

Windows Operating Systems

Many of the concepts and procedures introduced in this chapter are compatible with other versions of the Windows operating system. Chapters on the Windows 95 and Windows 98 operating systems are available at lpdatafiles.com.



William H. Gates III
1955 –

In 1975, while a freshman at Harvard University, Bill Gates and his friend Paul Allen created a BASIC language interpreter for the Altair computer. With the success of BASIC for the Altair, Gates and Allen founded the Microsoft Corporation in 1977. The huge success of Microsoft began in 1981 when Gates developed MS-DOS (Microsoft Disk Operating System) for the new IBM-PC. Today Microsoft is known for its Windows operating systems, Office application software packages, and many programming languages, such as Visual Basic.

This chapter introduces the Windows 2000 operating system. How to use the mouse, windows, and dialog boxes are discussed. Proper handling and formatting of diskettes and making backups of files are also introduced.

2.1 Operating Systems

All microcomputers run software called the *operating system*, which enables the user to communicate with the computer. When the computer is turned on, the operating system software is automatically loaded into the computer's memory from the computer's hard disk in a process called *booting*.

A widely used operating system is *Windows 2000*, which has a *graphical user interface*, or GUI (pronounced "gooey"). The Windows 2000 GUI uses icons, menus, windows, and dialog boxes to allow the user to work with applications software, such as Microsoft Office. *Icons* are small pictures on the screen that represent items in the computer and perform various tasks. *Menus* contain *commands* that are used to perform specific tasks and actions. A *window* is the area on the screen that contains an open application or document. A *dialog box* allows the user to choose and enter information that is needed to complete an action. A *document* is the material that you create using an application, and a document stored on disk is called a *file*.

Multitasking is a feature of Windows 2000 and allows for more than one application to run at the same time. For example, word processor and spreadsheet applications can run simultaneously. Windows 2000 also comes with applications that allow you to easily work with the operating system.

2.2 Using the Mouse

Tooltips

When pointing to an object that performs an action and pausing for a few seconds, a *tooltip* appears near the pointer, which provides information about the object or describes what action(s) the object can perform.

A GUI program requires an input device called a *mouse*, which is used to perform a variety of tasks. A mouse has two or three buttons and looks similar to:



The mouse

mouse pointer

When the mouse is in use, the *mouse pointer* is displayed on the screen. One common shape of the mouse pointer is an arrow:



The mouse pointer

The mouse pointer may change shape depending on the current operation being performed. For example, an hourglass shape (⌚) is displayed when the computer is performing a task and cannot accept additional input at that time.

moving the mouse pointer

Sliding the mouse on a flat surface causes the mouse pointer to move on the screen. Slide the mouse to the left and the mouse pointer moves to the left; slide the mouse to the right and the mouse pointer moves to the right.

pointing

Moving the mouse to place the mouse pointer on an icon or other object is called *pointing*. In this text, when we say to point to an object on the screen, we mean to move the mouse until the mouse pointer is placed on the object.

selecting

An object on the computer screen can be *selected* by pointing to it, pressing the left mouse button, and then releasing it quickly. This type of selection is called *clicking*. When we say to select, or click on, an item, we mean to point to it and then press and release the left mouse button.

clicking

right-clicking

Right-clicking is pressing the right mouse button and releasing it quickly. Pointing to an object on the screen and then right-clicking displays a list of commands that are related to that object.

double-clicking

A special form of clicking is double-clicking. As the name implies, *double-clicking* means to point to an object and press the left mouse button twice in rapid succession.

dragging

The last mouse technique is called *dragging*. When we say to drag, we mean to press and hold the left mouse button while moving the mouse. In some cases, an object can be moved by dragging it. When we say to drag an object, we mean to point to it and then hold down the left mouse button while moving the mouse. When the object is in the desired location, release the mouse button. At times, dragging using the *right* mouse button is necessary. The results of dragging with the right mouse button can be very different from dragging with the left mouse button. Unless specified, always use the left mouse button when dragging.

2.3 The Windows 2000 GUI

Desktop Appearance

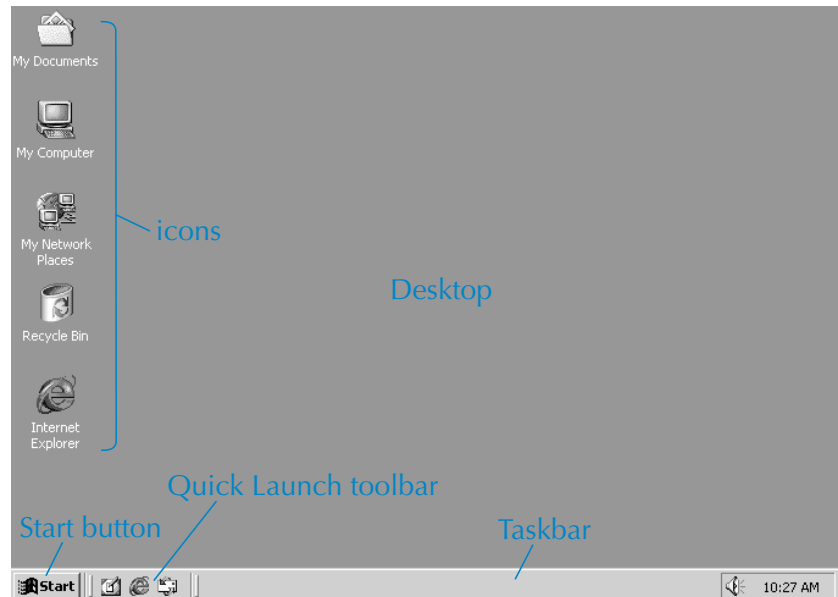
Your Desktop may appear different than the one displayed to the right depending on the properties selected. For example, a different color or an image may be displayed as the Desktop's background.

The Desktop's properties can be changed by right-clicking on the Desktop, clicking on the **Properties** command in the displayed menu, and then selecting the desired options from the displayed dialog box.

Your Desktop may also display different icons. Icons on the Desktop can be dragged to new locations. This allows you to arrange the objects on the Desktop the way you want them to appear.

The default icons that are displayed by Windows 2000 are: My Documents, My Computer, My Network Places, Recycle Bin, and Internet Explorer. The My Documents icon represents the My Documents folder on the computer's hard disk. By default, Windows 2000 stores all files to the My Documents folder. Folders are described in more detail later in the chapter.

The Windows 2000 GUI contains features that allow you to easily use the operating system and applications software. When the Windows 2000 operating system is running, the computer screen is referred to as the *Desktop*:

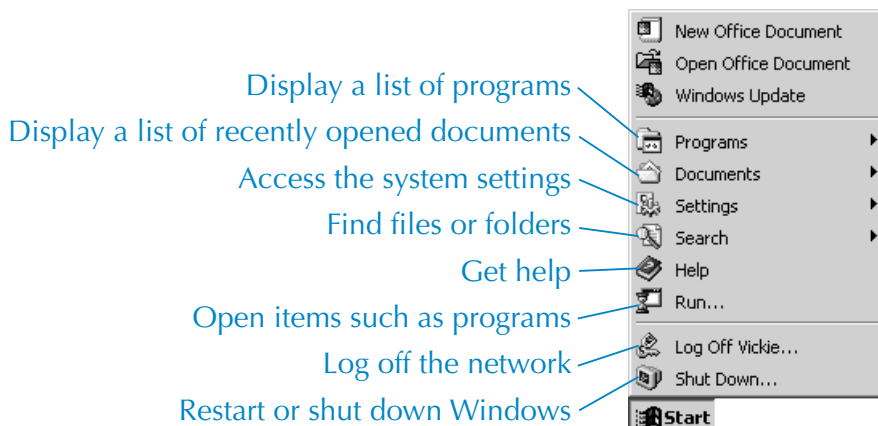


The Windows 2000 Desktop

- **Icons** are used to represent items in the computer, such as files and programs. Icons are double-clicked to perform tasks and run programs.
- **Start button** is used to run applications on the computer and is discussed in the next section.
- **Quick Launch toolbar** is displayed on the Taskbar and is used to quickly start frequently used programs. Icons on the Quick Launch toolbar only need to be clicked once to start the program.
- **Taskbar** displays the name of each open program. Clicking on a program name on the Taskbar displays or minimizes that program's window. The Taskbar allows you to easily switch between open programs.

