THE PC HELP DESK

Introduction to Windows 98
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Introduction

Yes, I know. There are a lot of books out there that talk about Windows 98. Few of these are really user-friendly and written in a way that makes learning fun and easy. If you have found one that you like, please take a few minutes to share the title with me as I would love to know about it. My attempt here is to help the novice understand some of the power of Windows 98 while getting started with the basics.

Although there are differences between Windows 95 and Windows 98, a lot of the differences are under the covers and should not make any difference for the casual user. My attempt here is to cover what Windows 98 looks and feels like. If you know of an important feature I fail to mention, please let me know.

This manual provides information about Windows 98. It starts with a description of the appearance of Windows 98 and how to control the look and feel of the system. It then goes on to actually running programs. Locating information on the system is important, so My Computer, the Windows Explorer and the Find function will be addressed. Several applets, or mini-applications, come standard with Windows 98, and each of these will be introduced.

No attempt is made to cover all the details of Windows 98 as the system is much too complex to be properly addressed here. The reader will become quite familiar with a number of aspects of Windows 98 while exploring this manual however.

The primary focus of this manual will be on those features of Windows 98 that will allow the reader to become productive using Windows 98 without having to worry about the operating system.

Although the emphasis here is on the Windows 98 operating system itself, perhaps I should at least say a few words about the mouse as this is your primary tool for controlling the system. You can do a lot of things in Windows 98 without the mouse, but to really be productive, you will need to use the mouse. Before I go any further, let me say that the mouse is not something you talk into. I know of several people who will swear at their mouse when it doesn't do what they want, but you can't control the system by talking into it. The mouse is a pointing device that allows you to select things in Windows 98. Don't be afraid of it. Put your hand firmly on the mouse and keep two fingers on top ready to press the left or right mouse button. When you get the mouse where you want on the screen, press down on the mouse pad to hold the pointer in place while you click the right or left button. The left button is used to select...
something in Windows 98 by clicking and releasing the button. To activate or
close something, you will want to click the left mouse button twice in rapid
succession. You may need to practice this some to get comfortable with it.
The right mouse button gives you a context sensitive menu of functions you
can perform when you click it. By this, I mean that the menu you'll see when
you click the right mouse button will depend on where you are. I encourage
you to get to know your mouse as it will be your best friend when you're using
your computer.

An operating system (OS) is the software that allows a computer user to
interact with a computer. For instance: some computers use MS-DOS
(Microsoft's Disk Operating System) that chiefly uses the keyboard. Some
computers run UNIX. Earlier versions of Windows were not actually an
operating system, but ran as an application under some version of DOS.
Windows 95/98 and Windows NT are the first operating system versions of
Windows. Windows (95/98 and NT), DOS, and UNIX are all operating
systems.

If you have any comments about what you read in this manual, please take the
time to send them to me. You'll find my mailing address on the inside of the
cover sheet along with my E-Mail address for those of you who have Internet
access.
Look and Feel of Windows 98

Starting and Stopping Windows 98

While it's easy to turn your computer on and off, there are a few things you need to keep in mind when you do.

Turn the Screen on First

When you turn on your computer, be sure to turn on your monitor first. The reason for this is that your computer will do some diagnostic tests and load some programs as it comes up. If a problem is detected, the information displayed on the screen might be helpful in figuring out what is wrong with your computer.

<F8> Boot Options

If you want to modify the system startup procedure, press <F8> when you see the message that says Starting Windows 95 and you will get a menu of different options. For example, if you wanted to bring the system up in DOS rather than in Windows, option 5 from the menu would allow you to do this. Windows 98 doesn't give you a message like Windows 95 does. <F8> works with Windows 98 the same as it does with Windows 95, but it's not easy to know exactly when to press <F8>. As a result, I would recommend that you just try <F8> periodically as your system is booting up.

System should come up ready to use

Under normal operation, your system should come up into Windows and be ready to use. If it doesn't for any reason, seek help unless you know what the problem is and how to correct it.

Shut the System Down Properly

Finally, when you're ready to turn your computer off, be sure to shut it down properly. Windows maintains a lot of information in memory in order to do the things it does for you. If you just turn power off without shutting it down properly, you stand a good chance of losing some information or doing damage to your system. To properly shut your system down, click on the Start button and then click on Shut Down... The underlined letter in the preceding is the key you can use instead of the mouse to select this. You'll get
a window asking for confirmation before your system shuts down. The window should look something like this:

![Shut Down Windows Window]

If, for some reason, you need to restart your system, you will follow this same procedure for shutting the system down except that you will change the option on the window that pops up.

Now, I can already hear you complaining about this procedure for shutting your computer down so I thought I would share this little tidbit with you I received. I apologize for not knowing the original author.

**Costello:** "Hey, Abbot!"

**Abbot:** "Yes, Lou?"

**Costello:** "I just got my first computer."

**Abbot:** "That's great Lou. What did you get?"

**Costello:** "A Pentium II-266, with 40 Megs of RAM, a 2.1 Gig hard drive, and a 24X CD-ROM."

**Abbot:** "That's terrific, Lou."

**Costello:** "But I don't know what any of it means!"

**Abbot:** "You will in time."

**Costello:** "That's exactly why I am here to see you."

**Abbot:** "Oh?"

**Costello:** "I heard that you are a real computer expert."
Abbot: "Well, I don't know-"

Costello: "Yes-sir-ee. You know your stuff. And you're going to train me."

Abbot: "Really?"

Costello: "Uh huh. And I am here for my first lesson."

Abbot: "O.K. Lou. What do want to know?"

Costello: "I am having no problem turning it on, but I heard that you should be very careful how you turn it off."

Abbot: "That's true."

Costello: "So, here I am working on my new computer and I want to turn it off. What do I do?"

Abbot: "Well, first you press the Start button, and then-"

Costello: "No, I told you, I want to turn it off."

Abbot: "I know, you press the Start button-"

Costello: "Wait a second. I want to turn it Off. I know how to start it. So tell me what to do."

Abbot: "I did."

Costello: "When?"

Abbot: "When I told you to press the Start button."

Costello: "Why should I press the Start button?"

Abbot: "To shut off the computer."

Costello: "I press Start to stop."

Abbot: "Well Start doesn't actually stop the computer."

Costello: "I knew it! So what do I press?"

Abbot: "Start."

Costello: "Start what?"
Abbot: "Start button."

Costello: "Start button to do what?"

Abbot: "Shut down."

Costello: "You don't have to get rude!"

Abbot: "No, no, no! That's not what I meant."

Costello: "Then say what you mean."

Abbot: "To shut down the computer, press-"

Costello: "Don't say, 'Start!'"

Abbot: "Then what do you want me to say?"

Costello: "Look, if I want to turn off the computer, I am willing to press the Stop button, the End button and Cease and Desist button, but no one in their right mind presses the Start button.

Abbot: "But that's what you do."

Costello: "And you probably Go at Stop signs, and Stop at green lights."

Abbot: "Don't be ridiculous."

Costello: "I'm being ridiculous? Well. I think it's about time we started this conversation."

Abbot: "What are you talking about?"

Costello: "I am starting this conversation right now. Good-bye."

Parts of the Screen

The Windows 98 screen consists of the Desktop, the Taskbar and windows. The Desktop contains some number of icons providing access to different functions. The Taskbar contains the Start button giving access to nearly everything on the system. Each program running on the system will be in a window. Windows consist of several parts: title bar, menu bar, scroll bars, etc. The Windows 98 screen might look something like the following:
Your desktop icons are usually down the left side of the screen as you see here. To activate any of these functions, simply double-click on them.

The **Taskbar** is normally across the bottom of your screen as you see above. At the left end of the **Taskbar** is the **Start** button that gives you access to all the programs available on your computer. To the right of the **Start** button, you'll see a button for each window you have on the desktop. On the right end of the **Taskbar** is the **SysTray** that will normally contain some number of icons in addition to the system time. If you pause the mouse on any icon on the **Taskbar**, the system will tell you something about it. For example, if you pause the mouse over the time, the system will tell you the day of the week and the date as well. If the **Taskbar** gets in your way, it can be moved or hidden as explained in **Taskbar** on page 94.

Windows 98 adds something neat to the **Taskbar** - **Toolbars**. If you right-click on the **Taskbar** (not on an icon), you'll see a context sensitive menu. The first item on this menu allows you control of the **Toolbars** you can have on your **Taskbar**. These **Toolbars** give you quick access to any function you want included simply by single clicking on them.
Windows will take up some amount of your screen - perhaps even the entire screen depending on how the program has been instructed to run. For now, we will assume that programs run in a window as displayed above. The top line of a window is referred to as the Title Bar. On the left end of the Title Bar is the Control button familiar to people who have used an earlier version of Windows. Next is the name of the program running in the window along with possibly the file on which the program is working. On the right end of the Title Bar are three buttons. The right-most button has an "X" on it and will close the window if you click on it. The next button looks like a miniature window and will toggle the window between window and full screen. The third button looks like an underline and will minimize the window dropping it down to an icon on the Taskbar. The program is not closed, but is simply not taking up any space on the desktop any longer. After clicking on this button, you can get the window back by clicking on the appropriate button on the Taskbar.

Under the Title Bar is the Menu Bar that will normally contain some number of items. Clicking on each of these will result in a menu of functions from which you can select. The content of the Menu Bar will depend on the program running in the window.

In the window above, there are two scroll bars - one for the left part and one for the right part of the window. A scroll bar may be down the right edge of a window or across the bottom of a window or both. The purpose of a scroll bar is to allow you to view information that won't fit in the window - you can scroll up or down to see the rest of the information. There are several ways in which you can use the scroll bar. First, there's an arrow on either end of the scroll bar that will move the information in that window one line at a time each time you click on it. Second, you can click on either side of the slide bar to scroll a screen at a time. Third, you can click on the slide bar itself and drag it up or down to see whatever part of the information you want to get to. All three methods of scrolling are useful depending on the situation.

The content of the remainder of the window will depend on the program running in the window.

**Moving Windows**

The title bar of every window is like the handle of a suitcase. By putting the mouse on it and holding down the left mouse button, you can drag the window around on your Desktop. When you release the left mouse button, the window will be in the new position. Moving a window can give you access to information in a window hidden behind.
Resizing Windows

You already know how to use the Maximize button to switch between a window and full-screen. Windows can be adjusted in a more granular fashion as well. When you move your mouse to a horizontal border, your mouse pointer will change to a Ú. When you move your mouse to a vertical border, it will change to a Ù. You'll see a diagonal arrow when your mouse is on one of the four corners of a window. Click and hold your left mouse button when you see this change in your pointer and drag to resize your window.

You have three ways of resizing windows using the borders:

- Horizontal Border - resizes a window up or down
- Vertical Border - resizes a window left or right
- Corner Border - resizes a window up or down and left or right

Arranging Windows

You already know how to move windows around on your screen and how to resize windows so you can see what you need. There are three predefined desktop layouts you can use as well. These predefined desktop layouts are accessible by right-clicking on the Taskbar (not on an icon) and selecting the appropriate layout. What you will see should look something like this:

<table>
<thead>
<tr>
<th>Toolbars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cascade Windows</td>
</tr>
<tr>
<td>Tile Windows Horizontally</td>
</tr>
<tr>
<td>Tile Windows Vertically</td>
</tr>
<tr>
<td>Minimize All Windows</td>
</tr>
<tr>
<td>Undo Minimize All</td>
</tr>
<tr>
<td>Properties</td>
</tr>
</tbody>
</table>

The underlined letter on each item on this menu can be used if you don't feel all that comfortable using the mouse to select items.

Cascade Windows

Windows will be arranged in a stair-step fashion where you can see the title bar of all non-active windows behind your active window.
Tile Windows Horizontally

Each window will go from the left edge to the right edge of the screen and take up an equal amount of the vertical space of the screen.

Tile Windows Vertically

Each window will go from the top to the bottom of the screen and take up an equal amount of horizontal space of the screen.

While you're looking at this menu, you might explore the other items available to you here, but I won't spend time on them now. Just be aware that you do have other options here. Be careful about making changes until you know the full meaning of those changes though.

Arranging Icons

Your Desktop comes with some icons and over time, you may add additional icons to give you quick access to things on your computer. These icons can be moved around on your screen to be more convenient for you. Simply click and hold the left mouse button on an icon and drag it wherever you want it. You can also use some predefined functions to arrange the icons on your Desktop. When you right-click on your Desktop (not on an icon or window), you'll get a menu containing a couple of functions that can be used to control the arrangement of the icons on your Desktop. The menu should look something like this:

<table>
<thead>
<tr>
<th>Arrange Icons:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Up Icons</td>
<td></td>
</tr>
<tr>
<td>Refresh</td>
<td></td>
</tr>
<tr>
<td>Paste</td>
<td></td>
</tr>
<tr>
<td>Paste Shortcut</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Properties</td>
<td></td>
</tr>
<tr>
<td>by Name</td>
<td></td>
</tr>
<tr>
<td>by Type</td>
<td></td>
</tr>
<tr>
<td>by Size</td>
<td></td>
</tr>
<tr>
<td>by Date</td>
<td></td>
</tr>
<tr>
<td>Auto Arrange</td>
<td></td>
</tr>
</tbody>
</table>

Arrange Icons

By pausing your mouse on this item, you'll see another menu that allows you to arrange the icons on your Desktop according to Name, Type, Size or Date in addition to allowing Windows to arrange the icons for you.
**Line Up Icons**

This simply moves your icons into a nice neat row.

Experiment with the different arrangement of the icons on your Desktop to get the look you want.

**Wallpaper Your Desktop**

Windows comes with several files that can be used as the background for your Desktop. These include Black Thatch, Blue Rivets, Bubbles, Carved Stone, Circles, Chess, Clouds, Forest, Gold Weave, Houndstooth, Metal Links, Pinstripe, Red Blocks, Sandstone, etc. These files are bitmap or BMP files and are found in your Windows folder. You can create your own bitmap files with *Paint* (see page 66) and use these as wallpaper for your Desktop as well.

