



NOTE: There will be a test covering the information in this handout this Friday!!!

Parts of the Computer

Output Devices: Monitor, Speakers, Printers

The monitor is the screen that displays information. It is the visual component of output. Computer screens have a much higher resolution than normal televisions, and are therefore more expensive. They are capable of displaying millions of different colors. The standard display used today is called SVGA. Older standards are VGA, CGA and EGA. The monitor is connected to a graphics card located inside the computer. The graphics card combined with the monitor determine which resolution you can use.

The speakers are connected to a sound card in your computer and output audio information.

Printers allow output from the computer to paper. There are currently two system printers available in the lab.

Input Devices: Keyboard, Mouse

The keyboard inputs information typed from it into the computer. There are a number of the different keyboards available. The most common are the 101-key keyboards, although new Windows keyboards will soon be standard (they include a start and window key). The keyboard connects to a special keyboard port included with most computers.

The mouse allows you to use the GUI (graphic User Interface) to navigate through programs by pointing and clicking on the screen. Most mice have two mouse buttons, left and right. The left mouse button is used for selecting most functions; the right mouse button is used in Windows95 to bring up property boxes, an easy way to edit or modify elements in a program (this will be discussed later). The Intellimouse is a fairly new device that is becoming popular, it concludes two buttons and a dial to help in scrolling and selecting.

Storage Devices: Hard disk drives, Floppy Drives, CD-ROM Drive

Hard Disk drives are storage devices in a computer that save data on a non-removable disk. Floppy drives are devices that store information on removable disks. CD-ROMs use CD disks to store a large amount of information cheaply. Most CD-ROM drives can only read data, not write data.

Each storage device is assigned a letter by the computer. Normally, drive A and B are floppy drives, and drive C is a hard drive. Additional storage devices are assigned letters after C; normally the CD-ROM drive is drive D.

Communications: Modem

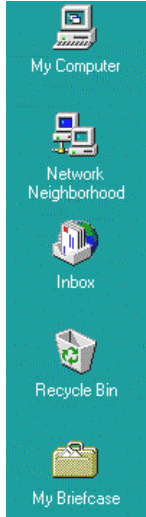
Modems are used to transfer data from one computer to another via a phone line. Modems are slow compared to the speed of a hard disk drive; the



fastest standard speed is 56K, or 56,000 bytes per second (a byte is equivalent to one letter, like an 'A'). At that speed, data transfer is many times 40% of the rated speed, so that data throughput for a 56K modem is typically about 15-25K per second (if you're lucky). Modems are used to copy files from one computer to another, or connecting to online services and the Internet.

The computers in the lab have DSL (digital subscriber line) access that is much faster than any modem. DSL service typically can transfer 75-150K per second.

Windows 98/ME Screen



When Windows 98/ME starts up, it displays the following:

The **Desktop**, which is the area that takes up the background of the screen,

The **Taskbar** (unless it is hidden), which is the gray bar located on the bottom of the screen.



The **Start** button (located at the bottom left corner of the screen) which can access all programs and files.

Icons, which are pictures that represent programs and files. There are four types of icons; program, file, printer and computer. Some icons that may be on your desktop are My Computer and Recycle Bin. There may also be small icons on the left side of the taskbar (next to the clock) which represent programs that are running. These may include volume control, virus protection, etc. On the bottom left

of the taskbar (next to the start button) are quick shortcut icons that can be used to run frequently used programs.

Computer Icons

The computer icons include **My Computer** and **Recycle Bin** (among others). **My Computer** gives you access to a window in which you can browse through the contents of your computer or find out information about disk drives, control panel, and printer that you have available to you.

The **Recycle Bin** serves as an electronic trash can. You can drag unwanted files, folders, or other icons over the top of it. Items are not deleted permanently from the system until you empty the trash (by double clicking on the recycle bin, and choosing empty recycle bin (under the File menu), or by right-clicking on the Recycle Bin and choosing Empty).

Network Neighborhood icon will be present if your computer is hooked up to a network.

Using the Mouse

Using the left mouse button, you can either single click or double click. Double clicking is used to perform an action, such as running a program, or loading a data file. A single click is used to select an item. You can also single click



using the right mouse button. This will bring up a menu of actions that can be performed on the selected item or object.

To move an object, dragging is used. To drag an object, select, and then hold down the left mouse button while you move the mouse. When you are at the desired location, release the mouse button and the object will move to that location.

Working with a Window

What is a Window?

A window is a rectangular area of the screen in which you view program folders, files or icons. The window is made up of several components that are the same for all windows.

Each window contains the title bar (at top), a menu bar (with menu options), three window control buttons (minimize, maximize and close), the active window, and a status bar on the bottom.




To open a window from an icon, double click on the icon. You can also open a window from the start menu, or by using a shortcut key (explained later).


Using Scroll Bars


Scroll bars appear along the bottom and right edges of a window when text, graphics, or icons in a window take up more space than the area shown. Using scroll bars, you can move up, down, left or right in a window.


In any scroll bar, there are also scroll arrows. Clicking on the arrows moves the view of the window a little bit at a time; clicking in the scroll bar moves the view a page at a time.

Sizing a Window

You can size a window by using the control buttons located at the top right of each window. The minimize button  removes the window from view and places the program on the taskbar for later use. If you are working on a document in a program, minimizing the window will not lose any information to your document.

The maximize button  enlarges the current image to fit the entire screen.

The Close button will  close the window. If the window is running a program, it has the same effect as using the exit command.

The Restore button is  used to restore the window to its former size. This button only appears if you have minimized the window.



Manual Sizing of a Window

You can manually set the size of a window by placing the mouse cursor on any window border. The cursor will become an arrow. By dragging, you can size the window to any size you want.

Moving A Window

To move a window, click and drag on the window's title bar.

Using Windows Help

Getting Help

All Windows applications have a help menu to assist you with tasks. Windows itself has a help menu. To access this help, select Help from the Start Menu.

The help menu has three options, Contents, Index and Find. Contents display the help available in outline form; Index displays a list of keywords that you can select help on, and Find searches for what you need help on.

Shutting Down Windows

Shutting Down – Turning off the Computer

Before you turn the power off on the computer **always** shutdown the computer first. To shutdown the computer, select Shut Down from the Start Menu. You will then have 3 or 4 choices:

1. Shut down the computer
2. Restart the computer
3. Restart the computer in MD-DOS mode
4. (Optional) Log on as a different user?

In most cases, you will select option 1. Windows will then close all programs, save any data and erase any temporary files it has created. When it is all done, it will display a message telling you it is now safe to turn your computer off.

Logging Off the Network

When you are done at your computer, it is VERY important that you Log off from the network. Click on the Start button and choose Log Off. Make sure the log on screen appears, and then turn your monitor off.