2.4 Using the Start Button

The Start button on the Windows 2000 Taskbar is used to start an application. Clicking on the Start button displays a menu of items:

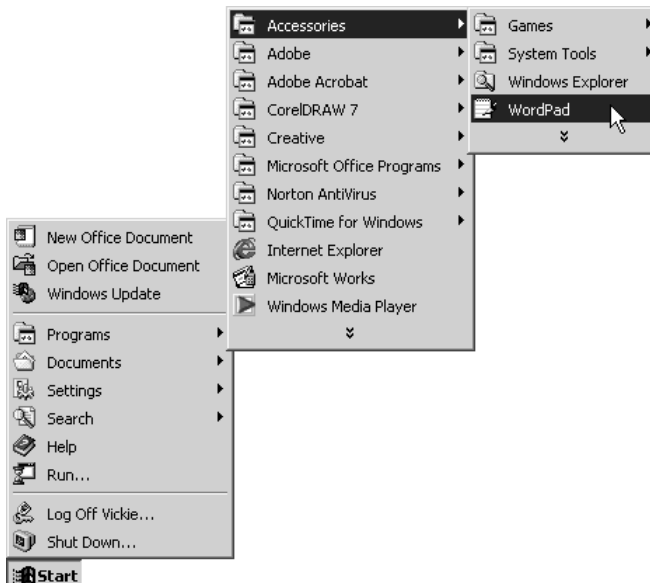


Personalized Menus

Windows 2000 personalizes menus by automatically hiding commands that have not been used recently. The hidden commands are displayed by pointing to the down arrows (▼) at the bottom of the menu.

Personalized menus can be turned off by right-clicking on the Taskbar, selecting the Properties command from the displayed menu, and then de-selecting the Use Personalized Menus option from the General tab in the displayed dialog box.

Some items are *commands* that perform specific tasks and actions, including starting an application. Note the Shut Down command. This command should always be selected before you turn off the computer. Other items have an arrow (▶), which indicates a group of related items will be displayed. For example, pointing to Programs displays a submenu of commands and other items with submenus. Clicking Accessories displays a submenu with the WordPad command for starting the WordPad application:

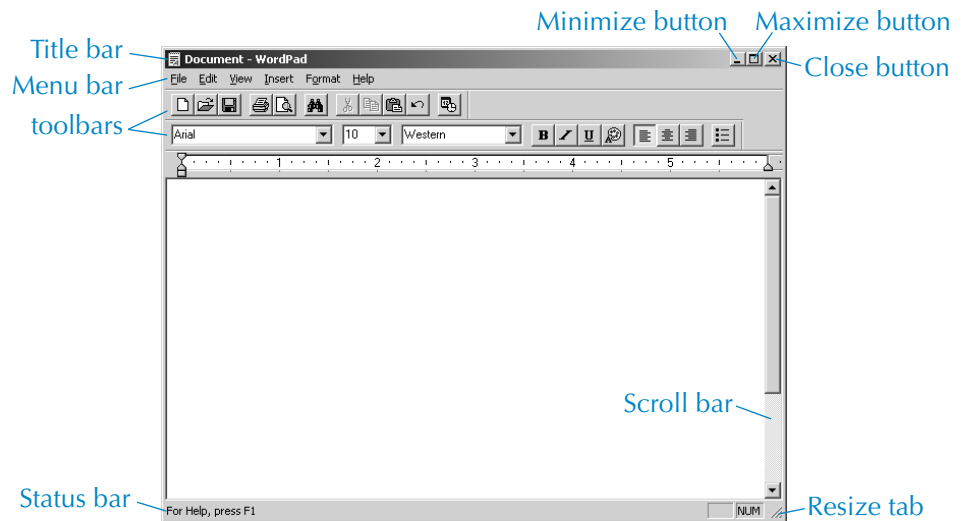


Desktop Shortcuts

If an icon for an application is displayed on the Desktop, the application can be started by simply double-clicking on the icon.

2.5 Using Windows

Applications, as well as most documents, are displayed in their own window. Most windows have similar features:



WordPad

The window to the right displays the WordPad application. WordPad comes with Windows 2000 and is a simple word processor program.

How to Use This Text

Throughout this text, new commands and procedures are introduced in a two-step process. First, a command or procedure is discussed. The discussion is then followed by a practice that leads you step-by-step through an example of how to use the command or procedure. You will perform the steps in the practices on a computer. When performing a practice, do every step in order as directed. Also, do not skip any practices because many of them build on previous ones. Skipping a practice may mean that you do not get the correct result at the end of the next practice.

- **Title bar** displays the name of the application or document. A window can be moved by dragging its title bar.
- **Menu bar** displays the names of drop-down menus that contain commands.
- **Toolbar** contains shortcuts for commonly used actions.
- **Status bar** displays information about the application or document.
- **Minimize button** (☐) reduces an application's window to its name on the Taskbar.
- **Maximize button** (◻) expands the window to fill the screen.
- **Restore button** (◻) is displayed instead of the Maximize button when a window has been maximized. Clicking on this button restores the window to its previous size.
- **Close button** (✕) closes a document window or ends the application and removes the window from the screen.
- **Scroll bar** is used to bring the unseen parts of the document into view.
- **Resize tab** is dragged to resize the window. The mouse pointer is displayed as a double-headed arrow (↔) when pointing to the Resize tab. A window can also be resized by pointing to any window border to display a double-headed arrow and then dragging the mouse.

Practice 1

In this practice you will view the Windows 2000 Desktop, locate the Start button, start an application, and minimize, maximize, and restore a window.

① BOOT THE COMPUTER

In addition to the steps below, you may have a log on procedure. Your instructor can direct you in the log on procedure.

- a. Turn on the computer and the monitor. After a few seconds, the computer automatically loads Windows 2000.
- b. After Windows 2000 is booted, the Welcome screen may appear. If the Welcome screen appears, first point to the Close button (✕) in the upper-right corner of the Welcome screen by moving the mouse until the mouse pointer is on it. Next, click the Close button by pressing the left mouse button once. The Welcome screen is removed from the Desktop.

② IDENTIFY THE PARTS OF THE DESKTOP

- a. Identify the icons on the Desktop. How many icons appear on the Desktop?
- b. Locate the Taskbar on the Desktop. Are there any open programs?
- c. Locate the Start button and point to it.

③ VIEW THE START MENU AND OPEN AN APPLICATION

- a. Click once with the left mouse button on the Start button. A menu of items is displayed. Note how some of the items have an arrow (▾).
- b. Point to Programs. A submenu of items available on your computer is displayed.
- c. Point to Accessories in the displayed menu (Accessories should be near the top of the list). A submenu is displayed.
- d. Point to WordPad in the submenu (WordPad should be near the bottom of the list). If WordPad is not displayed, point to the down arrows (▾) at the bottom of the list until the menu is expanded and the WordPad command is displayed.
- e. With WordPad still highlighted, click once with the left mouse button. The WordPad application is started and displayed in a window.

