Examine the Windows Operating System

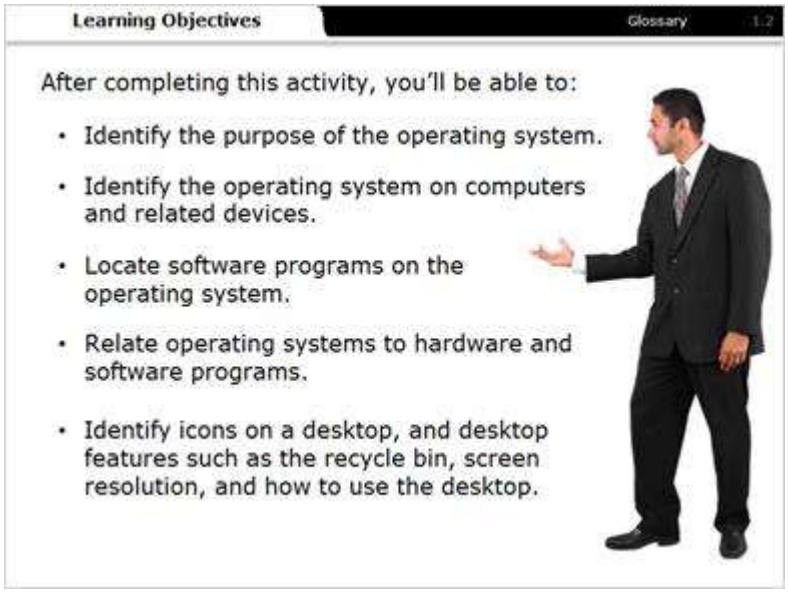
1. Operating System Platforms

1.1 Welcome

Notes:

Welcome to *Examine the Windows Operating System*. This activity will help you understand the operating system's purpose and learn the skills necessary to successfully navigate through the basics of Windows 7.

1.2 Learning Objectives

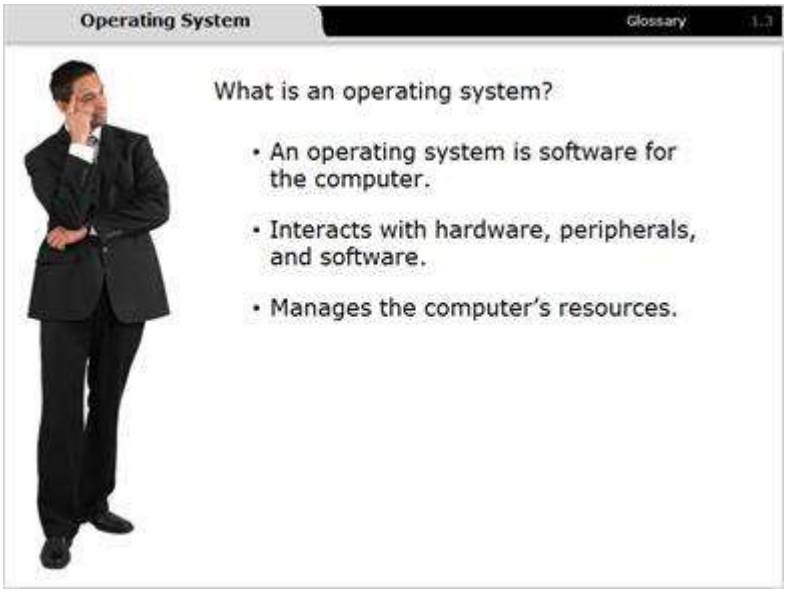


Notes:

After completing this activity, you'll be able to:

- Identify the purpose of the operating system.
- Identify the operating system on computers and related devices.
- Locate the operating system on computers and related devices.
- Relate operating systems to hardware and software programs.
- Identify icons on a desktop, and desktop features such as the recycle bin, screen resolution, and how to use the desktop.

