Case Problems provide further hands-on assessment of the skills and topics presented in the tutorial, but with new case scenarios. There are four types of Case Problems:
 - **Apply**. In this type of Case Problem, students apply the skills that they have learned in the tutorial to solve a problem.
 - **Create**. In a Create Case Problem, students are either shown the end result, such as a finished Web site, and asked to create the document based on the figure provided, or students are asked to create something from scratch in a more free-form manner.

- Challenge. A Challenge Case Problem involves three or more Explore steps. These steps challenge students by having them go beyond what was covered in the tutorial, either with guidance in the step or by using online Help as directed.
- **Research**. In this type of Case Problem, students need to go to the Web to find information that they will incorporate somehow in their work for the Case Problem.
- **ProSkills Exercises:** This feature is new for Office 2010 and Windows 7. ProSkills exercises integrate the technology skills students learn with one or more of the following soft skills: decision making, problem solving, teamwork, verbal communication, and written communication. The goal of these exercises is to enhance students' understanding of the soft skills and how to apply them appropriately in real-world, professional situations that also involve software application skills. ProSkills exercises are offered at various points throughout a text, encompassing the concepts and skills presented in a standalone tutorial or a group of related tutorials.

Glossary of Key Terms

- ACPI (Advanced Configuration and Power Interface) (WIN 138)
- animated cursor (WIN 93)
- aspect ratio (WIN 125)
- Auto-hide (WIN 107)
- behaviors (WIN 107)
- Bitmap Image (WIN 82)
- bitmapped graphic (WIN 82)
- cathode-ray tube (CRT) (WIN 132)
- ClearType (WIN 97)
- ClearType Text Tuner (WIN 79)
- color depth (WIN 124)
- desktop composition (WIN 103)
- DPI scaling setting (WIN 125)
- font (WIN 96)
- font-smoothing (WIN 97)
- High Color (WIN 130)
- hue (WIN 78)
- jaggie (WIN 97)
- Joint Photographic Experts Group (JPG or JPEG) (WIN 82)
- Jump Lists (WIN 106)
- lossless compression (WIN 82)
- lossy compression (WIN 82
- mouse pointer scheme (WIN 93)
- native resolution (WIN 126)
- palette (or color palette) (WIN 82)
- pixel (WN 82)
- PNG image (Portable Network Graphics)

(WIN 83)

- point (WIN 96)
- point size (WIN 96)
- Portable Network Graphics (PNG) (WIN 83)
- power action buttons (WIN 106)
- Power icon (WIN 125)
- Power Saver (WIN 125)
- primary mouse button (WIN 90)
- refresh rate (WIN 132)
- resolution (WIN 124)
- saturation (WIN 78)
- screen font (WIN 96)
- screen saver (WIN 79)
- secondary mouse button (WIN 90)
- Sound theme (WIN 79)
- Stair-step effect (WIN 97)
- static cursor (WIN 93)
- style (WIN 96)
- suggested sites (WIN 113)
- taskbar tools (WIN 107)
- theme (WIN 78)
- Theme Pack (WIN 79)
- TIFF (Tag Image File Format (WIN 83)
- True Color (WIN 130)
- typeface (WIN 96)
- Web Slice (WIN 113)
- weight (WIN 96)