④ MANIPULATE THE WINDOW

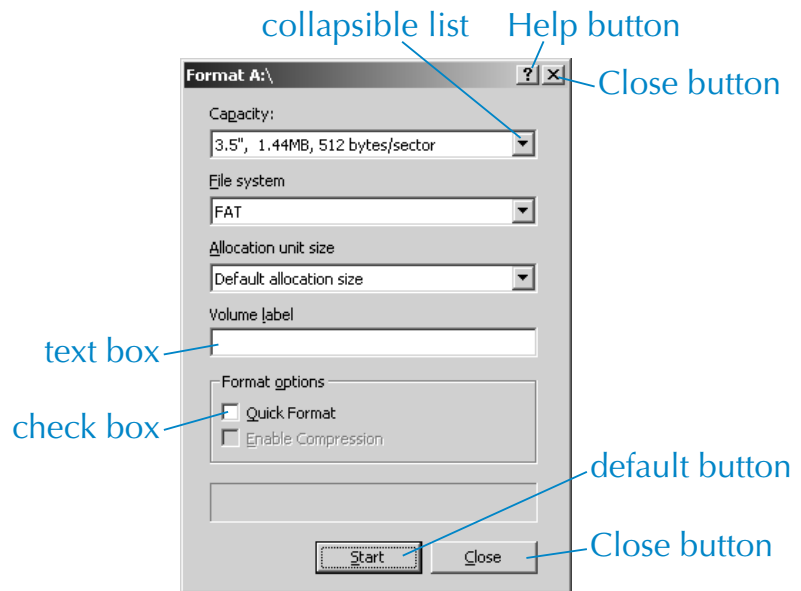
- a. In the WordPad window, locate the features of a window.
- b. If the window is maximized, click the Restore button (🗑️) to decrease the size of the window, otherwise click the Maximize button (📐).
- c. Click the Minimize button (▭). The window is reduced to a Document button on the Taskbar.
- d. On the Taskbar, click the Document - WordPad button. The window is again displayed.
- e. Click the Restore or Maximize button. The window is returned to its original size.

⑤ CLOSE THE WINDOW

Click the Close button (✕). The window is removed from the Desktop and the WordPad application is closed.

2.6 Using Dialog Boxes

A *dialog box* is used to supply the information needed to execute a command. Dialog boxes may have several options:



- **Collapsible list**, also just called a *list box*, displays a list of options to choose from by clicking on the down arrow (▼).
- **Help button** is used to display information about the dialog box options. Clicking on the Help button displays the mouse pointer. Clicking the question mouse pointer on an option in the dialog box displays information about that option.
- **Close button** removes a dialog box without applying any options. A Cancel button is sometimes displayed instead of Close. A dialog box can also be removed by pressing the Escape key or clicking on the Close button (✕), similar to closing a window.
- **Button** initiates an action when clicked.
- **Default option** is an entry or option that has already been selected for you. For example, the Start button in the dialog box above is the default button and has a solid outline. If no other options are selected, the default options are used when the Enter key is pressed.
- **Check box** is used to select or deselect an option; usually any number of check box options may be selected at the same time.
- **Text box** is used to type information that may be needed by a command.
- **Option button** (◉), sometimes called a *radio button*, is used to select an option; usually only one of a set of option buttons may be selected at a time. Note that there is no option button in the dialog box shown above.



Pressing the Tab key makes the next option in the dialog box active.

2.7 Using Diskettes

Files are often stored on a diskette. Handling diskettes carefully is important because they store files in a magnetic format that is vulnerable to dirt, heat, and magnets. Observing the following rules will help to ensure that your diskettes give you trouble-free service:

1. Keep diskettes away from electrical and magnetic devices such as computer monitors, television sets, speakers, and any type of magnet.
2. Do not expose diskettes to either extreme cold or heat.
3. Store diskettes away from dust, dirt, and moisture.
4. Never touch the diskette's magnetic surface.

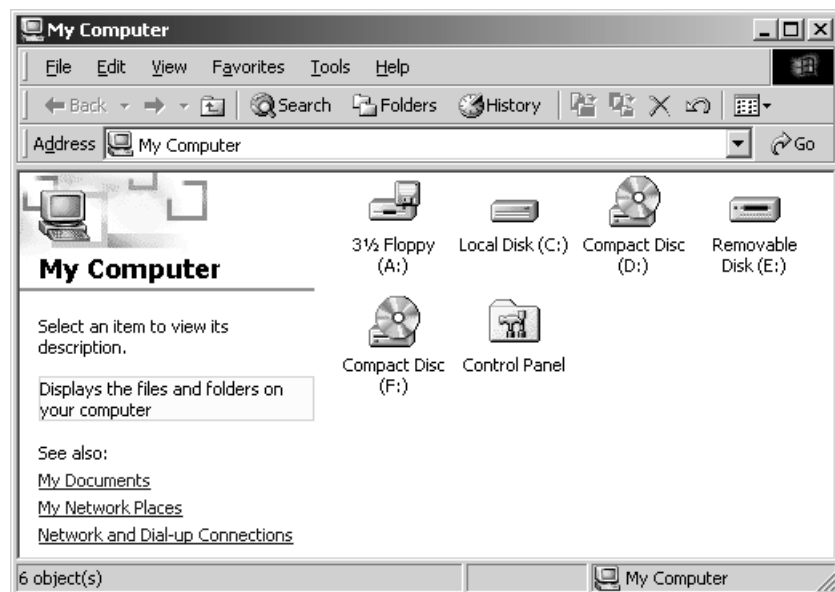
2.8 My Computer



My Computer is an application that comes with Windows 2000 and is used to view the contents of a single folder, which is used to store related files, or to view an entire disk. Double-clicking on the My Computer icon on the Windows 2000 Desktop displays a window with icons representing the available drives on your computer:

Folders

Folders can contain other folders. For example, you could create a folder with the name "Spring 2003" that stores all files related to your classes for the 2003 spring semester. Additionally, you could have folders for each class that semester stored in the Spring 2003 folder.



The My Computer window

Properties command




Right-clicking on an item in My Computer displays a menu with a Properties command. Selecting this command displays a dialog box with information and options regarding the item. For example, right-clicking on the (C:) drive icon and then selecting Properties displays a dialog box listing the capacity of the drive, including the amount of used space and the amount of free space.

The View Menu

The icons in the My Documents window can be displayed differently using commands in the View menu.

Double-clicking on one of the drive icons displays the files and folders stored on that disk drive in the window. For example, double-clicking on the (C:) drive icon displays the contents of the (C:) drive. The Control Panel folder contains settings for personalizing your computer.



The My Computer toolbar contains three buttons for navigation. The Back button ( Back) returns to the previously displayed folder. Clicking on the Forward button () displays the next folder in a previously displayed sequence of folders. Clicking on the Up button () displays the folder one level up. The title bar and the Address bar (located below the toolbar) display the currently selected folder.

My Computer is also used to format a diskette and copy a diskette as discussed in the next two sections.

