File Management: Step-by-Step Guide

Table of Contents

Teacher's note:

- Exercise 1 covers material up to Page 25

- Pages 25 - 37 are not tested in the exercises

- Exercise 2 covers material covered in Pages 38 - 44

Created and Maintained by:

Andrea Philo
Mike Angstadt
Len Porcelli

MONTGOMERY COUNTY-NORRISTOWN PUBLIC LIBRARY

NORRISTOWN, PENNSYLVANIA

Note to Home Students:

This guide is customized for the MC-NPL Computer Lab environment. During classes, students are provided with flash drives to save files to. Therefore, self-study students will have to use a different "save-to" location.

If you are at home, you might want to use the Windows "Documents" directory to save files to. Or, if you are in the Computer Lab, you can use the "Temporary Patron Drive".

Supporting files used in this lesson can be found on our website. The webpage address is:

www.mc-npl.org/class-resources

Note that, in order to use these files you may need to "enable editing" when you open them.

What is a File?

Show Slide 2

A file is very much like a typed document that you might find on someone's desk or in a filing cabinet; it's an item that contains a collection of related information. On a computer, examples of files include text documents, spreadsheets, digital pictures, and even songs. Every picture you take with a digital camera, for example, is a separate file, and a music CD might contain a dozen individual song files. Simply put, **a file is a collection of information that the computer keeps together as one object**.

Show Slide 3

Files we create	These are the files we will interact with most directly, since we make them ourselves. Word documents are just one example of files we create. Other examples include photos that you take with a digital camera and "MP3" files which store music.
Program Files	Programs consist of a very complex set of instructions to the computer. This information is stored together as a file. Programs are also sometimes called *applications*. Program file names often end in ".exe", which stands for "executable". **If you see an ".exe" file in an email attachment, never download it! This is one of the main ways that computer viruses spread!**
Support Files	While programs are the actual sets of instructions, sometimes the computer needs additional information. What a desktop icon looks like, or what a particular sound effect sounds like are a couple examples.

The main point is that **there are other files we will never see or touch**. These files we don't normally ever need to worry about. Our focus today is strictly with the first category of file, **files we create**.

Where are Files Stored?

Show Slide 4

When we create a file, most of the time it is because we want to access that information again in the future. Just like things in the real world, computer files need space in which to be stored. There are a few different places in the computer where you can store files.

- **Hard drive:** This is the most common place to store files. It is located *inside* the computer and is used not just to store your own personal files, but files belonging to all of the programs on your computer.

- **Removable Storage:** This is good to use when you are using a public access computer (like our lab computers) or a computer belonging to somebody else. Removable storage can be easily ejected from the computer, allowing you to carry your files around with you. Examples include flash drives and CDs.

Common Windows Folders

Show Slide 5

If every application stored the files it created in a different place, it would be very difficult to find anything. To address this, Windows comes with a handful of **common folders** you can use to begin organizing your files. Many applications use these folders as the **default** location for the files they create. Here is a list of Windows' most common folders.
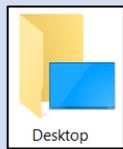
|			
Desktop	The files in this folder appear as icons on your computer's desktop.	Music	Use this folder to store all of your digital music, such as songs that you copy from an audio CD or download from the Internet.
Documents	Use this folder to store letters, tax information, job resumes, and other personal files.	Pictures	Use this folder to store your digital pictures, whether you get them from your camera, scanner, or in e-mail from other people.
Downloads	Use this folder to store files and programs that you've downloaded from the web.	Videos	Use this folder to store all of your videos, such as clips from your camcorder or phone, as well as digital movies that you've downloaded.
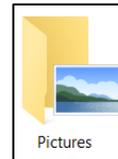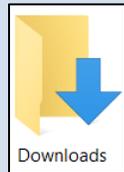
The way to access these common folders is through the **File Explorer** program. We will be looking closely at the File Explorer program later in this lesson.

For security reasons, the Computer Lab **does not** allow saving files to the common folders. We need to keep users from making changes to the library hard drives. While the Computer Lab's File Explorer program *does display the links* to the Common Windows storage folders, patrons do not have access to those folders*.

Instead, we recommend that patrons save to **removable storage** (in particular: **flash drives, A.K.A. USB drives or thumb drives**). These portable storage devices can be used to take your files to another computer and are commonly employed in public access computing environments.

Since we cannot save files to the common windows folders, we have supplied, for your convenience, a flash drive for you to use during your classes here in the Computer Lab. We have put some files onto it that will be used during this class. Let's learn how to use a flash drive!

Inserting a USB Drive

Let's start by learning how to insert the flash drive into the computer and then later on we will learn how to access the files that are on it.

1. First, **look** at the **notification area** on the taskbar and **notice** the typical array of icons.

Show Slide 6

2. **Note** that when we insert our drive, we will **notice** a **new icon**, indicating the presence of a removable drive.

Show Slide 7

3. **Remove** the flash drive from the case and **orient** the flash drive as pictured below.

Slide mechanism

This end goes into the USB port on monitor
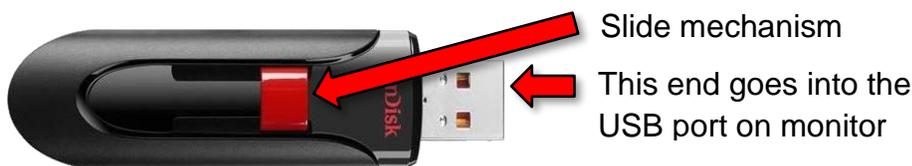
Show Slide 8

4. **Notice** that there is a **slide mechanism** on the side to retract the USB connector into the body of the drive. **Slide** this all the way to the right to **expose the connector**.

5. **Locate** the USB ports on the **monitor**. The connector will slide into the port only one way with your name label facing toward you and right-side up**.**

6. **Fit** the connector into the port and **gently push** it in.

7. **Look** at the notification area and **locate** the flash drive icon.

Go Back To Slide 7

Safe Removal of a USB Device

Before we learn more about creating and saving files, we are going to learn how to safely remove our flash drive. You should never just pull it out of the computer because, if the computer is in the middle of writing information to a file on the flash drive, it could become corrupted and unreadable!

1. First, and MOST important, be sure to **close** any and all windows that you might have open. **Check** your **taskbar** for buttons very carefully. Remember open programs will have **blue lines** under the taskbar icons.

   Show Slide 9

2. **Find** the flash drive icon in the notification area again. This time **point** to it with the mouse. The **ScreenTip** will say "**Safely Remove Hardware and Eject Media**".
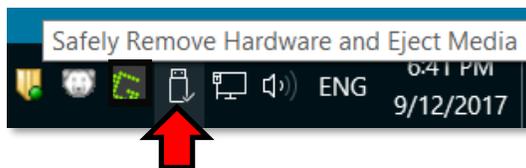
3. Once you **locate** the correct icon, **click** it.

4. When you do, a menu will appear. **Click Eject Data Traveler 2.0**.
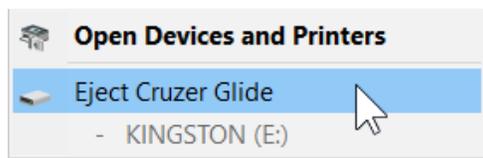
5. You will then see a **confirmation message** that the drive is safe to physically remove from the computer.
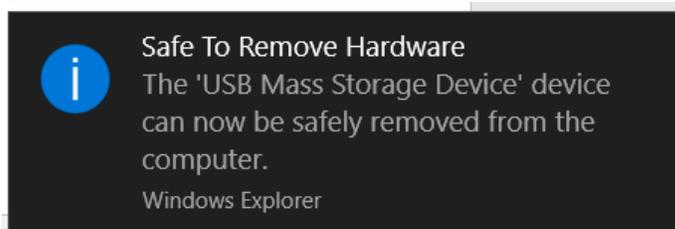
   Show Slide 10

6. Occasionally you might **forget** to close your windows before clicking on the Safely Remove Hardware icon. In that case a dialogue box will appear, saying that the drive cannot be safely ejected because it is in use. It prompts you to close all your windows and then try ejecting again.

7. **Be aware** that performing the safely remove step removes the USB device virtually from the computer. In order to use the drive again, <u>it must be physically removed from the port and re-inserted</u>.

8. **Remove** your drive from the computer.

9. **Insert** your flash drive as we will be using it later.

The File Explorer Window

File Explorer is a Windows file manager application. It is important to be familiar with how to access and use File Explorer, as it is *essential* to file storage and organization.

File Explorer was first given a major overhaul in Windows 8 in the form of a ribbon interface. This new design brought all of the tools that were previously buried in the menus of the previous Windows Explorer from Windows 7, and put them out in the open, organized and easy to find.

Opening the File Explorer Window

You can access this application several ways:

- **From the desktop:**

  1. **Look** for an icon on your desktop labeled "This PC", which is simply an alias for File Explorer.

  2. **Double-click** the icon to open the File Explorer window.

  3. **Close** the window.

     Note: Not all computers have this icon on their desktop.

- **From the Taskbar:**

  1. **Look** for the icon that looks like a manila folder on the taskbar.

  2. **Look** for the ScreenTip "File Explorer".

  3. **Single-Click** the taskbar button to open the File Explorer program.

4. **Note** the appearance of a **blue underline** underneath the File Explorer taskbar button. The blue underline indicates the program is **running**.

5. **Close** the window.

- **Using the keyboard:**

1. **Use** | Windows | + | E | key combination to open the File Explorer window.

2. **Close** the window.

==Fun fact:== Tapping the Windows key by itself will open the **Start Menu**.

Tech Tip:

File Explorer is responsible for not only displaying your computer's files, but also displaying the Taskbar and the Start Menu.

Parts of the File Explorer Window

Let's examine the File Explorer window.

Use the File Explorer taskbar button to ==open== the program. **Note** File Explorer has opened in a reduced size window.

Mention Handout 1 – Side A
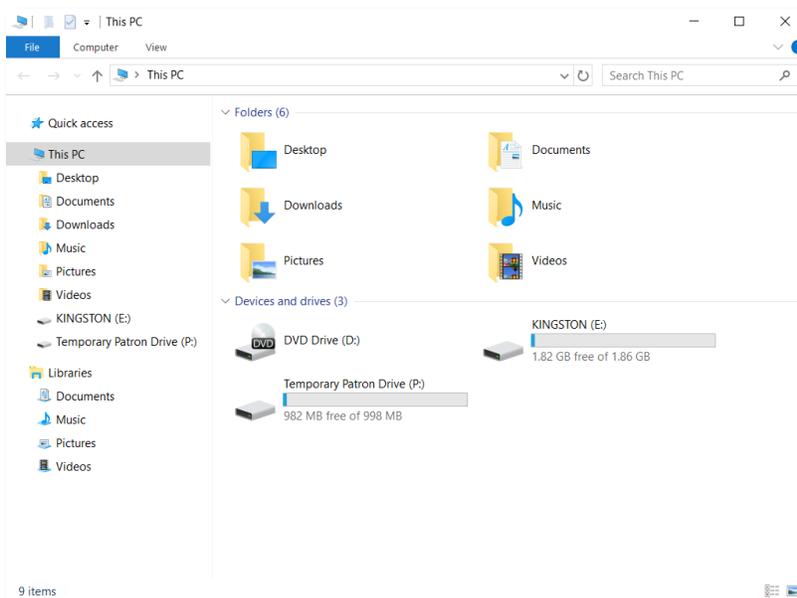
It is helpful to examine the window in **horizontal sections** starting at the top.
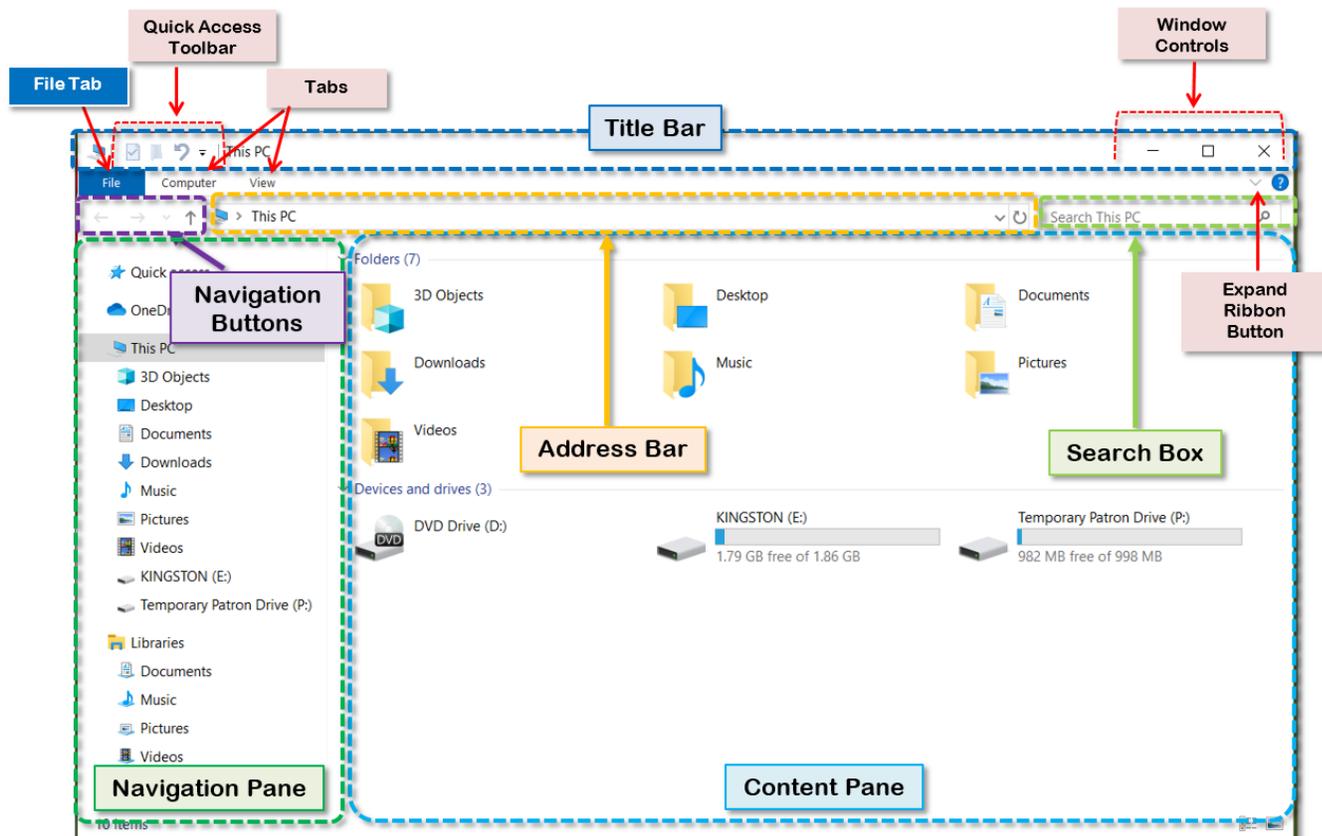
Title Bar

Contains the name of the drive or folder that is selected on the left side of the window. When File Explorer is first opened, the selected drive/folder defaults to "This PC". The **title bar** also contains the Windows Controls at the right end and the Quick Access Toolbar on the left.

