SANDY SENIOR CENTER

PRESENTS

Computer Fundamentals

Course Material
For
Computer Fundamentals

May, 2009

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Introduction

Sandy Senior Center

Computer Fundamentals Manual

This manual is designed to assist the student and instructor alike. This material has been gathered from several sources and is organized in such a manner as to take the student through the fundamental functions of Windows Operating Systems from Windows 95 through Windows 7. The course is designed to be taught in four classes, each class two hours long. The manual is generated in color. Feel free to print a color version but remember it costs 12 to 18 cents a page for the average color ink jet printer.

The following suggestions are given to make the learning process easier. Read the objectives for that week's class and try to determine your greatest weakness in that week's material. Read the section and go back over the objectives again. Mark the areas where you still need more information and have the instructor answer any questions that the material or classroom presentation does not cover adequately.

Acknowledgments

This manual was originally developed by Sandy Senior Center volunteer Jerry Stewart. Use of this manual is granted to all Salt Lake County Senior Centers under the provision that the acknowledgments section remain with the manual. Students may print the manual. All other use of this manual requires approval by the author. Thanks for the many volunteers who proof read this document and fixed my numerous English flaws.

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Class 1: Objectives – Computer Fundamentals

Know the following terms:

- Desktop
- Icon
- Folder
- Default
- Taskbar
- Context Menu
- Recycle Bin
- Properties sheet
- Personalize
- System Tray – Notification Area
- Quick launch Tray
- User

Be able to:

- Open up a context menu
- Arrange icons on the desktop
- Set up a folder on the desktop
- Restore a deleted file/document
- Permanently delete a file or document
- Identify which program is active by looking at the taskbar
- Move, change, or close a program on the taskbar

Understand:

- The start menu
- Why you have an "All Programs" menu item
- The main purpose of the Recycle Bin
- The functions of the taskbar.

List:

- Which files are not kept in the Recycle Bin

Operating Systems

A computer is worthless unless it does something you want it to do. The electronics that are used in a personal computer can and are used in millions of everyday devices. Dedicated computers are used to run your microwave oven, your car's ignition and fuel system, your TV set, DVD, VCR, and even the electric toothbrush just to name a few.

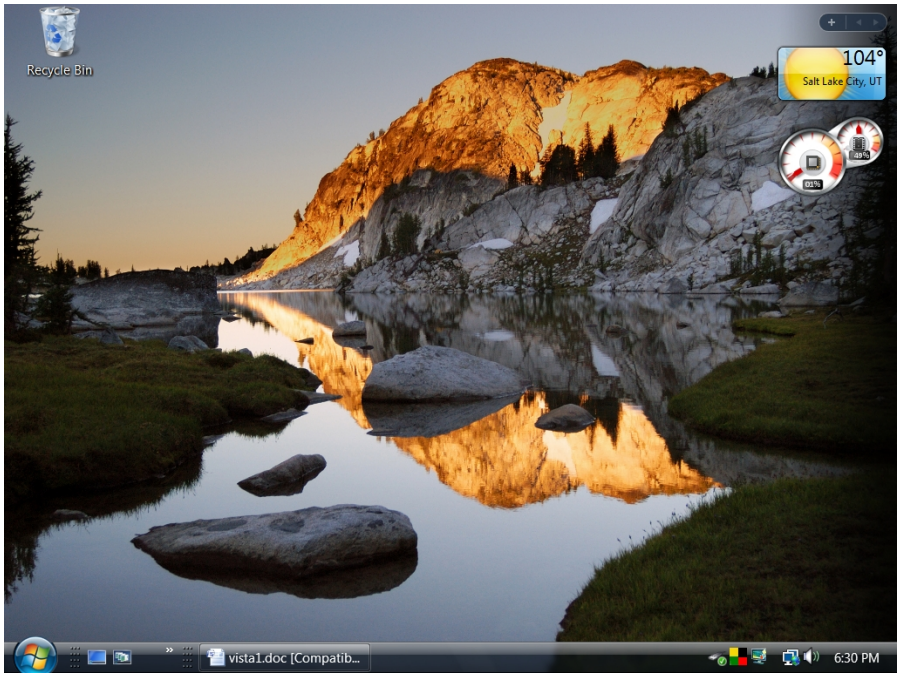
The personal computer has been designed to be a general purpose device that can perform multiple tasks depending on the programs installed (loaded) on the computer. Programs are software which contains instructions on what is to be done. The primary software that manages all of the other software in the computer and acts as interface between the hardware and the user is called the Operating System. The most common Operating Systems (OS) in the United States and most of the world are written by Microsoft. Apple's OS's and Linux OS's make up less than 10 percent of the personal computer market in the United States. The look and feel of each Operating System is different between each Manufacturer and Version. However they all perform basic functions and once you learn these functions you can apply them to the latest version. So why does a new version come out every few years? There are 3 basic reasons. Number 1 is that companies need to sell to make money. Number 2 is that new hardware is developed every year that does things faster and cheaper than the old hardware. Users want to do new things with this hardware like web cameras and wireless networks. The 3rd reason, unfortunately, is virus protection. The size of virus protection and related programs grow significantly every year. The memory and processor power required to operate these protection programs exceed the capability of the hardware built in years past. If you did not have to protect yourself you could easily do everything in an office environment with 10 year or older operating systems and hardware.

Microsoft has already discontinued providing updates on Windows 95, Windows 98, and Windows 2000. This makes them very vulnerable to viruses even with a virus protection program installed. It has been estimated that more than 85% of viruses could have been stopped by just keeping the Operating System updated. Windows XP is still being supported (expect updates to end in 2014), Windows Vista was the next operating system and Windows 7 was released in October 2009, the most current is Windows 7. This course will focus on the fundamentals that are common in these current OS's. Fortunately, Microsoft retains the old method of performing most functions even when a new and better way has been provided in a later version. Follow on courses will provide instruction on what is unique to a given version so you can use the improved

methods and additional programs provided in the version you have on your computer. This manual and the instructor will point out areas where the latest system may have better ways to do the things taught in this course.

All of the operating systems above come in several different versions like Professional, Home, Home Premium, etc. The primary difference is how many extra programs are provided in that version. For example, the XP Home and Home Media Center versions did not come with a backup program where the Professional had backup and server networking programs not found in the home versions.

The Desktop



The human interface has gone from a teletype interface to a graphical interface where pointing devices such as the mouse, touch pad and touch screen have become the primary input devices. The keyboard is still used to input written data and numbers.

This course will concentrate on the Microsoft Windows Operating Systems from Windows XP through Windows 7. Where to start when describing the operating system is difficult because of the number of terms that are used in a slightly different context when used with computers than they are when used in

everyday life. These terms will be in bold print the first time they are introduced and will be explained in the following material.

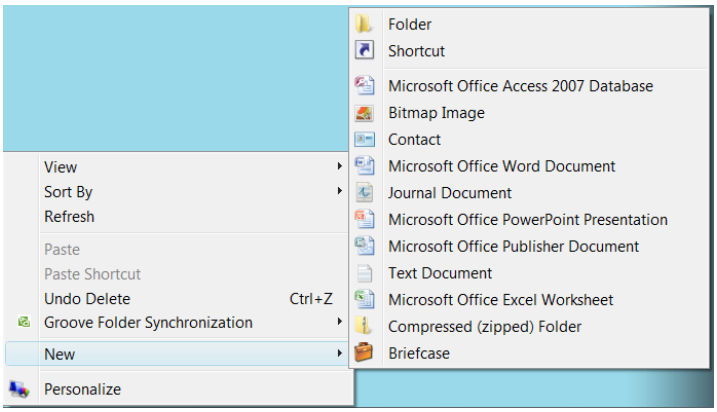
The **Desktop** is the name for the working area on your display for all of your Windows computing. At the bottom of the display you will find a divided area called the **Taskbar**. The **icon** in the bottom left corner will open up your Start Menu. An icon is a small picture that represents a link to a program or storage area called a folder. This is the fundamental method of running a program in the graphical user interface used in today's operating systems. In the early days you would have to type in the name and location of the program to start a program. Now all you have to do is click the mouse on the program menu or an icon. (When you single or double click is determined by the location of the icon and how the operating system is set up). Another name for icon is **shortcut**.

Windows XP can be set up to have a **quick launch** area just to the right of the Start Menu icon on the taskbar. In Vista this was pre-installed and could be turned off. In Windows 7 it is permanently installed as an integral part of the taskbar and cannot be turned off. This provides an area for short cuts to your favorite programs that only require a single left click. Shortcuts on the desktop require a double click. On the far right of the taskbar is an area called the **System Tray**. Later versions of Windows also call this the **Notification Area.** The area in the middle of the taskbar is where icons show the programs that you have opened. In Windows 7, the open programs and the shortcut icons have extra functions that will be covered later in the Windows 7 course. The picture above was taken of the computer used to develop this manual with the Microsoft Word "window" minimized. In the upper left hand corner is a picture of a wastepaper basket labeled Recycle bin. This **icon** is the only one on the desktop. Versions of Windows prior to XP came with many icons already loaded on the desktop. The reason the current versions do not, will be more understandable after we cover the start menu.

Using the left mouse button should be commonplace for most users but you will find that the right mouse button can be much more helpful. When you click using the right mouse button you bring up a **context menu** about whatever you clicked on. It provides you with <u>all</u> options available for that object. When you single left click on an object, you just select the item. If you double left click you select and apply the function of the item you selected. **For those of you that double clicking fast enough is still a problem, you can single left click, and then use the ENTER key on your keyboard.** This is the old way but it still works. This brings up an important lesson about Windows Operating Systems. They add new features in every new version but seldom eliminate the old way of doing things. When you right click you will be given the options to do what the double left click function does or a choice to do much more.

For example, right-clicking on an empty area of the **Desktop** will bring up a **context menu** similar to the one shown below. You can create new **folders,** files and shortcuts from the **New** sub-menu. The total number of things that can be done depend on the number of programs installed in your computer.

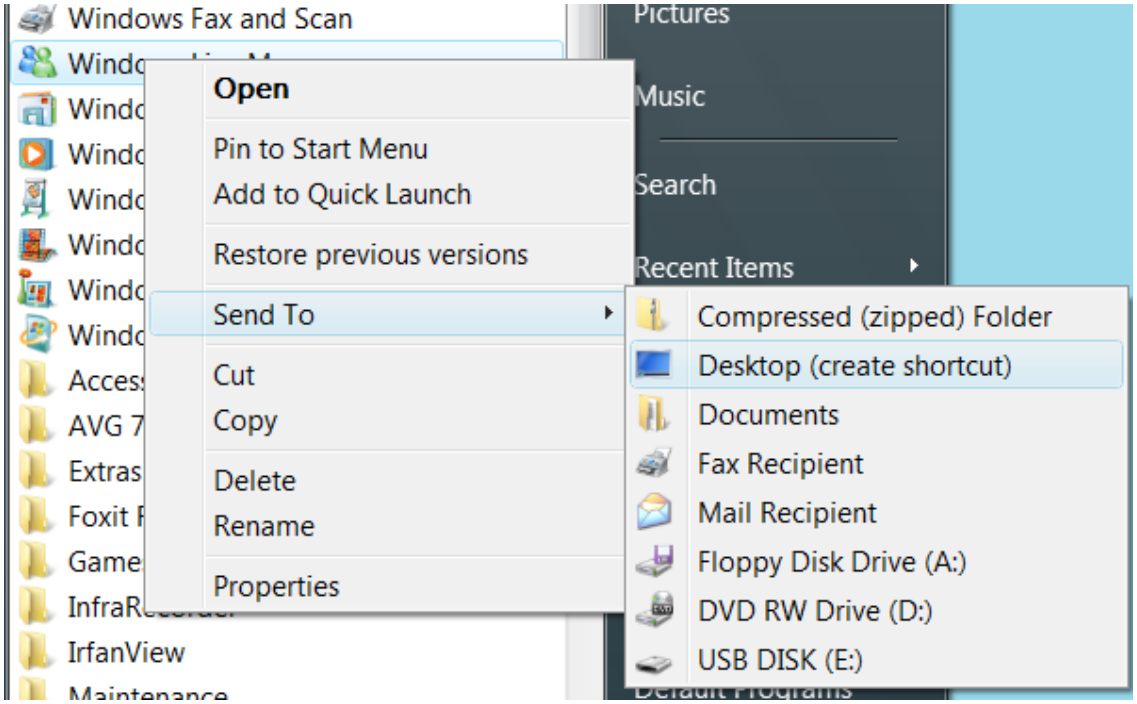
Selecting **Properties** from the sub-menu will bring up Options which will allow you to change how the desktop looks and works. Vista and Windows 7 use the word **Personalize,** as shown at the bottom left of this menu, instead of properties in a few menus but in most places it is still called properties.



