



Flash Drives and File Management (Windows)

Overview: This class focuses on saving, moving, and retrieving any file on a Windows-based computer. We will learn how to add new folders to the computer, and rename both folders and individual files, with a focus on saving, renaming, and deleting documents (resumes, for example).

Requirements: Basic mouse skills – ability to move the mouse indicator around on the computer screen, and easily click and double click on items on the screen. A **personally-owned flash drive**.

Objectives

- The student will:
 - Understand computer memory measurements and relate this information to flash drives
 - Understand the basics of saving, storing, and retrieving files
 - Define File Management
 - Use drives and follow pathways
 - Rename Sample Pictures and move to New Folders
 - Create a simple Word Document
 - Open Microsoft Word
 - Save the document to the USB drive (flash drive)
 - Safely remove the hardware
 - Retrieve the existing file on the USB drive
 - Create a New Folder on the USB drive
 - Rename the folder
 - Move the Word Document into the New Folder
 - Practice

Optional:

- Copy files from the hard drive to the flash drive



Computer Memory: Built-in Memory

Hard Disk (C: drive, Hard Drive or Local Disk) – located in the computer. It is made of **platters** (a hard drive may have from 1 to 6 platters inside its sealed compartment)

This is a picture of the hard drive that is located **inside** the computer. You should never open the sealed case of the hard drive (you will ruin the data on the platters)



There are also SSD (Solid State Drives) for sale, but they are about 1.5 times more expensive than traditional drives. They use integrated circuitry to store data, and have much faster start-up and storage time (there's no moving parts, only electricity moving through circuits). Wikimedia, Solid-State Drive, 2019)

Memory: Portable Memory

Flash drives (a.k.a. USB, thumb, removable disk, jump drive, or memory stick) plug into any available **USB** (Universal Serial Bus) port on the computer. They range in size from 64 to 512Gb (64Gb costs \$10 or less. 512Gb costs about \$50 or more). Most computers come equipped with 6 to 8 built-in USB ports.



USB plug and port



USB symbol: all universal serial bus ports and plugs are identified with this symbol

Flash drives are the most current way to save personal computer files. One flash drive is usually sufficient to save everything you need (pictures, text files, etc). You should own a flash drive if possible.



Flash Drive

Onedrive – The Cloud

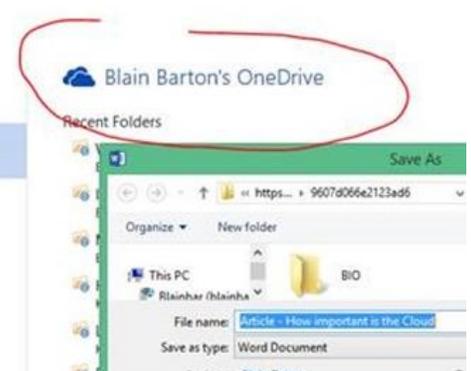
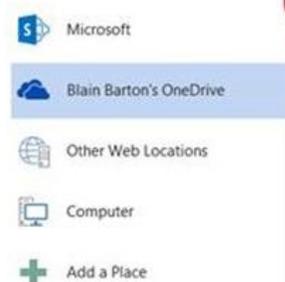
A new and important addition to Office and Windows is the **Onedrive**. It is essentially an online backup storage place that gives you **5GB of space** for free (note that you must have Internet access to get your items from Onedrive).

It is important to understand what the Onedrive is, as the “new office suite allows the option of **saving documents directly to OneDrive**, enabling users to access their Office files across a variety of devices.

Users will also have the option of saving their documents locally or offline and then have them sync with OneDrive upon going online again” (Webopedia, 2013).



Save As



Memory Space – What does it mean to you?

Name	Abbreviation	Size
Bit	b	1 bit (on or off, 1 or 0, electricity or no electricity – it's the lowest unit of measure – everything else is based on this)
Byte	B or b	8 bits – one typed letter (H)
Kilobyte	Kb	1000 bytes – about 1/2 page of text. 2KB is about 1page
Megabyte	Mb	1000 kilobytes – about 500 pages of text. 4Mb is about one digital photo or pop song
Gigabyte	Gb	1000 megabytes – 1 Gb is about 250 photos, or about 2,000 ebooks. 5Gb is about one DVD (Hollywood movie with extra features) A Blu-ray is about 27Gb.
Terabyte	Tb	1000 gigabytes – about 225,000 digital photos or about 450 DVD movies, 2 million ebooks
Petabyte	Pb	1000 terabytes – about 450,000 DVD movies (YIKES!) or 2 BILLION ebooks

Above table based on the HowStuffWorks Web site (2009). DVD and Blu-ray info: Watson, 2010.

File Management

So, computers store a tremendous amount of things in a very small area. How many things? “Amazon estimates the average size of a Kindle book to be around 2KB per page, including the cover image and any internal images (Kyrnin, 2013). **2KB per page** translates into about 500KB for a 250-page book. 500KB is actually quite small. 1GB would hold about 2,000 ebooks. The average Kindle has about 5GB of storage space. If all you had were books on the Kindle, it could hold about 10,000 ebooks.

Why on Earth am I getting into all this math and conversion? Because your average computer may have as much as a 3 **terabyte** hard drive. Just so we understand, a **3TB hard drive** could hold 6,000,000 (**6 million**) ebooks. That hard drive **fits in the palm of your hand**.