Window Controls

On the right side of the title bar, the Window Controls are used to maximize the File Explorer window, minimize the window and close it.

Quick Access Toolbar

A customizable toolbar for your favorite or most frequently used tools.

We're going to add a handy tool, the Undo tool, to the Quick Access Toolbar. The Undo tool is only accessible through the Quick Access Toolbar, yet it is not enabled by default. Many actions can be "undone" if you make a mistake and that is what this tool is for.

1. **Locate** and **click** **Customize Quick Access Toolbar**.
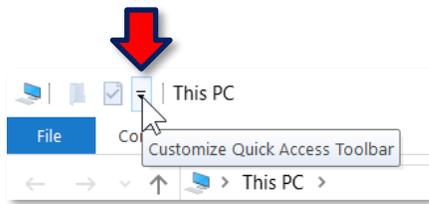
2. On the Customize Quick Access Toolbar **menu**, **click** **Undo**.
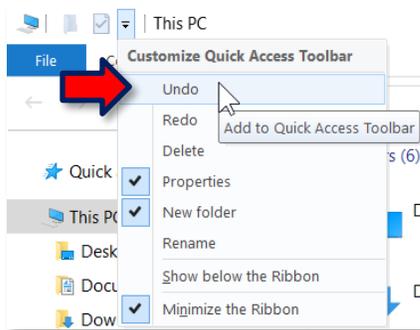
3. **Note** the Undo button is now visible in the Quick Access Toolbar.
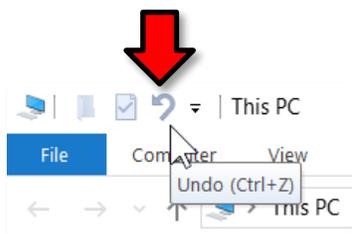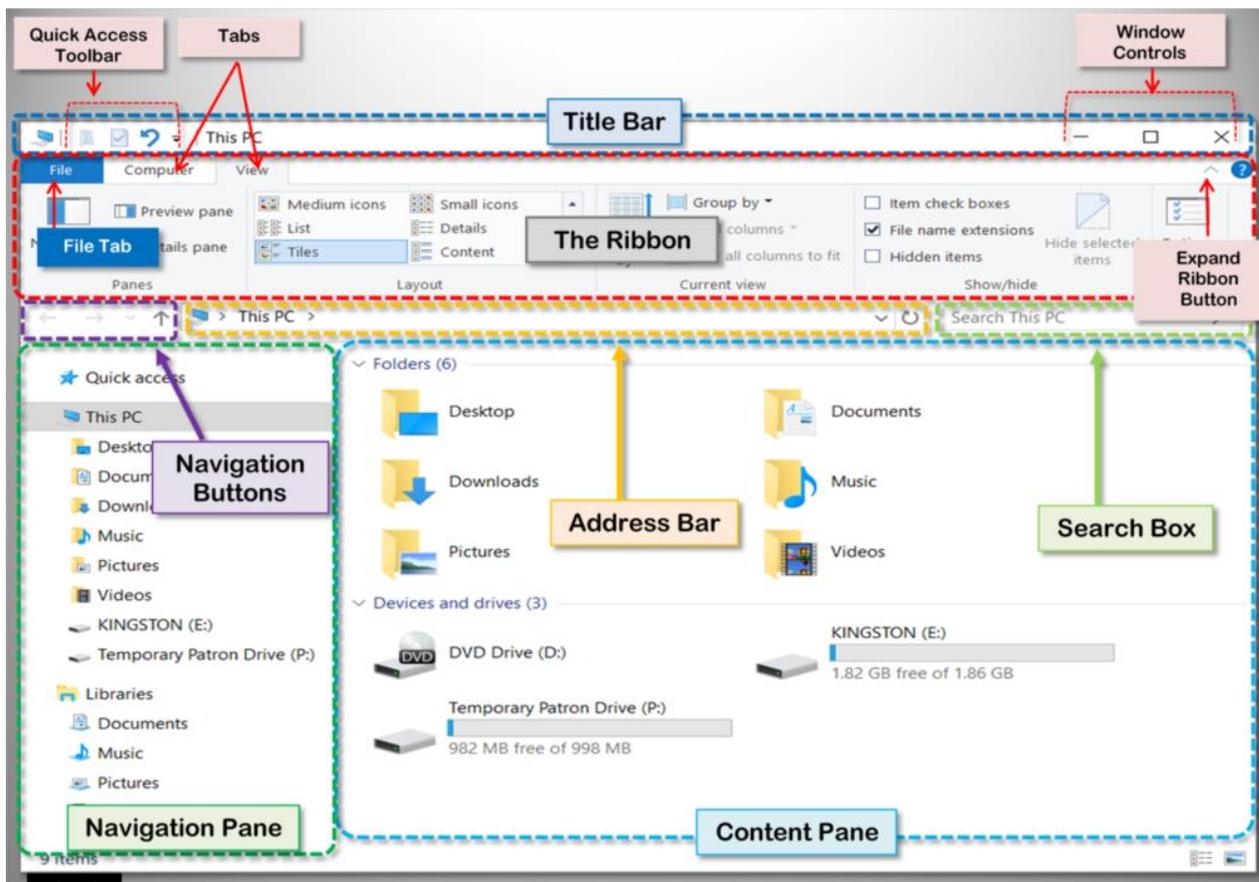
Tabs

The next horizontal section shows some **tabs** on the left and on the right end a small button that looks like **a downward-pointing arrow**. We are going to come back to the **small arrow** in a minute.

For now, **click** the **Computer tab**.

> **TEACHER Note:**
>
> If a tab is accidentally double-clicked, the will cause the ribbon to expand.
>
> Click the Expand/Minimize button to minimize the ribbon.

Note that an area opens up directly underneath the Tabs that displays some tools.

Click the **View tab**. A different set of tools displays. This display area is called **The Ribbon**.

File Tab

The File tab is part of the ribbon but displays quite differently. Its uniqueness is heralded somewhat by the blue color of the tab. This menu is designed to provide you with quick access to some of the more general commands in File Explorer.

1. **Click** <u>once</u> on the File tab. Note the absence of a toolbar or ribbon. **Keep** your pointer focused on the File tab.

2. The most common use for the File menu will likely be the list of frequently visited locations. **Note** the section on the right labeled **Frequent places**. This list will be populated by those folders and drives you return to time and time again. However, in the Computer Lab this functionality is disabled for privacy and security reasons.

3. Dismiss the File menu by **clicking** on the File tab again.

Expand/Minimize Ribbon Button

By default, in File Explorer, a ribbon does not remain in view when something else is subsequently clicked.

At the right end of the ribbon is the **Expand/Minimize the Ribbon** button. Clicking this button will cause the ribbon to remain visible even when another area of the screen is clicked.
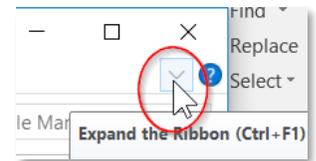
1. **Click** the **View tab**. **Note** the appearance of the Ribbon.

2. **Click** on the **Title bar** and **note** that the Ribbon disappears.

3. **Point** to the **Expand/Minimize Ribbon** button and **observe** the ScreenTip. It says **Expand the Ribbon. Expand the Ribbon** is the name of the button.

4. **Click** the **Expand the Ribbon** button.

5. **Point** to the button again and the ScreenTip will indicate the name has changed to **Minimize the Ribbon**. This particular button has two functions.

6. **Click** the **Minimize the Ribbon** button and the ribbon is now hidden or **minimized**.

Another way to **expand** the ribbon is to click a tab and then click the button that looks like pushpin. Ironically this button has no official interface name.

1. **Click** the **View** tab again.

2. **Click** the **pushpin** button.

We will look more closely at the Ribbon in a few moments, but for now let's examine the remaining sections of the File Explorer window.
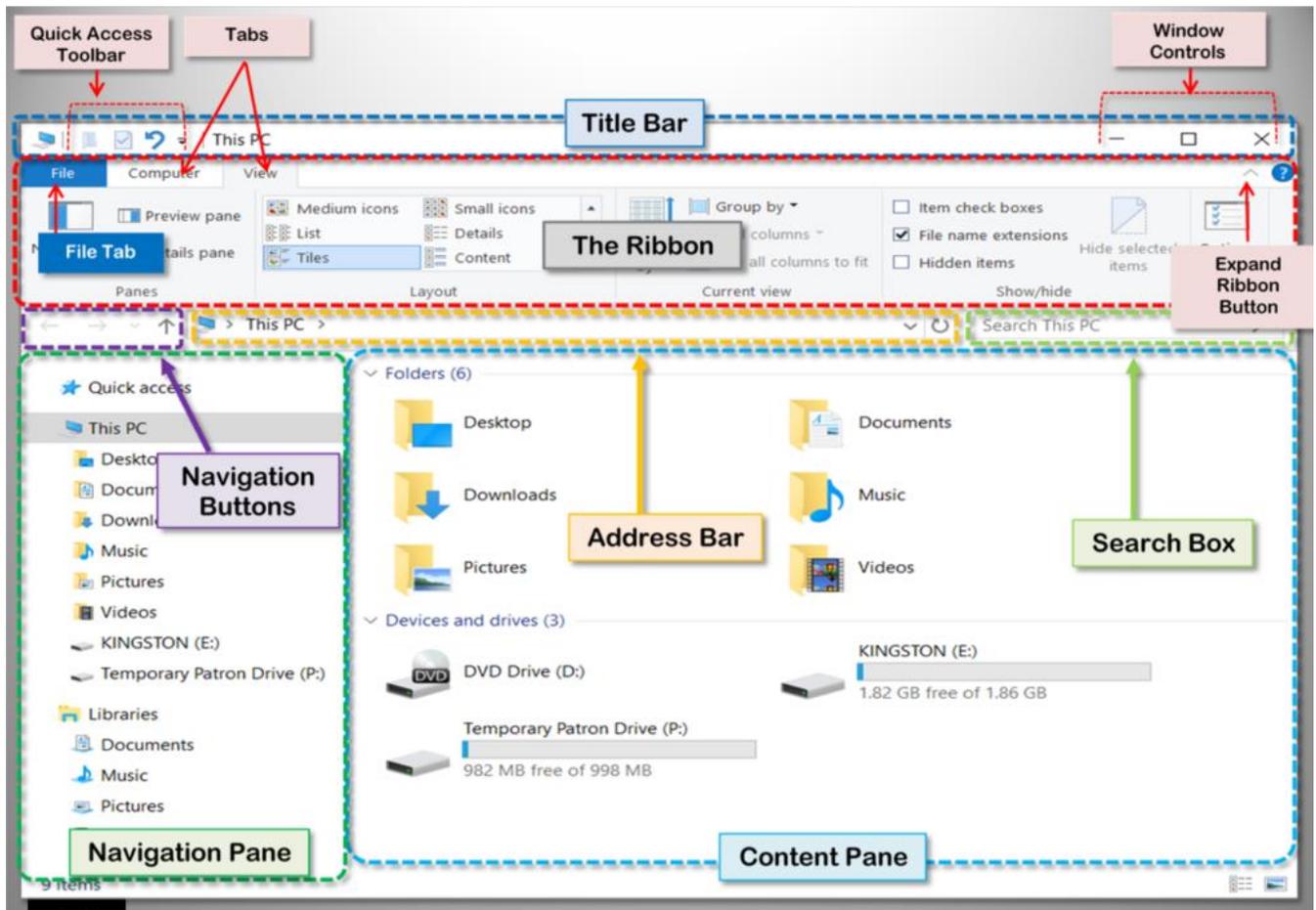
Underneath the Ribbon is a horizontal section that contains an Address Bar, a Search Box and some Navigational arrows.

Address Bar

Displays the navigational path to the drive or folder you are currently viewing. We are currently focused on the This PC drive/folder.

Search Box

Allows you to search your computer for specific files, much like an Internet search engine.

Navigation Buttons
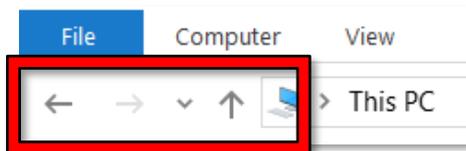
These allow "bread crumb" navigation to computer drive or folders that have already been accessed.