Desktop Icons

Unlike the previous versions of Windows, a new install of XP, Vista or Windows 7 will not have any icons on the desktop except the recycle bin. This does not prevent you from adding them for your convenience. However, the Start Menu has been redesigned in these versions of the operating system to automatically put your most often used programs on the start menu for you. The person or company that built your computer may have added icons during the build phase to advertise their products and you will need to decide if you want to keep them.

When you install new software most companies will automatically put their icon on the desk top. You can leave it there or remove it without worrying about deleting anything important. A desktop **icon** is just a shortcut to the actual location of the program or object it represents. To remove a shortcut icon from the desktop just right click on the icon and select delete from the pop up menu. To add an icon to your desktop you just need to right click on the program file or object file. From the context menu that opens, put your cursor over the **Send To** box in the context menu. A submenu will open and you then click on the **Desktop (create short cut)** line. See picture on the next page. There are other ways to create a desktop icon that are carryovers from previous Windows versions but this is the simplest. In many cases the instructor will also show you the keyboard way of performing a task. If you are a touch typist, it will be faster.



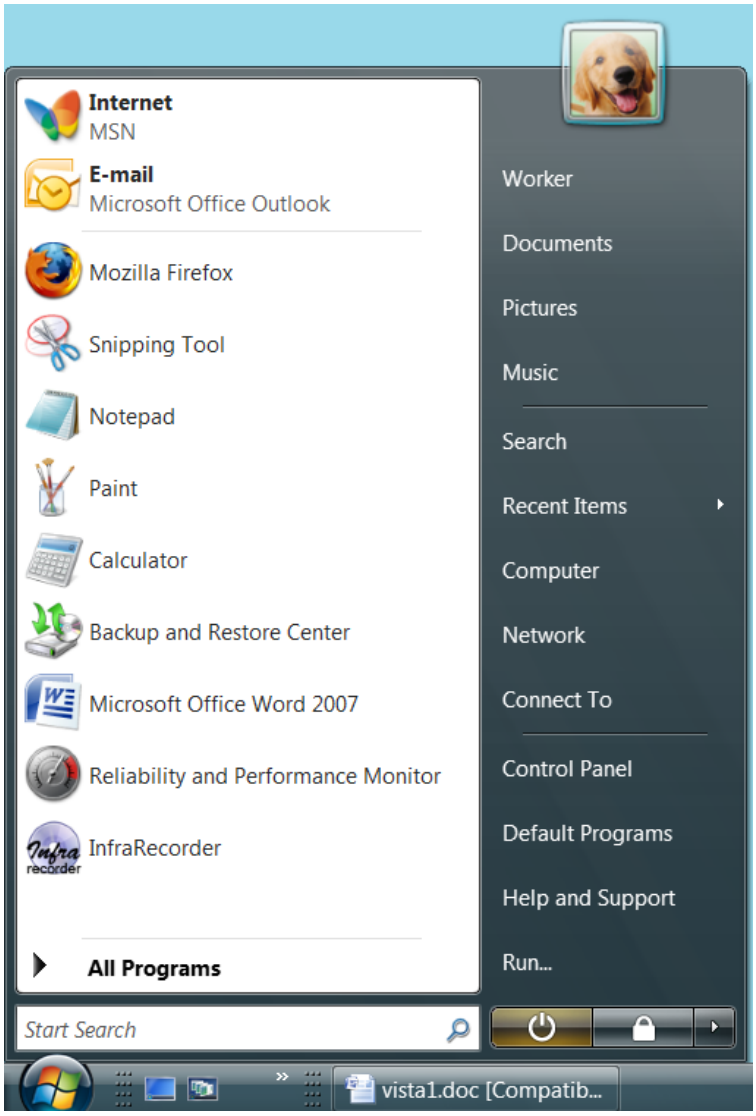
Start Menu

You will normally find the Start menu icon  on the bottom left side of the computer screen on the taskbar. On XP, the icon said **Start** instead of just being a picture. By the way, the taskbar can be moved to either side or top of the screen by dragging it into that position if it is not locked. It can also be made larger. We will keep the taskbar at the bottom of the screen during this course but if you have a wide screen display device you may want to put it on the right or left side and make it larger so you can read the tasks easier. This will be demonstrated in class.

When you left click on the ***START*** icon a menu screen will pop up. The menu will look similar to the one shown below if you are running Windows XP or later. If you are running Windows 2000 or older you will get a **classic** menu which only has one column. You can configure XP and Vista operating systems to use this type of menu by selecting **classic** in the configuration screen. The new dual column display is much easier to use and provides more information with a single click.

The multi-column version of the start menu is divided into multiple sections which can be tailored the way you want. In the top left section you should have

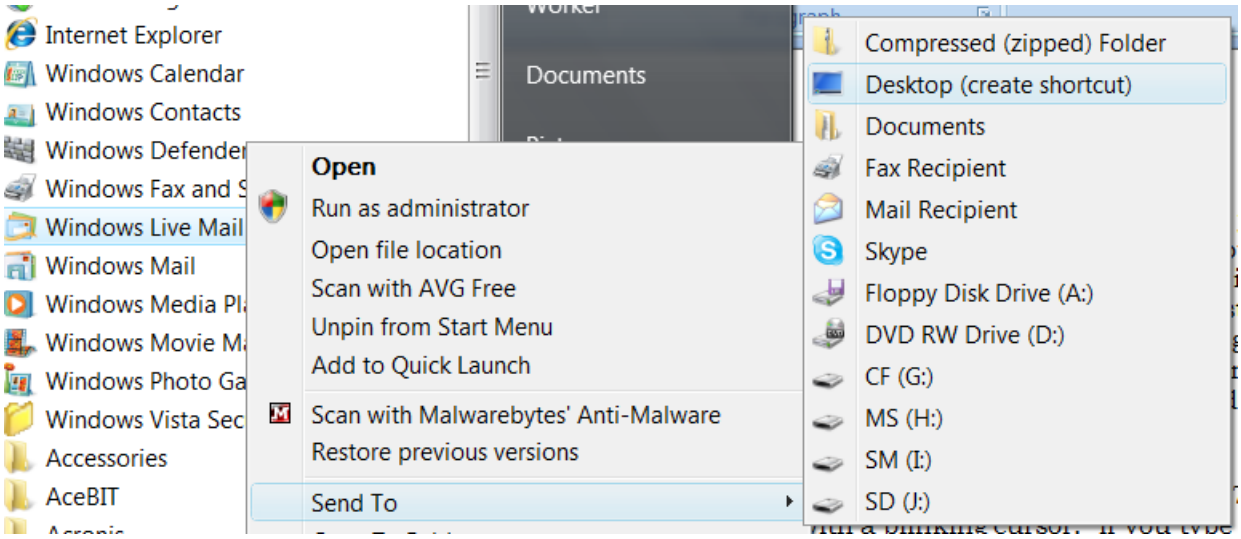
two entries; the first is the internet browser and the second is an email program. Of course, in a new installation, Microsoft will place their programs in these positions or the dealer you purchased the computer from may have replaced them with his favorites. The start menu on the right is from Vista. How to customize the start menu options will be shown in another course. In Windows 7, they have moved the Internet function down to the taskbar and deleted the Email start menu icon. because most people now use web (internet) mail instead of the mail client method of getting email. If you want to use an email client you can download the free Windows Live Mail client. This is handy if you have more than one email address. Once you have installed this program or another client of your choice, you can add the client as a shortcut on your taskbar or to the start menu.



As you move your cursor up and down this menu, the various menu items are highlighted with a band of color as the cursor passes over them.
Below the internet/email section (XP, Vista and Windows 7) the most often used programs for the logged in user will be shown. This is done automatically. A count is maintained each time you run a program. If you start using one program more than a program higher up on the menu, the menu will be automatically rearranged.

The next section down is not programmable and allows you to *Select* **All Programs**. This is how you get to programs that are not on the automatic selection list above. You can make shortcut icons on your desktop for

programs you use but do not make the most often used list by the following method. Right click on the desired program in the All Programs list; select *Send To – Desktop* from the resulting context menu. The picture below shows this operation for adding Windows Live Mail.



Below the **All Programs** section on Vista and Windows 7 is a box that says "**Start Search**" with a blinking cursor. If you type the first few letters of the name of the program you want, the closest matches will appear in a box above where you are typing. This is the fastest and easiest way to open a program. This feature is not available in XP or earlier versions of Windows.

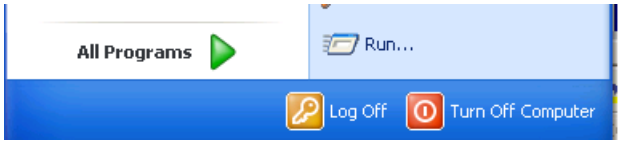
The upper right section contains an icon of the logged on user and a list of the most often used folders on your computer for that user. This list can be modified to add and subtract Microsoft provided icons. The middle right section contains another list of icons used to configure your computer and other common tasks you will want to do on your computer. If you have used an older version of Window's, you will recognize most of these folders as they were provided as icons on the desktop instead of being on the start menu.

The next section contains your **Control Panel**, **Help and Support** menu and **Default Programs** command in the standard configuration. The Control Panel is the single place to go to make any modification to your operating system. There are many other paths to make modification to your system, for example, using the right click on the desk top covered earlier in this section. The Help and Support section will be covered in the last week.

Turning off your computer

The shutdown function looks different in XP, Vista and Windows 7 but they all perform the same services. Clicking on the shut down selection is the proper way to power down your computer. DO NOT turn power off by an external power switch. Do not even use the power button on the computer unless your computer has been programmed to use the Shut Down method when this button is pressed. This is the case with most laptops but not as common with desk top computers. Read your manual to determine if this function has been enabled. Most modern computers are built so that you must hold the Power Button down for 5 seconds before the power goes off. This allows the computer to be programmed to do a software shutdown by using the button. You may notice that it takes from a couple of seconds to much longer to shut down your computer each time you do this. This is why you shut down your computer in this manner rather than just turning the power switch off. Before the software turns your computer off, it checks the programs that are running and gives you a chance to stores any unsaved information to the hard drive that would be lost if you just turn the power off. The software shutdown closes all open programs, the internet and LAN if they were connected. In addition to losing data by turning the power switch off manually, you could damage your hard drive if some program was in the middle of saving data when you used the power switch. Not a good thing. Windows will insist on checking the hard drive the next time you turn your computer on to check to see what damage might have been done by the improper shutdown. The "**Log Off** option allows you to change from the present user to a different user. Doing this does not exit you out of Windows, but closes the files for the current user and brings up a screen to allow someone else to sign in. If you are the only user of your computer, you may not see this option. As with many features of Windows, the way your computer looks will depend upon how the computer was setup when it was built or how a user has changed the options. The **Restart** command will shut down Windows and restart the BIOS sequence. This will restart Windows unless you interrupt the sequence. This allows any changes of the **registry** to be updated and become active. This will happen automatically when you install some software. You will learn more about the registry later. Depending upon the power saving capability of your computer, you will have an option to go either into the **Suspend** or **Standby** or other power saving mode. Skip to the section that covers your operating system to get more details.

XP - Shutdown



In XP Clicking on the red shutdown icon will bring up another window that will allow you to choose whether you want to shutdown, restart, or go into a power saving mode.

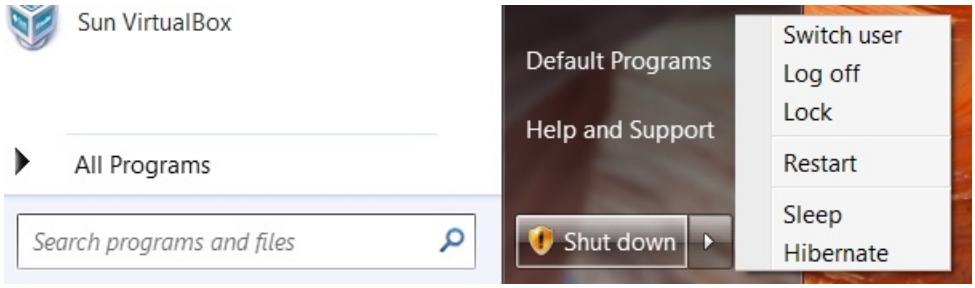
Vista OS Shutdown

At the bottom right of the start menu there are two icons on the left and a right pointing arrow that looks like a small white triangle.