1.3 Operating System

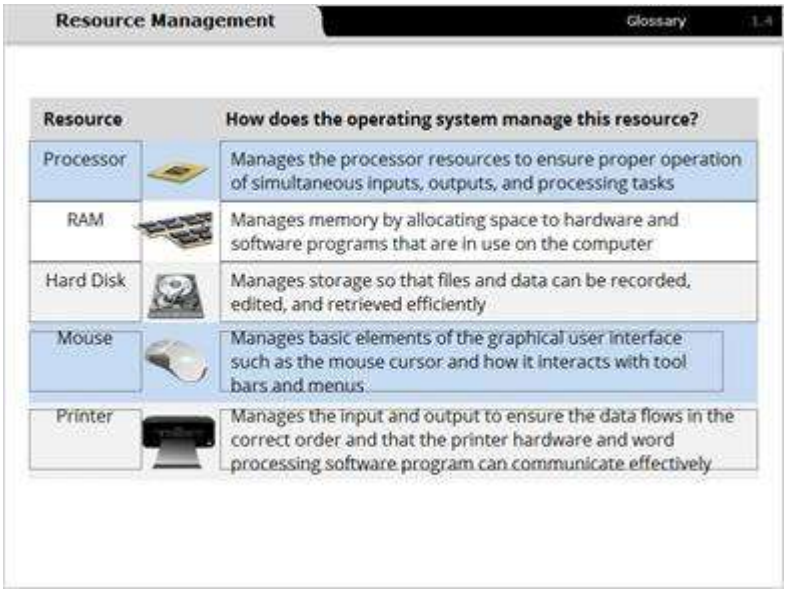


Notes:

An *operating system* is a network of software that acts as the manager for all hardware and software on your computer.

The operating system manages and interacts with: the computer hardware, peripherals like your mouse and keyboard, device drivers, and applications software. The computer's OS (operating system) acts as the main resource manager.

1.4 Resource Management



Notes:

An operating system acts as the master controller for all computer hardware and peripherals and manages resources. In computer terms, a *resource* refers to any computer system component that's required to carry out a task.

For example, the computer's processor is a resource. The operating system manages the processor to ensure inputs, outputs, and other processing tasks operate successfully.

Another example of a *resource* is your computer mouse. The operating system manages how the mouse and its cursor interact with the computer screen including toolbars and menus.

1.5 Resource Example

Notes:

Every operating system simultaneously manages multiple resources. For example, successfully printing a document requires several steps happening in a specific order.

- First, while in a word processing application you select the *print* command,
- Then, the word processing application sends a command to the operating system that sends the document to the printer,
- Next, the operating system sends the document data to the device driver for the printer. The device driver controls the printer, and
- Finally, the printer prints out the document.

All of these steps are managed in part by the operating system.

1.6 Operating Systems

Notes:

A computer's operating system determines its hardware and software compatibility. This system is also referred to as the computer's *platform*.

The three most common platforms are Windows, Mac OS, and Linux. Because each operating system is constantly updated and improved, each one has a number of different versions. Let's look at some of the different versions for each of the three most popular desktop computing platforms.

1.7 Windows OS

Notes:

Some versions of the Window's operating system, from earliest to most recent, include Windows 2000, Windows XP, Windows 7, and Windows 8.1.

1.8 Mac OS

Notes:

Some of the Mac OS versions include OS X Snow Leopard, OS X Mountain Lion, and OS X Mavericks.

1.9 Linux OS

Notes:

Linux versions include Ubuntu, Linux Mint, and Bodhi.

1.10 Practice Identifying OS

Notes:

Identify each operating system using the provided buttons.

2. Examine the Windows 7 Operating System

2.1 The Desktop

Notes:

The *desktop* is the operating system's main interactive area and it's also the first screen you see when you log on. It covers the entire screen and remains in the background throughout your computing session.

Your desktop may look different from this one because it's dependent on your operating system.

Your background may even feature a decorative picture or pattern. This is known as computer wallpaper.

Every desktop contains the taskbar, start button, icons, and a recycle bin.

2.2 Resource Management

Notes:

The *start button* contains the start menu, which is the primary access point for your computer's programs, folders, and files. This menu provides a list of items to choose from and is usually accessed when you want to start a task.

The *taskbar* is used to launch new applications and to show already open applications. Applications can be started from the taskbar by clicking its correlating button.

The *Internet Explorer button* launches the software application used to access the Internet using the Internet Explorer web browser.

The *media player* is a file library that runs audio, video, and displays images. It also has ripping and burning capabilities.

The recycle bin temporarily stores files before they're permanently removed.

2.3 Practice Using your Desktop

Notes:

Practice selecting the start button, Internet Explorer button, recycle bin, and the Window's media player button.

2.4 Software Applications

Notes:

Select each icon to learn about each application.

Windows DVD Maker: This icon represents a software program that creates DVDs.

Music Library: This icon represents a computer's music file library.

Sample Videos: This icon represents a video file folder.

Google Sheets: This icon represents spreadsheet software.