Navigation Pane

This area on the left side of the window is called the navigation pane. It is where you would select a drive or folder in order to see what it contains.

**Note** that each drive has a **drive letter** assigned to it. For example, our flash drive (labeled KINGSTON) has the letter "E:". This is something Windows does to uniquely identify different drives.

Teacher's note:

The drive letters students see for their flash drives may not all be the same. Point out that the letters Windows assigns to flash drives can be **unpredictable**.

Normally, you would see the C*: drive (the computer's main **hard drive**) displayed in the navigation pane, but it is **blocked** by our security.*

If a computer has a **DVD drive**, it is usually assigned the letter D:.

> **Why doesn't the DVD Drive display in the Navigation Pane?**
>
> The DVD Drive is only displayed there when it has a disc inside of it.

Content Pane

To the right of the navigation pane is the content pane. The content pane displays the contents of the currently selected storage location on the left. Currently **This PC** is selected so the content pane is displaying the common windows folders and the drives on the computer, including a drive named KINGSTON, which is our flash drive.

In the **Devices and drives** section **note** the **bar** that is underneath each drive (except for the DVD drive). The entire bar represents how much storage space the drive <u>has</u>, and the blue part shows us how much space is actually being <u>used</u>. As you can see, we are hardly using any of our flash drive's total storage space.

KINGSTON (E:)
1.82 GB free of 1.86 GB
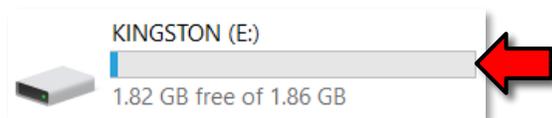
<u>Let's switch to a different drive and view the contents of that drive.</u>

Mention Handout 1 – Side B

1. **Look** in the **navigation pane** for our **flash drive**.

    a. Some flash drives are given a **name** based on the brand name of the drive. Ours is named "KINGSTON", after the manufacturer.

---

b. The computer itself assigns the drive a **letter**. The letter could **change** depending on how many devices are plugged in at the same time.

2. **Click** KINGSTON (E:) in the **navigation pane**.

3. **Note** the **Address bar** and the **title bar** in the **File Explorer window.** They have been updated to reflect the **selected drive.** The address bar even shows the navigational path to your drive.

4. **Notice** that the **content pane** now contains a list of the files on your flash drive.
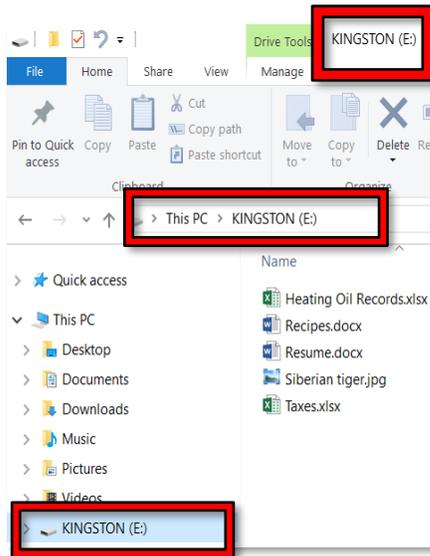
Contextual Tabs

These tabs appear on the ribbon based on the type of object that you've selected—such as a location, a folder, or a file—and then provide related commands. **Note** we have a contextual tab called **Drive Tools**, which appeared when we selected the flash drive.

The Ribbon

Background: The ribbon interface was first introduced in Microsoft Office applications in 2007. It features a set of toolbars organized into **tabs.** The toolbar for each tab contains related commands that are organized, grouped, and labeled, replacing the traditional drop-down menu system in earlier versions of Windows. This system of Core and Contextual tabs is designed to easily expose close to 200 different file management commands. The majority of these commands have always existed in previous versions of File Explorer, but they were buried in numerous nested menus, pop-ups, dialogue boxes, or right-click context menus.

Tabs

Active Tab

As we stated, the ribbon organizes tools onto various tabs. Only one tab at a time can be the **Active tab**. The grey color is the indicator of the active tab.

1. **Click** on the **Home tab** and then the **View tab**.

2. **Note** how the tab color turns to grey and the toolset also changes.
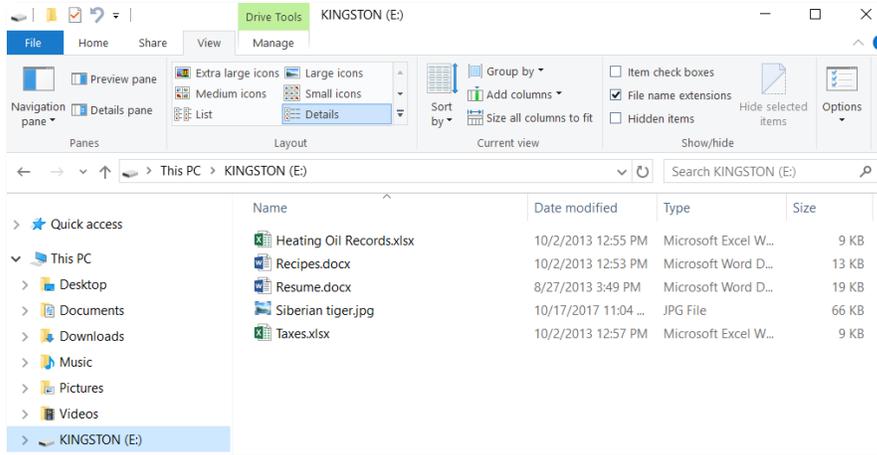
3. **Return** to the **Home** tab.
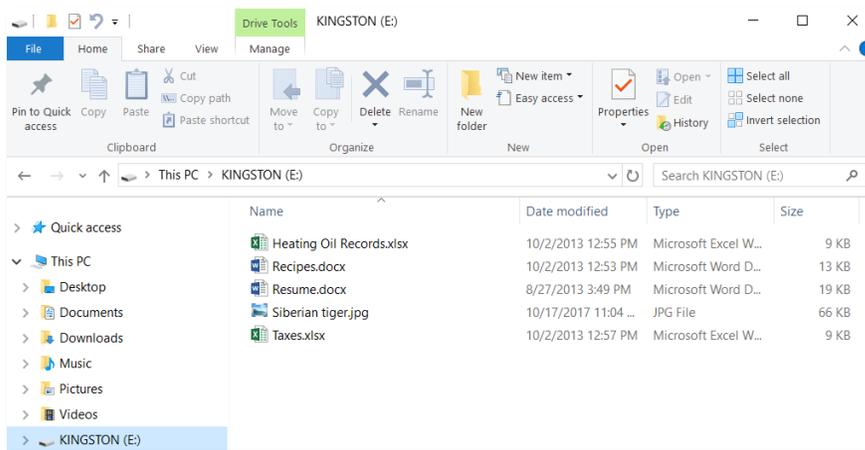
4. **Note** that some of the tools look grey. When they are grey, or "dimmed", it means they do not work for the selected item.

5. In the content pane, **click** **once** to **select** the **Resume.docx** file. **Note** there are now more active tools on the Home ribbon.
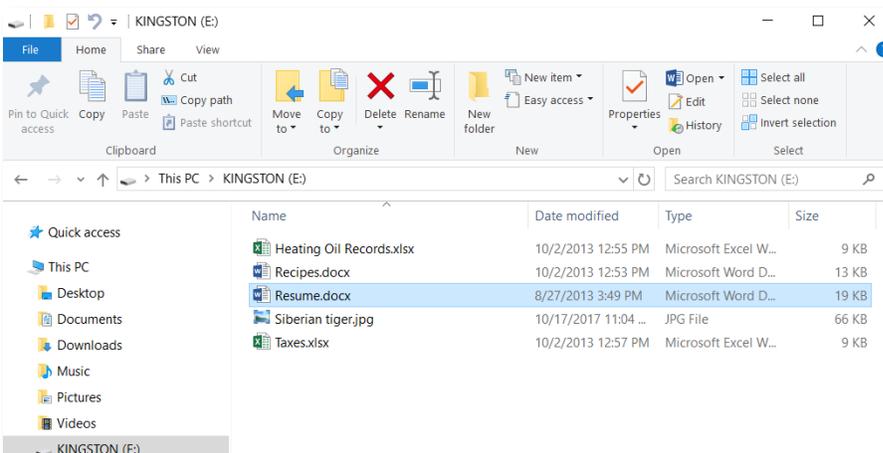
6. **Hover** over some active buttons on the **Home** tab to observe ScreenTips. The ScreenTips display the name of the button, along with a short description of what the button does.

Groups and Buttons

Groups

On each Tab, the Buttons (a.k.a. commands or tools) are organized into **Groups**. The groups have names, but the names are not clickable. **Point** to the group names. There will be no ScreenTips. Groups are simply an organizational device.

Buttons with Arrows

Note that some buttons have images on them and some have an image *and an arrow*. The arrow indicates that more information is needed to carry out the function of the button. Some arrowed buttons have <u>two parts</u>: the **button proper** and the **list arrow**.

- A <u>**one-part arrowed button,**</u> called a **menu button**, will light up completely in blue when you point to it:

  1. In the **Organize group**, **point** to **Move to**.

 2. **Note** there is no difference between the top and bottom of the button when you point to each section.

  3. This type of button will always open a list of options.

- On a <u>**two-part arrowed button**</u>, called a **split button**, only one section at a time will light up in blue when you point to it, so the blue color is key.

  1. In the **Open group**, **point** to the top part of the **Properties** button. This is the "**button proper**" section of the button. **Note** how it is "lit up" separately from the bottom portion.

  2. **Point** to the **bottom portion**, the section with the arrow. This is the "**list arrow**" section of the button. **Note** how it is "lit up" separately from the top portion.

  3. The **button proper** is the section of a two-part button that will carry out the default option or the last used option.

  4. The **list arrow** section will open a list of options.
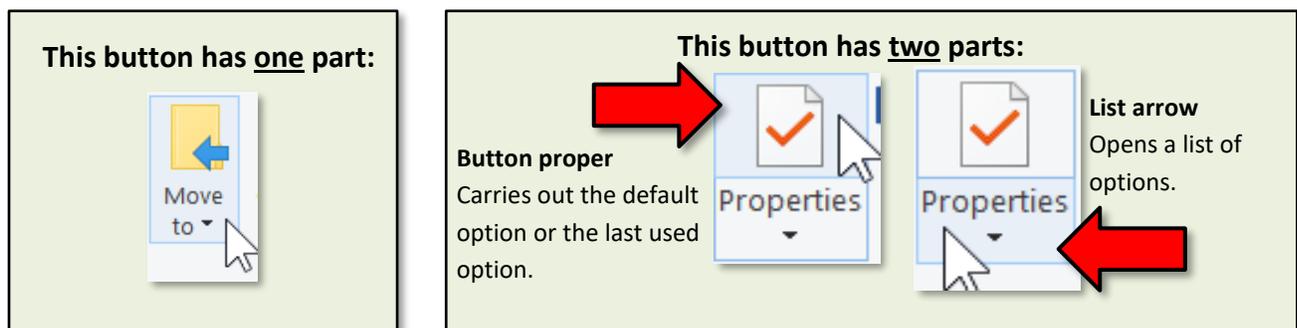
Creating and Saving a File

1. **Open Word 2016.** When the window is open you should see a blinking line in the open white area in the middle of the screen. As you tap letter keys on the keyboard, they will appear where this line is.

2. **Type** your name.

3. When we save a document for the first time, the computer needs additional information, so we will need to make use of a **Dialogue Box** to supply the computer with everything it needs to know. One of the important things the computer will need to know is **where we are going to save the file**. In the computer lab, we need to save files to a flash drive, so **insert** your flash drive (if it is not already).