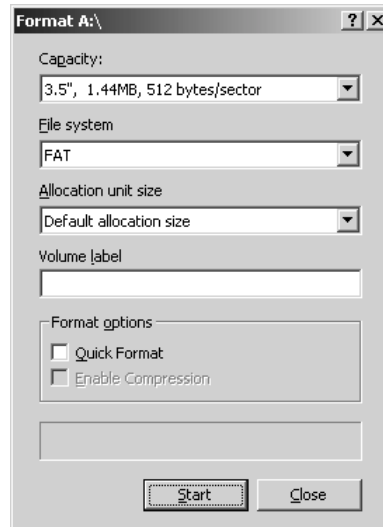
2.9 Formatting a Diskette

A new diskette may need to be formatted before it can be used. *Formatting* a diskette prepares it to receive data. The steps for formatting a diskette are:

1. Double-click the My Computer icon. A window is displayed.
2. Place the diskette to be formatted into drive A:
3. Right-click the 3½ Floppy (A:) icon. A menu is displayed:



4. Click the Format command. The Format dialog box is displayed:

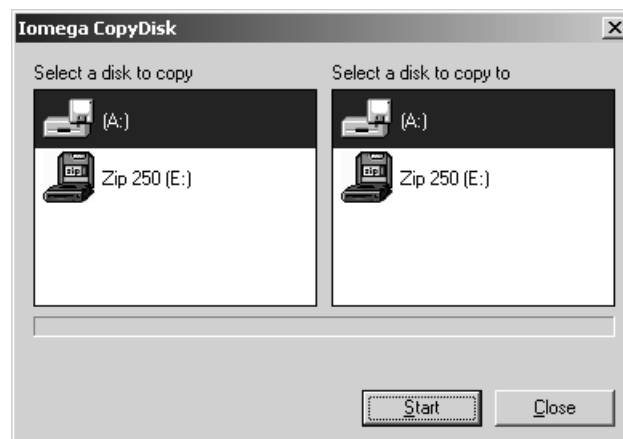


5. Select the Start button.
6. A warning dialog box should appear stating that formatting will erase all the data on the disk. Select the OK button. The formatting process may take a few seconds to a few minutes.
7. Select the OK button to remove the dialog box that appears after the formatting is complete and then select Close to remove the Format dialog box.

2.10 Copying a Diskette

The entire contents of a diskette may be copied to another diskette. The steps for copying a diskette are:

1. Double-click the My Computer icon. A window is displayed.
2. Right-click the 3½ Floppy (A:) icon. A menu is displayed.
3. Click the Copy Disk command. A dialog box is displayed:



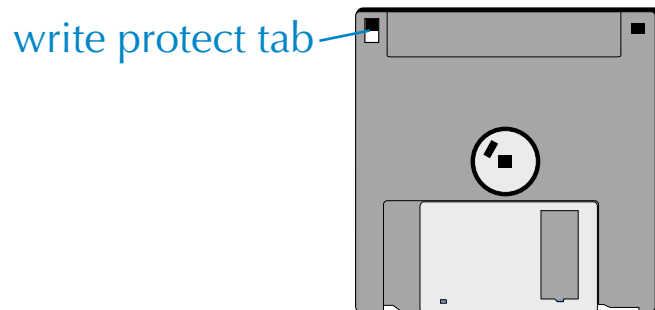
This dialog box displays the drives on your computer

4. Click the appropriate drive icons in the Select a disk to copy and Select a disk to copy to sections if they are not already selected.

5. Place the diskette to be copied from (source diskette) into the drive and then select the Start button.
6. When prompted, place the diskette that will be copied to (destination diskette) into the drive and then select the OK button.
7. Select the Close button to remove the CopyDisk dialog box when copying is complete.

write protecting a diskette

Because any data on the destination diskette is overwritten when using the Copy Disk command, it is a good idea to *write protect* the source diskette so that it is not accidentally used as the destination diskette. To write protect a diskette, turn to the back side of the diskette and slide the write protect tab upward. The write protect tab is located in the upper-left corner on the back of the diskette:



This diskette is write protected because the write protect tab has been pushed up

making backups

A *backup* is a copy of a file or diskette. Although it is easy to create backups of a file or diskette, many people do not take the time to do so. However, the few minutes it takes to backup a file could save hours if the file is damaged or deleted and must be recreated.


It is important to keep backup diskettes in a different location than the original copies. That way, the chances of both copies being destroyed are low. For example, if you keep your data diskettes in the computer lab, keep the backup copies at home. Businesses often store their backup copies in special fireproof safes, in safe deposit boxes at a bank, or with a company that provides off-site storage for computer data.

Practice 2

In this practice you will use My Computer to format a diskette. The following instructions assume that the 3½ floppy diskette drive is the A: drive and that you have a diskette for formatting. Note that any data that is on the diskette will be lost.

① *OPEN MY COMPUTER*

- a. Double-click the My Computer icon. The My Computer window is displayed with icons representing the hardware components of your computer.
- b. Double-click the (C:) drive icon. The contents of the (C:) drive are now displayed in the window.
- c. Navigate through the contents of the computer by double-clicking on different folders and subfolders displayed in the window.

- d. On the Local Disk (C:) toolbar, click the Back button () once. The previously displayed folder is again displayed.
- e. Continue clicking on the Back button until the icons representing the hardware components of your computer are again displayed.

② **FORMAT A DISKETTE**

- a. Place a diskette into drive (A:).
- b. Right-click the 3½ Floppy (A:) icon.
- c. Click the Format command. A dialog box is displayed. Note the different options in the dialog box.
 1. Select the Start button.
 2. If the warning dialog box appears, select the OK button. It may take from a few seconds to a few minutes to format the diskette.
 3. Select the OK button. The dialog box stating that formatting is complete is removed.
 4. Select the Close button. The Format dialog box is removed.

③ **CLOSE THE MY COMPUTER WINDOW**

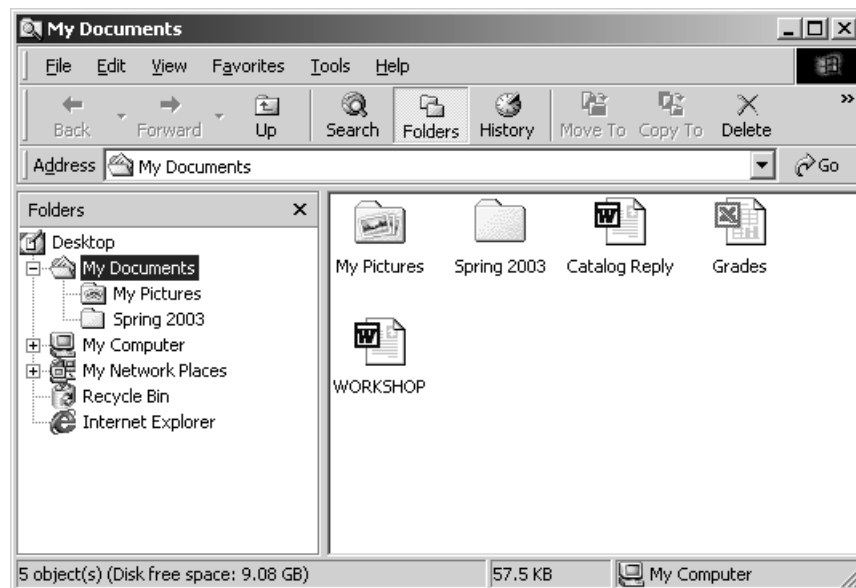
Click the Close button (). The My Computer window is removed.

④ **REMOVE THE DISKETTE FROM THE DRIVE**

2.11 Windows Explorer

Windows Explorer is an application that comes with Windows 2000 and is used to view and organize files and folders. Windows Explorer is similar to My Computer in that it shows the contents of the computer, but it is different because it can also show the hierarchy of the folders.