For a bigger idea, the Library of Congress, founded by the donation of Thomas Jefferson's personal library and one of the largest libraries in the world today, has an estimated 37 million books (Library of Congress, 2017). That's on **838 miles of bookshelves** (Library of Congress, 2017).

You would need about 18 terabytes to contain this entire collection. Amazon.com offers a 6TB hard drive for \$180. So, for about \$540 (3 drives) you could have enough storage space for the entire book collection of the Library of Congress – and then some. Physically, **these 3 drives would weigh less than 8 pounds and fit easily into a plastic grocery bag**.

How do you find *anything* in this mess??



File management deals with storing and retrieving **any** file you may have on the computer. It is important to save your files and organize them in a way you understand so you may find them again!

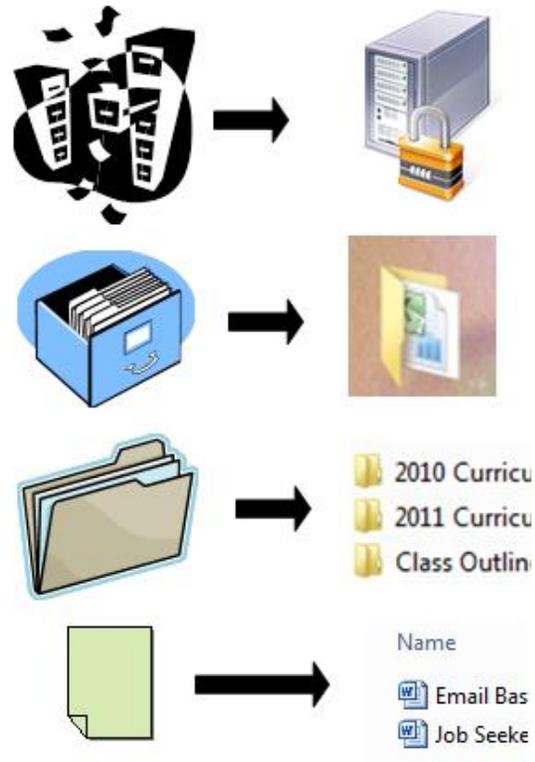
It may help you to understand file management on the computer if we think of it in “real life:”

If you picture a **library building** (this is your **hard drive**) you quickly realize you need to find the **right shelving unit**. (called the **Parent Folder**)

Next, you need to find the **right shelf** (called the **Subfolder**) and open it.

Once you have the **right shelf** you need the **right book** (called the **Subfolder**) and open that.

Of course once you have the right folder you need to find the **right page in the book** (called a **file**) and finally, open it. This is the essence of file management!



Follow Pathways to Find Files

Each **pathway** starts with a **drive letter**. Each **drive** on the computer is labeled with capital letters and a colon. For example:

C: (the hard drive/hard disk located inside the tower)

D: (**usually** a disk drive like a DVD or CD-RW) (It might be reserved for a System Recovery – a backup of files and drivers on your computer)

E: (**usually** a removable drive – a **flash** drive)

Within each of these drives are **folders** that you can use to organize your files.



Aside: The colon (:) tells the computer to look at the previous letter as the **drive** which is beginning of any **pathway**.

You can control and create new pathways in the **Windows Operating System** by using **File Explorer**. “File Explorer” is an information tool used by Windows-based operating systems that allows you to view data information related to the files on your computer.



Open it by clicking the icon from the **Taskbar**.

Inside File Explorer

Notice the Back and Forward buttons next to the pathway

This is our current location (This PC is the C: drive)
This Search bar is very useful

NAVIGATION PANE:
This is our focus area.

For your convenience you are also told what the drives actually are:

Hard Disk Drives: FOLDERS are on the hard drive (Desktop, Documents, Downloads, Music, Pictures, Videos)

ANYTHING YOU DOWNLOAD FROM THE INTERNET goes into the Downloads folder (pictures, videos, games, etc.)

Devices and Drives: These drives are also inside the computer but they allow you to save files to them and then you may take out the actual memory and carry it with you. Computers will **read** and **write** (play back/save to) removable devices. These computers have a **DVD RW drive (E:)** on them. This drive serves to both play back (“read”) DVDs and also save to (“write”) to them. To write to a DVD, you need to purchase a writeable DVD (regular DVDs are non-writeable).

The most common device you will use for removable storage is the **flash drive** (labeled **Removable Disk (F:)** here). It plugs into any **USB** port (Universal Serial Bus) and it’s very easy to write and rewrite data on it (save/delete/save again). Once you have files on a flash drive, you may use the public workstations at any library to attach them to an email and send them off to potential employers.

In Windows, the main place you will use for file management is the “File Explorer” listing on the left side of the screen. The default location to Save In: is Documents for text files (like using Word); and the default location for picture files is Pictures.

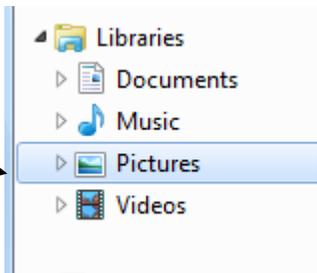
Once we are in the correct drive, all we deal with are **folders**.