4. Then **click** the **File** tab**.**
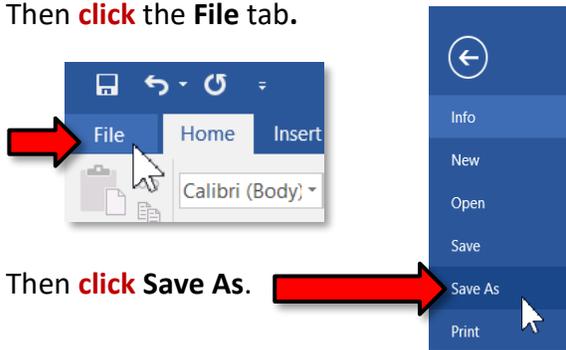
> **Teacher:** The file will be named **My Name.**

5. Then **click Save As**.

6. A Save As page opens where you can select a storage location. Some storage places are already listed, but our flash drive is not. To navigate to it, **click** Browse.
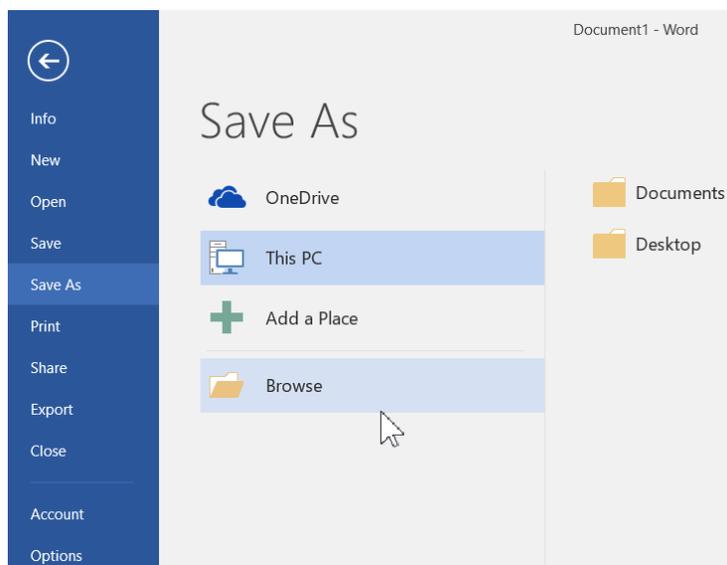
7. **Notice** the smaller window that appears in front of our work. This is a **dialogue box**. Because the computer needs to know more than just "OK, save," the dialogue box is where we tell it *how and where* we want to save our work.
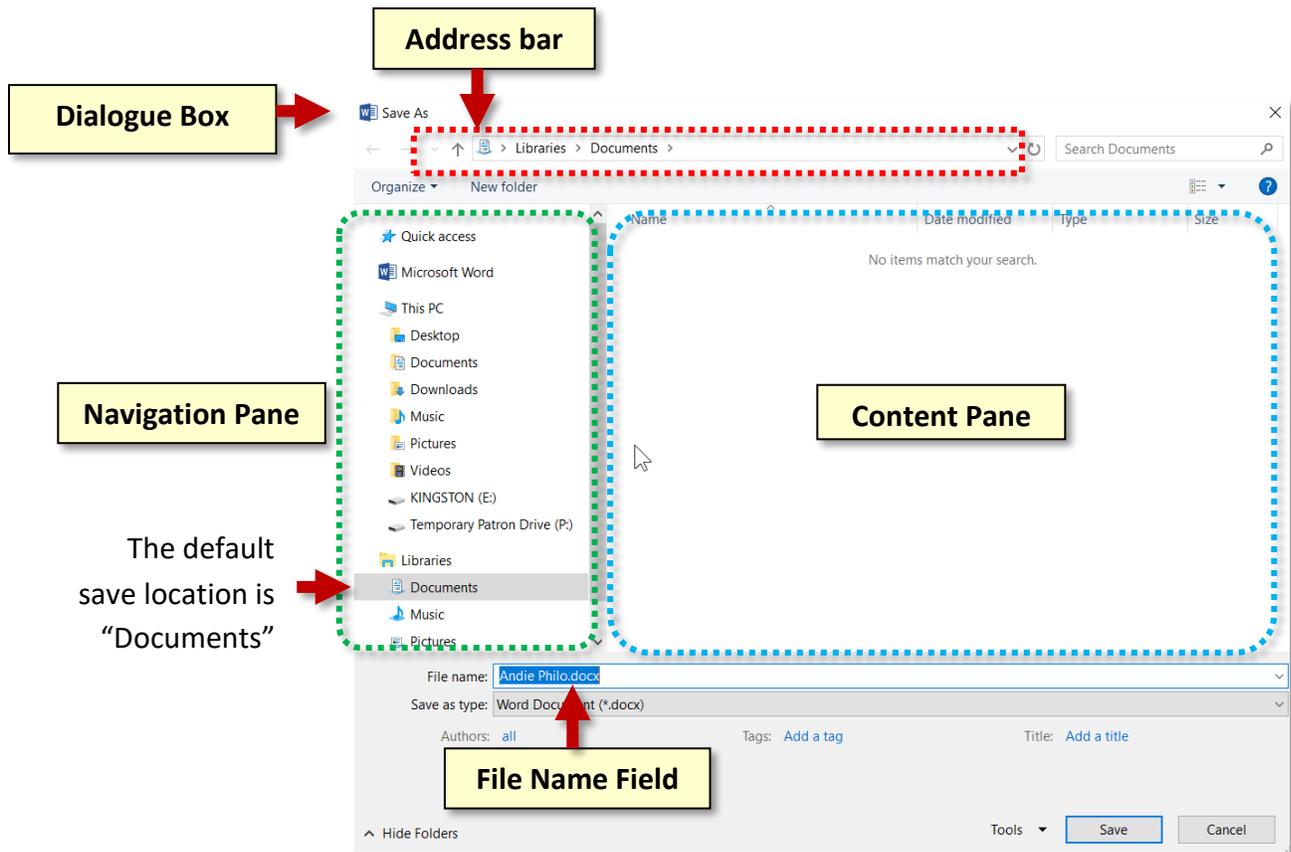
8. This dialogue box looks and functions much like the **File Explorer Window**. We can see many of the same components, such as a **title bar**, an **address bar**, a **navigation pane** and a **content pane**.

9. Now we are going to tell the computer where to save our file. The **location** where it will be saved is **displayed** for us in the **address bar**.

    a. In this case, **note** that the Save As dialogue has *defaulted* to the Documents **directory**, but we want to save our file to the **flash drive**.

    b. To save to the flash drive, we must first **look** for the flash drive listing in the navigation pane. In our case the flash drive entry has populated with the word KINGSTON which is the brand name of our flash drive. **Click once** on **KINGSTON (E:)**. The address bar should now read **This PC> Kingston (E:)**.
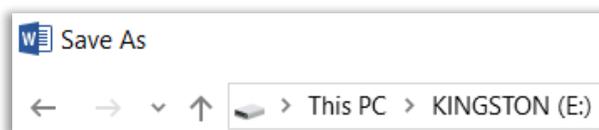
10. The other piece of information the computer needs to know is **the name of the file**. The file name should be **short** but also **descriptive** so that you can identify it at a later time.

    a. The file name is entered into the **file name field** at the bottom of the dialogue box. By default, Word tries to name it the first few words that were typed.

    b. **Click** into the file name field and the words (which should be your name) will be highlighted.

    c. **Type** the words **My Name** to name your file **"My Name"**.

11. Once we have given the computer a **file name** and a **save location**, we are ready to save.
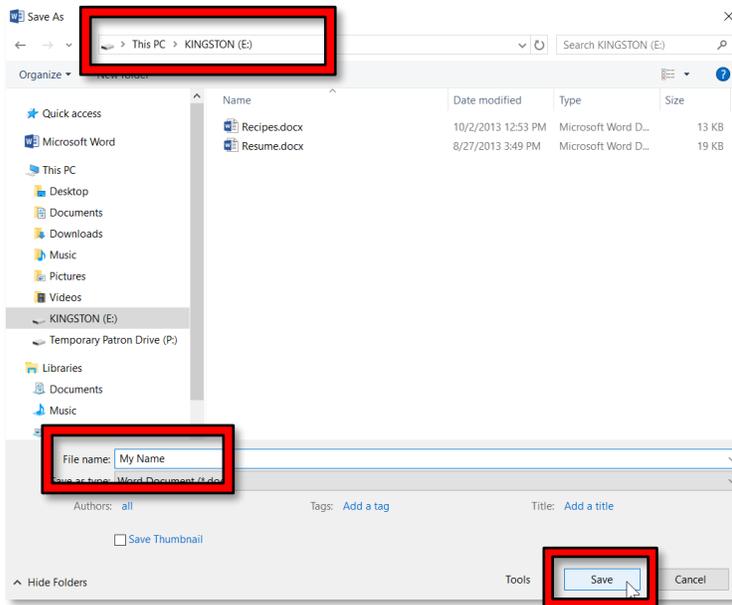
Note: Unlike the File Explorer Window, the "Save As" dialogue will only display the files on your drive that are of the **same type** as the file you are saving.

12. **Click Save** to save the file. **Congratulations!** You have now saved your first file!

13. **Notice** how the dialogue box **goes away** and we are **returned** to our file.

14. Also **notice** the **title bar**. It displays the new name of our file: **My Name.docx**.

15. **Close** Word.

16. **Close** File Explorer.

Opening Files

The purpose of saving a file is to bring it back later so that we can view it, print it or make changes to it. There are several ways to open a file. A common method is to use the Open command in the program that was used to create the file. This method is fine as long as you can *remember* which program you used to create the file. The alternative is to open files using File Explorer, where you can see a list of all your files regardless of which program they were created with. There are several ways to open files in File Explorer. Each method will result in launching the program associated with the file.

Open button

1. **Make** sure your flash drive is inserted and then **open** File Explorer. **Expand** the ribbon if it is not already expanded.

2. **Click** the flash drive in the **navigation pane**. You should **see** six files on the right in the **content pane**.
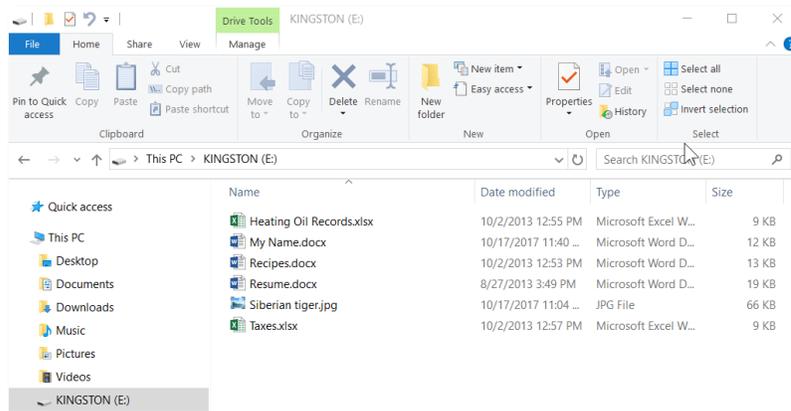
1. In the content pane, **click once** on **Resume.docx** to **select** the file.

2. On the **Home** tab, **find** the **Open** group and **note** the **Open button proper** (not the list arrow next to it) has a **Word icon** on it. File Explorer recognizes that the program used to create the selected file was Word.

3. **Click once** on the **Taxes.xlsx** file. **Note** the **Open button proper** now has an Excel icon on it because Excel was used to create the file.

4. **Click** the **Open button proper**. The Taxes.xlsx file will open in Excel.

5. **Note** that File Explorer recognizes which program was used to create the selected file and will launch that program and open the file simultaneously.

6. **Close** Excel.

Context Menu

1. **Right-click** on **Resume.docx** and **click** **Open** from the **context menu**. This is the same command as the Open button proper on the Home tab.

> **Important:** Make sure you right-click on the **file name** and NOT the empty space to the right of the file name. Right-clicking on the empty space will give you a **different** context menu.
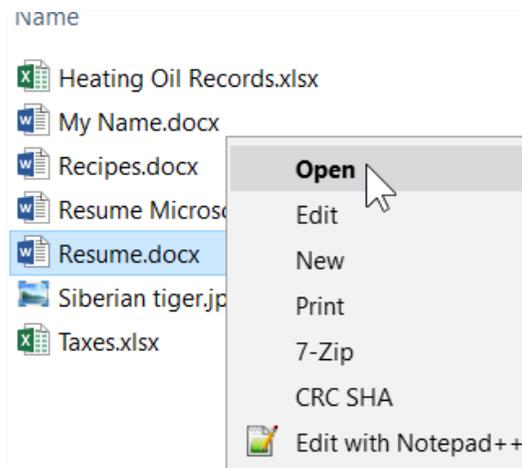
2. **Close** Word.

Double-clicking the file icon

1. **Double-click** the <u>icon</u> to the left of the file name Resume.docx.

2. **Close** Word.

> **Tech Tip:**
>
> **Note** that double-clicking the file name incorrectly, such as clicking on the file name rather than on the icon, can result in File Explorer thinking you want to <u>rename</u> the file.

File Saving Strategies

When making changes to an existing file, there are strategies for saving the new content that will either replace the original version of the file or create a new version of a file while retaining the original.

Editing a File and Preserving the Original Version

The strategy here is that after changes are made to a document, the file is with a different file name in order to preserve **the original file.**

Teacher's note:
Be sure to complete this section through p. 26 so that all of Exercise 1 can be completed.

1. Open **Resume.docx** by whichever method you prefer.

2. **Use** `Ctrl` + `End` to get to the end of last line of the document and **tap** `Enter`.

3. On the new line, **type Microsoft Engineer-DeVry University-Brunswick, NJ**.

Teacher's note:
Zoom in so the students can see what to type.

Ctrl + Fn + End on Puget

EDUCATION

Business Management, Yuba Community College – Marysville, CA
General Education/Travel and Tourism, Butte Community College – Oroville, CA
Microsoft Engineer – DeVry University – Brunswick, NJ

4. **Click** the **File tab** and then **click Save As**.

Opening a Save As dialogue allows us to create a **new copy** of our file that contains the changes we just made. The original version of the file will remain in case we need it again in the future (in this case, for another resume).
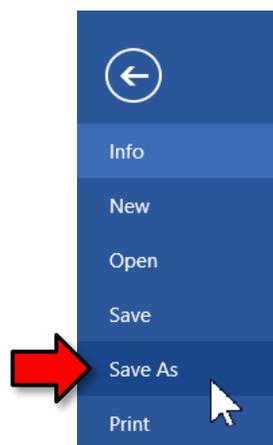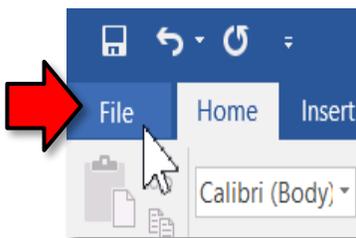
5. **Click** Browse on the Save As screen.

6. In the **Save As dialogue box**, **click** the **flash drive** as the destination for your file and **change** the file name to **Resume Microsoft Cert.** Then **click Save**.
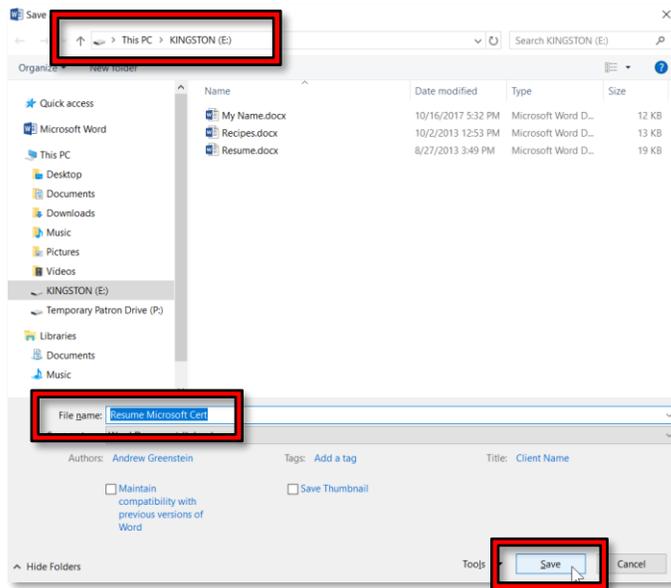
7. **Close** the Word window.