To change your wallpaper, right-click on the Desktop and select **Properties**. Select your wallpaper and **Tile** or **Center** it to suit your tastes. Click on **Apply** or **OK** to implement your wallpaper. Experiment with the different wallpaper to customize your Desktop to your liking. The **Display Properties** dialog box should look something like this:
We'll talk about using Paint to create bitmap files later in the material. There are also bitmap files that you can pick up on the Internet that can be used as wallpaper. For example, the file you see in the Display Properties dialog box above makes a striking wallpaper.

You can also pick up a copy of Microsoft Plus! that allows you to customize more than just your wallpaper. The Plus! pack contains Desktop themes which include wallpaper, icons, screensavers and sounds pertaining to different themes. And add-ons to the Plus! pack give you a wide variety. Plus! is part of Windows 98.

**Setting Your Screensaver**

In the early days of personal computers, screen savers were a necessity. The monitors used back then were monochrome monitors and if an image were left on the screen for any length of time, the image would burn itself into the screen and be there permanently. To prevent this from happening, screen savers were invented. Screen savers had one function - make constant changes to what was
displayed on the screen to prevent burn-in. As time went on, screen savers became more elaborate. Some of the designs used were actually fun to watch. With the advent of VGA color monitors, it became impossible to burn an image into the screen so the need for screen savers disappeared. They are nice to look at however and a lot of people enjoy them. Be aware that they can affect applications running on your system. This may not be important to you, but you need to be aware of it anyway.

To set up a screen saver, right-click on your Desktop and select Properties. One of the tabs across the top of the window you get will be Screen Saver. Click on this tab and select the screen saver you want. Once you have it configured, click on Apply or OK to implement your screen saver.

Windows comes with a number of different screen savers including Blank Screen, Flying Windows, Flying Through Space, Mystify Your Mind and Scrolling Marquee among others.

If you pick up a copy of Microsoft Plus!, you'll get a different screen saver to go with each of the themes you get. Some of these are pretty impressive. The Plus! pack comes with Windows 98.

There are several packages of screen savers that you can pick up if you want something unique.
Switching Between Windows

Windows 98 provides the ability to run more than one application or program at a time. Unfortunately, the size limitation of most screens makes it difficult to see everything about all applications you can have running. The Taskbar at the bottom of your screen allows you to switch between running applications simply by clicking on the button associated with a particular program. In addition to using the Taskbar to change between active applications, you can use the <Alt><Tab> key combination to quickly switch tasks.

You can switch windows simply by clicking on the appropriate icon on the Taskbar. And since the Taskbar is always available to you, why have another method of accomplishing the same thing? Well, this is true, but it requires you to move your hand from the keyboard, grab the mouse, move it to the Taskbar and click on a different application. All of this takes time. With <Alt><Tab>, you keep your fingers on the keyboard, but can quickly switch between applications. Here's how it works.
Press and hold down the <Alt> key. Tap the <Tab> key and a window will pop up in the middle of your screen showing you all the applications you currently have running on your machine. One application will be highlighted with a box around it. If this is the application you want to switch to, then release the <Alt> key and that application will come to the foreground. If the highlighted application isn't the one you want, simply continue to tap the <Tab> key until the application you want is selected and then release the <Alt> key. It's just that easy. And you never move your hands from the keyboard.

Windows 98 provides another neat feature. With Windows 98, you can actually have more than one monitor attached to your system. You can have one monitor with one application on it and another application running on the second monitor. You still need to be able to switch between these applications.

**Using Dialog Boxes**

Applications use dialog boxes to obtain information when necessary. Dialog boxes take on a variety of forms, but generally contain certain user selectable options.

- **Wait:** Click the up or down arrows to change the value.
- **Always** and **Never:** Click the option(s) you want. You can select more than one.
- **Screen Saver:** Click the down arrow to see a list of options; then click the option you want.
- **File name:** Type your selection in the box.
- **Display:** Click the option you want. You can only select one.
Drag the slide on the bar to make your selection.

Click the up or down arrows to move through the list, and then click your selection.
Starting Programs

With Windows 95/98, it's easy to run any of the applications that are installed on your machine. With a few exceptions, all applications are started using the Start button:

1. Click the left mouse button on the Start button on the Taskbar.
2. Move your mouse up to point to Programs - no need to click. The available programs and groups will appear to the right.
3. Move your mouse to the right to point to Accessories. Again available programs and groups will appear to the right.
4. Click the left mouse button on WordPad.
5. Type in some information.
6. To close WordPad, click on the Close button (the one with the "X" on it) in the upper right corner of the WordPad window. You'll get a dialog box asking you what you want to name the file and where you want to save it. We'll talk about naming files and where to put them in Naming a File on page 26.
7. Name your file My File.

As an exercise, try opening and closing the program called Paint. You'll find it in the Accessories group where you found WordPad. Both Paint and WordPad come free with Windows 98. WordPad is a word processing...
program that isn't as powerful as Microsoft Word or WordPerfect, but considerably more powerful than Notepad. Paint is a drawing program that can be used to create graphics.
Exploring Your Hard Drive

Let's examine a couple of ways in which you can explore the contents of your hard disk. The first is through **My Computer** and the second is by using an application known as the **Windows Explorer**. Each of these has advantages and disadvantages. **My computer** is easily accessible and provides a simplistic view of whatever you're after, however, it gives you a separate window for each object. The **Explorer** gives you a single window containing everything on your system, but may lead to information overload.

**My Computer**

You can look at just about anything on your computer through the **My Computer** icon on your Desktop.

1. Double-click on the **My Computer** icon on the Desktop. The window shows you an icon for everything on your computer.

2. Double-click on C-drive icon. This opens another window showing you the content of your C-drive.
3. Scroll down to the **Windows** folder and double-click on it. This opens another window showing you the content of the **Windows** folder.
4. Scroll down to the file called **Clouds** and double-click on it. This is a graphic file that comes with Windows 98. By double-clicking on it, Windows brings up **Paint** and loads this file.

The file that you created earlier called **My File** may be in the same folder as **Clouds**. See if you can locate it and double-click on it. Don't be surprised if **My File** is not in the same folder as **Clouds**. It may be elsewhere on your system and we'll locate it later. You created this file using **WordPad**, but when you double-click on it, Windows 98 will bring up **Word** instead if this application is available on your system. The reason is that Word is a more powerful word processor than **WordPad**. If **Word** is not installed on your system, Windows 98 will bring up **WordPad**.

Windows knows about file types and will automatically associate files that have a particular extension with the appropriate application. The extension on the **Clouds** file is **BMP** that is associated with the **Paint** application. The extension on the **My File** file is **DOC** that is associated with the **Word** application if **Word** is present; otherwise it is associated with the **WordPad** application. For more information, see **File Association** on page 28.

**CAUTION**: Don't attempt to use the file name extension for your own purposes or Windows will not be able to associate the file properly.

**Windows Explorer**

Using **My Computer** to look at what's on your computer is okay, but the number of windows you get could be overwhelming before too long. Fortunately, Windows 95/98 comes with another tool that simplifies things. It's called the **Windows Explorer** or **Explorer** for short. To bring up the **Explorer**, click on the **Start** button and point to **Programs**. The **Explorer** should be close to the last item in the list that comes up. If your keyboard has the Windows key (one will be between the <Ctrl> and <Alt> keys to the left of the space key), try pressing <Windows>E to bring up the **Explorer**.

Bring up the **Explorer** and go find the **Clouds** file you looked at earlier.

**HINT**: Look in the **Windows** folder on the C-drive.

The **Windows Explorer** is a very powerful tool for exploring your system. There are a couple of things that can enhance its power even more though.
The default for the Explorer doesn't look much different from My Computer. You do see everything on your system on the left side and the contents of whatever you want on the right side, but it still shows just icons. You might like to have some additional information. If you click on View and select Details, you'll see more information about the files and folders you're looking at.
You can change the sort order of the right window of the Windows Explorer simply by clicking on the title button at the top of the right panel to toggle the sort order from ascending to descending or back. In addition, this view allows you to see the date/time the files/folders were last modified. This information will come in handy as you work with your system.

You can adjust the size allocated to a particular field by double-clicking on the line between that field name and the next field name. For example, if you double-click on the vertical line between Name and Size, the Name field will expand to show you the full name of any file/folders in that pane.

You have access to a number of functions via the menu bar at the top of the Explorer, but it might be nice to have quicker access to those functions you'll use most frequently. In the View menu, you can click on Toolbar to activate a toolbar with frequently used functions. If you pause on each of the items on the toolbar, the system will tell you what they do. While you're at it, you might also select Status bar from the View menu giving you a lot of useful information as you explore your system.
Working With Files

If you are familiar with working with files in DOS or earlier versions of Windows, you have some surprises coming in Windows 98. Although the old concept of 8.3 file naming convention still works in Windows 98, this restriction has been lifted giving you the freedom to name files pretty much anything you want.

In Windows 98, you have to go out of your way to see the 3-character extension given to files. For the most part, this extension is now hidden although it is still present.

The 8-character file name has now been expanded to 250 characters including some special characters that use to be restricted. For example, you can now use blanks in the file name that allows you to give your files very meaningful names.

Let's take a look at several aspects of working with files.

Finding a File

If I tell you there's a file on your system called General.TXT and that this file is in the Windows folder and that you should use Notepad to look at it, you would probably have no trouble bringing it up and looking at it. On the other hand, if I were to tell you that there's a bitmap file on your system called Clouds and ask you to go look at it, you might have a bit more trouble. Where do you look for the file? How do you locate it? Enter the Windows 98 Find function:

1. Click on the Start button.
2. Point to Find.
3. Click on Files or Folders....
4. Enter whatever you remember about the file name and click on Find Now. Your file should appear at the bottom of the Find window.
For example, I told you there's a bitmap file on your system by the name of Clouds. That's all you know about the name so you enter that in the Named: field and click on Find Now. The resulting Find window should look something like this:

By double-clicking on the Bitmap Image file, you'll bring it up in Paint.

Notice that there are other tabs across the top of the Find window where you can enter other information about the file(s) you might want to look for. The
**Date** tab allows you to look for files based on when they were created or last modified. The **Advanced** tab allows you to look for particular file types and/or specific size files.

**Naming a File**

File names are no longer restricted to 8.3 as they used to be with earlier versions of Windows. You can now name a file with up to 250 characters. Most applications allow you to create a file and then name it as you save it. Although you can specify a file extension, you are better off if you let the application supply the extension and you supply the name. With 250 characters including spaces to play with in Windows 98, you can be pretty descriptive with your file name.

DOS and older versions of Windows used an 8.3 file naming convention meaning that you had 8 characters you could use in naming a file. A lot of people used the 3-character extension to allow them to name files a little better. This causes problems with file association that is a feature of Windows.

Windows 98 extends the 8 characters you are free to use to 250 characters and allows you to use some special characters such as spaces in the name. It should no longer be necessary to use the 3-character extension. There are still some restrictions on what you can put into a file name. You should stay away from the following characters as they will cause problems for the system: \ / : * ? " < > |

As a matter of fact, Windows 98 tries to hide the 3-character extension from view. Unless you really try, you won't see the extension. You can force Windows 98 to show the extension if you really need to see it, but you're better off without it.

While we're on the subject of files, let's talk a little about where you want to put the files you create. You will put files somewhere unless you decide not to create anything on your computer. Every application has a default location where files are store unless you change it. Most of the time, this default location is where the program you're running is stored. In other words, you have data and programs stored in the same place. This may seem convenient, but there are a couple of reasons not to do this. First, putting your data with your programs can make it difficult to locate your data when you want it. Second, sooner or later, you will want to back up your data. If your data is intermixed with the programs, it will be difficult to just back up the data and not the programs. If all your data is organized in one place, you always know where it is and it's easy to back up since you don't have to go looking for it.
What I suggest is that you create a folder on your hard drive and put all your data files in that folder. It doesn't matter what you call this folder as long as you reserve it for your data files and don't store any programs in it. Some systems will have a folder called My Documents that can be used for this purpose. If this folder doesn't exist, you might create it or perhaps create one named Data. Now you have a place to put all those files you create.

It won't take too long before you start having difficulty locating files within this folder because of the number of files you are accumulating. You have to look through all the files to find the specific one you're looking for. Perhaps it would be a good idea to organize your files some. Perhaps some of your files relate to business while others are of a personal nature. How about creating a couple of lower level folders called Business and Personal. You could have more than just these two, and yours could have other names. Now you can quickly zero in on your business files or your personal files without having to worry about the other.

Your personal files might still get rather crowded though over a period of time. Let's assume you write one letter a week. By the end of the year, you would have some 52 letters stored in your Personal folder. This may not be too bad, but after two years, it might be a little difficult to locate a particular file. Suppose we create a folder in Personal for each year. We might have folders called 1997, 1998, etc. This might help, but if you create more files than just 52, this might still not be enough. You might want to have a further breakdown of your files. Perhaps you would want a folder for those letters you write to Uncle Harry and another one for Aunt Mary.

Obviously the names you pick are purely up to you and you will probably want more of a breakdown than this, but your Data structure might look something like this:
Copying a File

With Windows 98, it's easy to copy and move files from one place to another. Using either My Computer or Windows Explorer, simply right-click on the file you want to copy and select Copy from the context sensitive menu. Then right-click where you want to place a copy of the file and click on Paste. A copy of the file will be placed there.

Another way to copy a file is to use the Edit menu at the top of the My Computer or Windows Explorer screen to select Copy. You can also use the hotkeys for Copy (<Ctrl>C) and Paste (<Ctrl>V).

Moving a File

The procedure for moving a file is similar to that for copying a file. Right-click on the file you want to move and click on Cut in the context sensitive menu. Then simply Paste the file where you want it to go. Again you can accomplish this by going to the Edit menu and selecting Cut there or by using the hotkeys for Cut (<Ctrl>X) and Paste (<Ctrl>V).