The first icon puts your computer in a low power state and retains your work in memory. A handy feature if you are using a laptop. You can change the setting on this icon to make this icon shutdown your computer instead (the icon will change to a red color to indicated that you have changed it to a power down function). The second icon logs the user off and locks the computer assuming the user has a password. The right pointing arrow is a standard feature in Windows that indicates that there is a sub menu available. If you put your cursor over this arrow the sub menu will pop up. In this case the sub menu contains the commands that allow you to **Shut down, Logoff**, **Restart** and other options just like XP.

Windows 7 OS Shutdown

The Shutdown option is now right on the Start menu and a single click will start the shutdown process. The right facing arrow will open the sub-menu that will you to Restart, Logoff, Switch user and other options as shown in the picture below.



Note

We will be using the word default or default setting throughout this manual and in the classroom. It has a special meaning in the computer world that might not be obvious to someone who does not have an engineering background. Most modern software has been written in a manner that allows the user to tailor the software to their special needs or likes. So the person that writes or installs your software chooses one way to do a given task. This is called the "default" setting. That implies that there is more than one way to accomplish that task and you have the choice to change the way it is accomplished. Sometimes this is done because users have complained how it was originally done and have asked for a new way. Sometimes, it is done because your needs will change based upon how you use your computer or what you are doing at that time. In general, the older the software the more ways there will be to accomplish or

view a given task and thereby will have more options. One student compared "default" like setting your alarm clock. Unless you change the default setting the alarm clock will go off at the same time every morning.

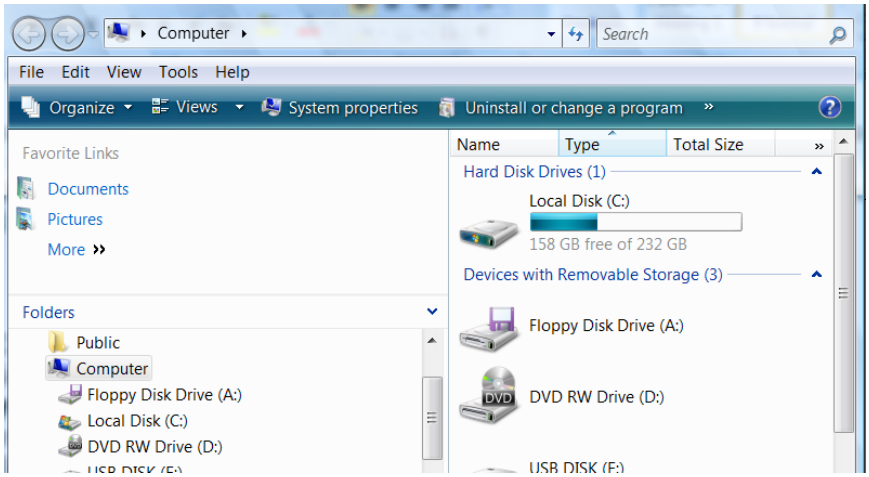
Running Programs

If the Program you want to run is on the Start menu you only have to single click on it with your left mouse button to start the program. If it is not there you should place the mouse cursor over the 

area to bring up the menu that shows "*all*" of the programs installed on your computer. These programs will include those provided free with your operating system (OS), and those that have been installed by you or your computer supplier. **All** is in quotes above because because it really doesn't show you all programs, just the ones that a user would normally use. The operating system itself is a collection of programs that run automatically when you turn on your computer. They provide the basic functions of a computer like putting information on the screen, allowing you to type on a keyboard, move the pointing device (mouse), keep track of where your files are located, storing files on your hard drive or other storage devices. The operating system also contains a lot of maintenance programs that can be run but you must know their name and location to use them. By default, system files are hidden to prevent a causal user from causes damage. A program is the name of a software file that performs some task. To get on the internet, you run a program called an internet browser. The internet browser that comes as part of Windows is called "Internet Explorer". A simple word processor program that comes with Windows is called WordPad. If you want more features than WordPad provides (like spelling and grammar checking) you would have to purchase a program like Microsoft Word, or Corel Word Perfect. There are also some very good free word processor programs that can be downloaded from the internet. When you use a word processor, it will generate a file that contains the information that you have entered. The OS will store this file on the hard drive (or where else you tell it to go) so that you can get the information back at a later date. These files can be stored in **folders** so that you can organize your data. Windows provides some standard folders to get you started and you can add your own personalized folders when you have so many files that extra categories make it easier for you to find things. We will explain how to do this later.

If you click on Computer on the start menu (short cut on the desktop if you are using classic menu) it will provide you access to the storage devices in your computer and access to common used folders. The view shown in the next figure is the *default* view for Vista and Windows 7.

Creating Folders in your hard drive will allow you to organize your files so you can find things easier. The hard drive is traditionally called C:/ because in the early days, A:/ and B:/ were used for the first and second floppy drives. The :/ was the software abbreviation for saying this was the root level (first level) of folders. If you were to see C:/User/Documents/Recipes it would mean that Users was the second level, Documents, the third level and Recipes the forth level. Think of a tree. C: is the trunk, User is the first limb, Documents is a branch off that limb and Recipes is a branch off that limb. Files in the Recipes branch would be leaves.

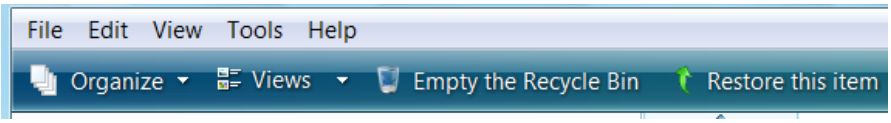


This window provides a graphic view of all hard drives, floppy drives, flash drives and CD-ROM drives on your system. You can double-click on any of their icons to manage the files and folders they contain. This is just one of several views that can be used when **Computer** is selected. This view is handy in that the storage devices are divided into fixed or removable categories. In Vista and Windows 7 a navigation pane is added on the left side to allow you to navigate to any place in your storage devices.

Recycle Bin

Double-clicking on this desktop icon opens your **Recycle Bin** folder. All files deleted from your hard drive end up here. Files deleted from your floppy, network drive, or external storage device will not go to the recycle bin. Another exception is your email program. Most email programs have their own "recycle bin", most often called deleted items. You must empty the "deleted items" bin separately from your Recycle Bin to permanently delete your emails. You can delete a file from your Desktop, a Windows Explorer window, or a My Computer

window simply by left-clicking, and dragging it over the Recycle Bin icon with the mouse button held down, and letting go of the button when you are over the Recycle Bin. The Recycle Bin has been left on the desktop so that you can use this feature when you have a Window open to another program. This way you do not have to go to the **Start Menu** to delete a file. Another option has been provided for those times you cannot see the **Recycle Bin**, just right click on the file or icon you want to delete and a menu will appear. One of the options on the menu will be **Delete**.



The primary purpose of the Recycle Bin is to give you a recovery method for accidental deletions. To recover a deleted file, double-click on the Recycle Bin icon, highlight the accidentally deleted file by left-clicking on it, and select "**Restore this item"** from the options. In some OS's "Restore this item" is at the top and other it is on left side of the window. Empty the Recycle Bin periodically to delete unwanted files, but remember that files deleted from the Recycle Bin cannot be retrieved by Windows.

A special function of the **control key** and the **shift key** that works in many programs will be very useful in Recycle Bin clean up. If you hold down the control key (labeled ctrl on most keyboards) and use the mouse to click on individual files it will allow you to select more than one. When you have all of them selected, right click on one of the selected files, and choose what you want to do from the resulting context menu, i.e. recovery selected files.

The **shift key** allows you to select a group of items that are in a row. Select the top or bottom of the group with a left click, then hold the shift key down and click on the other end of the group. Like above, right click in the highlighted area and select the action from the resulting context menu. Better yet you can use both functions in series. Say you have a list of 30 items in a row with only two you do not want to delete. Hold the Shift key down and left-click on the first and last item. Now change to the **Ctrl key,** hold it down and left-click on the two exceptions. You now have a list of 28 items selected.

The importance of the two paragraphs above is these functions can also be used in any Windows Explorer screen. Windows Explorer is the program that displays the results when you click on a folder to see the contents of the folder and when you run the search command. In addition to using the right mouse click you can also click on the **Edit** command on the top menu and select an

action from there such as cut and copy or move and copy to a folder. These commands will be covered more in the third week.

If you want to empty the recycle bin, there is a command on the menu that says empty the recycle bin. Depending on the version of windows you have it will either be on top or the left side of the window. You can use the ctrl key and shift key functions mentions above to just eliminate part of the files in the recycle bin.

Class 2: Objectives

Know the following terms:

Tabs
Toggle
Classic
Control Panel
Cascade and stacked
Drop down menu and icons for drop down menus
Scroll bar
Background tasks
Portrait - Landscape

Be able to:

Change the taskbar size, move the taskbar
Change Volume levels
Add/delete quick launch menu in XP or Vista
Close Program from taskbar
Choose default browser and email program
Clear Program list
Clear Recent items list
Add or delete start menu items

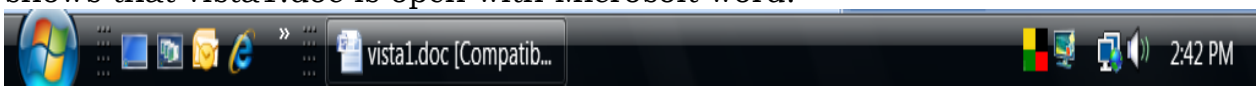
Understand:

The Recent documents list – start menu – program file menu
The 4 main parts of the Task Bar.

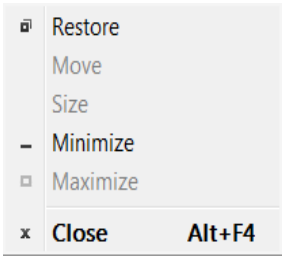
The Taskbar

The Windows **Taskbar** provides the easiest method of switching between several open applications on your desktop. Although the Taskbar can be dragged into any of the four sides of your screen, the default location is at the bottom, and that is the orientation which we are going to use for this text and in class. With the new wide screen monitors a lot of people will put the taskbar on the side to give themselves more vertical space. Feel free to do this at home.

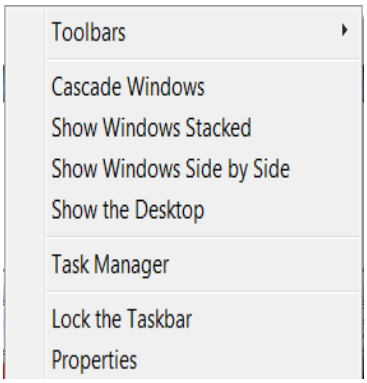
The Taskbar is divided into sections as covered in the first week. At the far left is the **Start** icon. This opens the **Start Menu**, the functions of which we have described in the first week. To the far right is the **System Tray** (called the Notification Area in Vista and Windows 7). This area contains the clock and other icons for programs which run in the background and need only occasional user input. Next to the Start icon the quick launch tray is displayed. In the picture below, from left to right is the Show Desktop icon, Switch Windows icon, Microsoft Outlook icon and Internet Explorer icon. The double white arrows to the right of the Internet Explorer icon tell you that more icons are available but are hidden because of the size of the quick launch tray. The area in the middle is the Taskbar itself. In the example below, the taskbar shows that vista1.doc is open with Microsoft word.



Programs place a button on the Taskbar when they are opened, as is the case for Word in the example above. Clicking on one of these buttons allows the user to bring that application's window to the foreground and make it active. As the Taskbar is by default always accessible at the bottom of your screen, this makes it very easy to restore a minimized window or switch between open windows. Also notice that in addition to the program name or icon, the name of the file being used by that program is also show. There will be time when you may have the same program open twice with two different files. An example would be a word processing program where you have an old letter opened and the second program has the new letter that you are writing in response to the old letter. This way you can switch between the two letters so you can answer question from the old to the new letter or copy information from one letter to the other. A new feature has been added in Vista and Windows 7 that causes a small window to pop up that shows you what the program looks like when you place the mouse cursor over the icon. This is very handy if you have the same program open twice because you will be able to see enough of the document used in that program to decide which one is the one you want to maximize.