There are **Parent Folders** and **Subfolders**. **Parent Folders** can be any folder that contains another folder. It may help to think of **Parent Folders** as the **drawer** of a filing cabinet. **Subfolders** would be represented by the actual manila colored folders inside the drawer.



Follow a Pathway to find a Picture

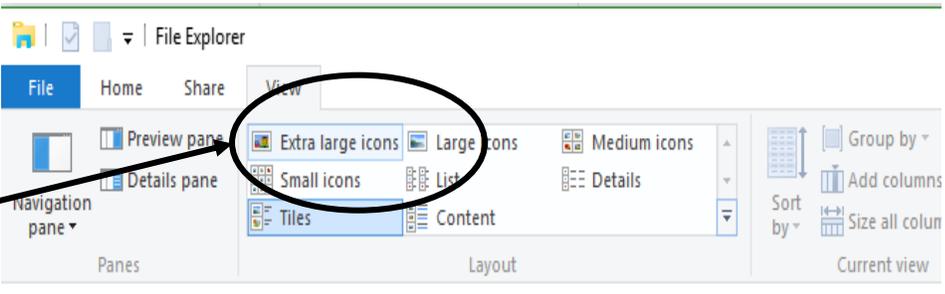
Windows makes it very easy to get into the Pictures folder. Just click once on the word on the left side of your Computer window.



Now we see the actual files in the **Pictures folder**. You may double click on any of them to see a larger version.



Once in File Explorer, you may want to change the **View** to make files easier to see. Click on the **View Tab** at the top of the window, then click **Extra Large Icons**. The pictures will be much easier to see!



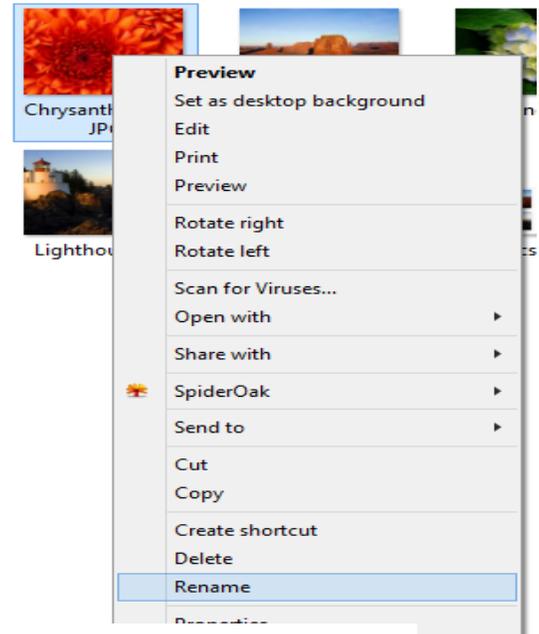
Renaming Pictures

Look at the thumbnail of the picture and **right click** on it

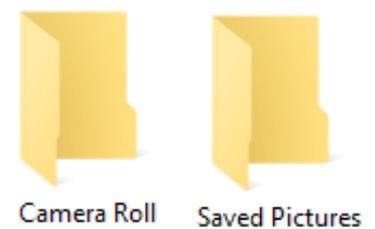
Click **Rename** on the submenu

The original name is in **BLUE**. Just **type over** that name!

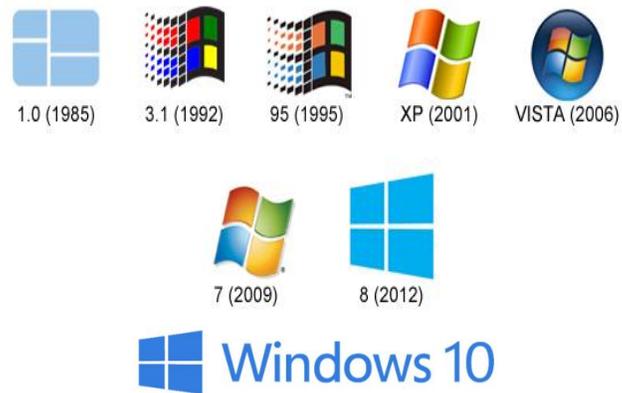
Make sure you press **Enter** to keep the name!



Since these folders (Pictures, Camera Roll and Saved Pictures) hold image files, you may think of them as “albums.” In Windows, we have the **Pictures** (parent) folder, with subfolders. There are also two permanent folders under Pictures: **Camera Roll** and **Saved Pictures**. Think of it this way: if you have a smart phone, you have a **Gallery** for all your photos. It’s the same for Windows 10, but they separate the pictures you may take with a **camera** (roll) and pictures you may **download** from the Internet (saved). Together, these folders make up a gallery (Microsoft just puts them into the Pictures folder, so as not to confuse users with yet another folder named **Gallery**).

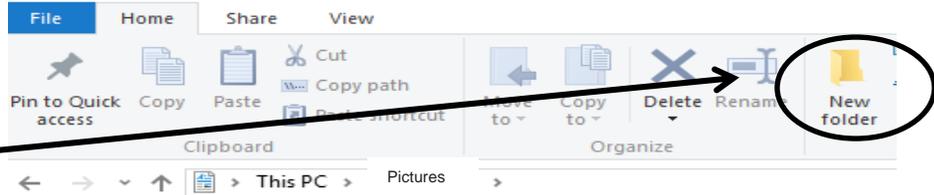


Windows 7 was the last of the “stand alone” operating systems released by Microsoft. Originally released in July, 2009, it was an excellent system, but not really compatible with Android or Apple products (they did not “talk” to each other). When Windows 8 came out (August 2012), Microsoft attempted to fix this issue by having users log into a Microsoft account. Having an account allowed users to store documents and pictures in the Onedrive, hence the folders for Camera Roll and Saved Pictures. These folders, seen here in Windows 10, allows users to log into Microsoft accounts on different devices and still retrieve photos. This can only happen if the user knows the Microsoft login information! (user name and password!)