8. **Look** at the File Explorer window and **note** the new file listed there.
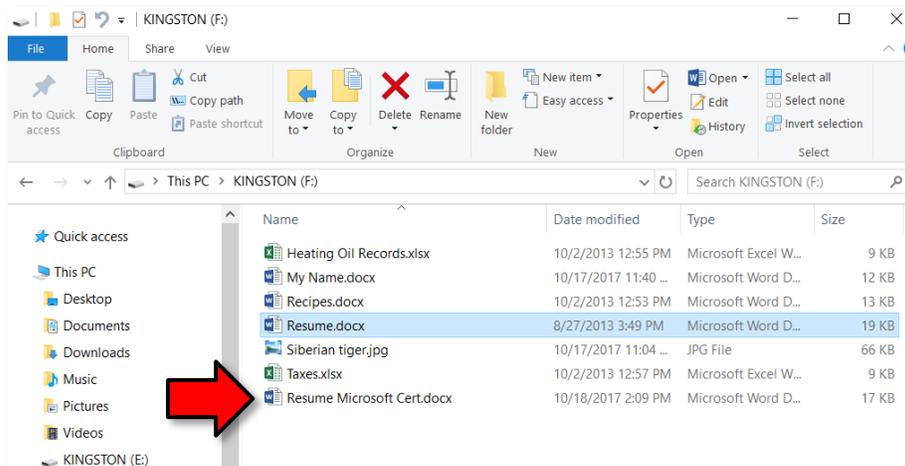
> ❓ **Why is the file at the bottom of the list and not in alphabetical order?**
>
> The file was put at the bottom of the list because it was created while the File Explorer Window was open. If we were to close the File Explorer Window and re-open it, the file would be displayed in alphabetical order.

9. **Remember**, the difference between the two resume files, besides the file names, is they have slightly different content.

10. **Close** File Explorer.

Editing a File and Replacing the Original Version

Our scenario is that we neglected to edit the **Resume Microsoft Cert.docx** file properly and we need to go in and make a small change. After that, we will save the file, but we <u>don't need to preserve the original content</u>, since the change we are making is <u>minor</u> enough that it doesn't warrant creating an entirely new file.

1. **Open** File Explorer.

2. **Click** the flash drive in the navigation pane.

3. **Open Resume Microsoft Cert.docx**.

4. **Use** [Ctrl] + [End] to get to the end of last line of the document.

5. **Insert** the word **Certified** at the <u>beginning</u> of that line.

Next, we are going to **save** the file with this new content, <u>but we are going to keep the file name the same</u>. This is called **overwriting** or **updating** a file.

1. **Click File** and **note** the **Save** command. **Remember**, before, when we wanted to change the name of the file, we clicked **Save As**. Clicking **Save** instead of **Save As** merely **updates** the file with the new content but the file still retains the same file name and so a new file is not created.

2. **Click Save**.

3. **Close Word** and **close File Explorer.**

A Closer Look at File Explorer

Make sure your flash drive is inserted and **open** File Explorer. **Expand** the ribbon if it is not already expanded.

Navigation Pane

1. **Point** your mouse to the list of locations on the **left** side of the **File Explorer Window to put the focus on the navigation pane**. Then **point** to the **right** pane (content pane). **Try again**. Do you notice something happening as you point to the left (**navigation**) pane?

2. The marks that appear and disappear are called **arrows** or **chevrons** and, like an outline, they indicate a heading and a sub-heading, or in this case, a directory and a sub-directory.

> ⌄ The **dark, down-pointing arrows** indicate a list that has been expanded to show sub-directories. For example, **This PC** currently has this type of arrow.

> ❯ The **light gray, right-pointing arrows** represent a directory that has not been expanded *or that does not contain any sub-directories.*

   a. **Click** the dark arrow next to **This PC** in the navigation pane. **Note** how the This PC directory collapses and you can no longer see the drives.

   b. **Click** the arrow again to expand the This PC directory.

3. The listing of locations in the navigation pane represents **places where files can be stored**. As you **point your mouse** to the **names** of the folders and drives in the list, **notice** how the **cursor changes** to the **hand** shape.

4. **Click** the **flash drive** entry in the navigation pane.

Content Pane

File Explorer gives you the ability to see the content in the content pane several different ways based on your needs and tastes. The tools for these options are on the **View** tab.

View Tab

Layout Group

1. On the **View** tab, look for the **Layout** group. You should **see** that the **Details** view is highlighted.
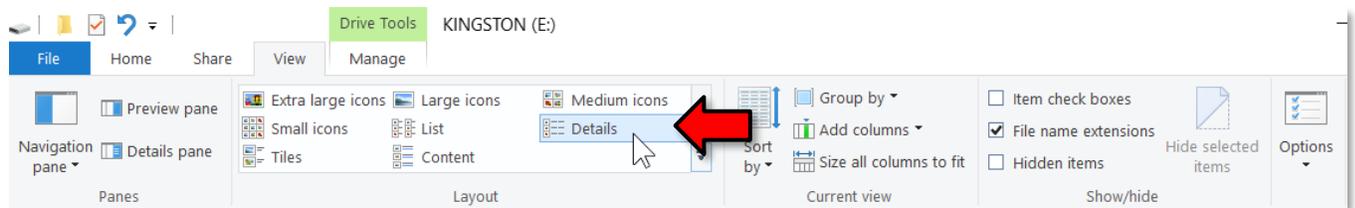
2. **Mouse over** the different views to get a "live preview" of the way the files would look in different layouts.

View Tab>Layout Group>Details View

Notice there are four **columns** of information about each file.

- **Name**: The file name.
- **Date Modified**: The last time the file was edited or saved.
- **Type:** The program that the file was created in.
- **Size**: How much storage space the file is using.

> **Tech Tip:**
>
> Date modified will only show the **date**, *not* the time, due to FAT 32 format of the flash drive.

View Tab>Layout group>Large icons view

In the **Layout** group, **click Large icons.**

This view is helpful if you have several different file types in your storage area, especially when you have image files. Image files will be displayed as a thumbnail of the image.

A downside, however, is that you're not able to see as many details about each file, such as the file size or date modified. **Pointing** to an icon will display these details in a **ScreenTip**. **Switch back** to the **Details** view.
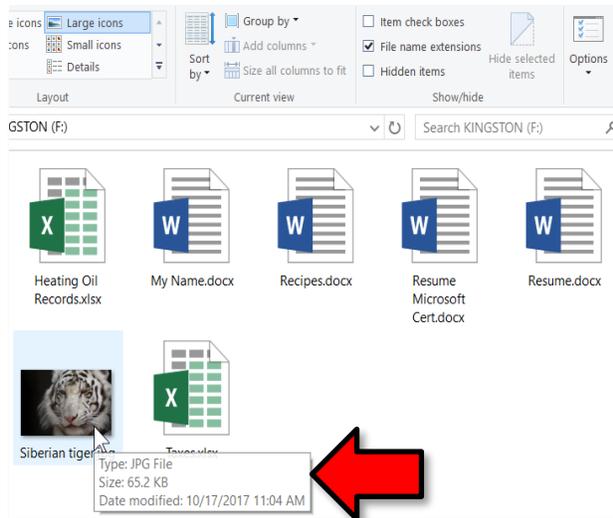

View Tab>Current View Group

The controls in the **Current View** group allow you to **rearrange the view** of the contents.

View Tab>Current View group>Resizing columns

Notice how some of the text in the **Type** column is hidden. *Let's **resize** so we can see all of the text.*

Size all columns to fit

1. On the **View** tab, in the **Current view** group, **click Size all columns to fit**.

2. **Note** that the columns have resized to fit the content.

NOTE: Resizing columns this way is not an action that can be undone, but if we wanted to resize the Type column back the way it was, it can be done with the mouse.

Resizing an alternate way - Click and Drag

1. **Position** the mouse cursor so it points to the dividing line between the **Type** and **Size** columns.
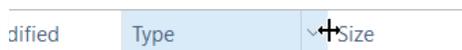
2. **Click, hold** and **move** the mouse to the **left** to decrease the width of the **Type** column.

<u>Resizing an alternate way – use of Right-click menu</u>

When the pointer focus is on a column label, the **Size all columns to fit** tool is available on a right-click menu. This menu also provides a tool for resizing one column.

1.   **Point** to the **Type** column and right-click.

2.   **Click Size Column to Fit**.
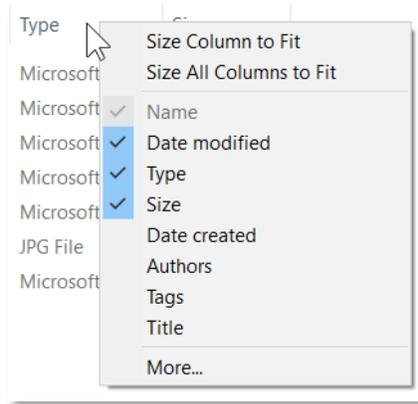
View Tab>Current View Group>Add columns

Currently we have four columns of file details being displayed. *Let's add and remove some columns*.

1.   On the **View** tab, in the **Current view** group, **click Add columns**.

2.   There are a few standard details listed on the menu. **Click Authors**. **Note** how a column now displays in the content pane that lists the authors of the various documents on our drive.

3.   In the **Current view** group, **click Add columns**, and then **click Choose columns**. **Note** the huge library of details that can be associated with a file, and that can be selected to display in the content pane.

4.   **Scroll to**, and then **click Date accessed** from the menu. **Click OK**. **Scroll** to the right and **note** the column that gets added to the content pane.

5.   **Click Add columns** again. **Note** that **Date accessed** has been added to this drop-down menu. This way it can be easily removed. **Click** on the <u>**checkbox**</u> for **Date accessed** to remove it from the menu.

6.   **Click Add columns** again and **click Authors** to remove it from the menu.

View Tab>Current View Group>Sorting Within a Column

It is possible to sort the files within a column. By default, files will be sorted alphabetically by **name**.

Name sort

1. On the **View** tab, in the **Current view** group, **click** **Sort by**.
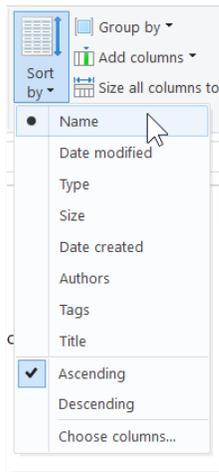
2. Then **click** **Name.** The alphabetical order of the file names has reversed.

3. **Click** **Sort by** again and then click **Name** to reverse the alphabetical order.

Tech Tip:

Folders sort separate from files.

Date Modified sort

1. **Click** **Sort by** again.

2. **Click** **Date Modified**. This is a handy sort that will bring your most recently edited documents to the top of the Name column.

3. **Click** the column heading for Name to get us back to where we started.

Tech Tip:

Clicking on the **label** of a column will also execute a sort.

Group by sort

1. On the **View** tab, in the **Current view** group, **click** **Group by**. The menu has a selection of details.

2. On the menu, click **Name**. **Note** the sorting that occurs.

3. **Click** **Group by,** and then **click** **Date modified** to observe those sorts.

4. **Click** **Group by,** and then **click** **Type** to observe those sorts.

5. **Click** **Group by,** and then **click** **Authors**. **Note** that even though this is not a column we have chosen to display in the Content pane, the files can be grouped by this detail and the details are revealed in the Name column.

6. **Click** **Group by,** and then **click** **(None)** to turn off all grouping.

View Tab>Show/Hide Group

File name extensions

Note how each item in the Name column in the content pane has an icon representing the program used to create the file, the file name, and the **file extension**.

- Every file has its own unique **extension** based on the program that was used to create the file. Whenever you save a file, the computer will automatically add the appropriate extension.

- However, the file extension is not always visible in the content pane. In fact, the display of the file extension is a setting that is not enabled by default. It is a setting that the user has to enable on his or her computer. Here in the Computer Lab our computers are set up to **display** file extensions. We think it is an important display because if you accidentally change a file's extension or remove it altogether, the computer won't know how to open it!

To turn on the setting that enables the display of file extensions, **click** the **View** tab. Then in the **Show/hide** group click in the **File name extensions** checkbox to **place** a checkmark.

ViewTab>Panes Group

Preview Pane

Sometimes it is helpful to see a small section of a document in order to determine if it is the particular one you are seeking. The Preview pane serves that purpose.

Make sure your flash drive is inserted and File Explorer is open. **Expand** the ribbon if it is not already expanded.

1. **Click** the flash drive in the navigation pane.

2. **Click** the **View** tab.

3. **Click** the **Resume.docx** file in the content pane to select it.