Right-clicking on a program's Taskbar button opens a **context menu** as shown to the right (Windows 7 only has the close command because it has new ways to do the other functions). In all cases, you can close a minimized program without first reopening it's window if you decide you don't need it open any more. Note that some of the options are grayed out and temporarily unavailable. Explorer's window was already maximized, so that option was suspended, as was moving or sizing the window. Therefore any time you see a grayed out command in a menu, it means that function is not available now but would be when certain conditions have been met.

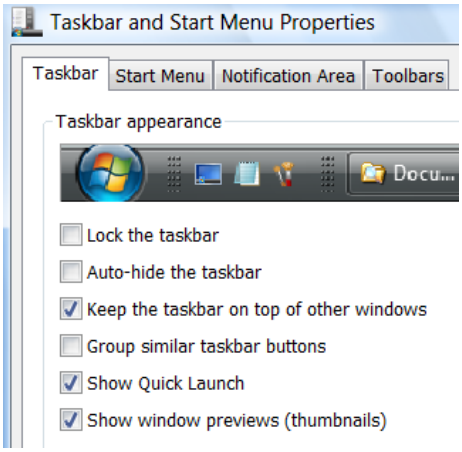


Right-clicking on an empty portion of the Taskbar brings up the Taskbar's own **context menu**, pictured to the right. The **Cascade** option places all of the open windows on the screen one behind the other with the top of each window just above the top of the one in front of it. This allows you to quickly switch between these windows with your mouse cursor by clicking on the visible part of each window to bring it to the front. The **Show Windows Stacked** and **Show Windows Side by Side** options tile the open windows across the screen so that all are completely visible. This is very handy if you have 2 or 3 separate windows open, but tends to be counterproductive for more than 3 windows as the space available for each grows so small it leaves you little with which to work. If you have a number of windows open and need to get at the Desktop quickly, the **Show the Desktop** option can be very convenient. Once employed, this menu item changes to **Show All Windows**, allowing you to restore them just as quickly. Finally, the **Properties** menu item opens the **Taskbar Properties Sheet**, described further on below. In XP, "*Show Windows Stacked*" and "*Show Windows Side by Side*" were labeled "*Stack vertically*" and "*Stack horizontally*".

The **System Tray**, at the far right of the Taskbar, 

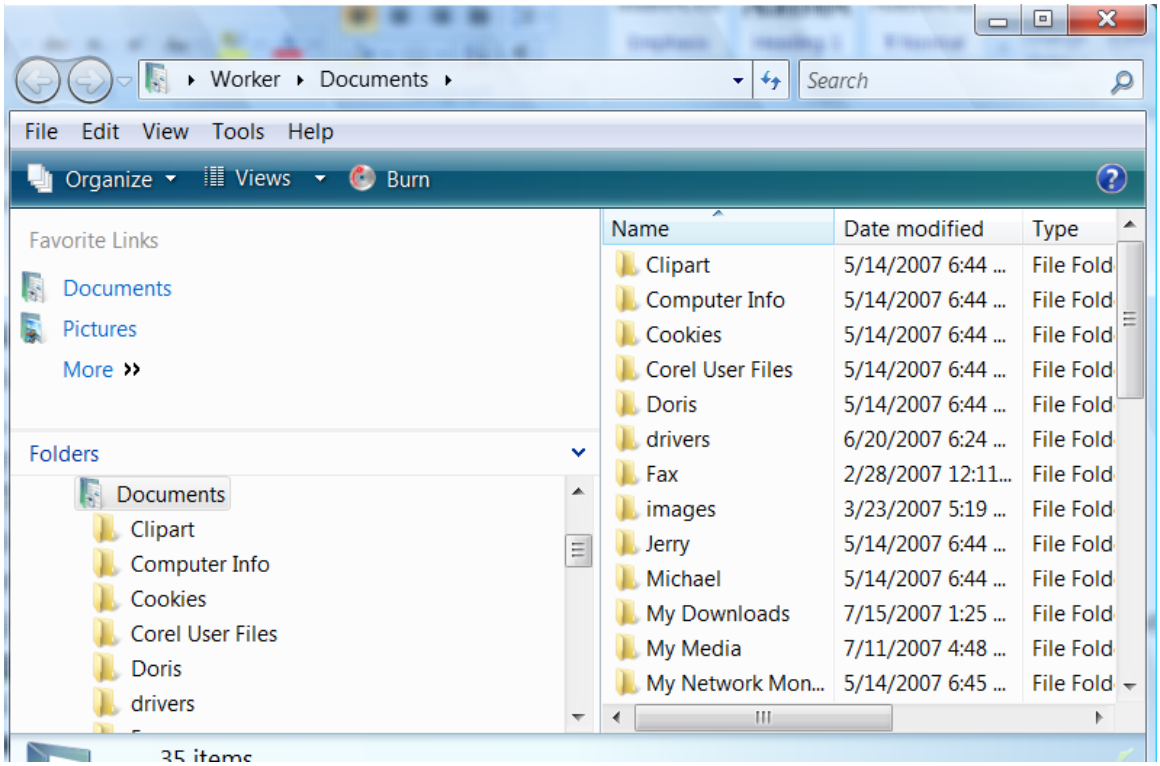
usually contains at least the computer's clock and a icon for a speaker. The speaker icon is near the middle in our example above. The speaker icon is your software Volume Control. Some speakers also have a manual control on the speaker itself. A single left click on this icon will bring up the Windows **Master Volume Control** -- a small slider which you can adjust up and down to set the volume level for your computer. If you have two speaker icons of different colors you have a computer that has more than stereo audio. The second colored speaker icon is used to adjust the setting and other features of a "High

Definition Audio System" like surround sound. The System Tray can also contain icons for various other programs which run in the background on your computer. Left- or right-clicking on these icons will bring up different menus which vary from program to program. In general the fewer icons in this tray, the better off you are. The two icons to the left of the speaker are the virus and firewall programs which are recommended. The two icons on the right side of the speaker are special programs that do nothing except made their program start faster when you call on them. Since they are in this tray, this means they are running in the background and wasting memory space and processor power. Right-clicking on an empty portion of the Taskbar and selecting **Properties** will bring up the **Taskbar Properties Sheet**.

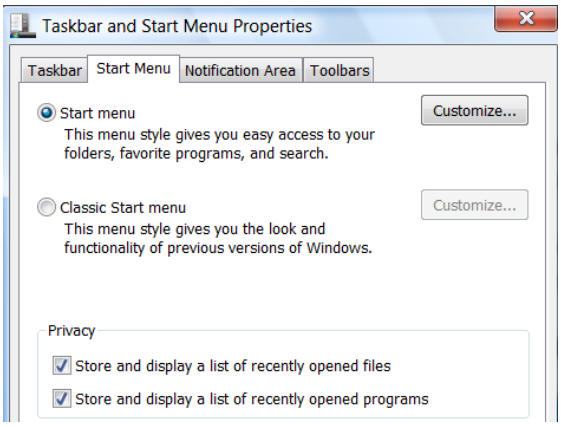


The Properties Sheet in Vista has 4 tabs, Windows 7 has 3 tabs. In Windows XP there are only two. The first one, **Taskbar**, contains settings which can be adjusted by clicking on the box to the left of each option. When the box is checked, the option is enabled. The first option, **Lock the Taskbar**, keeps the Taskbar where it is at and will not allow you to move it until you uncheck this box. The second, **Auto hide**, allows you to create a little extra Desktop space by causing the Taskbar to disappear below the bottom of screen. If you use this feature, you can make the Taskbar pop back up when you need it by moving your cursor to the very bottom edge of the screen. If you do not want the Quick Launch tray you can remove it by clicking in the box and the checkmark that was there will disappear and the Quick Launch tray will be removed from your taskbar. If you want it back, just click in the box again. This is called toggling. Each time you click in a box it will change from the state it is in to the opposite state (i.e. toggle). Many times the menu will disappear and you will have to bring the menu back up to confirm that you are in the desired state.

If you ever have so many windows open that the Taskbar buttons become too small to read, you can remedy this if you wish by resizing the Taskbar. Place your cursor directly over the top edge of the Taskbar until it turns into a size cursor. Click the left mouse button once and, while holding the mouse button down, drag the edge upward until you can see what you're doing. The taskbar must be unlocked to do this. If unlocked you can also click and hold the left mouse button down in a clear space on the taskbar and drag the taskbar to either side or the top of the screen. When you get close to the final position it will pop in place and you can this release the mouse button. This happens accidentally many times to a new user. When it is on the side of the screen it is



hard to read any of the information and you may not realize it is the taskbar. Having the taskbar on the top or bottom will be the most useable.



The second tab on the properties bar is the start menu. This allows you to choose between the Vista style and the Windows 9X style. The latter being called Classic. Remember when Coke® changed its flavor and no one liked the new flavor. Later, the old flavor was back and it was called Classic Coke. It's the same thing here, except, the new flavor seems to be catching on. There are two options you can change from the current screen. Notice that a check mark is in each of the two options in the Privacy area. For most people these are extremely handy features and should be checked. If you want to clear the programs list and start over, toggle the "Store and display a list of recently opened programs" box. This will remove all programs from the automatic program area of your Start Menu. You will need to use All Programs or the search window to start your programs to rebuild the most opened programs list.

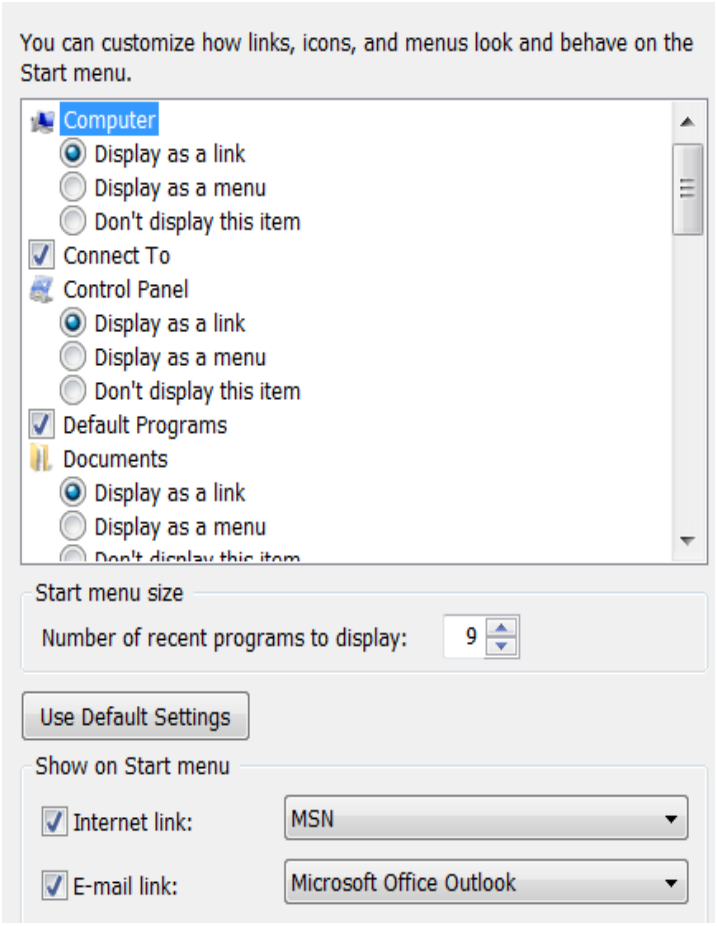
For now we will explore the Vista start menu and it optional features. To select the features you want on the start menu, left click on the **Customize** button. A

new window will open as shown on the right. The bottom section is where you select which internet browser and email program you want to show up in the upper left hand side of the start menu. You can delete these programs from showing up in the **Start Menu** by left clicking in the box you want to remove.

The  *is like the ► button in that it indicates that more options are available by clicking on this button, the difference is the menu pops down.*

The  *is a common dual button that allows you to click on the top half to increase the value shown or the bottom half to decrease the value.*

In the window to the right you can reduce the number of Programs to be displayed by clicking on the bottom arrow. It will decrement once for each click.



The **Connect To** box has been checked in the Start menu selection window. If you are not on a network, click in this box to clear the checkmark and eliminate it from your start menu.

Scrolling. If you look to the right of the menu you will see a scroll bar on the right hand side, which is reproduced here. This appears whenever there is more data than the screen can display at one time. You can left click and drag the button down to see more data or left click on the up or down arrows above and below the scroll button which will move it a line at a time. If you click in the empty space between the arrows and the scroll button, you will move a page per click. Unless you have a really old mouse, it will have a scroll wheel in between the left and right buttons. If you rotate this wheel it will also scroll the screen. By using one of the methods above, scroll down so you can see a **Favorites Menu.** Click in this box and an icon will be added to your start menu that will allow you to select a favorite web site

right from the start menu rather than opening your browser, going to your home page and then selecting your favorite web site and then going to that page. This can save you quite a bit of time if you have a slow internet connection.