Create and Rename New Folder

Once again, you want to be able to view your flash drive under the **File Explorer** information tool. Click on Home and click **new folder**.



Notice that the words **new folder** are in blue. You may now type in a new name for this folder.

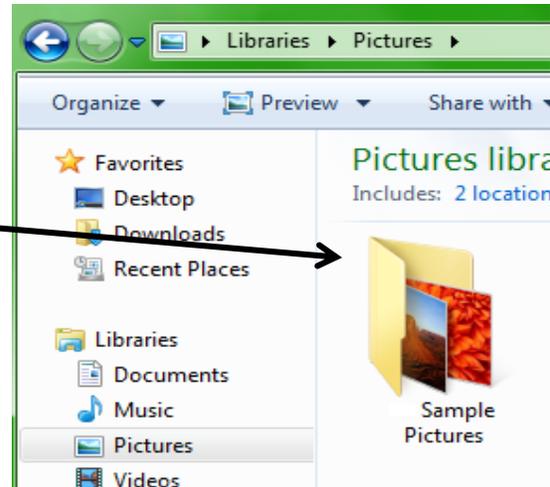
Press the **Enter Key** to make the new name of the folder permanent.



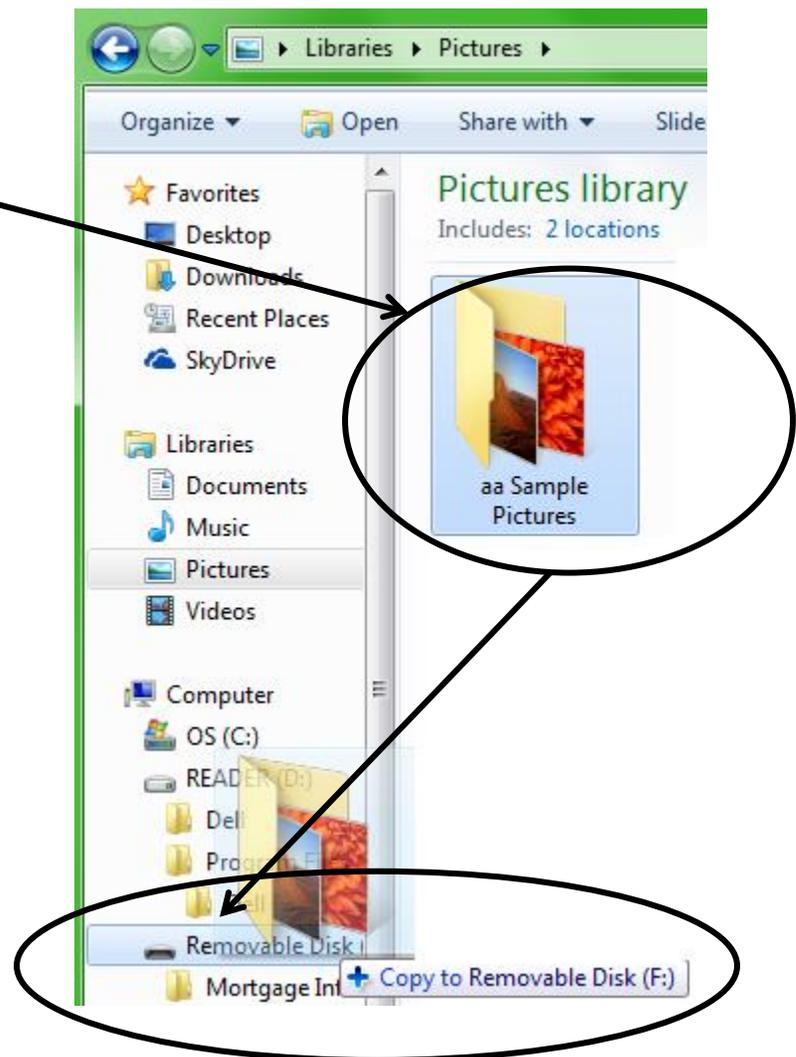
Once you’ve created and named the new folder, you may **drag and drop** the picture file into the folder. Place your mouse on top of the picture, click and hold your (left) mouse button, and drag the file onto the folder. Release the mouse button. Voilà! The picture is in the folder!

Copy Files from Hard Drive to Flash Drive

Find the **Sample Pictures** folder on the hard drive



Start in the **hard drive** window with the **Sample Pictures** folder. Move your mouse over the folder, click and hold the mouse button, and move the file to the **flash drive** in the navigation pane on the left. You will see the **Copy to:** **Removable Disk** tool tip on your screen. Let up on the mouse button.



Safely Remove Hardware

These steps are extremely important. You should follow these steps each and every time you disconnect your flash drive from any computers!

Locate the correct icon in the system tray. The system tray is in the lower right corner of your computer screen near the date and time.