File Association

Windows is familiar with the default file extensions used by most application. By allowing applications to use their default extensions, you can bring up a particular application and load a file into it simply by double-clicking on the data file. This doesn't work if you override the default extension for the
application. As a result, Windows 98 doesn't normally show you the extension on files. You have to specifically request to see it. If you're looking at a Details view of files, however, Windows will tell you what Type of file you are looking at. For most purposes, this should be sufficient.
Games

People generally don't think of games as a learning tool, but in the case of the games that come with Windows, they may be fun, but you learn as well. If you feel a little rusty when it comes to using the mouse to navigate around in Windows, perhaps the games are just the ticket for you. They are fun to play, but they will give you experience using the mouse and make you more comfortable with the system in general.

To start a game:

1. Click the Start button.
2. Point to Programs, point to Accessories, and then point to Games.
3. Click on a game.

If you do not see any games on your Accessories menu, then you did not install any games when you installed Windows.

Four games come standard with Windows 98 and will be described.

FreeCell

FreeCell is a very enjoyable game. As solitaire games go, it is much more enjoyable than most of them as you can win more often than not. When I first started playing FreeCell, I was able to win about 50% of the time. That quickly rose as my experience in the game increased. Here is a sample screen from FreeCell along with a brief description of the screen and what goes where. Although you can read the Help for the game yourself, I’ve included a few things here to get you started.
The four cells in the upper left of the screen are the free cells that can contain one card at a time each. You must remove cards before you can put another card in each of these cells. The four cells in the upper right of the screen are the home cells and will start with the aces and build up to kings. The bottom section of the screen contains eight stacks of cards laid out face up in a random order. You can move cards around using alternating colors by clicking on the card(s) you want to move and then on where you want them to go. By default, cards that can go to the home cells will do so as soon as they are uncovered.

The object of the game is to move all the cards to the home cells, using the free cells as placeholders. To win, you make four stacks of cards on the home cells: one for each suit, stacked in order of rank.

It is believed (although not proven) that every game is winnable.

**To play FreeCell: starting the game**

1. On the **Game** menu, click **New Game**.
The FreeCell game area consists of the four home cells (Home cells are the four card locations in the top right corner of the screen. Aces can be moved to the home cells immediately, and other cards of the same suit can be moved on top of them in ascending order. You win the game by moving all the cards to the home cells.), four free cells (Free cells are the four card locations in the top left corner of the screen. Each cell can hold one card.), and the deck of cards, which is dealt face-up in eight columns at the beginning of the game.

2. To move a card, click the card you want to move, and then click the area you want to move the card to. There are three places you can move cards to in FreeCell:

- Move to a free cell: any card from the bottom of a column.

- Move to a home cell: any card from a free cell or from the bottom of a column. Moves to a home cell must be made in order of lowest to highest, same suit. Aces can always be moved to an empty home cell.

- Move to the bottom of a column: any card from a free cell or from the bottom of another column. Moves to a column must be made in order of highest to lowest, alternating suit colors.

**To play FreeCell: strategy and tips**

- Before you make your first move, look for trouble spots like aces hidden at the tops of columns, or both red sevens stacked behind three kings.

- Try to keep your free cells unoccupied as much as possible. Empty columns are also valuable.

- To cancel a move, click the Game menu, and then click Undo, or click the card you just moved again.

- To reveal a partially hidden card, use the right mouse button to click it.

- If you have already put two or more cards in sequence in a column, you can move the entire sequence to a different column if there are enough free cells open. To move several cards at one time, click the bottom card of the sequence you want to move, and then click the column you want to move it to.
To move a card quickly to a free cell, double-click the card.

At the end of each move, FreeCell transfers unneeded cards to the home cells. A card is unneeded if there are no lower rank cards of the opposite color left in the playing area.

When only one legal move remains, FreeCell warns you by flashing the title bar.

Hearts

This is the typical game of Hearts where you are playing against three other players in an attempt to have the lowest score when one of the players reaches a score of 100. In this version of the game, the other three players are the computer.
The object of **Hearts** is to have the lowest score at the end of the game.

**Hearts** is a four-player game. If you are connected to a network, you can have other players on other computers on the network. If you're not connected to a network, you can let your computer play the other three hands.

**To play Hearts: starting the game**

1. To connect to a game that is already being played over a network, click "I want to connect to another game."

2. To start a new game over a network, click "I want to be dealer," and then wait for other players to join the game.

3. To play by yourself against your computer, click "I want to be dealer," and then press <F2>.

4. Select three cards to pass to an opponent (except for every fourth hand, when no cards are passed). To select a card to pass, click it. To deselect a card, click it again.

5. The player who has the two of clubs starts the play by leading it.

6. Each player, moving clockwise, clicks a card to play. You must play a card in the same suit. If you do not have one, you can play any card, except that you cannot play a heart or the queen of spades on the first trick.

   The person who plays the highest card of the same suit as the first card played takes the trick. That player starts the next trick by clicking a card to lead. You cannot lead a heart until a heart has been played on a previous trick.

**Scoring**

- At the end of each hand, you get one point for each heart in your hand and 13 points for the queen of spades. The game continues until one player gets 100 points or more, or until the dealer quits the game.

- If you win all the hearts and the queen of spades in one hand (called Shooting the Moon), then you get zero points and each other player is penalized 26 points.
To play Hearts: strategy and tips

- In most cases, avoid taking a trick (The cards you collect when you play the highest card that is the same suit as the first card played in a round.) containing hearts or the queen of spades. The only time you will want to take such tricks is when you are trying to Shoot the Moon (Winning all the hearts and the queen of spades in one hand. When that happens, you get zero points and each other player is penalized 26 points. Your chances of Shooting the Moon are best if your hand contains a large number of high-value hearts and spades.) or trying to prevent someone else from successfully Shooting the Moon.

- On hands that begin by passing cards to an opponent, pass cards with high values, such as aces or face cards.

- It is best to play your highest cards early in the game, while your opponents are likely to have some cards in each suit and will have to play those cards instead of hearts. Tricks that do not contain any hearts or the queen of spades do not add to your score.

- You need to keep track of which cards have been played, particularly whether the queen of spades has been played and whether hearts have been broken (that is, whether a heart has been discarded on an earlier trick).

Minesweeper

Minesweeper is a very fascinating game involving strategy and skill as well as a certain amount of luck. I have enjoyed this game since back in the Windows 3.1 days. There are a couple of different versions of this game, but they all work basically the same and it will give you plenty of experience using the mouse.
The object of the game is to find all the mines on the playing field as quickly as possible without uncovering any of them.

**To play Minesweeper: starting the game**

1. On the Game menu, click New.

   The Minesweeper game area consists of the mine counter, the timer, and the playing field.

2. Click any square on the playing field to start the timer.

   - To uncover a square, use the left mouse button to click it. If it is a mine, you lose. If a number appears on the square, it specifies how many mines are in the eight squares that surround the numbered square.

   - To mark a square you suspect contains a mine, use the right mouse button to click it.

**To play Minesweeper: strategy and tips**

- To mark a square you are uncertain about, use your right mouse button to double-click it. This marks the square with a question mark (?). Later, you can either mark the square as a mine, or uncover it.

- If you have found all the mines around a numbered square, uncover the remaining squares around it by clicking the numbered square with the left and right mouse buttons simultaneously.
• Look for common patterns in the numbers. Often, but not always, a pattern of numbers indicates a specific pattern of mines. For example, the pattern 232 at the edge of a group of uncovered squares indicates a row of three mines next to the three numbers.

Solitaire

This is the standard Solitaire game. The game is neat and provides a lot of experience using the mouse in a Windows environment. My only complaint is that you have to play a lot before you can win. I guess I get discouraged because I can't win more often.

The object of the game is to use all the cards in the deck to build up the four suit stacks from ace to king.

To play Solitaire: starting the game

1. On the Game menu, click Deal.
2. Begin play by double-clicking any aces on top of the seven row stacks to move them to the spaces at the top right of the screen and then making any other plays available on the board.

You will be building two kinds of stacks: row stacks (Cards are stacked in descending order, alternating between red cards and black cards. For example, you can play the two of hearts on the three of clubs.) and suit stacks (Cards are stacked in the four areas at the top right of the screen in ascending order, beginning with aces. For example, you can play the two of hearts on the ace of hearts.).

To free up cards that you need to build the suit stacks, you build row stacks.

To move a card or a stack of cards from one row stack to another, drag it.

To move a card to a suit stack, double-click it.

3. When you have made all the available plays on the board, click the deck to begin turning over cards. The card that is face up on top of the deck is always available for play.

To choose a scoring system

1. On the Game menu, click Options.

2. In the Scoring box, click Standard scoring, Vegas scoring, or None.

Note

On the Options menu, you can also specify whether to draw one or three cards at a time. These options are scored slightly differently.
Applications

Windows 95/98 comes with a number of applications that can make you productive immediately without having to install expensive software on your system. Clicking on the Start button, pointing to Programs, pointing to Accessories, and then clicking on the application name can start most of these applications. You should find the following applications if they have been installed on your system and we'll take a look at each of these.

Notepad

There will be times when you will want to edit textual files. Textual files are different from documents created by WordPad, Word or WordPerfect or some other word processing program in that they contain no imbedded codes. Editing these files with a word processing program can introduce special characters that make these files unusable. Instead, use Notepad which allows you to edit the file as pure text.

Textual files will normally have a TXT file extension, but there are several special purpose files in Windows that must be pure text. Some of the more important of these include your CONFIG.SYS, AUTOEXEC.BAT, WIN.INI and SYSTEM.INI. You may get to the point of wanting to play with these files. If so, use Notepad to edit these and not WordPad as your system cannot use the resulting WordPad file. If you decide you want to create a web page, but don't have an HTML editor, you will want to use Notepad so as not to introduce those nasty characters associated with WordPad, etc.

In addition to having a tool to use in editing those special files on your system, learning Notepad can provide a good foundation for learning some of the other tools that come with Windows 98 as well as a number of the applications that you may want to add to your system later. Notepad is simple to learn but has some features in common with other programs.
The first thing I want to point out in the above is that I have entered some text into *Notepad*. Notice that the text just runs off the end of the window - it doesn't wrap. We'll correct that in a minute, but this is the default for *Notepad*. You could, of course scroll to the right in order to see the rest of the information I entered or enlarge the window. Okay, let's look at some of the features of *Notepad*. Let's start off by looking at each of the menus across the top of *Notepad*. Before we go to the individual menus, notice something about the menu bar itself. See the underlined letters in each of the menu items (*File*, *Edit*, *Search*, etc.)? These are meaningful. If you hold down the `<Alt>` key and press these letters, you will select that menu. Obviously you can select each menu with the mouse, but this gives you an alternative way of getting into them. So, you can get into the *File* menu by pressing `<Alt>F`.

**File Menu**
This is the **File** menu. Notice a couple of things about this menu. First, notice that there are underlined letters on each selection. Again, although you can select each item with your mouse, you can do it with the keyboard as well. In this case, since you are already in the menu, you don't need the `<Alt>` key; simply press the underlined letter to select a particular item. Second, notice the "..." at the end of several selections. This indicates that selecting these items will take you to a dialog box that will allow you to carry out that operation.

**New** - This will start a new document. If you are currently working on a document that you haven't saved, the system will prompt you to save the old document before starting a new one.

**Open**... - This allows you to bring an existing document into **Notepad** to view and/or edit it. You'll see the following dialog box when you make this selection:

![Open Dialog Box](image)

This is the standard **Open** dialog box used by most Windows 98 programs. It consists of a toolbar across the top that shows you which folder you are currently in along with a couple of control buttons for getting to where you want to go. The main part of the **Open** dialog box shows you the files/folders that match the criteria for this application. In this case, all we see are folders. Next is where the system will tell you the name of the file it thinks you want. Right now, it doesn't know so it assumes you want to look at all **TXT** files. Next is where you can tell the system what type of files you are interested in looking at. By default, **Notepad** looks at **Text Documents**, but you can change this to look at anything else. Finally, you can either **Open** the selection or **Cancel** this operation.
**Save** - If you are making modifications to an existing file, **Save** will put the changes back into the file after confirming that you really want to make the changes. If the file you are working on is a new file, **Save** works the same as **Save As**.

**Save As**... - **Save As**... brings up a dialog box similar to the **Open** dialog box above. By default, **Notepad** will save a new file in the **Windows** folder. It's easy enough to change folders and save a file anywhere on the system you want though. I would encourage you to create a special place where you save your files rather than putting them in the **Windows** folder. See **Naming a File** on page 26 for some suggestions on how to organize your data.

**Page Setup**... - The **Page Setup**... dialog box allows you to customize some of the things you see when you print your document. For example, you can change the size of your paper, customize the header and footer on each page as well as the margin at the top, bottom and either edge of the paper. The **Page Setup**... dialog box looks like this:

![Page Setup dialog box]

**Print** - This is a standard print operation sending the information to the default printer. The only way to change the printer is to change your default printer.

**Exit** - This shuts down **Notepad**. If the file you've been working on has not been saved, you will be prompted to save the file before **Notepad** exits.
**Edit Menu**

<table>
<thead>
<tr>
<th>Edit</th>
<th>Search</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undo</td>
<td>Ctrl+Z</td>
<td></td>
</tr>
<tr>
<td>Cut</td>
<td>Ctrl+X</td>
<td></td>
</tr>
<tr>
<td>Copy</td>
<td>Ctrl+C</td>
<td></td>
</tr>
<tr>
<td>Paste</td>
<td>Ctrl+V</td>
<td></td>
</tr>
<tr>
<td>Delete</td>
<td>Del</td>
<td></td>
</tr>
<tr>
<td>Select All</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time/Date</td>
<td>F5</td>
<td></td>
</tr>
<tr>
<td>Word Wrap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set Font...</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The **Edit** menu contains those functions that allow you to manipulate the information you have on the screen. As was the case with the **File** menu, you have an underlined letter on each item and some hot keys down the right side. These work the same as they did before. In this case, there are some items that appear dim in the menu. The reason for this is that these items are not available at the present time. In most cases, you have to have something selected for these items to work. Windows does a pretty good job of communicating with you to tell you what you can and cannot do. Also notice that most of the items in the **Edit** menu have a key combination on the right (**Ctrl**+Z, etc.). These are hot keys that can be used from within the document without having to go to the **Edit** menu. For example, you can do a **Copy** from within a document by holding down the `<Ctrl>` key and pressing the "C" key. I don't recommend that you try and memorize these hot keys just now. Instead, I would recommend that you just make note of them as you use the menu items and over time pick up on those you use most frequently.