Windows Explorer is started by clicking on the Start button, pointing to Programs, and then Accessories, and then clicking Windows Explorer, which displays the Exploring window:




The Windows 2000 Exploring window

My Pictures Folder

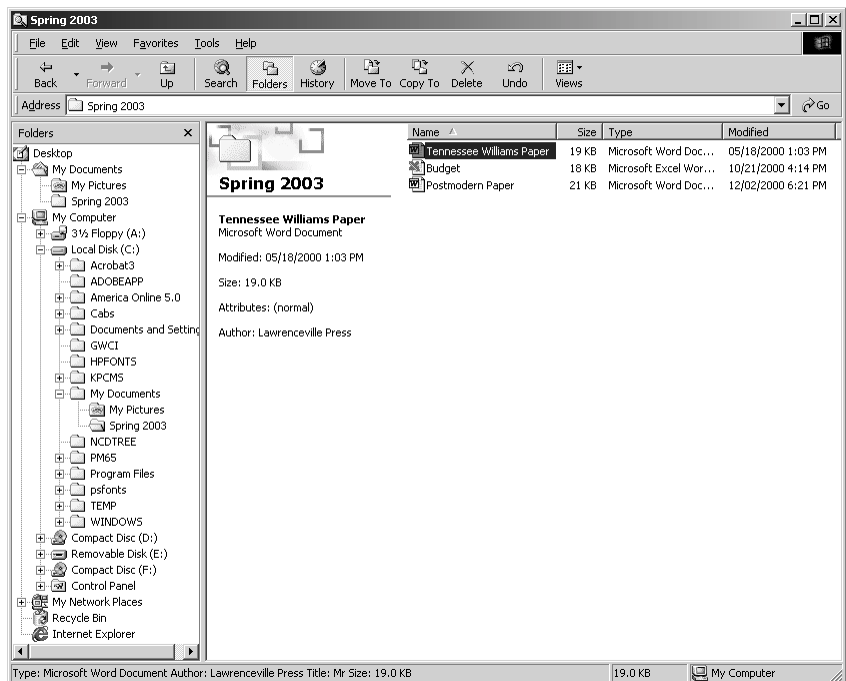
Windows 2000 automatically places a folder called My Pictures in the My Documents folder. The My Pictures folder displays a small picture, called a thumbnail, of any graphic files stored in the folder:



The Exploring window is divided into two panes. The left pane displays a list of all the folders stored on the computer and the computer's hardware components, which are represented by icons and their corresponding names. The left pane is named Folders. The right pane of the Exploring window displays the contents of whichever folder is selected in the left pane, as indicated on the Address bar. Note that the Folder button () on the toolbar appears pushed in. Clicking the Folders button again removes the Folders pane.

When Windows Explorer is first started, the Folders pane displays icons for the default icons on the Windows 2000 Desktop, with the My Documents folder selected. Notice how there are plus signs (+) and minus signs (-) to the left of the icons in the left pane. A plus sign next to a folder indicates that there are subfolders within that folder. Clicking a plus sign displays these subfolders and changes the plus sign to a minus sign. Clicking the minus sign will hide the subfolders and change the minus sign back to a plus sign. The example Exploring window below demonstrates this.

The folders and files displayed in the right pane can be displayed in different ways. It is helpful to display information about a file or folder such as the size, type, and the date it was last modified, as in the example below. This can be done by clicking View in the Menu bar and then clicking the Details command.




The Windows 2000 Exploring window expanded to view the main folders of the hard disk and a subfolder in the My Documents folder

Practice 3

In this practice you will use Windows Explorer to view the files and folders in the computer.

① OPEN WINDOWS EXPLORER

- On the Windows 2000 Taskbar, click the Start button.
- Point to the Programs command and then Accessories.
- Click the Windows Explorer command. The Exploring window is displayed. Note the two panes of the window and their contents.
- On the toolbar, click the Folders button (). The Folders pane, the left pane, is no longer displayed.
- Click the Folders button again. The Folders pane is again displayed.

② VIEW THE FILES AND FOLDERS

- In the Folders pane, click the My Computer icon. All the available hardware on the computer is displayed in the right pane of the window.
- In the Folders pane, click the plus sign (+) next to the My Computer icon. The contents of My Computer is expanded underneath the My Computer icon in the Folders pane.
- In the Folders pane, click the (C:) drive icon. The contents of the (C:) drive is displayed in the right pane.
- Navigate through the contents of the computer by clicking the plus and minus signs next to the different folders and subfolders displayed in the Folders pane.


2.12 File and Folder Management Using My Computer

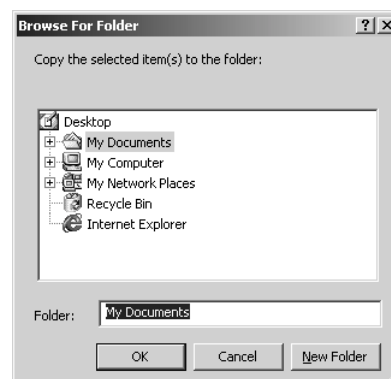
The My Computer application simplifies the tasks of copying, moving, creating, and deleting files and folders. *Copying* a file leaves the original file in its present location and places an exact copy in a new location. *Moving* a file removes it from its present location and places it in a new location.

copying a file



The steps for copying a file are:


- Select the file to copy by clicking once on its icon.
- Click the Copy To button () on the toolbar. A dialog box is displayed:



3. Select the desired folder to copy the file to using the list in the Browse for Folder dialog box and then select OK.

moving a file



A file can be moved from one location to another location by using the same steps for copying a file, substituting the Move To button () for the Copy To button.

copying & moving a folder

Folders can also be copied and moved using the steps listed previously. When copying or moving folders, all of the subfolders and files are also copied or moved.

creating a folder

A new folder can be created by first opening the existing folder or disk drive that is to contain the new folder. Selecting the Folder command from the New submenu in the File menu displays a new folder icon with the selected named New Folder. The folder can then be renamed by typing a new name and pressing Enter.

renaming a file or folder


Renaming a file or folder replaces an existing name with a new name. A file or folder can be renamed by first right-clicking its icon and then selecting the Rename command from the displayed menu. A new name can then be typed and Enter pressed. File extensions should be unchanged. Files and folders can have names up to 255 characters including spaces. Some special characters, such as \ / : * ? " < >, are not allowed.

creating a read-only file

A file can be made read-only to prevent it from being altered. A *read-only* file cannot have changes made to it. This means that any edits made to the file cannot be retained. A file is made read-only by first right-clicking its icon and then selecting the Properties command from the displayed menu, which displays a dialog box. Selecting the Read-only check box in the Properties dialog box and selecting OK makes the file read-only.

deleting a file or folder



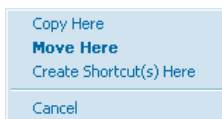
A file or folder can be deleted by selecting it and then pressing the Delete key or clicking the Delete button () on the toolbar. A warning will be displayed to verify the deletion.

2.13 File and Folder Management Using Windows Explorer

Windows Explorer also allows you to copy, move, create, and delete files and folders using the same methods discussed in the previous section. Files and folders can also be copied or moved using a method called *drag and drop*.

drag and drop

copying & moving a file



A file can be copied or moved from one location to another location by using the right mouse button to drag the file's icon to the destination folder. When the mouse button is released, a menu is displayed. Clicking the Copy Here command in the menu copies the file to the new location. Clicking the Move Here command in the menu moves the file to the new location.

copying & moving a folder

Folders can also be copied and moved using the drag and drop methods described above. When copying or moving folders, all of the subfolders and files are also copied or moved.

creating a shortcut

A *shortcut* is an icon on the Desktop that when double-clicked will display a file or start a program. A shortcut to a file or program can be created by dragging the icon which represents the desired file or program to the Desktop using the right mouse button. After releasing the right mouse button, clicking the Create Shortcut(s) Here command from the displayed menu creates the shortcut. When dragging an icon from the Exploring window to the Desktop, part of the Desktop needs to be displayed. Therefore, you may need to resize the Exploring window to display a portion of the Desktop.