If you are running XP the properties window will only have two tabs and look like the picture on the right. The options for notification area/system tray are included on the first tab and do not provide as many choices as Vista and Windows 7. It is a good idea to clear the check in the *Hide inactive icons box*. This way you will know all of the programs that are running in the background. The start menu tab in XP is very similar to that of Vista and Windows 7 and allows you to check and un-check those items that you want to appear or be deleted from the start menu.

The Help and Support Window

A left-click on the **Help** Start Menu item will open the Windows Main Help Database. The procedures of the **Help Database** are covered in the last class of this course.

Search

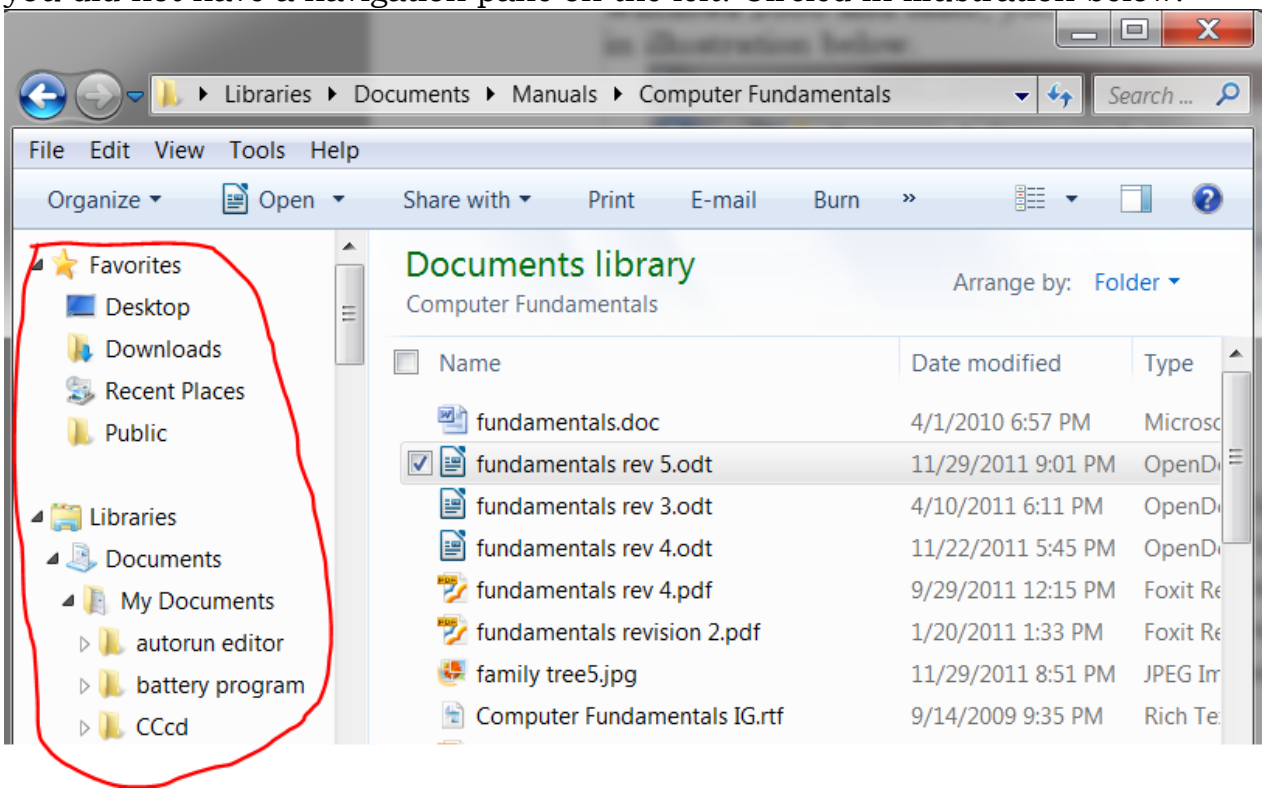
In XP the Search command is on the right hand side of the menu. In Vista and Windows 7 it has been moved to the bottom of the Start menu. This is one area where Vista and Windows 7 are much different than previous versions of Windows and more details are covered in the follow-on course. We will cover the basics of how to search in the last week of this course.

The Control Panel selection on the start menu will open the Control Panel window. In general, the Control Panel allows you to check, change and setup the hardware in your system. As with all options in Windows, there are many ways to get to the functions contained in the Control Panel. Many are handier and will get you there faster than clicking on the Control Panel. If you forget

how to use one of the shortcuts you learn in the Windows course, you will probably find the function you want to change in the Control Panel. The category view shows the most common tasks. In XP you can click on the "Classic" option and get a list of all the Programs available to change your computer. In Vista the category view is called "Control Panel Home" In Windows 7, the classic view is labeled small icons and large icons.

Documents (Vista and Windows 7)

Also provided on the start menu is a shortcut to the logged on user's Documents. This is a predefined folder that has been generated to start the user off in an organized fashion. Left click on the **Documents** (My Documents in XP) on the Start Menu and it will brings up the list of the text, sound, image, etc. files which you have stored in this folder. The program that displays these files is called **Windows Explorer**. The layout of Windows Explorer changed in every version of windows since Windows 2000. In Windows 2000 and older, you did not have a navigation pane on the left. Circled in illustration below.



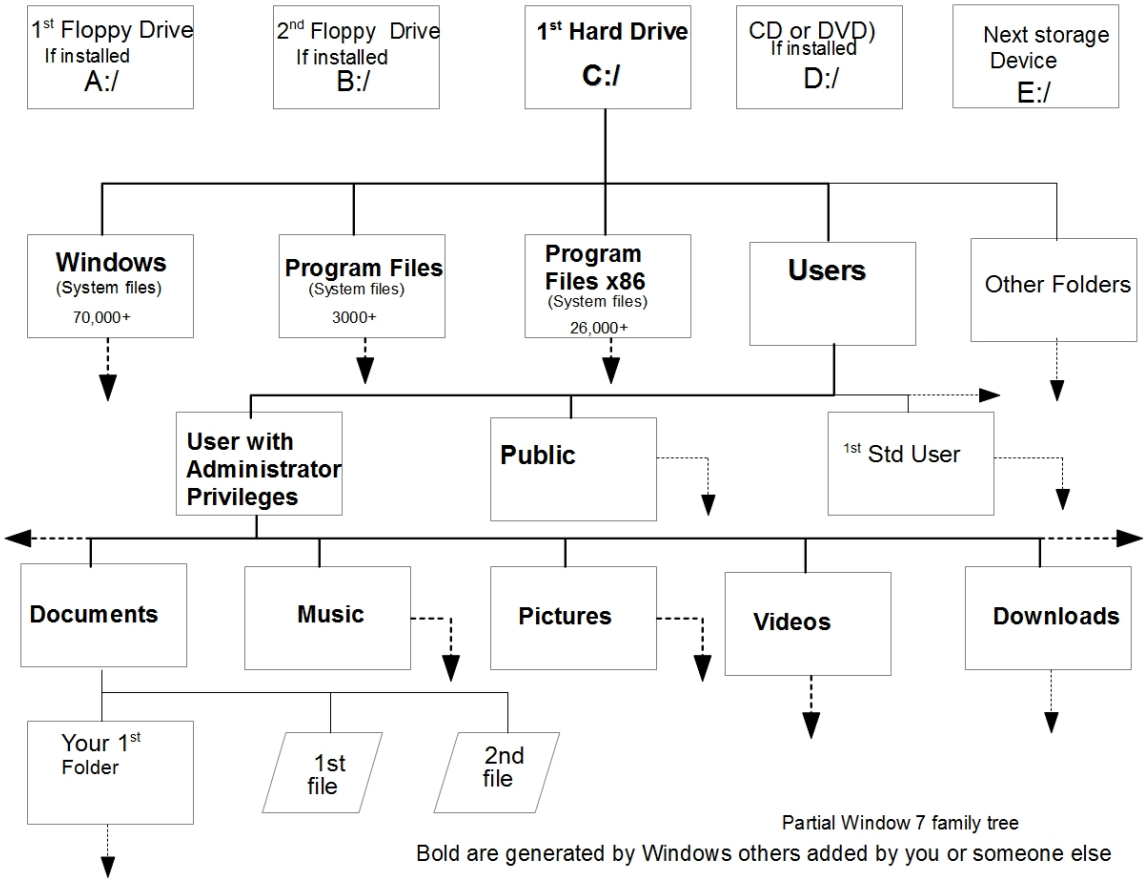
If you are using XP as an operating system the next section will have illustrations to show how it looks and works in XP.

In Vista and Windows 7 the box next to the left and right arrows is called the address bar. It tells you where in the computer you are viewing. You read this address from right to left. In the illustration above it shows that you are viewing the files in the Computer Fundamentals folder which is in the Manuals folder which is in the Documents folder, etc. As you navigate between areas it will change and tell you where you are. If you know where you want to go, you can type in the address there. Below the address bar is the Menu Bar. On the left below the command bar is the Favorite Links and Folders section. These two sections are part of the Navigation pane. If you enter a subject in the search box at the top right box it only searches in folders and sub-folders of where you are at in the address bar. For example, you could click on Downloads in the navigation pane and then type in the name of a file you downloaded. This feature makes searching for a file you have downloaded or that you have written much faster than the search available in older versions of windows.

In addition to the My Documents Folder, Microsoft has also created the following folders to get you started: My Pictures, My Downloads, My Videos, My Music, My Favorites, Saved Games and Shared Files. For each user that is added to your computer these folders are automatically created. In some of these folders Microsoft also includes some sample files of pictures, videos, and music in respective folders. The shortcuts on the start menu like “Documents” and “Music” actually take you to the logged in users “My Documents or My Music folder”. Once you start creating your own files, it is up to you to create your own folders and sub-folders to make things easier to find. For example, in My Music, you might want to have sub-folders of Pop, Classical, Country, Rock and Roll, etc.

A more visual way to think of how your files are stored is shown in the picture on the next page. In the first home computers our storage was kept on floppy drives. The first drive was labeled as A. The : was the separator and the / was computer shorthand for the root directory (the beginning of the family tree). A second floppy drive was soon added (B:) so that we could have the operating system on one floppy and programs and files on the other. It also provided the ability to copy files from one floppy to another for backup. As technology improved, Hard drives became available which were large enough that both the operating system and user files could be kept on a single device. The hard drive was given the definition of C. For may years after that the average home computer contained a hard drive and a floppy drive with the computer booting (starting) on the hard drive and the floppy was used to transfer files from one machine to another. As technology kept improving new storage devices were added and swapped. Now, the second storage device is called D, the third E, and so on. Just depends on what is installed in your computer, or plugged in after the fact. Floppy and mechanical hard drives are magnetic storage devices.

Compact Disk (CD) and DVD drives are optical storage devices. The USB flash drive is a solid state (transistors) device. It has totally replaced floppy drives. The latest technology is a solid state drive to replace the mechanical hard drive.