**Undo** - **Notepad** does have a rather neat feature called the **Undo**. In essence, this is your Oops button. If you make a mistake and suddenly say "Oops", you can select the **Undo** and reverse whatever it was you just did. Unless I'm mistaken, the **Undo** item will only work on the most recent change you've made to your document.

**Cut** - Again, this item is only available if you have something selected in your document. Otherwise you have nothing to **Cut**. You can select some piece of your document by holding down the left mouse button and dragging across the letters/words/sentences that you want to select. Your selection will have white letters and a blue background. Now you will be able to **Cut** this selection. **Cut** removes the selected text from your document and puts it on the **Clipboard**.
The information is not totally deleted, but is being held in case you want to put it somewhere else.

**Copy** - **Copy** is very similar to **Cut**. The only difference is that with **Copy**, your selected text is not removed from the document. Instead, a copy of your selected text is placed on the **Clipboard** for you to use later.

**Paste** - Once you have some text on the **Clipboard** (using either **Cut** or **Copy** above), you can move to wherever you would like to put this text and **Paste** it back into your document. In other words, the combination of **Cut** and **Paste** allows you to move text around within your document while the combination of **Copy** and **Paste** allows you to duplicate information.

**Delete** - When you **Delete** text from your document, it is gone. If you do this by accident, you can use the **Undo** function to bring it back, but otherwise it is gone. **Delete** does not place the selected text on the **Clipboard**.

**Select All** - If there is something you want to do with all the text in your document at the same time, all you have to do is select the **Select All** function and your entire document will be selected. Now you can either **Cut** or **Copy** all the text to your **Clipboard**.

**Time/Date** - The **Time/Date** function is a neat feature of **Notepad**. Some people like to keep a journal and in a journal, you might want to have the date and time as part of the document. Obviously, you can type in the date and time, but with the **Time/Date** function, **Notepad** will automatically insert the date and time like this: 7:47 AM 2/27/98.

**Word Wrap** - In the sample of **Notepad** I showed you earlier, you saw that the text ran off the edge of the window. In some cases, this is what you want, but most of the time, you'd like to be able to see all the text on the screen at the same time. If you only have a little bit of information, you might be able to enlarge the **Notepad** window to see all the text. Another way of handling this is to select the **Word Wrap** function. This will take words that don't fit in the **Notepad** window and wrap them down to the next line.

**Set Font...** - This allows you to change the font used to display the file you have open. It doesn't change the font of the file itself. It simply allows you to view/edit files using whatever font you wish.
Search Menu

This menu contains those functions that allow you to locate specific text within your document. If your document is short, you may not have a problem locating specific text, but if it's several pages long, having functions like this will really come in handy. Again, notice that there is a hot key available for one of these items.

Find... - As you've already seen, this function opens a dialog box that allows you to enter the text you want to search for along with a couple of pieces of information to help Notepad perform the search. If the text is found, it will be selected ready for you to Cut, Copy or overtype.

Find Next - This function simply repeats a previous Find.... This is useful if you have the same text in several different place within your document. In conjunction with Copy and Paste, this function would allow you to change some text globally within your document.

Help Menu

Most programs in Windows have a Help menu that provides information about using that particular program. The Help menu may not answer all your questions about a program, but I would encourage you to explore what is there before you look elsewhere. Most companies marketing software today are providing more Help and less hardcopy documentation.
**Help Topics** - **Notepad** is a very simple program to use as it doesn't contain a lot of bells and whistles. As a result, the **Help Topics** is not very long. You should be able to explore all of **Help Topics** in just a few minutes. I would encourage you to do so for two reasons. First, you'll know nearly everything there is to know about **Notepad**. Second, you'll become familiar with the format of the Help facility Microsoft uses so you'll know what to expect in other Microsoft products.

**About Notepad** - The function of the About for any program is simply to let you know what version of the program you are running. From time to time, the programmer might include some additional information about your system, but don't expect this. Here's what my version of **About Notepad** looks like:
As you can see, this tells me that I'm running Notepad for Windows 98 and that it's licensed to me. I get some additional information at the bottom of this window - the amount of memory I have in my system along with the amount of system resources I have free.

**WordPad**

For those who want something more powerful than Notepad, Microsoft makes available a word processing program called WordPad. WordPad is a basic word processing application that you can use to quickly create formatted letters, memos, or any other kind text document. WordPad works with other features of Windows 95/98 so you can do things like embed graphics into the documents you create. WordPad comes equipped with some of the basic features found in larger word processor applications. Some of these features will allow you to:

- Create documents with any font that is installed on your system
- Colorize and change the size of your text
- Created bulleted lists.
- Center and justify paragraphs.

One great feature of WordPad is that you can easily open documents you create with it in other popular word processing software programs such as Microsoft Word and WordPerfect. This makes it easy to take advantage of the more complex word processing capabilities of these applications without retyping your documents.
Another built-in feature is that WordPad's default text format is the same format used by Microsoft Word. So if someone sends you a Word document, you can open the document and see most of its formatting without having Word installed on your system.

Some people find the power of WordPad to be sufficient for their purposes. To really appreciate the power of WordPad, you need to experiment with it. Try typing something into WordPad and then modify it using the different features available. As soon as you bring up WordPad, you'll notice a couple of things. First, the layout is very similar to Notepad, which is a good reason for knowing Notepad before trying to understand WordPad. Second, there are some definite differences and those differences are what makes WordPad so powerful.

When we talked about Notepad, I told you the purpose of Notepad was to edit text files and that you should never use WordPad or a more sophisticated word processor because of the special characters they put into files. I just want to repeat that here in case you skipped over that discussion in Notepad. DO NOT USE WORDPAD TO EDIT TEXT FILES! You will get yourself into big trouble.

One more thing before we get started with the discussion of WordPad. I will assume you have read and understand Notepad. Notepad is a starting point and I will be referring to things I said there from here on. If you came here without reading about Notepad, I encourage you to go back and get a good foundation in Notepad first.
As with Notepad, you have a menu bar across the top of the window. You see some familiar items (File, Edit and Help) and you see some unique items (View, Insert and Format). We'll take a look at each of these and see the differences. Under the menu bar you should see the Standard Toolbar with some eleven icons on it. We'll look at each of these as well. Under the Standard Toolbar is the Format Bar with ten additional things. We'll look at each of these as well. Under the Format Bar is a Ruler that indicates the typing area. In essence, what you type will remain within the ruler. You have a large area for typing below the Ruler. At the bottom of the window is the Status Bar that will give you some information as you use this tool. Don't worry about it if you don't see all of these things. You'll learn how to control the window in a few minutes.

**Menu Bar**

Before we go to the individual menus, notice something about the menu bar itself. See the underlined letters in each of the menu items (File, Edit, View, etc.)? These are meaningful. If you hold down the <Alt> key and press these letters, you will select that menu. Obviously you can select each menu with the mouse, but this gives you an alternative way of getting into them. So, you can get into the File menu by pressing <Alt>F.
File Menu

Most of what is on the File menu is the same as what you learn with Notepad. This should make it much easier for you to pick up the new stuff here. Notice that there are underlined letters on each selection. Although you can select each item with your mouse, you can do it with the keyboard as well. In this case, since you are already in the menu, you don't need the <Alt> key; simply press the underlined letter to select a particular item. Second, notice the "..." at the end of several selections. This indicates that selecting these items will take you to a dialog box that will allow you to carry out that operation. Notice that some of the items in the File menu have a key combination on the right (Ctrl+N, etc.). These are hot keys that can be used from within the document without having to go to the File menu. For example, you can start a new document from within a document by holding down the <Ctrl> key and pressing the "N" key. I don't recommend that you try and memorize these hot keys just now. Instead, I would recommend that you just make note of them as you use the menu items and over time pick up on those you use most frequently.

New - This will start a new document. If you are currently working on a document that you haven't saved, the system will prompt you to save the old document before starting a new one.

Open... - This allows you to bring an existing document into WordPad to view and/or edit it. You'll see the following dialog box when you make this selection:
The only difference between this dialog box and the one you get with Notepad is that here you are looking for Word for Windows 6.0 (*.doc) files instead of Text Documents.

Save - If you are making modifications to an existing file, Save will put the changes back into the file after confirming that you really want to make the changes. If the file you are working on is a new file, Save works the same as Save As....

Save As... - Save As brings up a dialog box similar to the Open dialog box above. By default, WordPad will save a new file in the Windows folder. It's easy enough to change folders and save a file anywhere on the system you want though. I would encourage you to create a special place where you save your files rather than putting them in the Windows folder. See Naming a File on page 26 for some suggestions on how to organize your data.

Print... - This is a standard print operation sending the information to the default printer. Contrary to the way Notepad works though, WordPad allows you to change printers via the following dialog box:
Print Preview - WordPad offers a neat feature of allowing you to view your document as it will look when you print it without actually having to print it. You won't actually be able to read the document, but will be able to see the layout. The Print Preview will look something like this:

Page Setup... - The Page Setup... dialog box allows you to customize some of the things you see when you print your document. For example, you can
change the size of your paper as well as the margin at the top, bottom and either edge of the paper. The Page Setup... dialog box looks like this:

![Page Setup dialog box in WordPad](image)

**WordPad** provides quick access to the most recently edited document simply by clicking on the name of the file you want or by typing the number corresponding to that file.

**Send...** - This brings up a dialog box that allows you to send the file you're working on to someone via the Microsoft messaging system. The dialog box should look like this:

![Choose Profile dialog box in WordPad](image)
**Exit** - This shuts down **WordPad**. If the file you've been working on has not been saved, you will be prompted to save the file before **WordPad** exits.

**Edit Menu**

<table>
<thead>
<tr>
<th>Edit</th>
<th>View</th>
<th>Insert</th>
<th>Format</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undo</td>
<td>Ctrl+Z</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut</td>
<td>Ctrl+X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copy</td>
<td>Ctrl+C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paste</td>
<td>Ctrl+V</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paste Special...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear</td>
<td>Del</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select All</td>
<td>Ctrl+A</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Find...</td>
<td></td>
<td>Ctrl+F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Find Next</td>
<td></td>
<td>F3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace...</td>
<td></td>
<td>Ctrl+H</td>
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<td></td>
</tr>
<tr>
<td>Links...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Object Properties</td>
<td></td>
<td>Alt+Enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Object</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The **Edit** menu contains those functions that allow you to manipulate the information you have on the screen. As was the case with the **File** menu, you have an underlined letter on each item and some hot keys down the right side. These work the same as they did before. In this case, there are several items that appear dim in the menu. The reason for this is that these items are not available at the present time. In most cases, you have to have something selected for these items to work. Windows does a pretty good job of communicating with you to tell you what you can and cannot do. Again, take note of the hot keys available with the **Edit** menu.

**Undo** - **WordPad** has a rather neat feature called the **Undo**. In essence, this is your **Oops** button. If you make a mistake and suddenly say "Oops", you can select the **Undo** and reverse whatever it was you just did. Unless I'm mistaken, the **Undo** item will only work on the most recent change you've made to your document.

**Cut** - This item is only available if you have something selected in your document. Otherwise you have nothing to **Cut**. You can select some piece of your document by holding down the left mouse button and dragging across the letters/words/sentences that you want to select. Your selection will have white letters and a blue background. Now you will be able to **Cut** this selection. **Cut** removes the selected text from your document and puts it on the **Clipboard**.
The information is not totally deleted, but is being held in case you want to put it somewhere else.

**Copy** - Copy is very similar to **Cut**. The only difference is that with **Copy**, your selected text is not removed from the document. Instead, a copy of your selected text is placed on the **Clipboard** for you to use later.

**Paste** - Once you have something on the **Clipboard** (using either **Cut** or **Copy** above), you can move to wherever you would like to put it and **Paste** it back into your document. In other words, the combination of **Cut** and **Paste** allows you to move text around within your document while the combination of **Copy** and **Paste** allows you to duplicate information.

**Paste Special...** - The **Paste Special...** function allows you to bring in information from another file. You can either bring the information in as separate information or you can insert a link to the other file. If you bring the information in as separate information, it becomes part of this document independent of the source of the information. In this case, the information can be edited by double-clicking on the information and bringing up the application associated with the information. If the information is inserted via a link, any changes made to the other file will be reflected in the copied information. The **Paste Special...** dialog box will look like this:

![Paste Special Dialog Box](image)

**Clear** - When you **Clear** text from your document, it is gone. If you do this by accident, you can use the **Undo** function to bring it back, but otherwise it is gone. **Clear** does not place the selected text on the **Clipboard**.
Select All - If there is something you want to do with everything in your document at the same time, all you have to do is select the Select All function and your entire document will be selected. Now you can either Cut or Copy everything to your Clipboard.

Find... - This function opens a dialog box that allows you to enter the text you want to search for along with a couple of pieces of information to help WordPad perform the search. If the text is found, it will be selected ready for you to Cut, Copy or overtype.

Find Next - The Find Next function simply locates the next occurrence of whatever it is you did the Find... on in the first place.

Replace... - The Replace... function can locate and replace text within your document. Simply tell Replace... what you want to locate and what you want to replace it with and WordPad will do the rest.