Practice 4

In this practice you will create a folder, copy a file, rename a file, and make the file read-only. The following instructions assume that the 3½ floppy diskette drive is the (A:) drive and you have a diskette containing files. The Exploring window should still be displayed from the last practice.

① CREATE A FOLDER

- a. Insert a diskette with files into the (A:) drive.
- b. In the Exploring window, click the + sign on My Computer. Hardware options are displayed.
- c. In the left pane, click the 3½ Floppy (A:) icon. Any files on the diskette appear in the right pane.
- d. From the File menu, select New, and from the submenu select Folder. A new folder icon with the selected name "New Folder" is displayed in the right pane.
- e. Type the name Temporary to replace the default name and press Enter. The diskette in the (A:) drive now contains a folder.

② COPY A FILE

- a. The files stored on the diskette should still be displayed in the right pane. If not, click the 3½ Floppy (A:) icon.
- b. Using the right mouse button, drag a file's icon to the Temporary folder you created in the step above.
- c. Release the mouse button when the Temporary folder icon is highlighted. From the displayed menu, click the Copy Here command.
- d. A copy of the file now exists in the Temporary folder on the diskette in the (A:) drive.

③ CREATE A READ-ONLY FILE

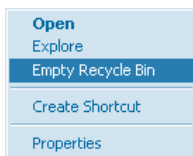
- a. In the left pane, click the plus sign (+) next to the 3½ Floppy (A:) icon. Any subfolders are displayed.
- b. In the left pane, click the Temporary folder icon. The file copied in the last step is displayed in the right pane.
- c. In the right pane, right-click the file's icon. A menu is displayed.
- d. Click the Properties command in the displayed menu. A dialog box is displayed.
 1. At the top of the dialog box, select the General tab if it is not already displayed.
 2. Click the check box next to the Read-only option.
 3. Select the OK button. The file is now read-only and no editing changes may be saved.

④ RENAME THE COPIED FILE

- a. In the right pane, right-click the file's icon. A menu is displayed.

- b. Select the Rename command from the displayed menu. The name is highlighted and a blinking cursor is displayed.
- c. Enter a new name for the file and then press Enter. Be sure to keep the file extension.
- d. A dialog box is displayed asking if you want to rename the read-only file. Select the Yes button.

5 CLOSE THE EXPLORING WINDOW



2.14 Recovering Deleted Files

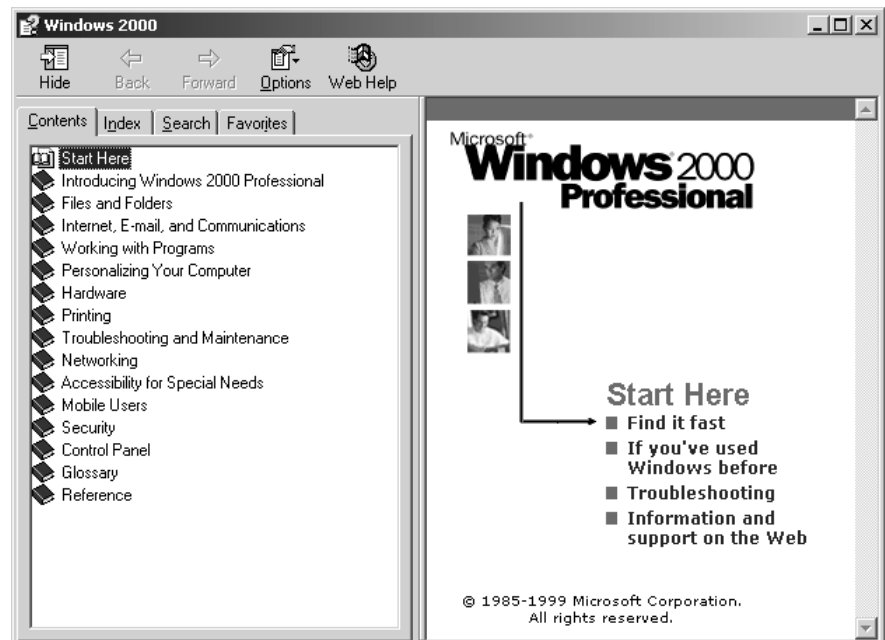
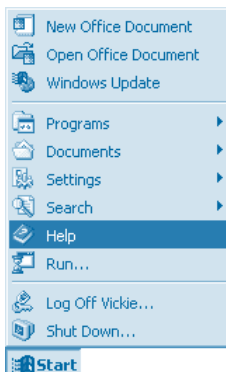
When a file is deleted it is not removed from the hard disk, instead it is moved to the *Recycle Bin*. Therefore, deleted files can be recovered. A file can be recovered by double-clicking the Recycle Bin icon on the Desktop to display a list of recently deleted files. Selecting the file to be recovered and then clicking the Restore button recovers the file.

Because deleted files are stored in the Recycle Bin, the deleted files are still taking up space on the computer's hard disk. If you want to permanently delete the files to have more space on the hard disk, right-click the Recycle Bin icon and then click the Empty Recycle Bin command. Windows 2000 will ask if you are sure you want to delete the files. Selecting the Yes button will permanently delete the files stored in the Recycle Bin and free up space on the computer's hard disk. It is important to note that Windows 2000 automatically empties the Recycle Bin periodically. Therefore, it is not always possible to recover a deleted file.

2.15 Using Online Help

Windows 2000 online help

Online help can be used to explore the features of Windows 2000. Clicking the Help command after clicking the Start button displays the Windows 2000 help window:



The online help window is similar to using the Exploring window. Selecting an item from one of the tabs in the left pane displays the information in the right pane of the window.