Click once on the icon.

This submenu opens. Click once on your flash drive (labeled "Store n Go Clip-it" here).



When the **Safe To Remove Hardware** balloon pops up, pull your flash drive out of the port.

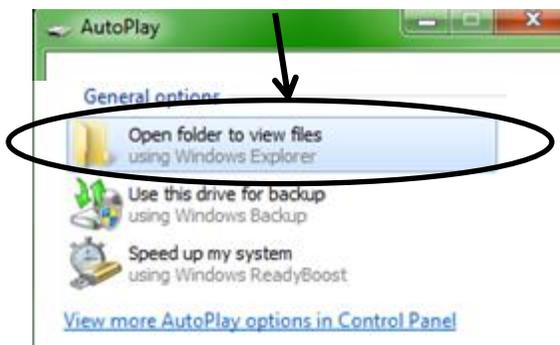


Retrieve the File from the USB Drive

Plug USB drive into proper port on computer

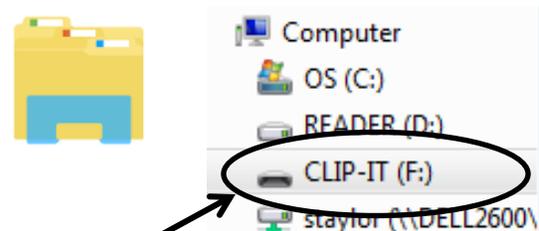


Click "**Open folders to view files**" in the auto play dialog box



Double click on the file name and the file should open in Word.

If Auto Play doesn't pop up on the screen, double click "File Explorer"



Then click on Removable Drive ((labeled "Clip-It (F:) here))

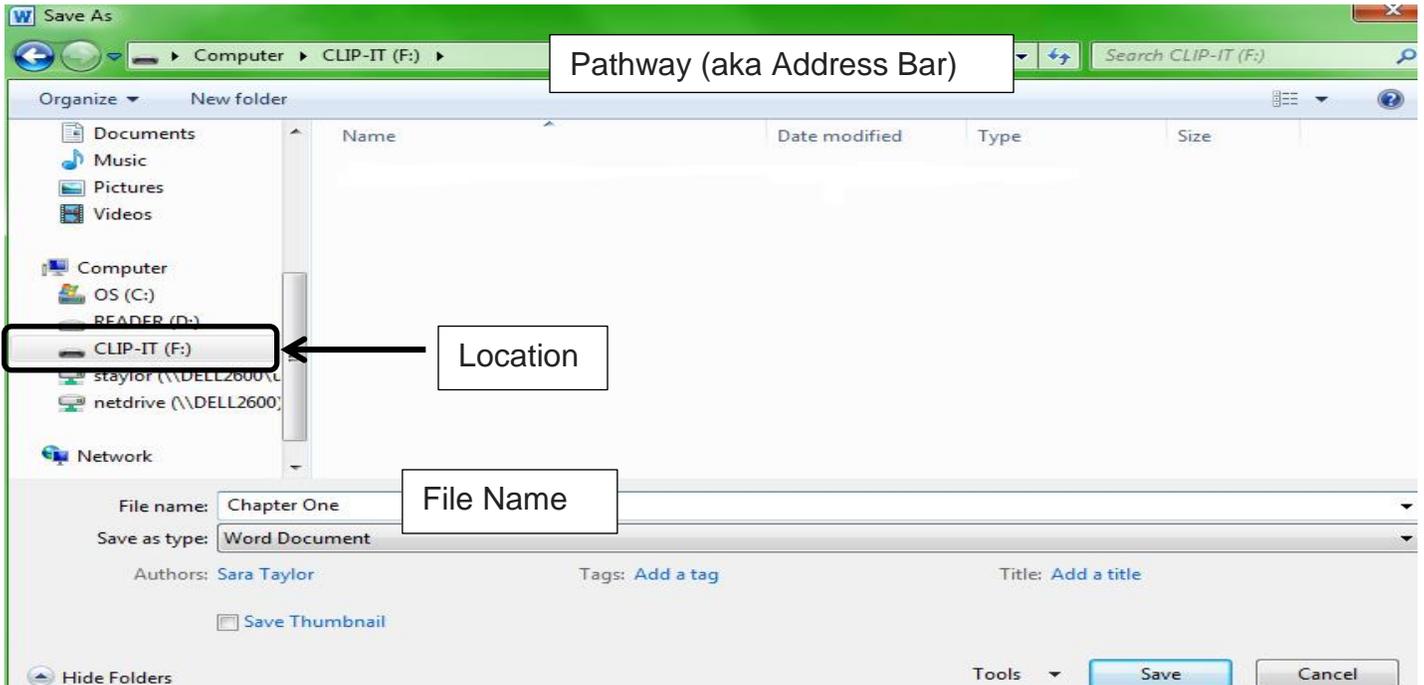
Saving a Document – Save Early and Save Often!