Links... - If you have information that you have linked into your document using the Paste Special... function above, then you can perform certain functions on that link using this function. The Links... dialog box should look something like this:
**Object Properties** - The **Object Properties** function allows you to do a lot of the same things you do with the **Links...** function above. In essence, you're editing the properties of a linked object and controlling how that object will be displayed and controlled.
Object - The appearance of this menu item will change depending on what you have selected within your document. Essentially, this function allows you to edit imbedded objects in your document.

View Menu

WordPad allows you to edit several different types of files. Among these are Text files, Rich Text files, Word 6 documents and Write documents. Each of these allows something different as far as the content is concerned. As a result, WordPad allows you to customize the look and feel of WordPad for each of these types of files.

Toolbar - This is a toggle that allows you to display the standard toolbar across the top of WordPad.

Format Bar - This is a toggle that allows you to display the format toolbar under the standard toolbar.

Ruler - This is a toggle that allows you to display the ruler showing you the typing area for your document.

Status Bar - This is a toggle that allows you to display the status bar at the bottom of your WordPad window.

Options... - This function brings up a dialog box that allows you to set up the view you want for each of the different types of files that can be edited with WordPad. You don't have to have a file open in order to customize WordPad for a particular type of file. The dialog box you get should look something like this:
**Insert Menu**

**Date and Time...** - *WordPad* allows you to maintain a journal similar to the way *Notepad* does by allowing you to insert the date and/or time into your document. Unlike *Notepad* though, *WordPad* allows you to control the format of what you enter. To accomplish this, *WordPad* will present you a dialog box that looks like this:

**Object...** - In addition to inserting the date/time into your document, *WordPad* allows you to put a number of different objects into your document that can help make your document more interesting to read. The objects you can insert into your document depend on how your system is set up, but the following is one possibility for inserting an object into your document:
Format Menu

Basically, the Format menu allows you to control the look of your document by changing the font, creating lists, controlling the look of your paragraphs and setting your tab stops.

Font... - The Font... function gives you access to a lot of the same function you'll find on the format bar. The format bar is probably more convenient if you have it turned on, but the Font... function puts everything in one dialog box:
**Bullet Style** - This function turns the current paragraph into an unordered list meaning that it begins with a bullet and is indented from other paragraphs before and after it. If you begin a new paragraph while in **Bullet Style**, the new paragraph will also be in **Bullet Style**.

**Paragraph...** - This function allows you to control the indentation of the current paragraph from the left and right margins as well as the indentation of the first line of the paragraph. You can also control the alignment of the paragraph (left, center or right) just as you can from the format bar.
**INTRODUCTION TO WINDOWS 98**

**Tabs...** - By default, **WordPad** gives you a tab stop every half-inch. This may be satisfactory, but if you'd like to have more control over your tab stops, look in the **Tabs...** function. To set a tab at a particular rule location, type in the position on the ruler and click on **Set**. To remove a tab stop you no longer want, select the setting from the list and click on **Clear**.

![Tabs dialog box](image)

**Help Menu**

Most programs in Windows have a **Help** menu that provides information about using that particular program. The **Help** menu may not answer all your questions about a program, but I would encourage you to explore what is there before you look elsewhere. Most companies marketing software today are providing more **Help** and less hardcopy documentation.

**Help Topics** - **WordPad** contains a few more bells and whistles than **Notepad**, but is still simple to use. The **Help Topics** is a little longer than in **Notepad**. It'll take you a little longer to explore all of **Help Topics**, but I would encourage you to do so anyway. First, you'll know nearly everything there is to know about **WordPad**. Second, you'll become familiar with the format of the Help facility Microsoft uses so you'll know what to expect in other Microsoft products.
About WordPad - The function of the About for any program is simply to let you know what version of the program you are running. From time to time, the programmer might include some additional information about your system, but don't expect this.

Standard Toolbar

You'll notice that all the functions available on the Standard Toolbar are also available elsewhere in the menus. In essence, the Standard Toolbar gives you quicker access to frequently used functions.

- This will start a new document. If you are currently working on a document that you haven't saved, the system will prompt you to save the old document before starting a new one.

- This allows you to bring an existing document into WordPad to view and/or edit it.
- If you are making modifications to an existing file, **Save** will put the changes back into the file after confirming that you really want to make the changes. If the file you are working on is a new file, **Save** works the same as **Save As**.

- This is a standard print operation sending the information to the default printer. If you don't want to send the printout to the default printer, use the **Print...** function in the **File** menu instead.

- **WordPad** offers a neat feature of allowing you to view your document as it will look when you print it without actually having to print it. You won't actually be able to read the document, but will be able to see the layout.

- This function opens a dialog box that allows you to enter the text you want to search for along with a couple of pieces of information to help **WordPad** perform the search. If the text is found, it will be selected ready for you to **Cut**, **Copy** or overtype.

- This item is only available if you have something selected in your document. Otherwise you have nothing to **Cut**. You can select some piece of your document by holding down the left mouse button and dragging across the letters/words/sentences that you want to select. Your selection will have white letters and a blue background. Now you will be able to **Cut** this selection. **Cut** removes the selected text from your document and puts it on the **Clipboard**. The information is not totally deleted, but is being held in case you want to put it somewhere else.

- **Copy** is very similar to **Cut**. The only difference is that with **Copy**, your selected text is not removed from the document. Instead, a copy of your selected text is placed on the **Clipboard** for you to use later.

- Once you have something on the **Clipboard** (using either **Cut** or **Copy** above), you can move to wherever you would like to put it and **Paste** it back into your document. In other words, the combination of **Cut** and **Paste** allows you to move text around within your document while the combination of **Copy** and **Paste** allows you to duplicate information.
- **WordPad** has a rather neat feature called the **Undo**. In essence, this is your *Oops* button. If you make a mistake and suddenly say "Oops", you can select the **Undo** and reverse whatever it was you just did. Unless I'm mistaken, the **Undo** item will only work on the most recent change you've made to your document.

- **WordPad** allows you to maintain a journal similar to the way **Notepad** does by allowing you to insert the date and/or time into your document. Unlike **Notepad** though, **WordPad** allows you to control the format of what you enter.

**Format Bar**

- **Times New Roman** - This function allows you to select the font for any selected text or for any future text. Simply click on the down arrow at the right and select the desired font.

- **12** - This function allows you to select the size for any selected text. The down arrow at the right will give a list of potential sizes you can choose from. If the size you would like is not listed, you can type in any size you want. Obviously your printer needs to support the size you enter, but figures like 150 or 200 are even acceptable.

- **Bold** - This function will make whatever text is selected bold.

- **Italic** - This function will make whatever text is selected italics.

- **Underline** - This function will underline whatever text is selected.

- **Color** - This function allows you to change the color of whatever text is selected.

- **Left Align** - This function will left align the current paragraph.

- **Center Align** - This function will center align the current paragraph.

- **Right Align** - This function will right align the current paragraph.
- This function turns the current paragraph into an unordered list meaning that it begins with a bullet and is indented from other paragraphs before and after it. If you begin a new paragraph while in Bullet Style, the new paragraph will also be in Bullet Style.

**Paint**

Paint is a very powerful drawing program that allows you to explore your artistic creativity. With Paint, you can create bitmap (BMP) files that can be used as wallpaper as we discussed earlier. I'm no artist, but I've managed to create some neat stuff with Paint.

Let's explore the Paint window and then see how to produce the image I've got above.

**Menu Bar**

Before we go to the individual menus, notice something about the menu bar itself. See the underlined letters in each of the menu items (File, Edit, View, etc.)? These are meaningful. If you hold down the <Alt> key and press these
letters, you will select that menu. Obviously you can select each menu with the mouse, but this gives you an alternative way of getting into them. So, you can get into the **File** menu by pressing `<Alt>F`.

**File**

<table>
<thead>
<tr>
<th>File</th>
<th>Edit</th>
<th>View</th>
<th>Image</th>
<th>Options</th>
<th>Help</th>
</tr>
</thead>
<tbody>
<tr>
<td>New</td>
<td>Ctrl+N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open...</td>
<td>Ctrl+O</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Save</td>
<td>Ctrl+S</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Save As...</td>
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<tr>
<td>Print Preview</td>
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</tr>
<tr>
<td>Page Setup...</td>
<td></td>
<td>Ctrl+P</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Print...</td>
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<td></td>
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<tr>
<td>Send...</td>
<td></td>
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</tr>
<tr>
<td>Set As Wallpaper (Tiled)</td>
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<tr>
<td>Set As Wallpaper (Centered)</td>
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</tr>
<tr>
<td>Logo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Ctrl+F4</td>
</tr>
<tr>
<td>C:\Program Files...\Xav4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>C:\Program Files...\aim95</td>
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</tr>
<tr>
<td>C:\Data\Western\Diskette\logo</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Most of what is on the **File** menu is the same as what you learn with **Notepad** and **WordPad**. This should make it much easier for you to pick up the new stuff here. Notice that there are underlined letters on each selection. Although you can select each item with your mouse, you can do it with the keyboard as well. In this case, since you are already in the menu, you don't need the `<Alt>` key; simply press the underlined letter to select a particular item. Second, notice the "..." at the end of several selections. This indicates that selecting these items will take you to a dialog box that will allow you to carry out that operation. Notice that some of the items in the **File** menu have a key combination on the right (Ctrl+N, etc.). These are hot keys that can be used from within the document without having to go to the **File** menu. For example, you can start a new document from within a document by holding down the `<Ctrl>` key and pressing the "N" key. I don't recommend that you try and memorize these hot keys just now. Instead, I would recommend that you just make note of them as you use the menu items and over time pick up on those you use most frequently.
**New** - This will start a new bitmap document. If you are currently working on a bitmap that you haven't saved, the system will prompt you to save the old one before starting a new one.

**Open...** - This allows you to bring an existing bitmap into **Paint** to view and/or edit it. You'll see the following dialog box when you make this selection:

![Open dialog box](image)

**Save** - If you are making modifications to an existing file, **Save** will put the changes back into the file after confirming that you really want to make the changes. If the bitmap you are working on is a new file, **Save** works the same as **Save As**.

**Save As...** - **Save As...** brings up a dialog box similar to the **Open** dialog box above. By default, **Paint** will save a new file in the **Windows** folder. It's easy enough to change folders and save a file anywhere on the system you want though. I would encourage you to create a special place where you save your files rather than putting them in the **Windows** folder. See Naming a File on page 26 for some suggestions on how to organize your data.

**Print Preview** - **Paint** offers a neat feature of allowing you to view your bitmap as it will look when you print it without actually having to print it. You won't actually be able to see the bitmap, but will be able to see the layout. The **Print Preview** will look something like this:
Page Setup... - The Page Setup... dialog box allows you to customize some of the things you see when you print your bitmap. For example, you can change the size of your paper as well as the margin at the top, bottom and either edge of the paper. The Page Setup... dialog box looks like this:
Print - This is a standard print operation sending the information to the default printer. Contrary to the way Notepad works though, Paint allows you to change printers via the following dialog box:
Send... - This brings up a dialog box that allows you to send the file you're working on to someone via the Microsoft messaging system. The dialog box should look like this:

Set As Wallpaper (Tiled) - This function saves you the hassle of saving the bitmap and then setting it as the wallpaper on your desktop. This does it all in one operation. In this case, the bitmap is tiled meaning that it is repeated to cover the entire desktop.

Set As Wallpaper (Centered) - This function saves you the hassle of saving the bitmap and then setting it as the wallpaper on your desktop. This does it all in one operation. In this case, the bitmap is centered rather than tiled as is the case in the previous item.
Paint provides quick access to the most recently edited bitmaps simply by clicking on the name of the file you want or by typing the number corresponding to it.

Exit - This shuts down Paint. If the bitmap you've been working on has not been saved, you will be prompted to save it before Paint exits.

Edit

The Edit menu contains those functions that allow you to manipulate the information you have on the screen. As was the case with the File menu, you have an underlined letter on each item and some hot keys down the right side. These work the same as they did before. In this case, there is one item that appears dim in the menu. The reason for this is that this item is not available at the present time. In this case, you can only Repeat what you have Undone. Windows does a pretty good job of communicating with you to tell you what you can and cannot do. Again, take note of the hot keys available with the Edit menu.

Undo - Paint has a rather neat feature called the Undo. In essence, this is your Oops button. If you make a mistake and suddenly say "Oops", you can select the Undo and reverse whatever it was you just did. The Undo item will only work on the three most recent changes you've made to your bitmap.

Repeat - Since the Undo item is your Oops button, the Repeat could probably be referred to as the Double Oops button. Essentially what it does is to reverse what the Undo did. If you made a change and suddenly decided you didn't want that change and pressed the Undo button only to realize that you really did want the change, you can use the Repeat function.
**Cut** - This item is only available if you have something selected in your bitmap. Otherwise you have nothing to Cut. You can select some piece of your bitmap by clicking on either of the first two items on the Toolbar and drawing a box around whatever you want to select. Your selection will have a dotted box around it. Now you will be able to Cut this selection. Cut removes the selected area from your document and puts it on the Clipboard. The information is not totally deleted, but is being held in case you want to put it somewhere else.

**Copy** - Copy is very similar to Cut. The only difference is that with Copy, your selected area is not removed from the bitmap. Instead, a copy of your selected area is placed on the Clipboard for you to use later.

**Paste** - Once you have something on the Clipboard (using either Cut or Copy above), you can move to wherever you would like to put it and Paste it back into your bitmap. In other words, the combination of Cut and Paste allows you to move an area around within your bitmap while the combination of Copy and Paste allows you to duplicate it.

**Clear Selection** - This function removes whatever you have selected from your bitmap. It does not place the selected area on the Clipboard. If you do this by accident, you can use the Undo function to bring it back, but otherwise it is gone.

**Select All** - If there is something you want to do with your entire bitmap at the same time, all you have to do is select the Select All function and your entire bitmap will be selected. Now you can either Cut or Copy everything to your Clipboard.

**Copy To...** - The Copy To... function takes whatever part of your bitmap you have selected and makes a copy of it and allows you to store that copy into a file.