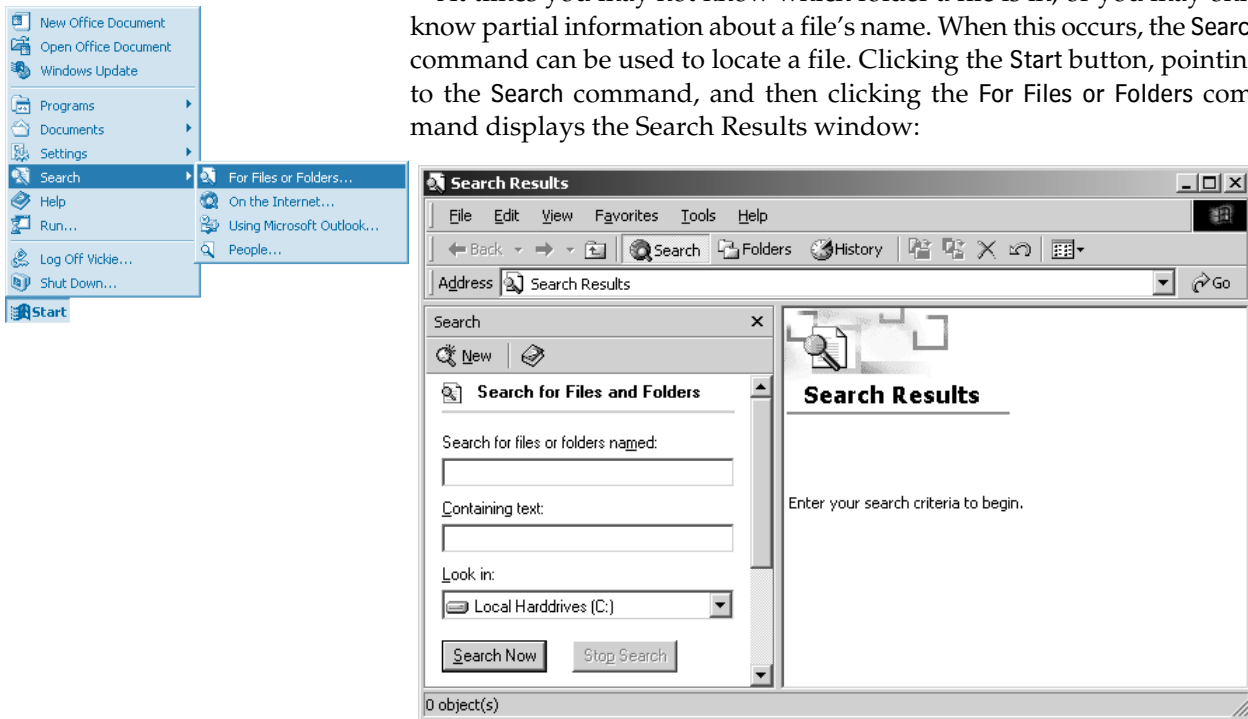
The Contents tab displays a table of contents of the information you can find using the online help. Selecting the Index tab allows you to either type a word to search for or select from a list of topics. After entering or selecting the topic, selecting the Display button shows information pertaining to the topic.

application online help

Online help can also be used to explore the features of an application and help answer questions you might have. Most Windows 2000 based applications have a Help menu. Commands from this menu can be used to display information using a window similar to the one shown on the previous page.

2.16 Finding Files

At times you may not know which folder a file is in, or you may only know partial information about a file's name. When this occurs, the Search command can be used to locate a file. Clicking the Start button, pointing to the Search command, and then clicking the For Files or Folders command displays the Search Results window:



The Search Results window displays the location of files

If the complete name of a file is known but not the location, the location can be found by typing the complete name in the Search for files or folders named entry box, clicking the Look in collapsible list and selecting the appropriate drive, and then selecting the Search Now button. This searches the contents of the computer and then displays the location of the file in the right pane of the window, if it is found.

If only the partial name of a file is known, the location can be found by using an asterisk (*) in place of the unknown characters. For example, suppose the location of a file that included “Lisa” in the file name is unknown and the rest of the file name is also unknown. Entering *Lisa* in the Search for files or folders named entry box and then selecting the Search Now button will display the locations of all the files that contain “Lisa” as part of the file name. The asterisk (*) is used to represent unknown characters.

It is also possible to find a file when the entire name is unknown, if some of the text contained in the file is known. For example, a word processor file with an unknown file name that contains the text “March 17, 2003 Meeting Agenda” can be located by entering the text in the Containing text entry box and then selecting the Search Now button. This will display a list of all the files containing the text “March 17, 2003 Meeting Agenda”.

Practice 5

In this practice you will use the Windows 2000 online help to find information on how to create folders. You will also use the Search command to find a file.

① *START ONLINE HELP*

- a. On the Taskbar, click the Start button and then click the Help command. The Windows 2000 help window is displayed.
- b. Click the Index tab if the index is not already displayed.

② *VIEW INFORMATION ON FOLDERS*

- a. Type Folders in the entry box. A list of matching help topics is displayed.
- b. Click the “creating” option in the list and then select the Display button or press Enter. A dialog box of related help topics is displayed.
 1. Select the “Create a new folder” option if it is not already selected and then click the Display button. The steps on how to create a new folder are displayed in the window.

③ *CLOSE ONLINE HELP*

Click the Close button (✕) to remove the window.

④ *FIND A FILE*

- a. Click once on the Start button.
- b. Point to the Search command, and then click the For Files or Folders command.
- c. In the Search for files or folders named entry box, type read*
- d. In the Look in collapsible list, click the down-arrow (▼) and select the (C:) drive if it is not already selected.
- e. Click the Search Now button. The contents of the hard drive are searched, and the locations of all files with a name that begins with “read” are displayed.
- f. Click the Close button (✕). The Search Results window is removed.

Chapter Summary

This chapter introduced the Windows 2000 operating system and some of its applications. Windows 2000 is a disk operating system with a graphical user interface.



A mouse is an input device used to select an object on the screen by pointing to the object and then clicking the left mouse button once. Some objects are selected by double-clicking, which is pressing the left mouse button twice in rapid succession. Dragging is the technique of holding down the mouse button while moving the mouse. In some instances it may be necessary to use the right mouse button instead of the left mouse button, but only when specifically stated to do so.

Windows 2000 displays a Desktop with a Start button to start an application, a Taskbar that displays a button for each open program, and icons that represent items in the computer. The Quick Launch toolbar in the Taskbar is used to quickly start commonly used programs.



Applications and documents are displayed in their own windows. All windows have similar features such as a Menu bar and the Minimize, Maximize, Restore, and Close buttons.



Dialog boxes are used to supply information needed to execute a command. Common elements found in dialog boxes are buttons, text boxes, check boxes, radio buttons, and collapsible lists. A default option is an entry or option that has already been selected. If no other options are selected, the default options are used when the Enter key is pressed. The Tab key can be used to make the next option active.

Files are stored on diskette in a magnetic format. Diskettes should always be handled carefully to avoid problems.

The My Computer application can be used to format new diskettes and copy the contents of an entire diskette. It is a good idea to write protect your source diskette when using the Copy Disk command. Backing up a file is important because it could save hours of extra work if the file is damaged or deleted and must be recreated. Backup diskettes should always be stored in a different location than the original copies.



My Computer and Windows Explorer can be used to navigate through the files and folders stored in the computer. Folders are used to store and organize related files. Files and folders can be copied and moved using buttons on the toolbar or using a method called drag and drop. Folders are created using the Folder command from the New submenu. Read-only files cannot have changes made to them. Files and folders can also be deleted and renamed. Shortcuts can be created on the Desktop to display a file or start a program.



A deleted file or folder is moved to the Recycle Bin where it later may be recovered. Files are permanently removed from the Recycle Bin using the Empty Recycle Bin command making more space available on the hard disk.

Windows 2000 online help provides information about Windows 2000 features. The Search command and locates files on the computer.

Vocabulary

Backup A copy of a file or diskette.

Booting The process by which Windows 2000 is automatically loaded into the computer's memory from the hard disk when the computer is turned on.

Box See collapsible list.

Button A dialog box option that initiates an action when clicked.

Check box A dialog box option used to select an option.

Clicking Placing the mouse pointer on an object and pressing and releasing the left mouse button.

Collapsible list A dialog box option that displays a list of options to choose from by clicking the down-arrow.

Commands Perform specific tasks and actions.

Copying Leaves the original file or folder in its present location and places an exact copy in a new location.

Default An entry or option that has already been selected for you.

Desktop The computer screen that displays the Start button, Taskbar, icons, and Quick Launch toolbar when Windows 2000 is running.

Dialog box Allows the user to choose and enter information that is needed to complete an action or command.

Document The material that you create using an application.

Double-clicking Placing the mouse pointer on an object and pressing the left mouse button twice in rapid succession.

Drag and drop A method of copying or moving objects by using the right mouse button and dragging them to a new location.