4. **Locate** the **Panes** group and **click Preview pane**.
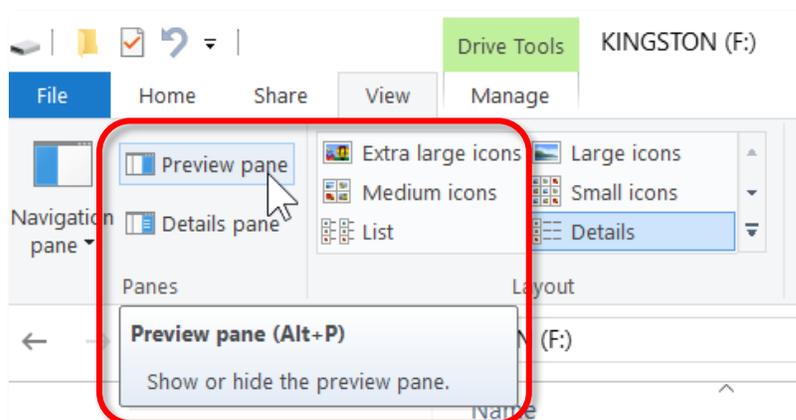
5. **Note** the Preview pane for this document includes a scroll bar. The document is squeezed into this pane and can be viewed completely by scrolling.

The Preview pane can be widened through the use of a resizing cursor.

1. **Point** your cursor to the **left-side border** until it forms the shape of an arrow with two ends. When it does this, **click**, **hold** and **move** the mouse to the left.

2. Now **Resize** the preview pane as far to the right as it will go.
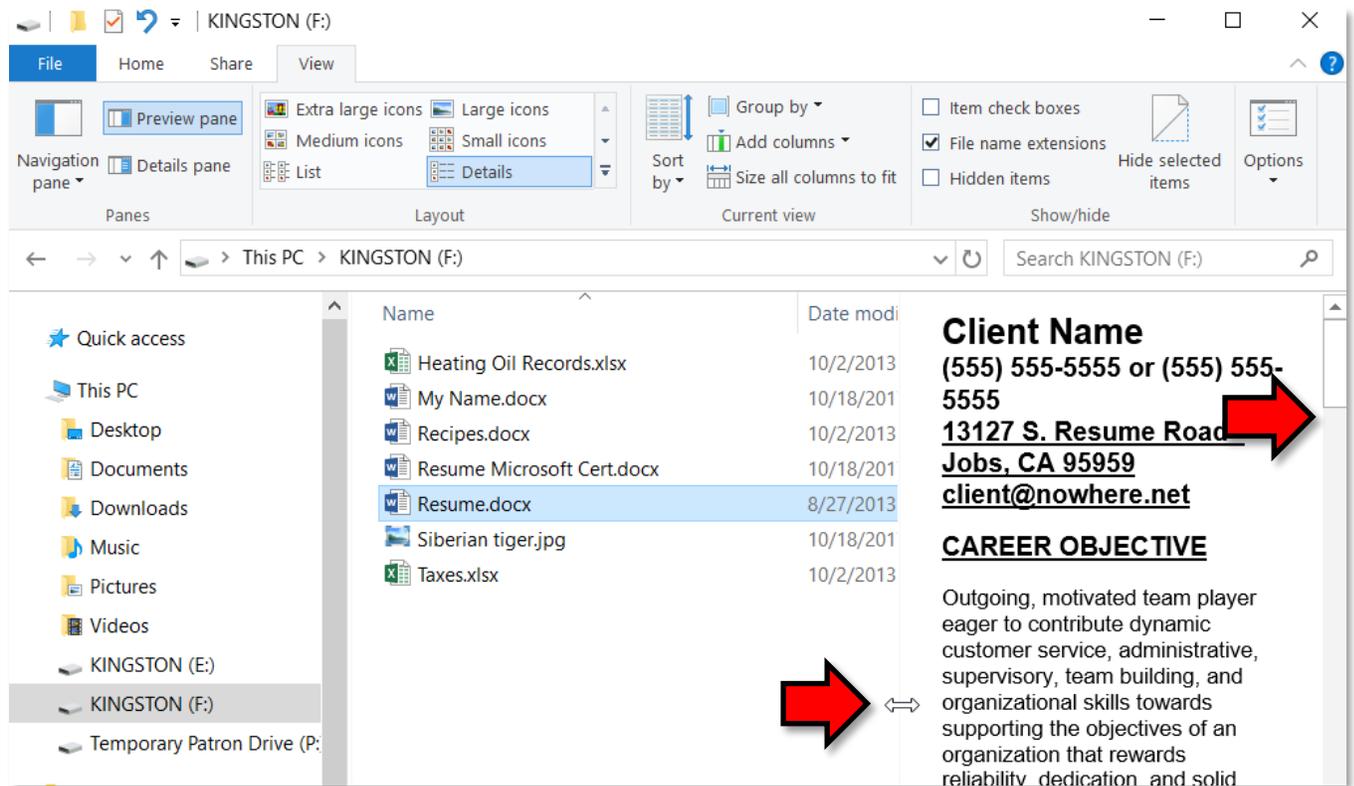

3. **Toggle off** the Preview pane by **clicking Preview pane** again.

View Tab>Panes group>Details Pane

The details pane provides a way to view the **metadata** that is associated with a file.

> Metadata is data that describes other data. Meta is a prefix that in most information technology usages means 'an underlying definition or description.'
>
> Metadata summarizes basic information about data, which can make finding and working with particular instances of data easier. For example, author, date created and date modified and file size are examples of very basic document metadata. Having the ability to filter through that metadata makes it much easier for someone to locate a specific document.
>
> – Margaret Rouse

Let's look at some metadata!

Opening the Details Pane

1. **Make** sure your flash drive is inserted and File Explorer is open. **Expand** the ribbon if it is not already expanded.

2. **Click** the flash drive in the navigation pane.

3. In the content pane, **click My Name.docx**

4. On the **View** tab, in the **Panes** group, **click Details pane**. We now see metadata associated with this file.

5. **Note** the Details pane on the right can also be widened with a resize cursor.
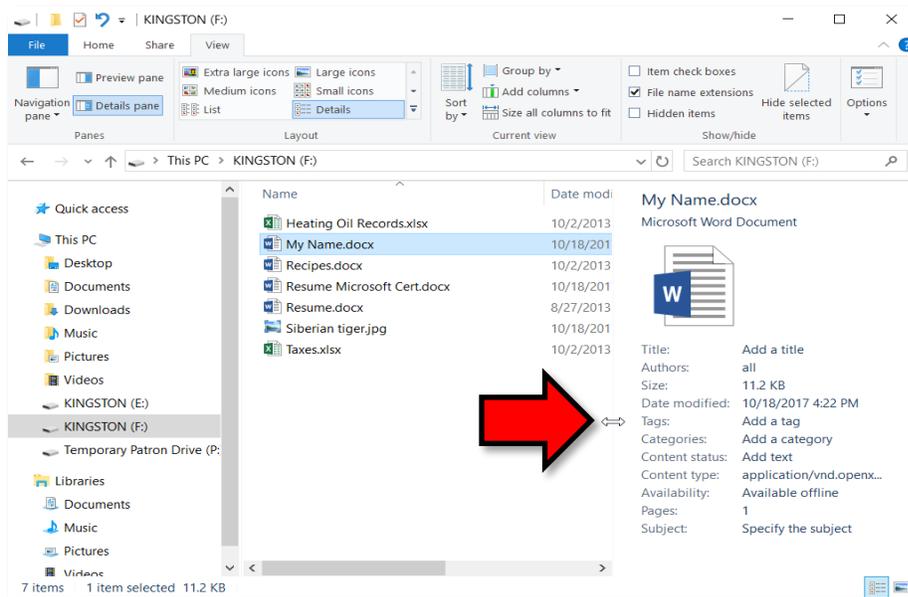
Teacher's note:

Need to CLOSE File Explorer before proceeding to the next page or else skip steps 1-4 on the next page.

Editing Metadata in the Details Pane

Metadata information is searchable, so adding specific metadata that has meaning for you will aid in locating your documents. Conveniently, it is possible to add or change metadata right in the Details pane.

Let's add some metadata!

1. **Make** sure your flash drive is inserted and File Explorer is open. **Expand** the ribbon if it is not already expanded.

2. **Click** the **flash drive** in the navigation pane.

3. **Click My Name.docx**.

4. On the **View** tab, in the **Panes** group, **click** **Details pane**.

5. **Click** into the **Add a tag** field and type **important**.

6. **Notice** the **semicolon** that was inserted at the end of the word. If you wanted to specify multiple tags, you would separate them with semicolons. There is no need to delete this semicolon if you only have one tag.

7. **Click Save**.

8. **Notice** how the semicolon **disappeared** because we only have a single tag.

9. **Toggle off** the **Details pane** by **clicking** **Details pane** again.

10. **Close File Explorer.**

Later we will search for this file based upon the metadata we just added.

My Name.docx
Microsoft Word Document

Title:	Add a title
Authors:	all
Size:	11.1 KB
Date modified:	10/17/2018 1:55 PM
Tags:	important;
Categories:	Add a category
Content status:	Add text
Content type:	application/vnd.openx...
Pages:	1
Subject:	Specify the subject
Comments:	Add comments
Date created:	10/17/2018 1:55 PM
Date accessed:	10/17/2018 1:55 PM
Computer:	GATES15 (this PC)

Save   Cancel

Searching for Files with File Explorer

We don't have that many files right now, but as you become more productive you could end up with hundreds or even thousands of files on your computer. Even though you may have attempted to organize them by separating them out into different folders, finding a particular file can still be a daunting task.

The Search Windows box in Windows 10 will search for files on your hard drive, but is not able to search for files on removable devices. Because our hard drives are locked down, we will only be able to show you how to find files on a removable device. For that functionality, the program to use is File Explorer.

Our scenario here is we want to find a certain document that is on our flash drive, but we can't remember what file name we gave the document. What we do remember is that the document has a particular word in it, namely "gress".

Search Tools Contextual tab

1. **Make** sure your flash drive is inserted and **open** File Explorer. **Expand** the ribbon if it is not already expanded.

2. **Click** the flash drive in the navigation pane.

3. **Click** in the **Search box** to the right of the address bar.

4. **Note** the appearance of a **Search Tools contextual tab.** It has one tab of its own, **Search**, and it is in an **Active** state.

5. The Search box is where you would type a word that you want Search to look for in a **file name**. For the time being **leave** the cursor in the Search box and we will examine the searching tools available to us.

Search Tools>Search tab>Location group

In the **Location** group, by default, the **All subfolders** tool will be active. This means that all the subfolders as well as the files at the root of the selected folder will be searched.

Search Tools>Search tab>Refine group

The **Refine** group has tools to refine the search for files by the date they were modified or by the approximate size of the file, etc.

Search Tools>Search tab>Options group

The **Options** group has an **Advanced options** button. With this button, you can tell the Search function to look for our search term in both the file name as well as in the body of the file. By default, the Search function only looks for the search term inside of file names.

Since we will be searching for a word within a document, we need to turn on that functionality, as it is not enabled by default.

1. In the **Options** group, **click** **Advanced options**.
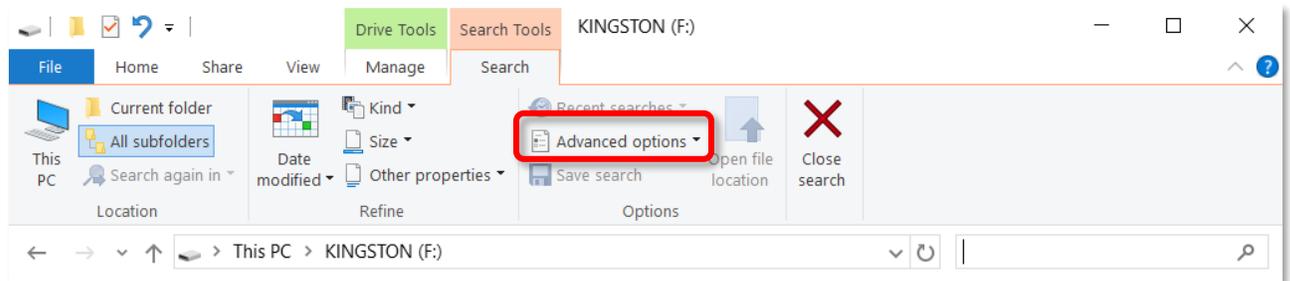
2. On the **Advanced options** menu, **click** **File contents**. This action will select that option and also **close** the Search tab.
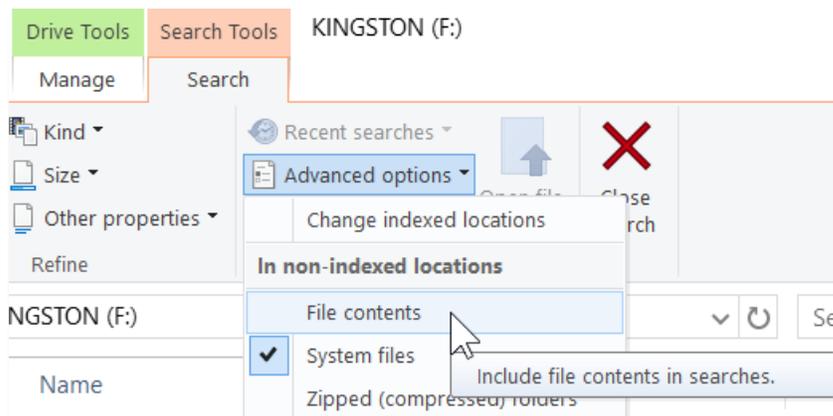
Search Results

1. We are ready to type our search term (which is **gress**), but for now <u>simply type the first letter</u> into the Search box.

   a. **Note** that you get a search results display in the content pane based on that single letter.