**Paste From...** - The Paste From... function allows you to bring another bitmap image file into the bitmap on which you are currently working.
**View**

*Paint* provides you with several tools to help you create your bitmap. These tools are user controllable through the *View* menu.

**Tool Box** - This is a toggle that allows you to display the Tool Bar normally down the left side of *Paint*. When the command has a check mark next to it, the Tool Bar is on.

**Color Box** - This is a toggle that allows you to display the Color Bar at the bottom of the *Paint* window. A check mark appears when the Color Bar is visible.

**Status Bar** - This is a toggle that allows you to display the Status Bar at the bottom edge of the *Paint* window. When the command has a check mark next to it, the Status Bar is on.

**Zoom** - Notice the wedge to the right of the *Zoom* item. This indicates that there is more to this menu item and that just pausing your mouse on it will show the next level of it. You can control the amount of zoom along with a couple of additional things while you're in zoom mode.

**View Bitmap** - This will allow you to view your bitmap as a full screen. This is a neat function, but doesn't give you any indication on how to get out of the function and back to *Paint*. The secret is to click the left mouse button anywhere on the screen and you're immediately back into *Paint*.

**Text Toolbar** - This function toggles the Text Toolbar on or off. This is only available when you are working with text in your bitmap.
Image

Flip/Rotate... - This function allows you to flip your bitmap or a portion of your bitmap either horizontally or vertically or rotate your image 90°, 180° or 270°. The dialog box you'll see will look something like this:

Stretch/Skew... - This function allows you to stretch your bitmap or a portion of your bitmap horizontally or vertically by some percentage. It also allows you to skew your image horizontally or vertically by so many degrees. This dialog box will look like this:
Invert Colors - When you select this function, each color is replaced by its color complement. For example, white becomes black, and red becomes blue.

Attributes... - This function allows you to specify the size and color of your overall bitmap. The size controls the white area of the image screen. This allows you to specify very precise sizes for your images. You cannot use this function for an existing bitmap. When you change the attributes, you will start a new bitmap. The dialog box will look like this:

Clear Image - This function will erase everything in the current bitmap and allow you to start over.
Options

**Edit Colors...** - This function allows you to create custom colors. For example,

1. In the Color Box, click the color you want to change.
2. On the **Options** menu, click **Edit Colors**...
3. Click **Define Custom Colors**, and then enter new values in either the RGB (red, green, blue) or HLS (hue, saturation, and luminescence) color models.
4. Click **Add to Custom Colors**.

To save your custom colors, click the **Options** menu, and then click **Save Colors**...  To use your saved colors, click **Get Colors**...  For Help on an item, click the ? at the top of the dialog box, and then click the item.
Get Colors... - If you have created custom colors and saved them, you can bring them in later to use with another bitmap by using this function. You'll see a dialog box similar to the Save Colors... dialog box.

Save Colors... - If you have created custom colors, you can save them for use in other bitmaps later. When you select this function, you'll see the following dialog box:

![Save Colors dialog box]

Draw Opaque - With Paint, you can either draw transparent (specifies that the existing picture will show through your selection and the background color of your selection will not be displayed) or opaque (specifies that your select will cover the existing picture, using the foreground and background colors of the selected object). To choose transparent drawing, make sure Draw Opaque is not checked. To choose opaque drawing, make sure Draw Opaque is checked.

Help

Most programs in Windows have a Help menu that provides information about using that particular program. The Help menu may not answer all your questions about a program, but I would encourage you to explore what is there before you look elsewhere. Most companies marketing software today are providing more Help and less hardcopy documentation.
**Help Topics** - Paint contains a few more bells and whistles than Notepad, but is still simple to use. The Help Topics is a little longer than in Notepad. It'll take you a little longer to explore all of Help Topics, but I would encourage you to do so anyway. First, you'll know nearly everything there is to know about Paint. Second, you'll become familiar with the format of the Help facility Microsoft uses so you'll know what to expect in other Microsoft products.

![Help Topics: Paint Help]

**About Paint** - The function of the About for any program is simply to let you know what version of the program you are running. From time to time, the programmer might include some additional information about your system, but don't expect this.
**ToolBar**

- This icon allows you to select an irregularly shaped object from your picture in order to cut/copy it somewhere else either within your picture or to another application.

- This icon allows you to select a rectangular section of your picture in order to cut/copy it somewhere else either within your picture or to another application.

- This icon will turn your cursor into a little square. By holding down the left mouse button and dragging the mouse across sections of your picture, you'll reset the image to the background color. You can control the size of the eraser with the selection box that appears at the bottom of the ToolBar.

- As this icon implies, you can use it to dump color into your picture. The color you put into your picture can be selected from the Color Bar normally at the bottom of the window.

- This icon looks like an eyedropper that can be used to pick up a color from one place in your picture and put it somewhere else. Once you have used the eyedropper to pick up a color, you will be automatically switched to the paint icon above to dump this color into another part of your picture.

- This icon allows you to draw freehand. Essentially you get a pencil and by holding down the left mouse button, you can draw whatever you want in your picture.

- This icon allows you to magnify the picture you are working on. You can increase the size of the picture two times, six times or eight times. This can be very useful if you are doing some very fine work and need precise control. This only changes the view of the picture and not the actual size of the picture.

- This icon acts as a paintbrush allowing you to paint the color select on the Color Bar onto your picture in a number of different patterns.
- This icon looks like a paint spray can and works pretty much the same way. As you hold down the left mouse button, you will spray the color selected onto your picture. The longer you hold the mouse button down over the same place, the darker the color becomes.

- This icon allows you to add text to your picture. Once activated, your mouse will turn to crosshairs allowing you to create a rectangular section of your picture where you want to put some text. You should then get a font toolbar that allows you to adjust the font, size, etc of the text you want to use. You can then simply type in the text you want. It's not always that easy to get just the right effect in your picture so you might want to save a copy of your picture in case it doesn't turn out the way you want.

- This icon allows you to draw a straight line in Paint. To choose the width the line will be, click a line width from the bottom of the ToolBar. To choose the color the line will be, click a color. Simply click at the beginning of a line and release at the end of the line. Paint does the rest. Use the left mouse button to draw with the foreground color or the right mouse button to draw with the background color. To draw a perfectly horizontal, vertical, or 45-degree diagonal line, press and hold down the <Shift> key while dragging the mouse pointer.

- This icon is tricky. To choose the width the curve will be, click a line width at the bottom of the ToolBar. To choose the color the curve will be, click a color. First draw a straight line as above. Click where you want one arc of the curve to be, and then drag the mouse pointer to adjust the curve. Each curve must have at least one arc but no more than two. Repeat this step for a second arc. Use the left mouse button to draw with the foreground color or the right mouse button to draw with the background color. To undo a change, click Edit and then click Undo. You can undo up to three changes.

- This icon allows you to draw a rectangle. Click a color from the color box for the shape’s outline. To fill the shape with color, click a color by using the right mouse button, and then click a fill style from the bottom of the ToolBar. To draw a rectangle, drag the mouse pointer diagonally in the direction you want. As you do, Paint will draw a rectangle for you. To draw a square, press and hold down the <Shift> key while dragging the mouse pointer. You have a couple of options you'll see at the button of the ToolBar when you start using this icon. You can simply draw a rectangle with all other lines still
visible behind, you can draw a rectangle and not be able to see the lines behind, or you can simply shade an area with your background color.

- This icon allows you to draw a series of connecting line. To create a colored fill, click a color by using the right mouse button, and then click a fill style from the bottom of the tool box. To draw the polygon, drag the mouse pointer and click at each corner. Double-click when you're done. To use only 45- and 90-degree angles, press and hold down the <Shift> key while dragging the mouse pointer. To undo a change, click Edit and then click Undo. You can undo up to three changes.

- This icon allows you to draw an ellipse or circle. Click a color from the color box for the shape's outline. To fill the shape, click a color by using the right mouse button, and then click a fill style from the bottom of the ToolBar. To draw an ellipse, drag the mouse pointer diagonally. To draw a perfect circle, press and hold down the <Shift> key while dragging the mouse pointer. To undo a change, click Edit and then click Undo. You can undo up to three changes.

- This icon works just like the icon above except that the rectangles produced have rounded corners.

**Color Bar**

The Color Bar can be used to select both foreground and background color for whatever you are working on. The foreground color can be selected simply by using the left mouse button to select a color. The background color is selected using the right mouse button.

**Character Map**

The Character Map allows you to view all of the various fonts that you have installed on your computer and to use these in other Windows applications. Some examples of some characters available through Character Map include:

As you can see, the Character Map can be a very powerful tool.
The Wingdings font is one of my favorite fonts. It provides characters not available on the standard keyboard. By using these characters, you can enhance your documents and make them much more interesting. If you single-click on any of the characters, it'll blow up so you can get a good look at it. If you double-click on a character, it will be copied to **Characters to copy** in preparation for putting them into your document. Once you have characters in the **Characters to copy** area, you can click on the **Copy** button to place these characters on the **Clipboard** so you can **Paste** them into another application.

**Clipboard**

The **Clipboard** is essential a shelf within Windows that can hold one object at a time. An object can be a letter, word, paragraph and/or graphic. An object can be placed on the **Clipboard** from any Windows application. That same object can then be placed into any Windows application repeatedly until the contents of the Clipboard are replaced. Operations dealing with the clipboard include:

**Cut** - Removes the selected object or text and places it on the **Clipboard** so you can paste it elsewhere.

**Copy** - Makes a copy of the selected object or text and places it on the **Clipboard** so you can paste it elsewhere.

**Paste** - Inserts the object or text that is on the **Clipboard**. This command is available only if you have cut or copied an object or text.

There is a program called the **Clipboard Viewer** that allows you to work with the contents of the **Clipboard**.
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Let's look at some of the features of the Clipboard Viewer. Let's start off by looking at each of the menus across the top of the Clipboard Viewer. Before we go to the individual menus, notice something about the menu bar itself. See the underlined letters in each of the menu items (File, Edit, Display, etc.)? These are meaningful. If you hold down the <Alt> key and press these letters, you will select that menu. Obviously you can select each menu with the mouse, but this gives you an alternative way of getting into them. So, you can get into the File menu by pressing <Alt>F.

File Menu

This is the File menu. Notice a couple of things about this menu. First, notice that there are underlined letters on each selection. Although you can select each item with your mouse, you can do it with the keyboard as well. In this case, since you are already in the menu, you don't need the <Alt> key; simply press the underlined letter to select a particular item. Second, notice the "..." at the end of the Open... and Save As... items. This indicates that selecting these items will take you to a dialog box that will allow you to carry out that operation.

Open... - This allows you to bring an existing Clipboard file into the Clipboard Viewer. You'll see the following dialog box when you make this selection:
Save As... - Save As... brings up a dialog box similar to the Open... dialog box above. By default, the Clipboard Viewer will save a new file in the Windows folder. It's easy enough to change folders and save a file anywhere on the system you want though. I would encourage you to create a special place where you save your files rather than putting them in the Windows folder. See Naming a File on page 26 for some suggestions on how to organize your data.

Exit - This shuts down the Clipboard Viewer.

Edit Menu

Delete - Delete will first ask you if you are sure you want to empty the contents of the Clipboard and will then do it. Very simple.
Display Menu

This menu contains those functions that allow you to display the contents of the Clipboard in several different formats. This menu will change depending on the type of data the Clipboard contains. As a result, it would be difficult for me to cover all the various options. Instead, I'll let you explore this on your own. The menu shown above is for when the Clipboard contains text information.

Help Menu

Most programs in Windows have a Help menu that provides information about using that particular program. The Help menu may not answer all your questions about a program, but I would encourage you to explore what is there before you look elsewhere. Most companies marketing software today are providing more Help and less hardcopy documentation.

Help Topics - The Clipboard Viewer is a very simple program to use as it doesn't contain a lot of bells and whistles. As a result, the Help Topics is not very long. You should be able to explore all of Help Topics in just a few minutes. I would encourage you to do so for two reasons. First, you'll know nearly everything there is to know about the Clipboard Viewer. Second, you'll become familiar with the format of the Help facility Microsoft uses so you'll know what to expect in other Microsoft products.
About Clipboard Viewer - The function of the About for any program is simply to let you know what version of the program you are running. From time to time, the programmer might include some additional information about your system, but don't expect this. Here's what my version of About Clipboard Viewer looks like:
As you can see, this tells me that I'm running **Clipboard Viewer** for Windows 95 and that it's licensed to me. I get some additional information at the bottom of this window - the amount of memory I have in my system along with the amount of system resources I have free.

**Clock**

Most computers come with a built-in clock. This clock is used by the system to prioritize files and operations. Every file that is stored on the computer carries not only the name of the file, but the size, date and time the file was created or last modified. Windows 95/98 provides a means for displaying the clock as well as changing the clock. To adjust the clock, double-click on the clock on your **Taskbar**.

By double-clicking on the time on the **Taskbar**, you can change the date and time for your computer through an easy-to-use dialog box.
The Calculator can be a very powerful tool if you need to do some quick calculations and don't have your hand calculator handy. It also contains some very powerful features that aren't available on a lot of regular calculators.

The Calculator normally comes up in the Standard mode which is what most people will use. In this mode, you have the most common functions including memory, square root, percentage and reciprocal. The calculator also contains a Scientific mode which gives you access to many more functions. Don't be afraid to explore this tool as you may never need your hand calculator again as long as you're working on your computer.
INTRODUCTION TO WINDOWS 98

With much of the Standard view of the Calculator, I assume everyone is already familiar with what you have available. As a result, I'll skip the basics of how a calculator works and concentrate on what makes this unique from a regular calculator. The only key that is probably unique on the above view is the Back key. This is essentially a backspace key. Let's look at each of the menus across the top of the Calculator. Before we go to the individual menus, notice something about the menu bar itself. See the underlined letters in each of the menu items (Edit, View and Help)? These are meaningful. If you hold down the <Alt> key and press these letters, you will select that menu. Obviously you can select each menu with the mouse, but this gives you an alternative way of getting into them. So, you can get into the Edit menu by pressing <Alt>E.