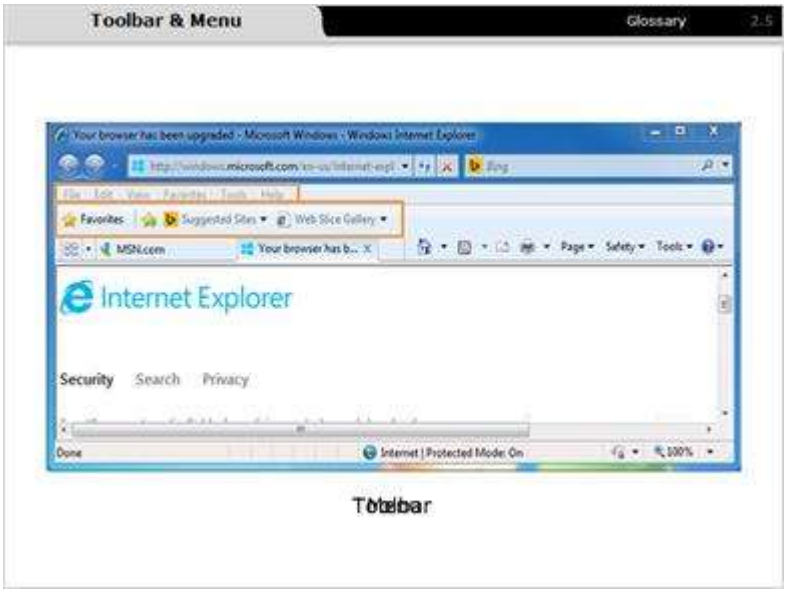
Adobe PDF: This icon represents a picture document file, also known as a PDF.

Internet Explorer: This icon represents the Microsoft Internet Explorer Web browser used to access the Internet.

MP3 file: This icon represents a music file in MP3 format.

Word Document: This icon represents a document file.

2.5 Toolbar & Menu



Notes:

A *toolbar* is a rectangular graphic usually located horizontally along the top of a window or software application. The toolbar contains buttons, icons, and menus that allow you to make selections in the application.

Most software applications contain dozens of commands, or actions, which are used to make the software application function. These commands can be found in the software application's *menu*.

To save screen space, menus are often hidden and won't appear until you click on a title in the *menu bar*. In the Microsoft Windows operating system, the menu bar titles begin with the commands: file, edit, and view.

The software application currently in use determines the menu bar command's names and number of options.

2.6 Menu & Submenu

Notes:

Sometimes a menu item isn't a command. Instead, that menu item contains another menu. This is known as a *submenu*. Let's look at an example.

In this directory, the *Organize* menu command was selected and then the *Layout* command was highlighted to show a submenu called *Menu bar*, which was originally hidden from view. Submenus are often indicated by a small arrow pointing to the right.

2.7 Practice Menus & Submenus

Notes:

Practice using menus and submenus by displaying the navigation pane in this window.

Select the *Organize* menu. Then select *Layout*. Finally, select *Preview pane* from the layout submenu.

2.8 Log In

Notes:

For security reasons, all operating systems require you to log in before using the computer. The log in consists of two parts: a username and a password. Each of these is case sensitive and may require the use of letters, numbers, and symbols.

As a student, your school may have established a username and password for all on-campus computers. On your home desktop or laptop computer, you set the username and password.

To log in to the computer, type in the correct username and password. This authenticates you within the operating system and allows you to access and use your programs. Different operating systems have different log-in screens, so your computer may look different from this one.

2.9 Practice Home Log in

Notes:

Practice logging into the Windows 7 operating system by typing in the given password. Click the arrow to complete the log in process.