2. **Note** also that the title bar lists the search term (g) as well as the process we are using, which is **Search**.
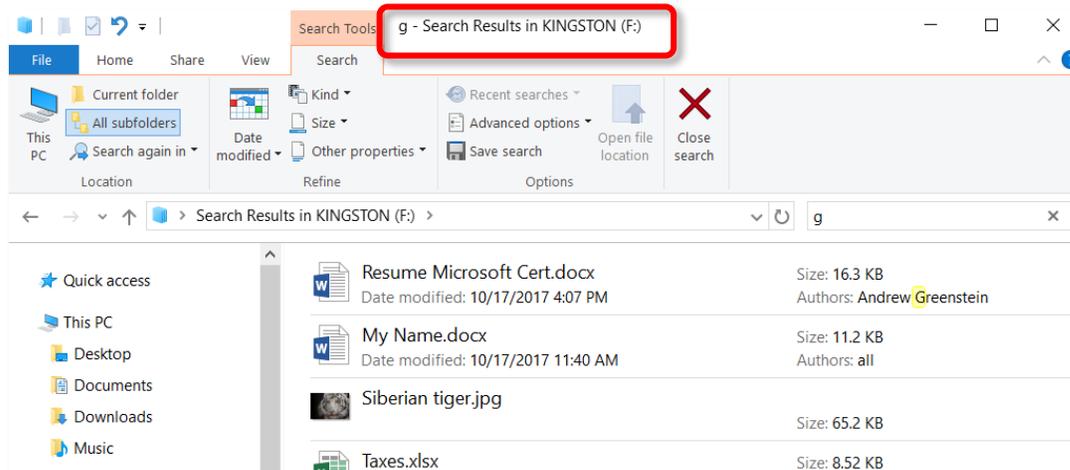
3. **Continue** to **slowly type** the remaining letters, **noting** the changes in the search results as you refine. By the time we complete typing **gress**, the results show one file that contains that term.

4. In the search results list, **select** the **Heating Oil Records.xlsx** file. On the Search ribbon, in the **Options** group, **note** the **Open file location** button. Clicking this button would take you out of Search and into the directory or folder that contains the file listed in the search result. You could also simply **open** the file from the search results.

*Since we have searching file contents enabled, let's search for that file (My Name.docx) that we added a **metadata tag** to. A search for a file with a tag will yield results as long as the Advanced option of searching within file contents is enabled.*

1. **Close** the Search ribbon with the Close search button.

2. **Click** the flash drive in the navigation pane.

3. **Click** in the Search box and **type important**.

4. **Open My Name.docx** from the search results list.

5. **Click** the File tab to view the metadata tag on the right side in the details section.

6. **Close** Word.
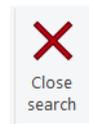
Clearing Search History

1. **Click** in the **Search box** again and **note** how a recent search may appear in the search box or multiple terms might even appear in a dropdown list. Clearing a search history is not simply a matter of deleting a term from the Search box.

2. On the **Search** tab, in the **Options** group, **note** there is an active button (that was previously inactive), the **Recent searches** button.
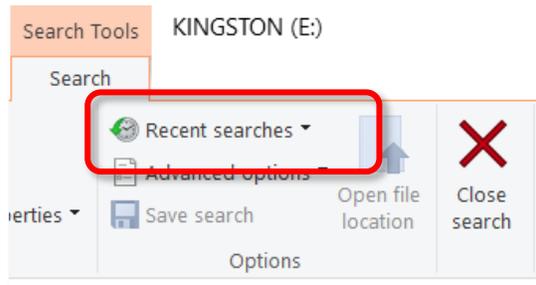
3. The **Recent searches** button can be used to clear your search history. **Click Recent searches**, and then **click Clear search history**.
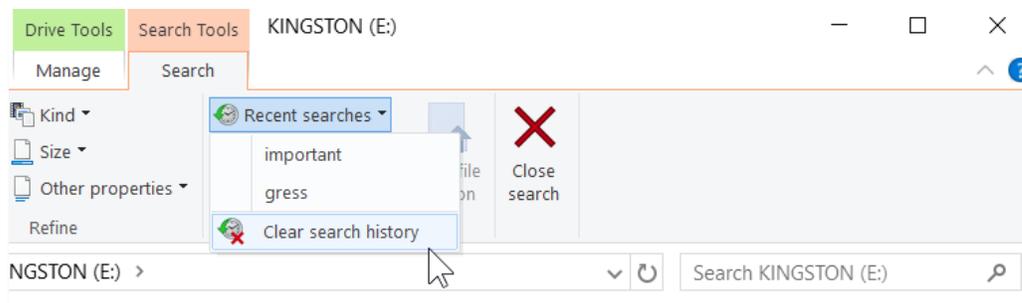
4. **Close** File Explorer.

> **Tech Tip:**
>
> If you click the **Close search** button **without** clicking anywhere else outside of the Search box, the search term you typed will not be retained in the search history.

Folders and Files

We don't have that many files so far, but let's suppose this is your office computer, and you are creating several new files every day. Eventually you would have so many files you wouldn't know what to do with all of them.

We can organize our files by putting them into **folders**. A folder is just a storage bin for files. Think of an **office file cabinet**. You could pile your papers on top of the cabinet, or you could put them in one of the drawers. Once you decide to put them into a drawer, you can put them into the very front, or separate them using dividers. The dividers, in turn, might have manila folders to further help keep things organized. Like this separation technique, computer folders serve no purpose other than for file organization.

Making a Folder

Mention Handout 2

1. **Make** sure your flash drive is inserted and File Explorer is open. **Expand** the ribbon if it is not already expanded.

2. In the navigation pane, **click** the **flash drive.**

3. On the **View** tab, in the **Layout** group, **click Details.**

4. **Switch** to the **Home** tab. Then on the **New** group, **click New folder**.

5. **Note** a new item appears in the content pane. It has an icon that looks like a manila folder and the temporary name of **New folder** is highlighted in blue.

    New folder

6. When a folder name or a file name is highlighted in blue like this one is, it means that the name field is in **Edit mode** and the name can be changed. It is hard to see, but **note** there is a blinking cursor in the name field. In order to rename the folder or file at this point, simply **begin typing** the new name. In this case, type **Personal**. **Tap** ⎄Enter⎄ to commit the name.

7. **Create** a second **folder** and **name** it **Business**. Don't forget to commit the new name by tapping the ⎄Enter⎄ key.

Navigation to Folders

1. In the **navigation pane**, **click** the light grey **chevron** next to the **Flash Drive** to expand the directory.
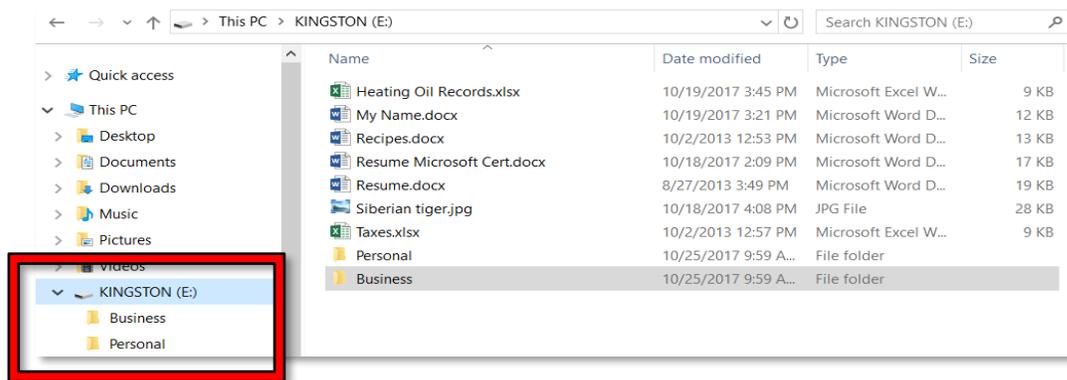
2. **Note** you can see the *folders* we just created displayed in the navigation pane, but you cannot see the listing of *files* there. The navigation pane displays ==containers== for files (drives and folders) only, not the files themselves.

3. In the **navigation pane, click** the **Personal folder. Note** the change in the **title bar** and **address bar**.

4. **Note** that the content pane is telling us **the folder is empty**. Currently all of our files are on the **root** of the flash drive. In other words, they are not inside any of the **folders** on the flash drive.

5. To see our files that are at the **root** of the flash drive, we have to **click** the **flash drive entry** in the **navigation** pane. The **content** pane is now showing **all the files as well as the folders**.

Organizing Files

Creating folders is a first step to getting organized. The Home tab provides tools for moving your files into folders, renaming and deleting files.

To get ready for this section:

1. **Make** sure your flash drive is inserted and File Explorer is open. **Expand** the ribbon if it is not already expanded.

2. In the navigation pane, **click** the **flash drive.**

3. **Make sure** you are in "Details" view: On the **View** tab, in the **Layout** group, **click Details.**

4. **C**lick the **Home** tab and **look** for the **Organize** group.

Moving Files

Move file from root to a folder on the same drive

1. To activate the tools for organizing files, in the content pane, **click My Name.docx.**

2. In the **Organize** group **look** for the **Move to** button. We are going to move My Name.docx to the Personal folder.

3. When you **click Move to** a menu drops down with some common folder locations. Since our flash drive is not on the list will we need to choose a specific location. **Click Choose location...**
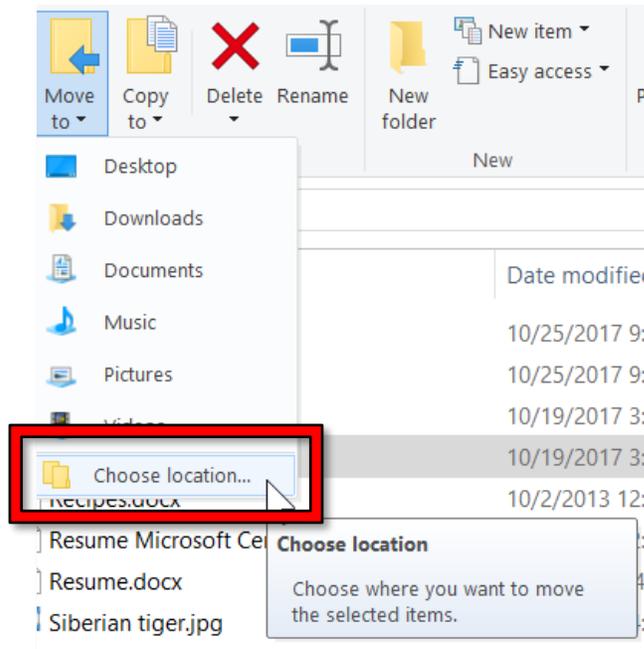

4. A **Move Items dialogue** box comes up. It will be necessary to **scroll** until we see the flash drive, and in particular the Personal folder. You may need to **expand** the flash drive folder to see the subfolders. **Click** the **Personal** folder to select it as the destination for our **My Name.docx** file.
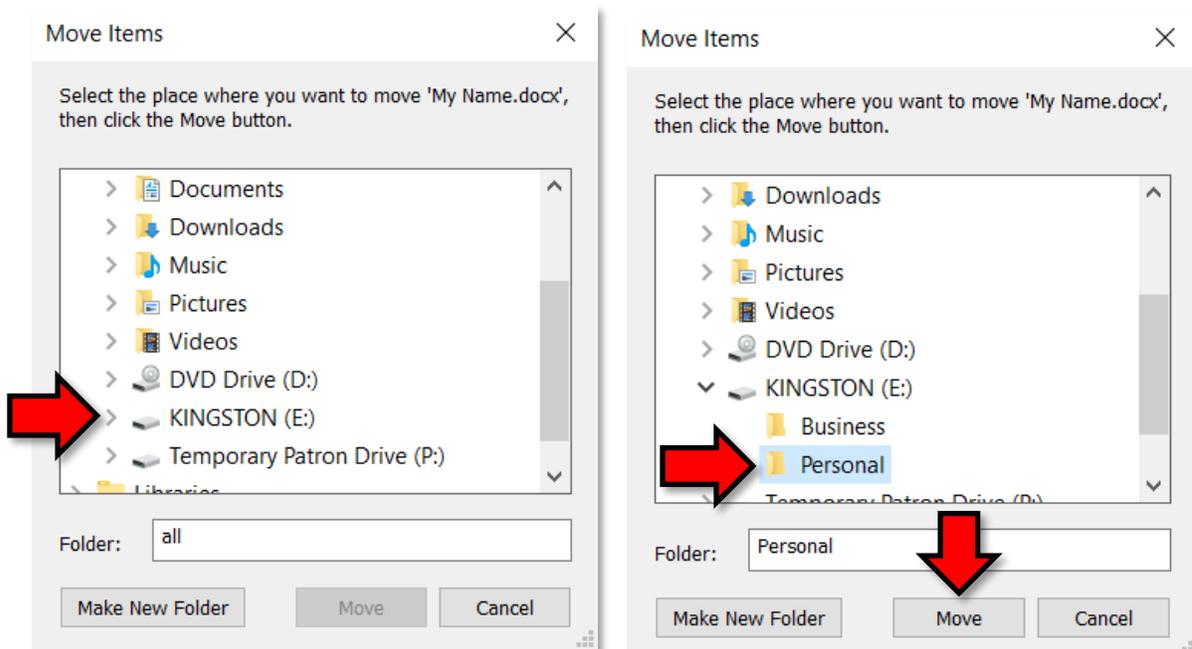

5. **Click Move** to execute the move.

6. **Click** the **Personal folder** in the **navigation pane** to **see** the **My Name.docx** file in the content pane.
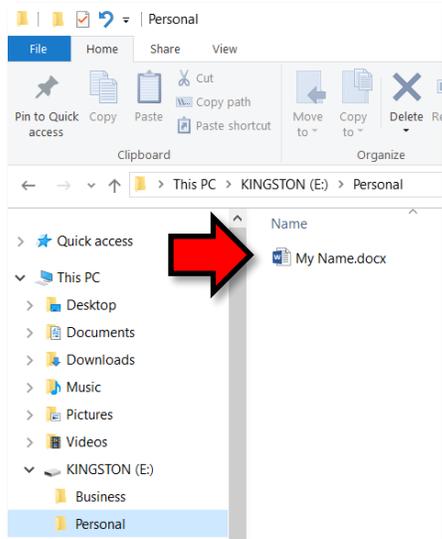
7. **Click** the flash drive in the navigation pane as we are going to practice moving more files from the **root** to the subfolders.