The easiest way to save a document is to use the Quick Access Toolbar



Click the **Save Button**

If this is the first time you are saving a document, the Save As dialog box will appear on the screen:

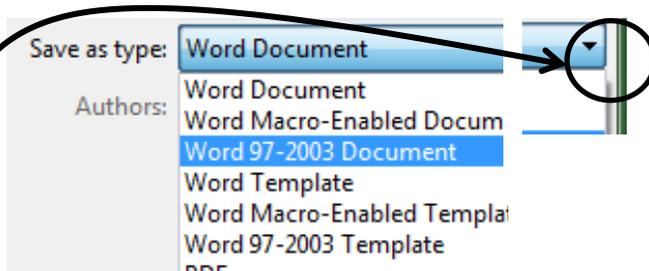


You need to tell the computer the following information:

****Where to Save the file – be sure to choose your USB drive from the task pane on the left.**

File Name: remember this so you may find the document again

Sometimes it is necessary to change the type of file. If you need to do this, click the upside-down triangle and choose another type (most often it will be the **Word 97-2003 Document** type)

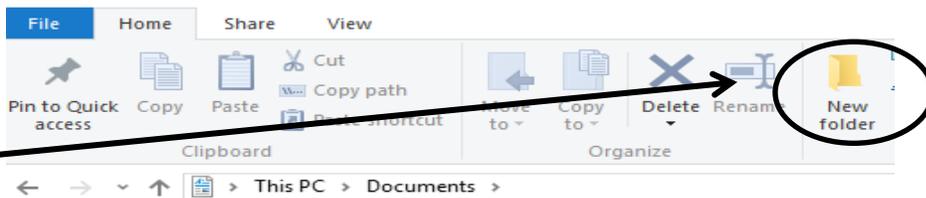


****If you'd like to save multiple copies of the same document, you may choose the **File Tab > Save As** and rename the document as often as you wish. You may want to save your FINAL COPY of a Word document as a **PDF** (Portable Document Format). This format is readable by any computer with a free copy of Adobe Reader. Most computers have this program; **I consider the PDF the "safest" format for resumes.** Even if a company doesn't have your version of Word, they probably have Adobe Reader, so they can see your resume attachment. Last, but not least, PDFs are not changeable. Without the Adobe Acrobat program, no one can edit a PDF. This means that you will need to save twice for a PDF: Once as a Word document, and once as a PDF.**

CLOSE WORD	CLOSE WORD	CLOSE WORD
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Create and Rename New Folder

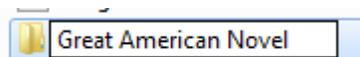
Once again, you want to be able to view your flash drive under the **File Explorer** information tool. Click on Home and click **new folder**.



Notice that the words **new folder** are in blue. You may now type in a new name for this folder.

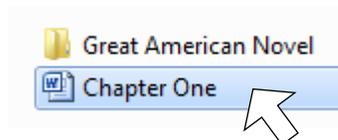


Press the **Enter Key** to make the new name of the folder permanent.



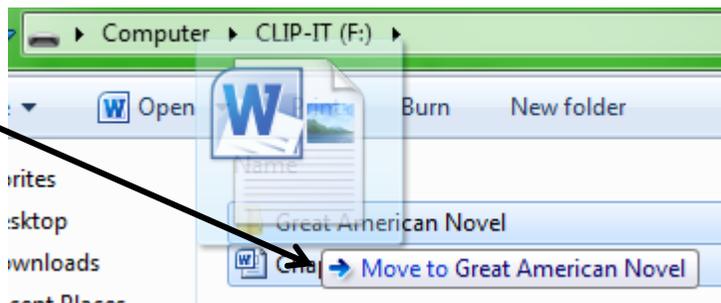
Move File to New Folder

Click and hold your (left) mouse button over the name of the file (the file name will turn blue).



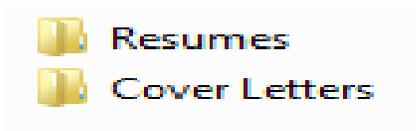
Drag your mouse over the newly created folder. When you're in the correct place, you will see a tool tip pop up that looks like this:

Let up the mouse button.



The idea is to get to a point where you create and organize many different kinds of files on your own personal USB drive. For example, if I were searching for employment, I would create a resume folder and a cover letter folder. Then, any letters or resumes I saved could be organized within these folders:

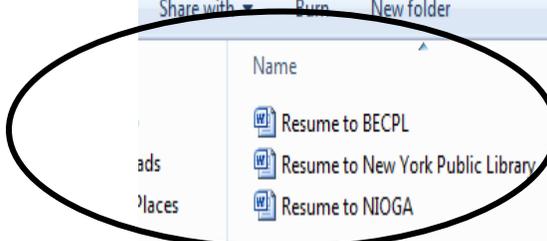
Folders



Pathway



Files



References

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https://en.wikipedia.org/wiki/Solid-state_drive.

Resources

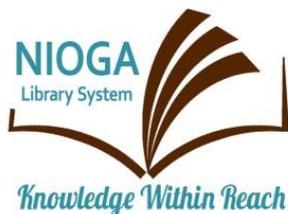
These items are available in the NIOGA Library System!

Contact your local library for assistance!