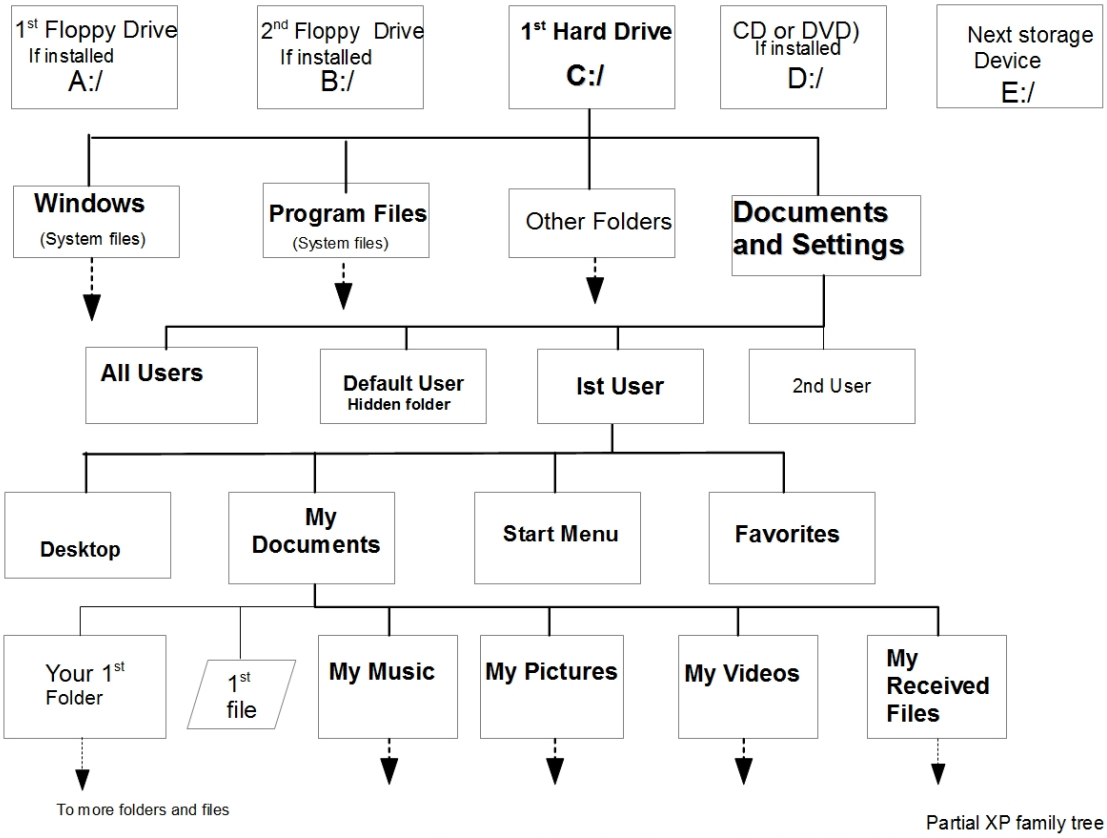


Partial Window 7 family tree

Bold are generated by Windows others added by you or someone else

Unless you add a standard user, which is highly recommended, your family tree will look like above. The computer must have at least one user with administrator privileges so that you can add programs and customize your computer. If there are two computer users there should be three accounts, a user with administrator privileges and a password and two standard users with or without passwords. You should use the standard account for all activities except installing programs. You can even use the standard account for installing modern programs as long as you have the administrator password.

Documents (XP)



Partial XP family tree

Bold are generated by Windows others added by you or someone else

In XP you do not have the navigation pane and the fast search command of Windows 7 so it more important to understand the file structure of your computer. Also XP came with three levels of users. The standard user with administrative rights, a limited user and a "super" administrator account (professional version) that a company server could access to administrate policies, updates and other functions. The limited user account was really limited so it was primarily useful for guests or kids. So for most of you using the home version you had one user that had administrator rights. Setting up a second user if there were two users in a household was still a good idea but most people did not. The family tree was also structured a little differently.

Class 3: Objectives

Know the following terms:

- Move Cursor icon
- Resize Cursor icon
- Top Menu
- Bar and Ribbon
- Tool Bar
- Status Bar

Be able to:

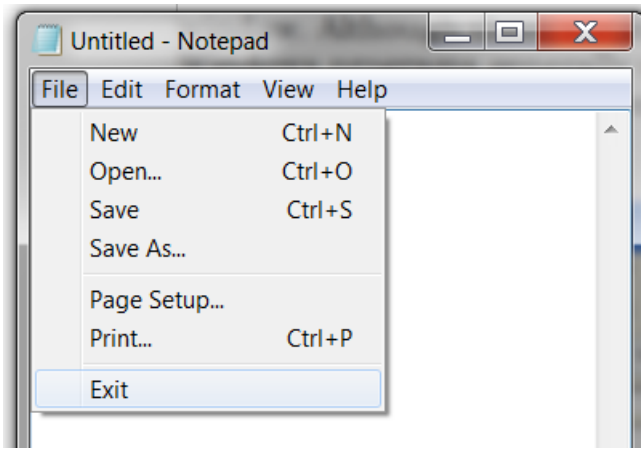
- Move window by dragging and cursor keys
- Resize window by dragging and cursor keys
- Close Window by 3 methods
- Identify and use the main menu, tool bar, status bar
- Cut, Copy, Paste and select using Edit Menu
- Cut, Copy, Paste and select using Control Keys
- Cut, Copy, Paste and select using Mouse
- Properly save file
- Determine which version of software you have

Understand:

- The functions of the title bar,
- The functions of the Top Menu
- The functions of the Tool Bar
- The functions of the Help Menu

Windows

By now you are aware that Windows programs are displayed on your screen in a re-sizable box known as a window. Each program will be run inside its own window. Although there are minor variations from one program to another, Windows programs generally use a standardized set of controls. Once you get to know how to operate them, you should be comfortable getting around in any new program.



For our purposes, we are going to show NotePad, a rich text editor which is included with Windows. If it is not on the pre-programmed start menu or an icon on your desktop, you can open a copy of NotePad by clicking on the Start button, and then selecting **All Programs -- Accessories – NotePad.**

The Title Bar

Every Windows program has a Title Bar at the top of its window. Its most obvious function is to display the name of the program. Many programs also display the name of the file you are currently working on. In the illustration above the file name is 'Untitled", this a default name for NotePad and you will have a chance to change it when you save your work. You can also use the Title Bar to move a window. If the program is not full screen, place your mouse pointer over the title bar, click and hold down the left button. Then, while holding the button in, move your mouse around and watch the window. It's that easy. Note the three buttons to the far right of the title bar. These are the basic window controls which you will find on every program window. The button on the left with the picture of a flat line is the **minimize** button. A single left-click on this button will shrink the window down into the program's button on the Taskbar. Left-clicking once on that Taskbar button will restore the window to its previous size (**Restore Up**). The "X" button on the right will close the window and its associated program entirely. The button in the center with the single large square will **maximize** the window, causing it to fill your entire screen.

Once a window is maximized, the picture on the middle button changes to two overlapping squares. A single left-click on this button now will shrink the window back down to its previous size (**Restore Down**). You can also enlarge or

shrink a window to any specific size you desire by holding your cursor directly over one of the window's edges or corners until the pointer changes into a **Resize** cursor a two-way arrow similar to the example at the left. Clicking on the left mouse button, holding it in, and dragging the resize cursor in or out will expand or contract the window.

A drop-down menu containing items to perform all of the tasks  above can be accessed by clicking once on the small program icon on the far left of the Title Bar. The options generally include: Restore, Minimize, Maximize, Close (the same four actions provided by the three buttons on the right of the Title Bar), Resize, and Move. Double-clicking on this same icon will exit the program. Double-clicking anywhere else on an open part of the title bar will toggle the Maximise and Restore Down functions. When you select Move or Resize from that menu, a **Move** cursor or the resize cursor as shown above, will appear. You can then move or resize the window by using the arrow keys on your keyboard. When the window begins to move, the cursor will change back to a pointer and you can then switch to the mouse if you wish. When you're done, press the enter key on your keyboard or click the left mouse button once to finalize the change.

Top Menus

Top Menus are common to virtually every Windows program. However, Microsoft has started a new concept that will eventually replace the Top Menu. Starting with Microsoft Office 2007 they introduced what they call the **Bar and Ribbon**. More on that later. As you can see on the previous page, NotePad uses the traditional menu. It has five tabs in the top menu. Of these, the **File** and **Help** menus are nearly always available in every program. The **Edit** and **View** menus are also very common. As this is a tutorial on program windows in general, we'll just cover the four most common menus. Not all programs will have identical menu items to NotePad, but the ones we'll describe are very common. The more that a program will do, the more tabs and menu items it has.

To access one of these menus, just move your cursor over the name of that menu and left-click once. A box will drop down containing all of it's menu items. Move your cursor down over the item you wish to select and left-click once more.
Alternately, you can bring up any menu in the window in which you are working by holding down the Alternate key and pressing the key corresponding to the underlined letter in that menu's name. In the case of the File menu you would click Alt+F. You can then select an item from that menu by typing the underlined letter shown. As you can see, some of the items have shortcut keys

listed to their right on the menu. You can select these options with your keyboard without even opening the file menu first. In the case of Print, you can just hold down the Ctrl key while you press the P key.

File Menu

New **Ctrl+N** Gives you a new, blank document with which to work when you're starting from scratch.

Open **Ctrl+O** Opens an Open dialogue box so you can browse your computer's directory tree for an existing file that you wish to open.
A **Dialogue Box** is a special type of sub-window of a program that allows the user to enter data, such as a file name, to be passed to the program. It may often look like a Windows Explorer window, but it functions as an input screen for the program that opened it.

Save **Ctrl+S** When you edit a file, the changes do not become permanent until you save them to your disk. Selecting Save while editing an existing file will overwrite that file on your disk with your alterations. Selecting Save while editing a new document will open the **Save As** dialogue below.

Save As If you are editing an existing file, and you wish to save the changes to disk without overwriting the original file, Save As allows you to create a new file containing the changes you've made without altering the original. Additionally, you can use this option to create a new format for the file in many applications.
For example, in WordPad you can open a Microsoft Word document (.DOC) and save it in plain text format (.TXT). Such options vary greatly from one program to another. Selecting Save As opens the **Open/Save As** dialogue box described below, which allows you to browse your disk for the folder in which you wish to save the new file and gives you an opportunity to name the file.

Print **Ctrl+P** Opens the Print dialogue box, which allows you to select a number of print options and then send your job to the printer.

Page Setup...
Many programs offer this feature, which allows you to change such printing options as margins, paper size, and whether the printed sheet is going to be oriented horizontally (landscape) or vertically (portrait).

Exit Closes the program.

The Save As Window

When you elect to save a document with the Save As option, a small dialogue box opens up. You can browse your directory tree for the file you wish to open

or the spot in which you wish to save a file through the use of some simple navigation aides. The functions are similar to those of any other Windows Explorer screens, described earlier but with a few extra options. The Save As window has a toolbar button that allows you to instantly create a new folder with one click of the mouse. This is great for making a new folder in which to save a file without leaving the Save As dialogue. When you press it, a new folder called (logically) New Folder appears inside the folder in which you are presently browsing. You just type in a name for it (unless you want a bunch of folders named "New Folder" on your drive), double-click on its folder icon, and click the **Save** button to save your file inside the new folder. In XP the icon is not labeled so you will need to look harder.

The file name block in the resulting window will turn blue and say “untiled.txt in Notepad (or whatever the default name is for that program you are using, for example it would be “document.rtf” in WordPad). The default name should be changed to what you want to call this file. Unless you have clicked elsewhere, a blinking cursor should already be there waiting for you to type the new name. If you have clicked somewhere else, click in this box and change the default name to something that you will remember. Do not worry with the defalut extension disappearing when you type your new name (.txt and .rtf) in the above examples. The box under the name (save as type) will automatically add the extentionsion. The down arrow to the right of that box, when clicked drops down a selection of file types which you can choose for the particular program you used to create the file. This may be necessary if the person you are sending the file to does not have a compatible program to the one you are using to create the document. You may be using open office and your friend Microsoft Word version 2003.

To make it easier, change the name first and then use your navigation tools and new folder tools second. Windows doesn't allow 2 files in the same folder to have identical names.

Edit Menu

WordPad's Edit menu has quite a few items, six of which are common to most Windows programs:

Undo **Ctrl+Z** As the name implies, this item allows you to undo the last change you made to your document. Some programs allow you to continue and undo each previous change by continuing to click on this menu item.

Cut **Ctrl+X** You can select a string of text by placing your cursor on one side, clicking the left mouse button, and holding it while you drag the cursor across the text. With this menu item, you can then remove that selection from that portion of the document. You can then move your

cursor to another portion of the document and select Paste to place it there.

Copy **Ctrl+C** You can use this item to copy a selected text string for pasting elsewhere without removing the original string as in the Cut item above.

Paste **Ctrl+V** This item is used to place the text string you cut or copied using the items above in another portion of the document.

Clear **Del** Sometimes called **Delete** on the Edit menus of other programs. This removes the selection entirely without saving it for pasting elsewhere.

Select All **Ctrl+A** Allows you to select the entire document for one of the Edit functions described above.

View Menu

The View menu in NotePad is extremely limited. However, we show two notable options below that are common in most Windows programs.

Toolbar

This item either hides or displays the window's toolbar, if available, a feature described in the next section. This item is usually a **toggle switch**, as indeed it is in WordPad. Clicking on this menu item alternately adds a check mark to the left of the item or removes it. When the check mark is there, the tool bar is displayed. When it is absent, so is the tool bar.

Options

Many programs allow the user to configure a set of options dealing with such items as the program window's appearance and functions. The dialogue box for this is usually opened via this menu item. Sometimes the Options item is located on another menu, and sometimes it is named **Settings** or **Properties**. The configurable options vary widely from one program to another.