Dragging Holding down the left mouse button while moving the mouse.

Drop-down list See collapsible list.

Enter key Accepts a highlighted menu command or selected dialog box options.

Escape key Cancels the current operation.

File A document that is stored on disk.

Folder Organizes and stores related files.

Formatting Preparing a diskette to receive data.

GUI (Graphical User Interface) A program that uses icons, menus, windows, and dialog boxes to allow the user to work with application software.

Icon A small picture on the screen that represents an item in the computer and can perform various tasks.

Menu A list of commands.

Menu bar Displays the names of drop-down menus that contain commands.

Mouse Input device that is used to move the mouse pointer and perform a variety of tasks.

Mouse pointer A shape displayed on the screen when the mouse is in use.

Moving Removes a file or folder from its present location and places it in a new location.

Multitasking A feature of Windows 2000 that allows more than one application to run at the same time.

My Computer A Windows 2000 application used to view the contents of a single folder or to view an entire disk.

Operating system Software run by all microcomputers which enables the user to communicate with the computer.

Option button See radio button.

Pointing Moving the mouse to place the mouse pointer on an icon or other object.

Quick Launch toolbar Used to quickly start frequently used programs. Displayed on the Taskbar.

Radio button A dialog box option used to select an option from a group of options.

Read-only A file that cannot have changes made to it.

Recycle Bin Stores deleted files for a period of time so that they may be recovered.

Renaming Replacing an existing file or folder name with a new name.

Resize tab Dragged to resize a window.

Right-clicking Placing the mouse pointer on an object and pressing and releasing the right mouse button.

Scroll bar Used to bring the unseen parts of a document into view.

Selecting Clicking an object on the screen.

Shortcut An icon on the Desktop that when double-clicked displays a file or starts a program.

Status bar Displays information about the application or document.

Tab key Selects the next option in a dialog box.

Taskbar Displays the names of each open program.

Text box A dialog box option that is used to type information that may be needed by a command.

Title bar Displays the name of the application or document.

Toolbar Contains shortcuts for commonly used actions.


Window The area of the screen that contains an open application or document.


Windows Explorer A Windows 2000 application program used to view and organize files and folders.


Windows 2000 An operating system that uses a graphical user interface.

Write protect Moving the write protect tab on a diskette so it cannot receive data.

Windows 2000 Commands and Buttons

 **Back button** Returns to the previously displayed folder. Found on the My Computer and Windows Explorer toolbars.

 **Close button** Closes a document window or removes an application window from the screen.

 **Copy To button** Copies a file or folder from one location to another location. Found on the My Computer and Windows Explorer toolbars.

Copy Disk command Copies the contents from one diskette to another. Displayed by right-clicking the (A:) drive icon in the My Computer window.

Copy Here command Copies a file or folder from one location to another location. Displayed when dragging a file or folder with the right mouse button.

Create Shortcut(s) Here command Creates a shortcut. Displayed after releasing the right mouse button when dragging a file or folder's icon.

 **Delete button** Deletes a file or folder. Found on the My Computer and Windows Explorer toolbars.

Details command Displays a file or folder's size, type, and the date it was last modified. Found in the View menu in the My Computer and Exploring window.


Empty Recycle Bin command Permanently deletes the contents of the Recycle Bin and frees up hard disk space. Displayed after right-clicking the Recycle Bin icon on the Desktop.


Folder command Creates a new folder in the currently selected folder or disk drive. Found in the New submenu in the File menu.

 **Folders button** Displays or hides the Folders pane, which shows the hierarchy of folders. Found on the My Computer and Windows Explorer toolbars.

For Files or Folders command Locates files in the computer. Found in the Search submenu in the Start menu.


Format command Formats a diskette. Displayed after right-clicking the (A:) drive icon in the My Computer window.


 **Forward button** Displays the next folder in a previously displayed sequence of folders. Found on the My Computer and Windows Explorer toolbars.

 **Help button** Displays information about the dialog box options. Found in the upper-right corner of a dialog box.


Help command Displays information about Windows 2000. Found in the Start menu.

Large Icons command Displays the contents of the currently selected folder as large icons. Found in the View menu in the My Computer and Exploring window.

 **Maximize button** Expands the window to fill the screen. Found in the upper-right corner of a window.

 **Minimize button** Reduces an application's window to its name on the Taskbar. Found in the upper-right corner of a window.


Move Here command Moves a file or folder to a new location. Displayed when dragging a file or folder with the right mouse button.

 **Move To button** Moves a file or folder from one location to another location. Found on the My Computer and Windows Explorer toolbars.

Programs command Displays a menu of the application available on your computer. Found in the Start menu.

Properties command Displays the Properties dialog box where the Read-only check box can be selected to make a file read-only. Displayed after right-clicking a file's icon in the My Computer and Exploring windows.


Rename command Highlights a file or folder's name so it can be changed. Displayed after right-clicking a file icon in the My Computer and Explorer windows.

 **Restore button** Restores a window to its previous size. Found in the upper-right corner of a window when the window has been maximized.

Shut Down command Should be selected before turning off the computer. Found in the Start menu.

Small Icons command Displays the contents of the currently selected folder as small icons. Found in the View menu in the My Computer and Exploring window.

Start button When clicked, displays a list of commands from which applications can be run.

 **Up button** Displays the folder one level up from the currently displayed folder.

Review Questions

Sections 2.1 — 2.6

1. a) What is an operating system?
b) What is a GUI?
c) What is a file?
d) What is multitasking?
2. a) What is a mouse?
b) What is pointing?
c) What is double-clicking?
3. List the steps required to drag an object.
4. a) What is the Desktop?
b) What does the Taskbar allow you to do?
c) What do icons represent?
5. What is the Start button used for?
6. What is the Quick Launch toolbar used for?
7. List the features found in a window and describe them.
8. a) What are commands.
b) When is the Shut Down command used?
9. a) What is a dialog box used for?
b) Name four options available in a dialog box and describe each of their purposes.

Sections 2.7 — 2.10

10. a) Why is it important to take good care of a diskette?
b) What should be avoided when handling or storing a diskette?
11. a) What is My Computer? What is it used for?
b) What is a folder?
12. List the steps required to format a diskette.
13. a) What command is used to duplicate the entire contents of one diskette to another diskette?
b) What happens to the original data on a diskette when it is used as a destination diskette?
14. List the steps required to write protect a diskette.
15. a) Why should backups of data be created?
b) Why is it important to keep backup diskettes in a different location than the originals?

Sections 2.11 — 2.16

16. List the step required to start Windows Explorer.
17. a) What is Windows Explorer used for?
b) Explain what is displayed in the Exploring window.
18. a) What is indicated by a + sign displayed to the left of an icon in the Folders pane of the My Documents folder?
b) What does a – sign indicate?
19. a) What is the difference between copying and moving a file?
b) What happens to a folder's subfolders and files when the folder is moved?
20. List the steps required to copy a file using My Computer.
21. List the steps required to create a subfolder named Letters in the My Documents folder.
22. a) What does a shortcut do?
b) List the steps needed to create a shortcut.
23. Can changes be made to a read-only file?
24. List the steps required to move a file using the drag and drop method.
25. What is the Recycle Bin used for?
26. a) List the steps required to display information about diskettes in the Windows 2000 online help.
b) What menu in an application can be used to help answer questions you might have?
27. Why would an asterisk (*) be used with the Search command?
28. List the steps required to find the location of a file named Harold Pinter Thesis.
29. What needs to be entered into the Search for files or folders named entry box to find all the files that contain Elvis.