Author	Title
McFedries, P	Windows 11 Simplified
McFedries, P	Teach Yourself Visually: Windows 11
Reed, J	Microsoft 365 for Dummies
Wang, W	Office 2016 for Dummies

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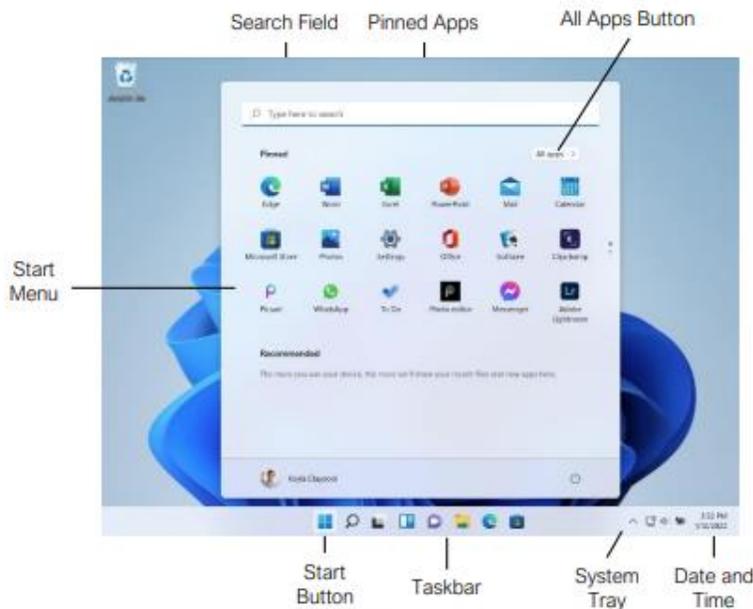


Microsoft®
Windows 11
 Quick Reference Guide



Free Quick References
 Visit ref.customguide.com

Windows Desktop and Start Menu



Keyboard Shortcuts

General

Open the Start Menu	Windows
Copy a file or folder	Ctrl + C
Cut a file or folder	Ctrl + X
Paste a file or folder	Ctrl + V
Quick Settings Menu	Windows + A
Task view	Windows + Tab
Close an app	Alt + F4
Lock computer	Windows + L
Print	Ctrl + P
Open File Explorer	Windows + E
Open the Run dialog box	Windows + R
Open the Task Manager	Ctrl + Shift Esc
Capture screenshot	Windows + PrtScn
Open Search	Windows + S
Open Narrator	Windows + Ctrl + Enter

Settings Shortcuts

System settings	Windows + I
Accessibility Settings	Windows + U
Voice Typing	Windows + H
Cast pane	Windows + K
Display options for second screen	Windows + P
Quick Link menu	Windows + X

Desktop Shortcuts

Show/hide desktop	Windows + D
Maximize window	Windows + ↑
Minimize/Restore window	Windows + ↓
Minimize all windows	Windows + M
Snap window to left	Windows + ←
Snap window to right	Windows + →
Snap Layouts Menu	Windows + Z
View open apps	Ctrl + Alt + Tab
Switch between apps	Alt + Tab
New desktop	Windows + Ctrl + D
Switch desktops	Windows + Ctrl + ← / →
Close active desktop	Windows + Ctrl + F4
Peek at the desktop	Windows + ,
Minimize all but the active window	Windows + Home
Refresh active window	F5

Start Menu

Open the Start Menu: Click the **Windows** Start button on the taskbar; or, press the **Windows** key.

View All Apps: Click the **All Apps** button in the Start menu.

Pin an App to the Start Menu: Right-click an app in the All Apps list and select **Pin to Start**.

Pin an App to the Taskbar: Right-click an app in the All Apps list and select **Pin to Taskbar**.

Unpin an App from the Start Menu: Right-click an app in the Pinned group and select **Unpin from Start**.

Lock Your Computer: Click your **User Icon** button and select **Lock**.

Sign Out of Windows: Click your **User Icon** button and select **Sign Out**.

Switch Users: Click your **User Icon** button and select another user.

Put Your PC to Sleep: Click the **Power** button and select **Sleep**.

Shut Down or Restart Your PC: Click the **Power** button and select either **Shut down** or **Restart**.

Apps

Launch an App: Click the app's icon in the Pinned group in the Start menu; or, click the **All Apps** button in the Start menu, scroll through the list of apps, and select the app you want to open.

Search for an App: Click the **Search** button on the taskbar and type the name of the app you want to open.

Jump to an Open App: Click the **Task View** button on the taskbar and select an open app; or, press **Windows + Tab**.

Note: You can also right-click an app in Task view to see additional options for viewing and closing the app.

Install an App: Click the **Microsoft Store** icon on the taskbar. Browse or search for the app you want and click it. Click **Get** to install a free app or **Buy** to install a paid app.

Update an App: Click the **Microsoft Store** icon on the taskbar and click the **Library** tab in the bottom-left corner of the window. Click the **Get updates** button at the top of the window.

Uninstall an App: Right-click an app's icon in the Pinned group in the Start menu or in the All Apps list, then select **Uninstall**.

The Fundamentals

View the Notification Center: Click the **Date and Time** on the right end of the taskbar. Notifications are grouped by the app that triggered them.

- Click a notification to open it in the associated app.
- Click a notification's **×** **Clear** button to clear the notification.
- Click an app's **×** **Clear** button to clear all that app's notifications.
- Click the **Clear All** button to clear all notifications at once.

View the Quick Settings Menu: Click the **Network, Volume, and Battery** icons in the system tray.

- Click a feature's button to toggle that feature on or off.
- Click and drag the **Brightness** slider to adjust screen brightness.
- Click and drag the **Volume** slider to adjust system audio volume.