Help Menu

The Help menu is easy to understand. Like WordPad, most programs offer at least two items on this menu:

Help Topics

This will open the program's Help window.

About

This will displays information about the program such as its author, copyright notice, and version number.

The Toolbar

Many programs offer you a toolbar, which provides you shortcuts to many of the more popular Top Menu commands. WordPad's buttons are standard among many programs, so we'll give a brief description of each one. In addition, WordPad adds a **Format Bar** directly beneath the Toolbar. This is common among word processors and text editors, so we'll cover its options, too. Many programs also offer **tool tips**
-- holding your cursor on one of the buttons for a second brings up a little window with the name of that button. This can be a big help in keeping them straight until you've grown familiar with them.

Toolbar Buttons

New Document. Same as **New...** option in the **File** menu.
Open File. Same as **Open...** option in the **File** menu.
Save File. Same as **Save** option in the **File** menu.
Print File. Same as **Print** option in the **File** menu.
Print Preview. Same as **Print Preview** option in the **File** menu.
Find. This option, also available in the **Edit** menu, searches for a specific text
Cut. Same as the **Cut** option in the **Edit** menu.
Copy. Same as the **Copy** option in the **Edit** menu.
Paste. Same as the **Paste** option in the **Edit** menu.
Undo. Same as the **Undo** option in the **Edit** menu.
Date/Time. Inserts the present date and time into the document.

Format Bar Items

The Font Face Window allows you to select a particular font. The down arrow to the right will drop down a scrollable menu of every font installed on your computer.

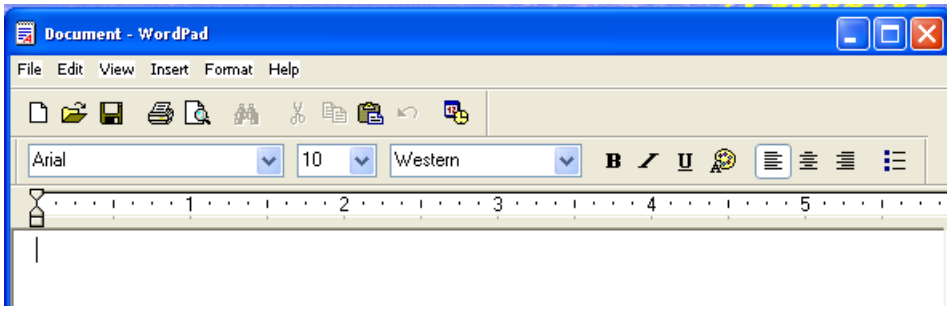
The Font Size Window allows you to change the size of your text.

The Font Style Buttons allow you to display the font in (from left to right) **B**oldface, **I**talics, **U**nderlined, or change the font color.

These buttons allow you to align your text to the left margin, center it, or align it to the right margin.

The Status Bar

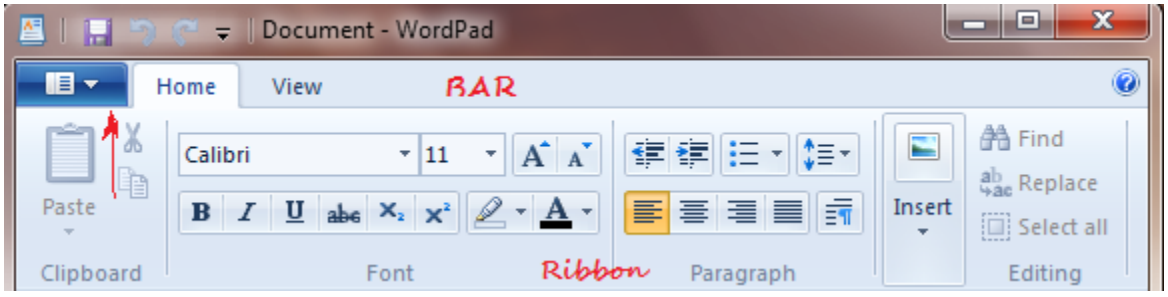
Some programs offer you a Status Bar at the bottom of their window which displays helpful information for you.



The examples above were from NotePad. In XP and Vista, WordPad uses the same top menu approach. See illustration above. In addition to the drop down menus, shortcuts to the most often used functions are provided below the top menu in what is called the tool bar.

BAR and Ribbon

So how does the Bar and Ribbon compare to the traditional menu and how do you use it if you have Microsoft Office 2007, 2010 or Wordpad and Paint in Windows 7. First the concept; instead of having tabs where each menu drop downs when you click on them, one menu is always shown in the form of shortcut icons instead of words (the ribbon). The bar has tabs on it and clicking a tab displays that subjects menu on the ribbon. In the case of Wordpad and Paint, there are only two tabs labeled "Home" and "View". The Home tab is the one you will use the most. It is displayed by default. The File menu which is the first tab on the traditional menu is not one of the tabs but a file icon in the upper left corner. See figure below. A hand drawn red arrow in the figure below points to the icon. Don't miss the three shortcuts located on the title bar. The floppy disc icon is your save command, and the curved arrows are your undo and redo commands. The down arrow to the right of the redo icon will allow you to customize and minimize the bar and ribbon.



If you click on the file icon, a traditional menu will pop down giving you the choices you would normally see under the "File" menu. See figure below. Another change is that the Help menu seen at the end of the traditional Top

Menu has been replaced with a blue circle icon and is located to the far right on the tab bar. 

Cut Copy and Paste

One of the fundamental things you can do in most programs is cut/copy and paste. It is so useful in day to day applications that each new version of Windows has added additional ways to accomplish this task. We are going to cover the original ways that are still useful and sometimes all that is available in some programs. Technically it is cut and paste or copy and paste. The difference is that if you "cut" it disappears from where you cut and it reappears where you paste. When you "copy" it stays in the original place and copies into the new location. To accomplish this whatever you cut or copied is placed in a reserved memory place called the "clipboard". When you paste, it is copied to the new location. Whatever is on the clipboard stays there until you replace it with something new or until you shutdown the computer.
In class we will practice the many ways you can do this task in NotePad and WordPad. However, is important to remember that Cut/Copy and Paste can be used with any object such as pictures and files. Moving your files into folders is a great way to organize your documents, pictures and music.

There are four steps involved and the methods can be mixed or matched.

Step 1. **Select (highlight) the object to be copied or cut.**
Step 2. **Choose copy or cut.**
Step 3. **Use mouse or cursor keys to move to new location.**
Step 4. **Paste**

Selecting can be done by the mouse or keyboard. Left-click and drag in word processing or just left-click on other objects like files. If you want to select multiple objects you can hold the Ctrl key down while selecting each object. If the objects are in a row you can hold the Shift key down and select the first and last object. If you prefer the keyboard you can hold the Shift key down and use the cursor arrows to select the items you want. This is real handy in word processing programs that want to "help" you by selecting whole words or sentences when you only want a portions of a word or sentence.

Choosing cut or copy can be done by many methods. Using the drop down menu in "edit", the short cuts in the toolbar(XP) (ribbon in Windows 7), or the keyboard. Ctrl X will cut, Ctrl C will copy. You can remember X for cut because it looks a little like scissors. You can also right-click in the selected

area and select cut or copy from the menu. The cut short cut icon is scissors, and copy shortcut icon is two pieces of paper.

Moving the cursor to the new location can be done with the mouse, or keyboard cursor keys. In a word processing program you may have to add spaces and/or carriage returns to generate the new location.

Paste can be done the with the same methods as selecting cut and copy. Ctrl V is the keyboard shortcut. Ctrl P was already in use (Print) so they took the next available letter. The shortcut looks like a clipboard.

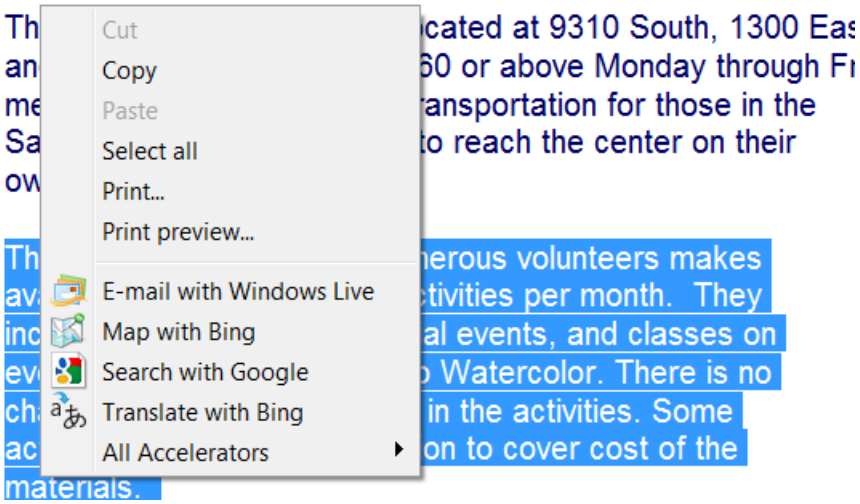
For example, you can highlight some of the text in a web browser's window. Now do a Ctrl C or right click and choose **Copy.** Now, go to WordPad and click somewhere in the Document Window. Select **Paste** using one of the methods described earlier. Many programs allow you to move data between different programs in this manner. If you select a picture or file to be copied, it will go to the clipboard, **but you will only be able to paste it, if the receiving program supports that object.** For example WordPad will accept pictures but NotePad will not. Also, do not confuse a picture file with a picture. To paste a picture in another document such as email or word processing program, you need to use a picture program that will open the picture file and then allow you to copy the actual picture or part of the picture. This moves it to the clipboard so that you can paste it. In Windows 7, WordPad has been improved and it will take a picture file, convert it and paste it with a single click. If the program will not accept the format you are using, the paste icon or menu item will be light gray instead of dark.

To make file moving easier, the Windows Explorer top menu also has a Move to Folder and Copy to folder functions added to the Edit menu. Once you have objects selected clicking on Move to Folder or Copy to folder, a navigation window will open that makes moving to a new location easier. This navigation window will also allow you to create a new folder at the same time.

The Document Window

The Document Window of a program is where you do all your work. Most programs offer you drop down menus or the Bar and Ribbon to allow you do the cut and paste and other functions. However, some don't and this is where knowing the mouse or keyboard method will still allow you to do the task. For example, most modern Internet browsers fall into this category.

Still, you can highlight some of the text in a web browser's window. Hit Ctrl C and this will move the data to the clipboard. Or you can right click in the selected area and chose **Copy** from the context menu. Then, go to WordPad or other program of your choice and click on a portion of its Document Window. Select **Paste** using one of the methods described earlier. Many programs allow you to move data between different programs in this manner. Below is a picture of some text being selected from our web site and then the user right-clicking in the blue area to get the copy command.



Class 4: Objectives

Know the following terms

- HyperLink
- System Files
- Hidden Files
- File extension
- Indexed
- Tagged
- Wild Cards

Be able to:

- Open Windows Help two ways
- Get Windows help by topic
- Get Windows help by search box
- Search for files by category
- Search for files by name
- Search for files with wild cards
- Search for files by data in file
- Sort the search results
- Burn a CD time permitting.

Help and Support

The Windows help function continues to be the most changed item in each version of Windows. Microsoft is still trying to figure out the best way. The Table of Contents is located in different areas in each version. The index function is no longer available in Vista and Windows 7. There are two main ways to bring up the Help and Support menu. Go the start menu and click on **Help and Support** or use the F1 key at the top left of your keyboard. If you have just booted your computer, then you will need to single left click on an empty spot on desktop before you use the F1 key. This is to insure that Windows knows that you want help on the Operating System and not some other program. This also applies if you have an open window on your desktop. If it is active, the help menu will be for that program not the Operating System.