**Edit Menu**

This is the Edit menu. Notice a couple of things about this menu. First, notice that there are underlined letters on each selection. Although you can select each item with your mouse, you can do it with the keyboard as well. In this case, since you are already in the menu, you don't need the <Alt> key; simply press the underlined letter to select a particular item.

**Copy** - Copy takes a copy of the value you have displayed and places it on the Clipboard for you to use later.
Paste - Once you have something on the Clipboard (using either Cut or Copy above), you can Paste it back into the Calculator. In other words, the combination of Cut and Paste allows you to move a value while the combination of Copy and Paste allows you to duplicate it.

View Menu

Scientific – This shows you the scientific view of the Calculator which is much more complex than the Standard view. It contains many more functions and the ability to work is the binary, octal and hexadecimal numbering systems as well as decimal.

Standard – This shows the normal view for the Calculator. This is the view that is shown at the start of this section and the one that most people will use. It contains all the functions that most people will need when working on the computer.

Help Menu

Help Topics - The Calculator is a very simple program to use as it doesn't contain a lot of bells and whistles. As a result, the Help Topics is not very long. You should be able to explore all of Help Topics in just a few minutes. I would encourage you to do so for two reasons. First, you'll know nearly everything there is to know about the Calculator. Second, you'll become familiar with the format of the Help facility Microsoft uses so you'll know what to expect in other Microsoft products.
About Calculator -- The function of the About for any program is simply to let you know what version of the program you are running. From time to time, the programmer might include some additional information about your system, but don't expect this. Here's what my version of **About Calculator** looks like:
As you can see, this tells me that I'm running Calculator for Windows 98 and that it's licensed to me. I get some additional information at the bottom of this window - the amount of memory I have in my system along with the amount of system resources I have free.
Shortcuts Hints and Tips

There are a number of shortcuts, hints and tips that can really increase the power of this operating system. Let's take a look at some of these.

Taskbar

The Taskbar is a powerful part of Windows 98. It provides access to nearly every part of your system as well as providing information about what is running on your system. But it can get in the way. Fortunately, you can move it out of your way by moving it to another edge of your screen or you can hide it altogether.

First, you can move the Taskbar to any side of the screen simply by dragging it to a different side of the screen. This allows you to get it out of your way while still keeping it visible. When you click and drag the Taskbar, be sure to click on the Taskbar itself and not on an icon.

Second, you can hide the Taskbar by

1. Click on the Start button.
2. Point to Settings.
3. Click on Taskbar & Start Menu.... You'll get a dialog box entitled Taskbar Properties.
4. The bottom portion of this window contains four items. The second is Auto hide. Click the left mouse button on this item and a check mark will appear in the box to the left of it.
5. Now click the OK button at the bottom of the Window. The Window closes and your Taskbar goes away.

Now that your Taskbar is gone, don't panic. It's still available when you need it. All you need to do is move your mouse down to the bottom of your screen. As you touch the bottom of the screen, the Taskbar will pop up for you to use. When you move off the Taskbar, it will hide again.

Start Menu

Newcomers to Windows accept the Start menu as a fixed, unchangeable list of programs. This simply is not the case. Of course you can add new programs to...
the **Start** menu when you install them, but you may also want to modify the **Start** menu to suit your taste.

You can right click on any item in the **Start** menu and move it, copy it, delete it, change its properties etc.

To move or copy an item from your desktop to the **Start** menu, just drag it over the **Start** icon, and the **Start** menu will open up. Drop it wherever you want it in the **Start** menu.

### Send To

When you right-click on a file in the Explorer or My Computer, the context sensitive menu you get shows you what you can do with the file you’ve clicked on. One of the items listed is Send To. The system maintains this pretty well, but you may find that you’d like to have something in the **Send To** menu that Windows has not placed there for you.

To add Notepad to the menu (for example):

1. Open Explorer and Go to `C:\WINDOWS\SENDTO` folder.
2. Click **File**, **New**, **Shortcut** and Click on the **Browse** button.
3. Find **Notepad.exe** in your Windows directory.
4. Click **Open**, **Next**, **Finish**.

You'll have Notepad in your **Send To** Menu.

Similarly you can add other programs to the **Send To** menu.

### `<Ctrl><Esc>`

If your **Start** button isn't readily available or you don't want to use the mouse, you can bring up the Start menu by pressing `<Ctrl><Esc>`. You can then use your cursor keys to navigate the menu.

Here's a little trick I hope you'll never need. Working with Windows 98 is easy. All you need to do is point your mouse at the **Start** button and you can get to anything on your system, right? Well, true, but what happens if your mouse quits working. It can happen. Without your mouse, you can do just about anything on your system including properly shutting it down. Although Microsoft has geared everything to the mouse, it didn't forget that there are some people out there who have problems with the mouse every once in a
while. If you hold the <Ctrl> key down and tap the <Esc> key, you'll pop up the Start menu. You can then use your cursor keys to select things. As I say, I hope you never need this, but it's nice to keep this in the back of your mind just in case.

If your keyboard is a Windows 95 compatible keyboard, you have a few extra keys on it that weren’t on earlier keyboards. For example, you may have a key between the <Ctrl> and <Alt> keys to the left of the Space bar. This is the <Window> key. You also have one of these to the right of your Space bar as well. If you simply press the <Window> key by itself, you’ll pop up the Start menu. This gives you an even quicker way of getting to the Start.

**Hard Disk Maintenance**

Your computer is like a car - it requires maintenance to continue to run properly. Your system comes with a couple of programs to help with this maintenance. Always check your hard disk for errors before optimizing.

- **Scandisk** - checks your hard disk for errors
- **Defrag** - optimizes hard disk file structure

One of the problems that has been inherent in computers for a long time is that data that stored on them ends up fragmented. I won't go into the details of how this happens, but as the data on your hard disk gets fragmented, your computer will run slower and slower until eventually it will stop altogether. Before Windows 95, the only way to correct this situation was to get out of Windows and use some not-so-user-friendly programs called SCANDISK and DEFRAG to clean things up. These tools come with DOS v6.0 or later. With Windows 95, Microsoft has beefed up these necessary tools so they now run under Windows. They still give you some rather cryptic messages when errors are detected, but it's now possible for anyone to run these tools. Both of these tools are located in the System Tools group inside the Accessories group. You'll find ScanDisk and Disk Defragmenter in here. For the most part, these tools are easy to use, but there are too many options to go into detail here. Rather than expanding this document into a volume, let me suggest you get some additional help on the specifics of these tools. I would like to point out that it's imperative that you run ScanDisk before you run the Disk Defragmenter.

Windows 98 comes with something called the Task Scheduler that automatically runs ScanDisk and Disk Defragmenter at times you specify. You should see an icon in the Systray on the Taskbar for the Task Scheduler.
To set things up to run Scandisk and Disk Defragmenter automatically, look in Accessories, System Tools for something called the Maintenance Wizard. It will walk you through setting things up. I might remind you that in order for this to work at the time you specify, your computer must be turned on and you cannot be using it. If you're using it, the Task Scheduler will simply postpone the maintenance until it finds you not using the computer.

**Working with Documents**

When you use the computer, you will normally create or modify data. When you save this data, it will be placed in a file or document. Documents come in a variety of types: bitmaps, textual, word processing files, etc. Each type of file is associated with a particular program by Windows. For example, bitmap files are associated with Paint, textual files are associated with Notepad, etc.

In order to understand the importance of this concept, let's bring up Notepad. You'll find it in the Accessories group. Once you have Notepad up, open a file called General located in the Windows folder. This particular file contains some useful information about Windows 98. You can read it later. Now close Notepad.

The process you just performed seems natural enough, but it's rather involved particular if the file you were after was somewhere other than your Windows folder. Now that we've opened this file, let's do it again, but this time using a different procedure.

Click on the Start button and move your mouse up to Documents. Pausing on Documents will open a list of the fifteen most recently opened documents. Click on the General document. Notepad will start and the General file will automatically be loaded.

You have just experienced the benefit of file association. If the file you want to work with is in Documents, you can bring it up in the appropriate program very quickly by clicking on it here. If the file is not listed in Documents, but you know where it is, you can use My Computer or the Explorer to locate it and double-click on it. If you know the name of the file, but not where it is located, you can use the Find facility to locate the file and double-click on it.

**Using the Mouse**

Most people who have used an earlier version of Windows are familiar with the basic use of the mouse. You use the left mouse button to single-click on something to select it, double-click on something to activate it, or click and...
drag something. The operations are still available in Windows 95/98, but
Windows 95/98 also implements the right mouse button by providing a context
sensitive menu of functions you can perform wherever you use it.

To demonstrate the power of the right mouse button, let's use it with the file
we've been working with recently - the General textual file in the Windows
folder. Bring up the Explorer and look in the Windows folder for the General
file. Right-click on this file and you should see something like the following
menu:

This menu contains those operations that are available for use against the object
currently selected. All of these operations are available elsewhere, but
Windows 95/98 makes them convenient. The right mouse button is available
everywhere in Windows 95. The content of the menu will change depending
on where you use it, but it will always give you those operations that are
available for the object you have selected.

**User Profiles**

If more than one person uses the same computer, you can set up user profiles so
that when one person logs on, their personal Windows settings are used. For
example, you could have your own desktop colors, icons, and program groups
appear when you log on to Windows, but if someone else logs on, their settings
appear instead.

To set up user profiles, double-click the **Passwords** icon in the **Control Panel**.

To establish individual user profiles on the same system,
1. Click the Start button.

2. Move the mouse up to Settings and then to the right to Control Panel and click.


4. Click the User Profiles tab.

5. Select the Users can customize their preferences and desktop settings option.

6. You might also consider clicking on the User Profile Settings buttons.

7. Click the OK button. A System Settings Change dialog box appears. Click the No button.

8. Close the Control Panel.

9. Select Shut Down... from the Start menu. The Shut Down Window dialog box appears.

10. Select the Close all programs and log on as a different user? option and click the Yes button.

A new account will be established for each person logging on the system.

One word of caution is appropriate about user profiles and passwords. Establishing user profiles and passwords does not prevent someone from getting on your computer. All it does is to prevent someone from getting into your configuration and making changes to it. There are two ways in which someone can get onto your computer without your password. First, when you get the log on screen, by pressing the <Esc> key, you can get onto the system using the default system configuration. Second, anyone can type in their own name and a password and create a user profile.

**Restarting Windows**

Windows 95/98 needs to be restarted from time to time. Microsoft even recognized this by putting an option in the Shut Down... menu called Restart the Computer?. This option does a warm boot of the system meaning that it goes through everything except the power-on diagnostic check. This can take a while depending on your system.
If you hold down the key after clicking on **Restart the Computer?** and then click **Yes**, the computer will only restart Windows which can be done fairly rapidly instead of taking the long route. You do need to hold the key down until the system acknowledges what you want and starts bringing up Windows again.

**Registry**

Before upgrading to Windows 95, did you use **SysEdit** to make changes to your **CONFIG.SYS**, **AUTOEXEC.BAT**, **SYSTEM.INI** and **WIN.INI** files? It was a very powerful tool, wasn't it? What ever happened to it?

Well, I have some good news and some bad news for you. ☺ The good news ☺ is that **SysEdit** is still there and you can access it through the **Start** menu, **Run...** and typing in **SysEdit**. The bad news ☹ is that you need to be careful because Windows 95/98 has changed things a bit on you and you might do more damage by making changes to these files than you will cure. Windows 95/98 has something new called the **Registry**. The **Registry** takes the place of and supplements what use to be in **WIN.INI** and **SYSTEM.INI**. Windows 95/98 tries to maintain some consistency for the sake of old 16-bit applications, but I wouldn't bet on everything being the same. As a matter of fact, the Windows 95/98 version of **SysEdit** will actually block you from changing some things in these files because it interferes with the way it does things. Instead of using **SysEdit**, let me recommend that you use **RegEdit**. It works with the **Registry**. A word of caution is in order here as well though. If you don't know about the **Registry**, don't mess with it. It's not a single file that you can back up in case you screw things up. It's a database drawn from many places in your system. Learn about the **Registry** before you try to make changes to it.

**Rescue Diskette**

In Windows 95/98, as in Win3.1x, installation of new applications sometimes renders your system unbootable. To help in these situations, create a bootable "rescue" floppy disk. Insert a diskette that's either blank or contains nothing you need. Click on the **Start** button, go to **Settings** and then to the **Control Panel**. Double-click on the **Add/Remove Programs** icon. Click on the **Startup Disk** tab then click on **Create Disk**. When Windows 95/98 is done, make the disk read-only, label it and test it to be sure you can boot your computer from it. To be extra safe, make two boot disks.
Windows 98 Tips

In your WINDOWS folder, you'll find a text file called General full of tips and tricks written by the Microsoft's Windows 98 development team. A lot of the information contained in this file is technical in nature and may not apply to your computer. For simpler and more pertinent information, don't overlook the Help facility. Click on Start and then on Help. Take your time to explore some of the information available here as this is the best way to learn your way around Windows.

Creating Icons and Hotkeys

As you may already know, you have many icons on your desktop and in the Start menu that give you access to things on your system. As you work with your system, you will add others as part of the normal operation of your system. Most people begin to wonder how they can create their own icons or delete some of those they have and no longer want. This is the topic of this section.

Warning: This is an advanced topic and if you don't already feel comfortable with Windows 95/98, I would encourage you not to tackle this until you've been through the rest of this book.