Connect to a Wireless Network: Click the **Network, Volume, and Battery** icons in the system tray to open the Quick Settings menu, click the **> Manage Wi-Fi Connections** button (next to the **Wi-Fi** toggle button), select a network from the list, click **Connect**, enter the network's password, then click **Next**.

Add a Virtual Desktop: Click the **Task View** button on the taskbar, then click the **New Desktop** button.

Switch Between Virtual Desktops: Click the **Task View** button on the taskbar, then select another virtual desktop from the row of desktops along the bottom of the screen; or, press **Win + Ctrl + ←** or **→** to cycle through virtual desktops.

Rename a Virtual Desktop: Click the **Task View** button on the taskbar, right-click a desktop thumbnail, select **Rename**, enter a new name, then press **Enter**.

Folders and Files

Open File Explorer: Click the **File Explorer** icon on the taskbar. Double-click a file or folder to open it.

Move or Copy Files and Folders: Select the file or folder you want to move, then click the **Cut** button (to move) or the **Copy** button (to copy) on the toolbar. Navigate to the folder you want to move or copy the file or folder to, then click the **Paste** button.

Rename Files and Folders: Select the file or folder you want to rename in File Explorer and click the **Rename** button on the toolbar. Type a new name for the file or folder, then press **Enter**.

Folders and Files

Delete Files or Folders: Select the file or folder you want to rename in File Explorer and click the **Delete** button on the toolbar.

Search in a Folder: Click in the **Search** field in the upper-right corner of the File Explorer window. Type a search term, then press **Enter**.

Sort Icons: Click the **Sort** button on the toolbar, then select a sorting method (name, type, date modified, etc.). Click the **Sort** button again and select a sort order (ascending or descending).

File Explorer Views: Click the **View** button on the toolbar. Use the options here to change how your files are viewed—as a grid of icons, simple or detailed lists, or tiles that display a file's contents.

Compress Files or Folders: Select the files or folders you want to compress, then click the **See More** button on the toolbar. Select **Compress to ZIP file**, type a name for the compressed folder, then press **Enter**.

Create a Shortcut: Right-click the file or folder you want to create a shortcut to, select **Show More Options**, then select **Create Shortcut**. Move the shortcut to the desktop, or another folder.

Restore a Deleted File or Folder: Double-click the **Recycle Bin** icon on the desktop. Select the file(s) or folder(s) you want to restore, then click the **Restore the Selected Items** button on the toolbar.

Restore All Deleted Files and Folders: Double-click the **Recycle Bin** icon on the desktop, then click the **Restore All Items** button on the toolbar.

Empty the Recycle Bin: Double-click the **Recycle Bin** icon on the desktop and click the **Empty Recycle Bin** button on the toolbar; or, right-click the **Recycle Bin** icon and select **Empty Recycle Bin**.

Connect to a Network Computer: Click the **Network** category in the File Explorer Navigation Pane to expand it, then double-click the computer you want to connect to. Enter a user name and password for a user on that computer, then click **OK**.

Personalize Windows

Change the Desktop Background: Click the **Start** button and open the **Settings** app. Click **Personalization**, then click **Background**. Use the options here to select a new background color or image.

Customize the Lock Screen: Click the **Start** button and open the **Settings** app. Click **Personalization** and then click **Lock Screen**. Use the options here to select a new background image and status information.

Maintain Your Computer

Pair a Bluetooth Device: Click the **Start** button and open the **Settings** app. Click **Bluetooth & Devices**, click the **Add Device** button, click **Bluetooth**, select a device, then click **Done**.

Connect a Paired Bluetooth Device: Click the **Start** button and open the **Settings** app. Click **Bluetooth & Devices**, click the **More Options** button for a paired device, then select **Connect**.

Disconnect a Paired Bluetooth Device: Click the **Start** button and open the **Settings** app. Click **Bluetooth & Devices**, click the **More Options** button for a connected device, then select **Disconnect**. You can also select **Remove Device**, then click **Yes** to unpair the device.

Check for Windows Updates: Click the **Start** button and open the **Settings** app. Click **Windows Update** and then click the **Check for updates** button.

Open the Task Manager: Right-click the **Start** button and select **Task Manager**; or, press **Ctrl + Shift + Esc**. If a task is no longer responding, select it and click **End task**.

View Power and Battery Settings: Click the **Network, Volume, and Battery** icons in the system tray to open the Quick Settings menu, then click the **Battery** icon. Adjust the time needed for your display and computer to sleep, adjust power modes, and configure Battery Saver mode here.

Adjust App Privacy Permissions: Click the **Start** button, open the **Settings** app, and click **Privacy & Security**. Click a specific permission category (location, camera, microphone, etc.) to choose which apps can and cannot access that data.

Keep Windows Secure: Click **Show Hidden Icons** in the system tray (if necessary), then click the **Windows Security** icon; or, in the **Settings** app, click **Privacy & Security**, click **Windows Security**, then click the **Open Windows Security** button.

Some of the categories available that will help ensure Windows is secure include:

- **Virus & threat protection** checks your computer for viruses and other malicious files.
- **Firewall & network protection** configures network firewalls for both private and public networks to keep your computer safe from network attacks.
- **App & browser control** configures warnings for suspicious files, applications, and websites that you download and visit.
- **Device performance & health** keeps track of system, software, and driver updates, while monitoring storage space and battery life.