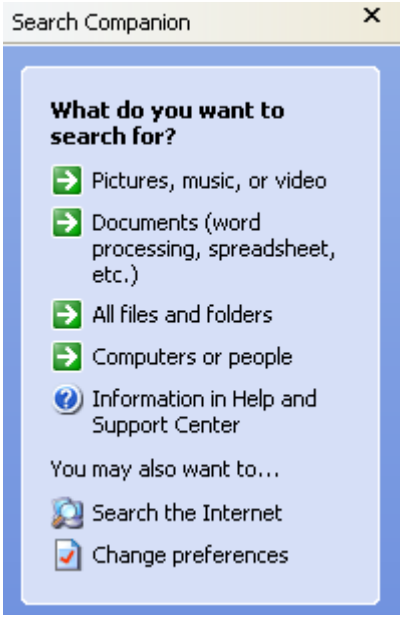
Since you are taking this course, the first thing you should click on is the "Windows Basics" or "Learn about Windows Basics" **hyper link**. When you move your mouse over a hyper link the cursor will change from a pointer to a hand with the index finger as the pointer. A hyper link is just a shortcut to a new location that uses text instead of an icon. This is extremely common on

the internet. You will see that most of the topics covered here are included when you click on the Windows Basic" hyperlink. This is an excellent place to go to review what was taught in this course and find out more information on how to use your computer. If you cannot find what you want there, try typing your question in the "Search help" box. When using the Search help box you may need to try different word combinations to find what you need. This is one of the reasons that we covered "terms" each week. In XP, type in "tutorial" and then return. Look for "Take the Windows XP tour. This will provide you with a movie type presentation. In Windows 7, Click on the "How to Get started with your computer" hyper link. Follow the links to "…Getting Started" and "…what's new on Windows 7". This will take you to the Microsoft web site for similar presentations.

You should click on "What's new in Windows XP (Vista or 7)" hyper link to see what features have been added or changed from the previous version. This is handy if you use more than one computer and wonder why something works on one computer and not the other.

Search

The Search Function is another area where each version has a new look and more features. We will only cover the fundamentals in this course. A more detailed coverage will be available in a follow-on course. Searching can be done from every Windows Explorer screen in Vista and Windows 7 in addition to the Start Search (Search in XP) box on the start menu. In Vista and Windows 7, this search is limited to the indexed files and folder. All the files you create or download will be indexed. System files are not.



XP
XP Search does not use an indexing approach and must do a real time search of the computer. In XP the menu shown to the left will appear when you click on Search.

Notice the ***Pictures, music, or video*** option on the top. Clicking on this will allow you to select one of these categories and then XP will automatically limit the search for files with extensions related to what you choose. If you search for pictures, it will only look at JPG, BMP, PCX, etc., files. If you have a unique file format from you camera it may not find

them but it will find all of the common picture formats. To find your unique file format you will need to use the "**All files and folders**" option.

The ***Documents*** menu does the same thing for Office suite type files such as word processing, presentation programs and spreadsheets. Selecting this option bring up a menu that allows you limit your search to different time frames. Both the Picture and Documents menus have advanced options that allow you to further limit your search or change where you search. The ***All files and folders*** allows you to search for any kind of file.

You can also use **wildcards** if you're not sure of the complete name of the file. Two wildcards can be used when specifying file names: the *asterisk* *****, and the *question mark (?)*. The *asterisk* is used to represent a whole word, file name or a group of characters and the *question mark* is used to represent a single character.

For example, to find all the files in the current directory that ends in the extension **.TXT** you can use either **.TXT or *.TXT**
To find all the files that begins with the letter **S** type: **S or S***.
We include the * in this text because older versions of Windows required it and most search engines on the internet still use it.
To find all the files that have a name of 4 characters in length and ends in the extension **.TXT** use: **????.TXT**

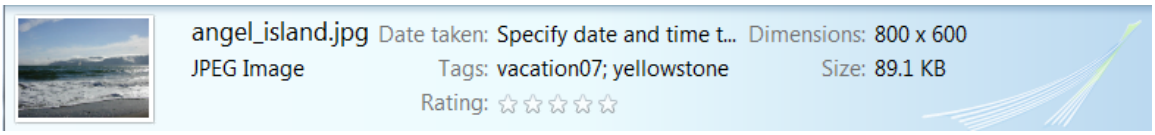
A search for ***.*** will return a list of all the files on the drive or folder selected for the search. Note that the more specific your search, the more useful the search results will be. The ***.txt** and ***.*** searches will surely find the file you're looking for, but may return so many other file names that you will need hours to sort through them all.

Search Vista & Windows 7

Before we start on how we use the search box in Vista and Windows 7, we need to define "Indexed" and "Tagged". Files located in the Users area and selected areas such as Microsoft Outlook files and saved Internet files are **indexed** by default whenever the computer is on but no user activity is present. Windows will search these files (and the contents of text files) and put them in an index file that is hidden. When you click on search, the computer does not have to search the computer just the index file. This makes the search almost instantaneous. As you type in letters in the window Search Box, the results will be displayed above. What files are indexed can be changed. Type in ***indexed files*** in the search block of the Help and Support menu and you will learn more information on this subject and how to modify what is indexed. It is not

recommended to select the entire hard drive to be indexed or your computer will be indexing in the background all of the time. There are over 30 thousand files that make the operating system work. They are called and marked as **system files**. Unless you are a system administrator, you should never touch these files. To prevent this, system files are automatically marked as **hidden files** also. You can change the property of any file to be hidden if you want to protect it from casual exposure, but anyone who knows about computers will know how to find it. If you really want to protect a file from other users, you should encrypt it. The business versions of XP, Vista and Windows 7 will allow you to do this. If you have the home version, you will need to use a second source program to do this.

Vista\Windows 7 and some programs like Microsoft Word also allow you to add **tags** to your files. This is especially handy with pictures and music. In addition to the file name you can add multiple tags that you will use with your search command. For example, you can tag a picture as "vacation07;Yellowstone" and when you searched for Yellowstone or vacation07, it would identify that file even though the file name was p00044. The semicolon is used to separate tags and is added automatically when you type a space. To tag a file, look at the bottom of Windows Explorer for something that looks like the picture below.



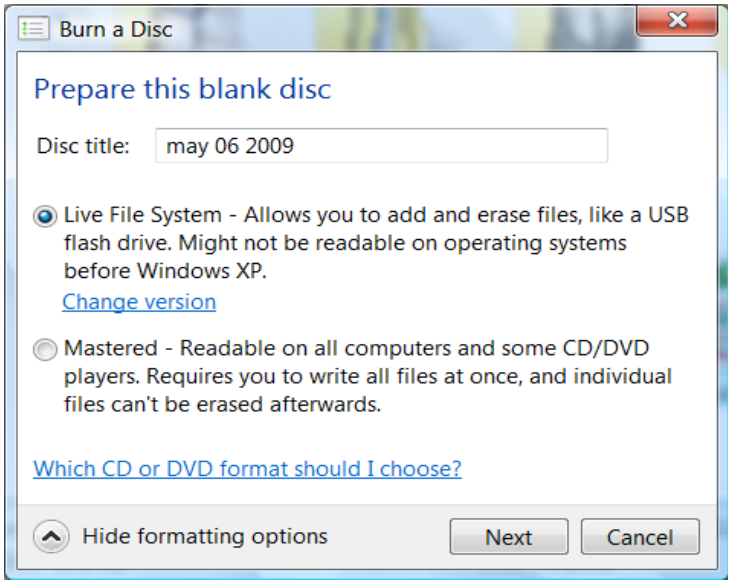
All files cannot be tagged, for example files ending with .txt or .rtf cannot. If the file cannot be tagged, the tags line show above will not appear. Try first with pictures or audio files to see how this feature works and then try with a .txt or .rtf file and see what is missing. XP does not support this feature without second source software.

A filename is made up of two parts; the first is the name that you or whoever wrote the file has named it and the second is called the **extension**. It takes the form of ***filename.ext.*** Originally the extension was only 3 characters, now there are some four letter extensions. The extension describes the format in which the file is saved. All programs that allow you to save a file have a default extension and automatically apply this extension to your file name. More sophisticated programs may allow you to save in many formats that you can select by using the "save as" command. Knowing the extensions of your favorite programs can limit the number of responses you get when you search.

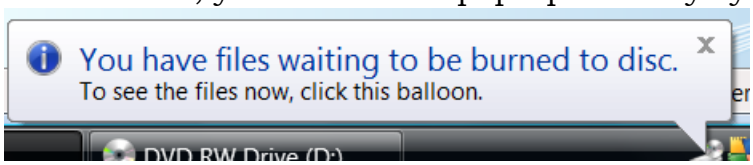
Burning a CD

Windows XP was the first Windows OS to provide a built in capability to burn a data CD. Vista added the capability to burn a data DVD including Blue Ray if you have a Blue Ray DVD burner installed in your Computer. There are almost a hundred different CD and DVD formats available today and Windows will read most of them if the CD/DVD device's firmware supports it. XP provided the ability to write the "mastered" CD data format. Vista and Windows 7 have added a second format called the "Live" data format and have made this the default format. The advantage of this new format is that data files can be added and deleted on the CD or DVD after the initial burning. The disadvantage of this format is that it can only be read by your computer until the CD or DVD is full or has been "closed out". It also takes longer to burn the first file in the Live format because the CD or DVD has to be reformatted. We will cover the mastered method in this course. First insert a Blank CD or DVD in your drive. If the auto read function is enabled, you will get a pop up telling you this is a blank CD or DVD. Just close this window for now, later you may want to explore some of the options available in this pop-up.

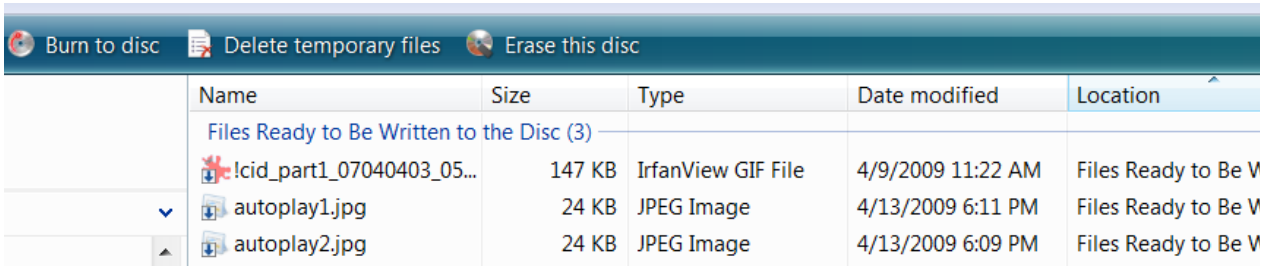
Any of the cut and paste methods covered in Week 3 can be used to send the data to the CD/DVD drive. For example, open your Pictures Folder, and select all of the pictures by using Control A with your keyboard or Select All from the top menu. From the top menu select Copy to Folder and then navigated down the menu until you find your CD/DVD burner and then click on your burner. You can also use the right click "Send to" menu to do the same thing. In Vista and Window 7 you will see a pop up like below. Actually this is how the pop-up looks after you click on the "Show formatting options" icon on the original pop-up. In you have XP you will not have any options and will go to the burn screen directly.



In addition to allowing you to select Mastered or Live File System this screen will allow you to type in a name for your disc. Once you have done this and clicked Next, you will have a pop up that says you have files ready to be written.



You can either click on the balloon pop up or go somewhere else to add more files to this CD. Once you have all the files you want to burn added to the CD you should navigate to your CD burner, i.e. click Computer and then click on your CD burner icon. Once you do that you will see a picture similar to below. To burn the disc click on the icon next to the words “Burn to disc”. Look to the left of the filenames in the list and you will see a box with a little down arrow. This indicated these files are just in the temporary burn folder and have not yet been burned to the CD. Once you click on “Burn to disc” the CD will be written to and the CD drawer will then open after the burn is complete. Close the drawer and when the auto play function window opens up you can click on the view files folder to see the file on your CD. The little down arrow box will be gone.



In the example above, notice that there is a “Erase this disc” icon displayed on the right side of the menu. This happen because a CD-RW disc was used for this illustration. A CD-RW disc is one that can be erased and user over multiple times (about 1000 times). A CD-R disc cannot be erased and is much cheaper and will last much longer. In the “mastered” format it can only be written once. In the Live File System format you can add files until the disc is full. Deleting a file using the Live File System does not recover the space originally used by the deleted file, it just removes the file from the directory. The DVD disk market has several different types of media and you must choose a disc that is compatible with your DVD burner. Older DVD burners would only burn one media type, i.e. DVD-R(W) or DVD+R(W). If the W is added it indicates that it is erasable. Newer burners will burn the DVD-R, DVD+R, and DVD-RAM and the very latest will also burn the Blue Ray media. Read your manual to see what you’re DVD burner will do. The DVD-RAM was a media that would allow the disc to be erased and written to many times more than the DVD-RW or DVD+RW media’s. The Blue Ray media is much denser and will allow much more data to be written to the disc. Basically a DVD is just a denser version of the CD and all DVD burners will play and burn a CD.

Using the fundamentals shown in this course should give you a basis to learn any new program or new Windows Operating System.