It's impossible for me to know exactly what sort of an icon you want to create so let me pick one to use as an example. Suppose I want to access WordPad easily. There are actually several different ways in which we can create an icon for just about anything, but perhaps the easiest way of explaining this is to tell you that the program you run when you bring up WordPad is called wordpad so let's go find that program. Go to the Start menu and point Find and then click on Files or Folders.... Type in "wordpad" in the Named: field and click on Find Now. The result will be a list of files with the name of "wordpad". One of these files will be an Application. Right-click on this wordpad file and drag it to your desktop. When you release the right mouse button, you'll get a context sensitive menu containing your options. Select Create Shortcut(s) Here. You have just created a shortcut to WordPad. Now let's take this a couple of steps further.

The name of the shortcut we've created is "Shortcut to Wordpad". This is okay, but I think it would be more meaningful if we changed the name to just "WordPad" instead. To do this, right-click on the icon and select Rename from the context sensitive menu that you get. This will allow you to change the name and type in "WordPad" in place of "Shortcut to Wordpad". There! That's better. At this point, you might like to check to make sure the shortcut
we've created really works. Try double-clicking on it to make sure WordPad comes up.

Using this new WordPad icon is only slightly better than clicking on the Start button, moving to Programs, Accessories and then clicking on WordPad. Normal access to WordPad would require a click, moving the mouse until you get to WordPad and then clicking again. Our new icon requires a double-click. You still have to take you hand off the keyboard, grab the mouse and use it to activate WordPad. Suppose we make another change here that will allow us to bring up WordPad without using the mouse.

Right-click on the icon again and select Properties this time. This brings up the WordPad Properties dialog box which allows us to specify how WordPad will run when we use this icon. Notice the Target: and Start in: fields. The Target: field specifies the name and location of the program that is going to be executed. Note that WordPad is in the Program Files, Accessories folder. The Start in: field specifies where WordPad will look initially for any files you want to load or save. Since we set up a special area in which to put our data (see Naming a File on page 26), let's change the Start in: field to point to C:\Data. Now, look at the Shortcut key: field. This allows us to specify a key that we can use to activate this shortcut. Go to this field and just press the "w" key. Notice that the field becomes "Ctrl + Alt + W". In other words, in order to activate this icon, we need to hold down the <Ctrl> and <Alt> keys and press the W key. Okay, now click on OK. Try pressing <Ctrl><Alt>w and see if WordPad comes up.

Let's project this concept out a ways. I can foresee creating a bunch of shortcuts like this. Before long, it might be difficult to remember all the shortcuts you create even if you make them meaningful like the <Ctrl><Alt>W for WordPad. Suppose we create a WordPad file that will contain all the shortcuts we create along with what they point to. As a starting point, this file might look like this:
By making the font size large (I used 20), we can print this file and post it next to the screen and use it for a quick reference. Okay, now let's save this file. Because I figure we will want to modify this file every time we create a new shortcut, I placed it in the C:\Data folder and named it Shortcuts so it would be easy to find.

Now all we have to do whenever we want to update this file is double-click on the WordPad icon we created and open the Shortcuts file. Neat, eh? Hey, wait a minute. Might it be possible for us to do this all in one operation? Let's go back in to the Properties for our icon again (right-click on the icon and select Properties from the context sensitive menu). Notice that the Target: field contains double-quotes around the full path to the file we are going to execute - "C:\Program Files\Accessories\WORDPAD.EXE". I wonder if we can add the name of the file we want to work with to the end of this. Let's try expanding this field to - "C:\Program Files\Accessories\WORDPAD.EXE" "Shortcuts.DOC". The reason for the double quotes around what we added is that we don't want the system to alter this in any way. In addition, we didn't specify the path to the file. Can you guess why? Think about this. Remember the Start in: field? Isn't that where we placed this file? Sneaky, eh? If we had placed this file somewhere else on the system, we would have needed to tell the system where to find the file. Okay, time to give this another try to make sure it does what we want. Double-click on the icon and see what happens.
With the change we've made to this icon, perhaps "WordPad" is not the best name for it. Granted it brings up WordPad, but it also loads the file called "Shortcuts.DOC" as well. Perhaps a better name for this icon would be "Edit Shortcuts". To make this change, simply right-click on the icon and select Rename and type in the new name. While you're at it, I suspect you don't want to use <Ctrl><Alt>W as your hotkey any more. Perhaps <Ctrl><Alt>S would be more appropriate. And don't forget to change your document as well.

For all of this, we've been working with a shortcut icon on the desktop. We could just as easily do the same thing on the Start menu. To access what is on the Start menu, click on Start, Settings and then Taskbar to get the Taskbar Properties. Click on the Start Menu Programs tab at the top and then on Advanced. This will give you a dialog box that looks very much like the Windows Explorer except that it deals with the Start menu.

**Diskettes**

I can hear you now. A diskette is a diskette is a diskette. What can you say about a diskette that I didn't learn a long time ago? Well, read on and you might be surprised. There are actually two different kinds of diskettes and some things you need to know about each. Let's take a look at each of these.

**5 1/4" Diskettes**

The 5 1/4 inch diskette dates back to the early days of personal computers. I can remember my first personal computer having 5 1/4 inch diskettes (two of them) and no hard drive. Back then, diskettes would hold 160KB worth of data. This wasn't much, but without anything more, this was sufficient.

It wasn't too long before technology began to show its stuff. The 160KB diskettes were doubled to 320KB, but at about the same time a change occurred that allowed a little more data to be stored on a diskette giving a capacity of 360KB. This was a big improvement.

The next improvement came several years later and resulted in a capacity of 1.2MB. This is the maximum capacity of the 5 1/4 inch diskette.

**3 1/2" Diskettes**

You probably already know that 3 1/2 inch diskettes come in two flavors - 720KB and 1.44MB. The difference is very subtle and a lot of people won't even notice it. If you look at a 720KB diskette and a 1.44MB diskette side-by-side, you'll notice that the 720KB diskette has one window with a little tab.
This is your write protect window and tab. The 1.44MB diskette has the same thing, but the 1.44MB has another window in the other corner. Hmmm.... Is that the only difference? For the most part, yes. The diskettes are manufactured pretty much the same, but the 720KB diskette doesn't contain this extra window. Well then, suppose you punched a hold in this location on the 720KB diskette - would that make it a 1.44MB diskette? YES! You can buy a single hole punch at the drug store and use it to punch the hold. After you've punched the hold, reformat the diskette and the system will allow you to do so at 1.44MB. You just doubled the amount of space available on the diskette. Neat, eh? Learned anything new yet? 😊

I mentioned the write protect window and tab. Perhaps I should say a little more about these. When looking at either a 720KB or a 1.44MB diskette, you will see a little window that has a tab covering it. The tab can be slid to open the window by turning the diskette over. As long as you cannot see through the window, you can write to the diskette. If you want to protect your data so it won’t get accidentally overwritten, simply open the window and nothing can be written to the diskette again until you close the window.

Okay, try this. When you installed Windows 95, you may have had difficulty finding enough space on your already crowded hard drive. If so, you may have resorted to DriveSpace to make more room so you could install your new operating system. Hey, this is great. You don't really need to buy another hard drive after all. You now have all sorts of space. But.... There's always that word. After you get Windows 95 up and running, you notice that your system is really running slow. Well, that DriveSpace you installed does slow things down primarily because you have to go through an extra level of software before you get to the physical hard drive. Solution? Remove DriveSpace. Yes, I know this means you have to go buy another hard drive, but better that than to have your system running as slow as it is. Sorry about that. And I know the title of this page is Diskettes. So what does this have to do with diskettes? I just wanted to remind you of DriveSpace and what it can and can't do.

Okay, let's apply this to your diskettes. If you take your 720KB diskette and apply DriveSpace to it, you can increase the space available on it to 1.25MB. Wow! That's almost as good a 1.44MB diskette. So what happens if you do this to a 1.44MB diskette? You get 2.6MB. So, how do you accomplish this miraculous thing. Well, in the Windows Explorer, right-click on a formatted diskette. Click on the Compression tab and follow the bouncing ball to increase the space on your diskettes.
Okay, okay. There is a down side to this. Be careful about which diskettes you compress. You don't want to compress diskettes you want to use to take information to a Windows 3.x system as it won't work. I recommend you use this technique on diskettes you want to use to store information from your system that you don't need ready access to. Another problem is when you don't want the diskette compressed any more. You can't simply format it to get it back as Windows 95 recognizes that the diskette is compressed and won't allow you to format it. What you have to do is use the DriveSpace utility to format it. This doesn't do away with the compression though. You then have to tell DriveSpace to uncompress the drive.

If you're willing to live with these problems, go ahead and enjoy the extra space on your diskettes.

The following may be funny, but you might be surprised to know that I've actually seen some of these:

Never leave diskettes in the drive, as the data can leak out of the disk and corrode the inner mechanics of the drive. Diskettes should be rolled up and stored in pencil holders.

Diskettes should be cleaned and waxed once a week. Microscopic metal particles may be removed by waving a powerful magnet over the surface of the disk. Any stubborn metal shavings can be removed with scouring powder and steel wool. When waxing a diskette, make sure the surface is even. This will allow the diskette to spin faster, resulting in better access time.

Do not fold diskettes unless they do not fit into the drive. "Big" Diskettes may be folded and used in "Little" drives.

Never insert a diskette into the drive upside down. The data can fall off the surface of the disk and jam the intricate mechanics of the drive.

Diskettes cannot be backed up by running them through a photo copy machine. If your data is going to need to be backed up, simply insert TWO diskettes into your drive. Whenever you update a document, the data will be written onto both disks. A handy tip for more legible backup copies: Keep a container of iron filings at your desk. When you need to make two copies, sprinkle iron filings liberally between the diskettes before inserting them into the drive.

Diskettes should not be removed or inserted from the drive while the red light is on or flashing. Doing so could result in smeared or possibly unreadable text. Occasionally, the red light remains flashing in what is known as a "hung" or
"hooked" state. If your system is hooking, you will probably need to insert a few coins before being allowed to access the slot.

If your diskette is full and needs more storage space, remove the disk from the drive and shake vigorously for two minutes. This will pack the data enough (data compression) to allow for more storage. Be sure to cover all openings with scotch tape to prevent loss of data.

Data access time may be greatly improved by cutting more holes in the diskette jacket. This will provide more simultaneous access points to the disk.

Periodically spray diskettes with insecticide to prevent system bugs from spreading....

**Viruses**

There are over 40,000 viruses out there in cyberspace just waiting to infect your computer. And 200 new viruses are invented every month. It only takes one virus to render your computer useless. You have an anti-virus program. Are you protected? Maybe or maybe not. If you aren't updating the program on a regular basis, you could still be in trouble. Please read on.

Let me start off with a story. I recently received E-Mail from a couple who said they purchased McAfee virus scan several years ago. They had version 2.0.5 and wanted my advice on what to do. Should they upgrade what they had or should they just buy a new version. I recommended that they buy a new version since McAfee has gone through several revisions since they bought theirs and the cost is not all that great. They took my advice and bought the latest version of McAfee and installed it on their computer. McAfee immediately detected a virus on their system and told them it couldn't remove the virus without deleting the file. They agreed. Another infected file was detected and removed. And then another. Before too long, they realized they were in big trouble and contacted me again. Because they already had a virus on their system and it had spread throughout the system, there wasn't much I could do remotely so I recommended they shut their computer down and call a local computer person to come disinfect their computer and get them back up and running.

Now, the cost of the McAfee virus scan is $49.95 as I write this. The cost of having someone come out and disinfect a computer could be several hundred dollars. Need I say more? Well, yes, I suppose I should say a few more words.
Some people feel their computer will never be infected by a virus. I'm not sure how they come to this conclusion. Perhaps they never get sick themselves. They never have a cold and they don't get their flu shots each year. I don't know, but if their computer ever comes in contact with another computer, they are inviting a virus to infect it. By contact, I mean in any fashion. Perhaps your friend gives you a diskette and suggests you try a piece of software. That software could be infected and infect your computer. Or perhaps you go down to the local computer store and buy the latest software for your computer. It very well could be infected with a virus and infect your computer when you install it. Or perhaps you enjoy getting on the Internet and looking around. There are a lot of very nice things on the Internet - viruses included. Just by browsing the Internet, your computer could become infected with a virus. If you download anything to your computer, there is an even better chance that you could catch something. Even if you don't intentionally download anything, files are being transferred to your computer simply by the way you connect to the Internet, and these files could contain a virus. In short, not having a virus scan program on your computer is like having unprotected sex - you're asking for trouble.

Okay. So I've convinced you that you need to protect your computer, and you go to the computer store and buy a virus scan program (McAfee is just one of several programs that will protect your computer). You're done, right? Well, you've taken the first step. As I said earlier, in addition to there being over 40,000 viruses out there today there are some 200 new viruses invented every month, and the software you bought last month will not protect you against the new viruses that were invented this month. It can't because when they wrote that program they didn't know about the new viruses. Most virus scan programs today come with the ability to update what is called the signature file which identifies the viruses and removes them. These updates are free in most cases if you know how to get them. The key is that you need to make an effort to keep your virus scan software up to date. If nothing else, you should contact the company you bought your virus scan software from and ask them if there are any updates.

I am most familiar with the McAfee virus scan program. I have been a registered user of it for many years. McAfee has a shareware version of their virus scan program that is available on a trial basis. It only costs you $49.95 to get a registered version and the peace of mind you get with it is well worth the investment. There's a catch though - the chicken or the egg story. If you already have a virus on your system, the virus scan software may not be able to help you. If you don't have a virus, why do you need a virus scan program? Well, my recommendation is that you get yourself a virus scan program. If you aren't already infected, you'll have the peace of mind knowing that you won't
catch anything in the future. If you discover that you have a virus, you then need to take steps to disinfect your system and do it as quickly as possible. The longer you wait, the more damage the virus can cause. And once you're protected, don't forget to keep it up to date. You need to get the latest software as well as the latest signature file. Both are important.

One final word. **THERE ARE NO GUARANTEES!** Since there are some 200 new viruses invented every month, you can have all the protection in the world and still catch a virus. This is unfortunate, but a fact of life. The key is to protect yourself as best you can and hope that you don't catch one of those new viruses before they come out with an update to detect it.
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