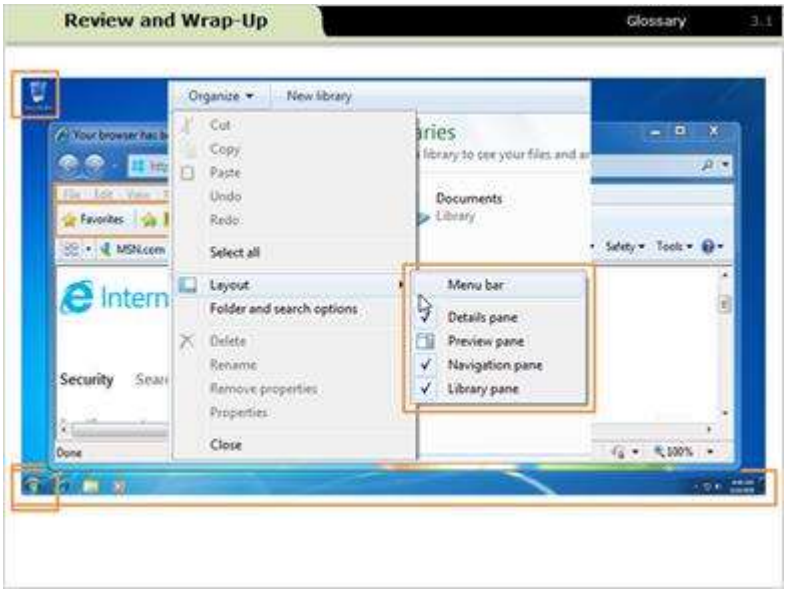
2.10 Practice Network Log in

Notes:

Practice logging into the Windows 7 operating system by typing in the given username and password. Click the arrow to complete the log in process.

3. Review and Wrap-Up

3.1 Review and Wrap-Up



Notes:

We examined the Windows operating system and were introduced to:

- The desktop,
- The start button,
- Icons like the recycle bin, and
- Taskbars.

You were also introduced to:

- Toolbars,
- Menus, and
- Submenus.

3.2 Review and Wrap-Up

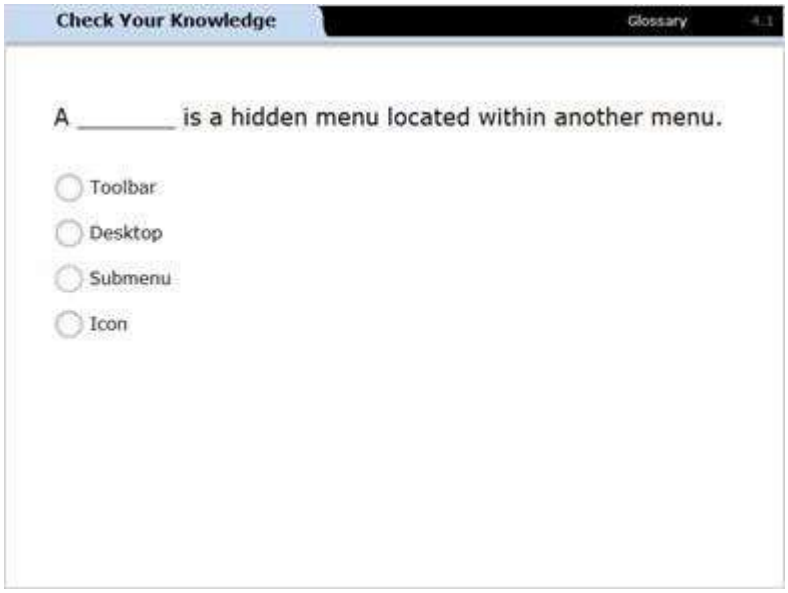
Notes:

Components of the Windows operating system used to navigate include:

- The *start menu* is used to find software programs
- The *taskbar* is used to see open software programs
- *Buttons* are located on the taskbar and are used to launch programs
- *Icons* are used to identify software programs or file types
- The *recycle bin* temporarily stores files before they're permanently removed
- The *desktop* is used as the main area of the operating system
- *Menus* are used to issue commands for software programs
- Menus may be used to find *submenus*

4. Check Your Knowledge

4.1 Multiple Choice

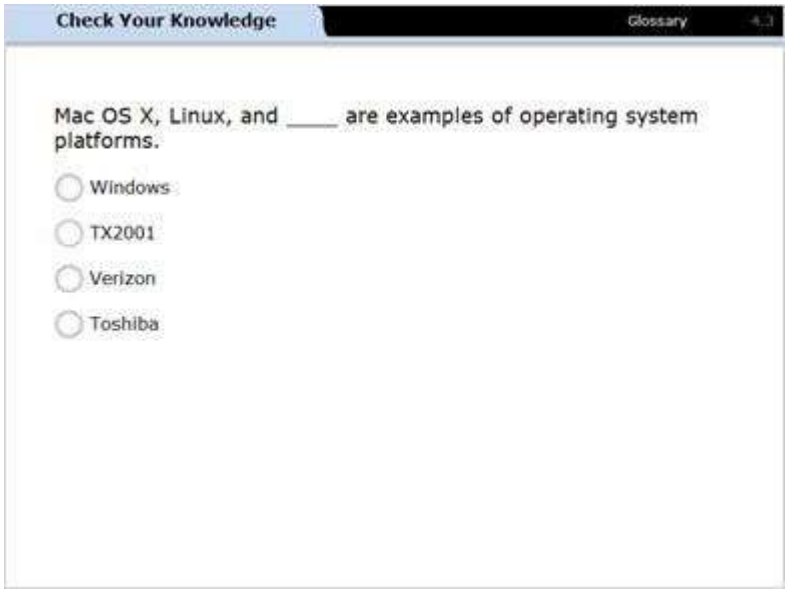


Notes:

Select the correct answer.

A _____ is a hidden menu located within another menu.

4.2 Multiple Choice

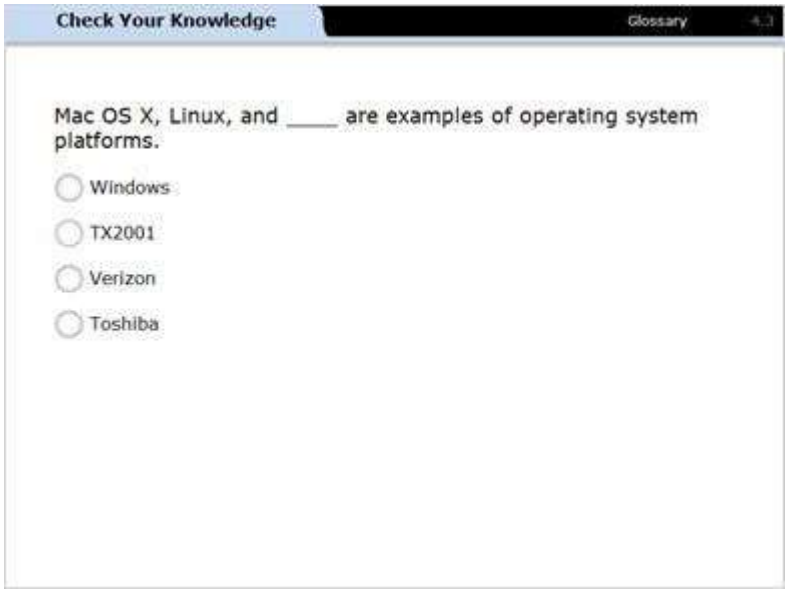


Notes:

Select the correct answer.

Which one of these is NOT a **resource** managed by an operating system?

4.3 Multiple Choice



Notes:

Select the correct answer.

Mac OS X, Linux, and _____ are examples of operating system platforms.

4.4 Identify

Notes:

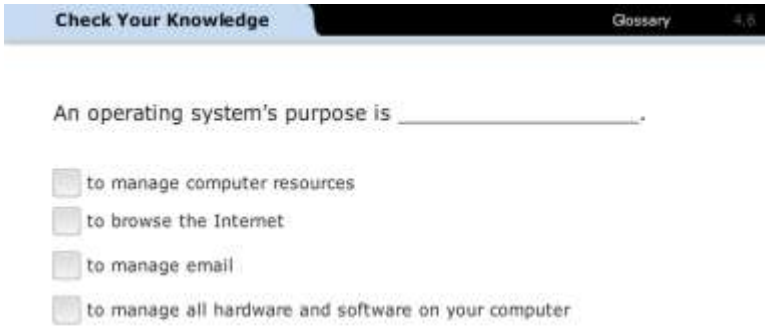
Where is the taskbar? Use your mouse to locate and click on the taskbar.

4.5 Identify

Notes:

Where is the start button? Use your mouse to locate and click on the start button.

4.6 Multiple Response



Notes:

Select the correct answers.

An operating system's purpose is _____.

4.7 Multiple Response

Notes:

Identify which operating system each image represents.

4.8 Identify

Notes:

How would you launch Internet Explorer? Use your mouse to locate and click on the icon.

4.9 Identify

Notes:

Where is the recycle bin? Use your mouse to locate and click on the recycle bin.

4.10 Campus Log in

Notes:

You are on-campus at a computer lab and need to use the computer to type a paper for class. Complete the necessary steps to log in to the computer. Your username is tsmith. Your password is r3vd7ti.

5. Conclusion

5.1 Conclusion

Notes:

Congratulations. You have completed: *Examine the Windows Operating System*.

Use your mouse to click on the restart button if you would like to repeat this module.