8. **Move** **Heating Oil Records.xlsx** to the **Business** folder.

9. **Move** **Taxes.xlsx** to the **Business** folder.

10. **Click** the **Business** folder in the navigation pane to **verify** that both files were moved.

11. **Move** **Resume.docx** from the **root** of the flash drive to the **Personal** folder. Verify.

12. **Move** **Resume.docx** from the **Personal** folder to the **Business** folder. Verify.

13. **Move** **Taxes**.**xlsx** to the **root** of the flash drive. Verify.

14. Final results should look like this (next page):

Show Slide 14
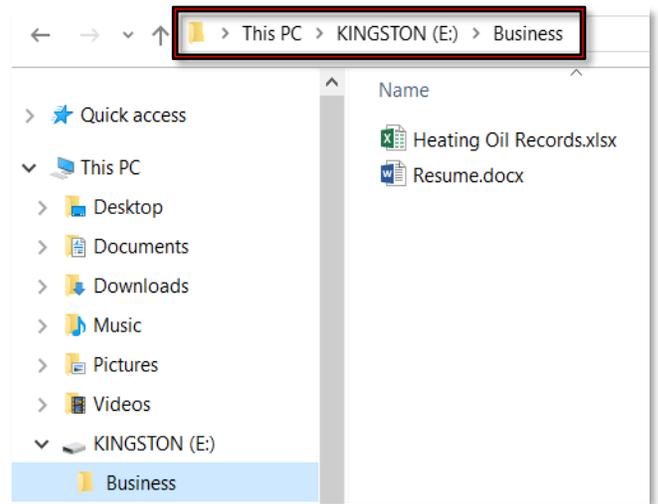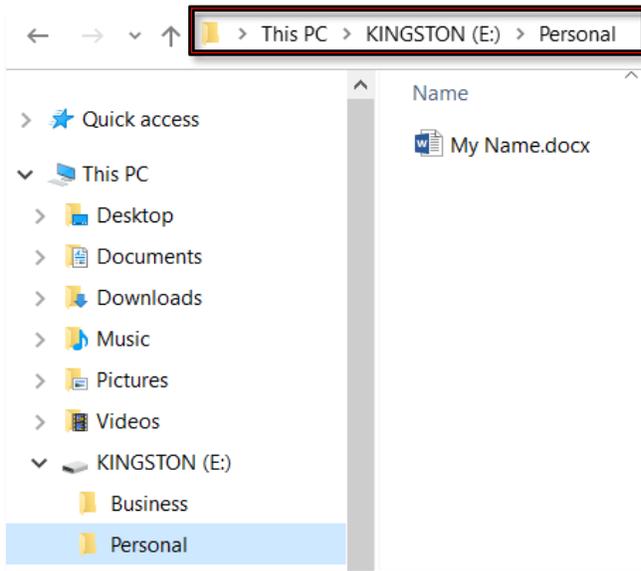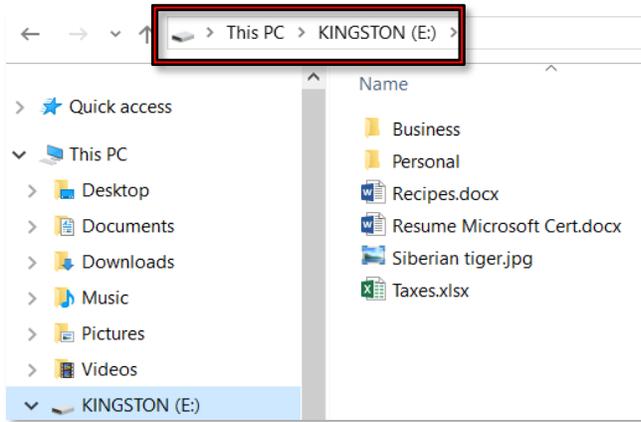
Tip: Another way to move a file is to use the "Cut" and "Paste" commands, accessed through the file's right-click context menu.

Renaming Files

When you save a file, you give it a file name. That file name can be changed using a tool in File Explorer.

1. In the navigation pane, **navigate** to the **root** of the flash drive.

2. **Click Taxes.xlsx**.

3. On the **Home** ribbon, in the **Organize** group **click Rename**.
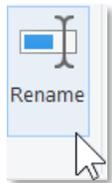
4. The file name is now in **edit mode** just as when we first created our two folders. **Type Tax Year 2019** and **tap** Enter to commit the new name.

> **Tip:** Another way to get a file name into edit mode is to **slowly double-click** the file name.

Canceling a Rename operation

It is possible to back out of a rename operation <u>as long as you do not press Enter to commit the new name</u>.

1. **Click Siberian tiger.jpg**.

2. On the **Home** ribbon, in the **Organize** group, **click Rename**.

3. The file name is now in **edit mode**. **Type** "gray wolf" but ==DO NOT hit Enter.==

4. **Tap** Esc on the keyboard.

5. **Notice** how the filename changes back.

Undoing a Rename operation

However, if you DO press Enter by mistake, it is still possible to change the filename back by using Undo.

1. The Undo button is located on the **Quick Access Toolbar**. The button is **hidden** by default, so we first need to **unhide** it.

   a. **Click** the **Customize Quick Access Toolbar** button.
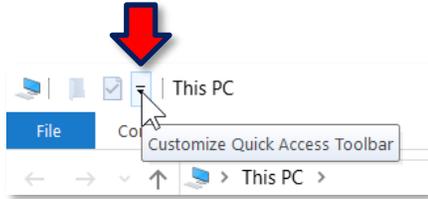
    b. **Click Undo**.
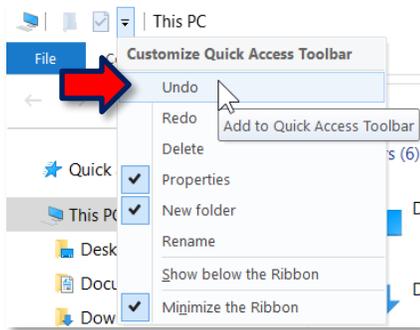
2. **Click Siberian tiger.jpg**.

3. On the **Home** ribbon, in the **Organize** group, **click Rename**.

4. The file name is now in **edit mode**. **Type** "gray wolf". This time, we are going to **tap** Enter to commit the new name.

5. **Click** the **Undo** button.

6. **Notice** how the filename changes back.

Invalid File Name Characters

There are some characters that are not allowed to be part of a file name.

1. **Click Tax Year 2018.xlsx** and **click Rename**.

2. **Type** a **question mark**. This is an **invalid** character.

3. **Notice** the "**speech bubble**" that appears. It lists the characters that are not allowed in file names.

> A file name can't contain any of the following characters:
> \ / : * ? " < > |
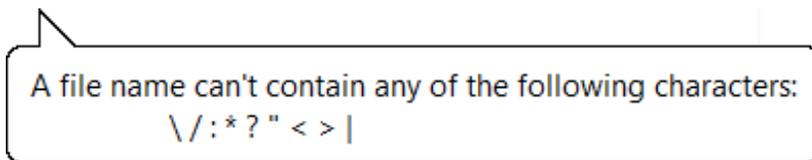
4. **Tap** Esc to **undo** the rename operation.

Renaming a Flash Drive

It is possible to assign a new name to your flash drive, but the Rename command is not accessible through the ribbon.

1. **Click** the flash drive in the **navigation** pane.

2. **Keep** the cursor focused the **flash drive entry** and **right-click**. **Click Rename** from the context menu.
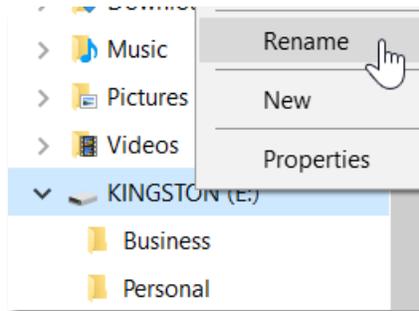
3. **Notice** how the flash drive's name turns blue. The flash drive's name is now in edit mode.

4. **Type** your **first name.**

5. **Tap** Enter to commit your changes.

6. **Change** the name back to **KINGSTON** (all upper-case).

Deleting Files

It is possible to delete files one at a time. It is also possible to select several files at once to delete. Finally, it is possible to delete a folder, but that will also delete all the files in the folder.

It is important to **note** that when deleting files from **removable media**, the deletion is permanent, meaning no chance of recovery. When deleting from the **hard drive**, deleted files go into a Recycle Bin, from which they can be restored. *In the Lab, the Recycle Bin is not accessible*.

Delete a Single File

1. **Click** the **Business folder** in the **navigation pane.**

2. In the **content pane, click** **Heating Oil Records.xlsx**. On the **Home ribbon,** in the **Organize** group **note** the **Delete** button. This is a split button.

3. **Click** the **list arrow** portion of the button. **Note** that the Recycle option is greyed out. Therefore the delete button proper will carry out a permanent delete. **Click** the **Delete button proper**.

4. A Delete File confirmation box will appear asking you if you are sure you want to <u>permanently</u> delete the file. **Click Yes** to remove the file.
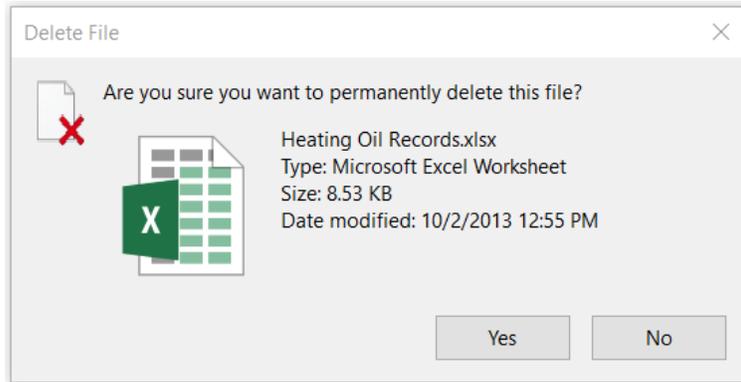
Tip: Deleting from the hard drive would offer **two active options** on the dropdown list (pictured at right). The button proper would carry out whichever option is at the <u>top</u> of the list. In the case imaged on the right, the deleted item would be **recycled** because the "Recycle" option is at the top of the list.

There is also an opportunity to activate a **confirmation** of recycling. In the image, the option to **Show recycle confirmation** has not been enabled. Clicking on that option would enable it.
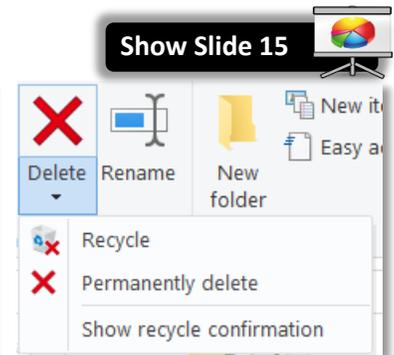
Delete Multiple Files – Contiguous Selection

1. **Click** the **flash drive** in the navigation pane and, in the content pane **click** the <u>file</u> at the top of the list.

2. **Hold down** the Shift key and **click** the **last file** in the list. **Note** that **all** the files are selected.

3. Normally we would click the Delete button proper to delete these files, but we're going to try something else first. **Click** in a clear area to **deselect** the files.

Delete Multiple Files – Non-Contiguous Selection

1. **Click** the file at the top of the list.

2. **Hold down** the Ctrl key and **click** the last file in the list. **Note** that **only two** files are selected. We skipped some files. Holding the Ctrl key allows you to select individually any files you want to delete.

3. **Click** the **Delete button proper**.

Tip: You can also tap the Delete key on the keyboard to delete a file. 📝

Deleting Folders

1. In the navigation pane, **click** the **Business** folder. **Note** that we have a file in that folder.

2. **Keep** the cursor focused on the **Business** folder and **right-click** and then **click Delete.**

3. **Click Yes** in the Delete Folder confirmation box. **Note** not only have we deleted the folder but the file inside it as well.
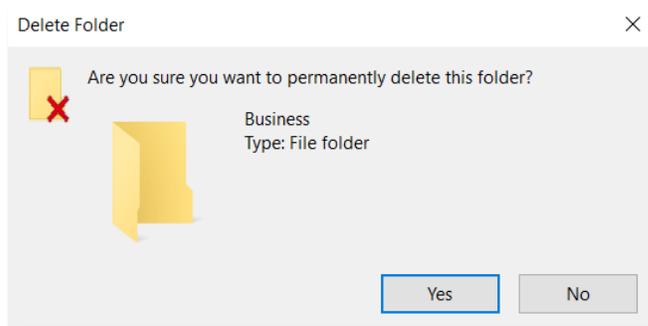
4. **Close** File Explorer.

Creating a New File and Saving into an Existing Folder

We are going to create a file to save to the **Personal** folder on our flash drives. There are two ways to accomplish this task:

- One way involves opening Word, creating content in a document and then using the Save As dialogue box to name the file and save it to a specific folder on a drive.

- The second way is to use the New Item button in File Explorer.

Start with Word

1. **Insert** your flash drive.

2. **Open Word.**

3. **Type** your **dream job** into this new document.

4. **Click** the **File tab**, **click Save As**, and then **click Browse**.

5. In the **Save As dialogue box**, **navigate** to your save location by **clicking** on the **arrow** next to the **flash drive listing** in the **navigation pane**.

6. **Click** the **Personal** folder in the navigation pane.
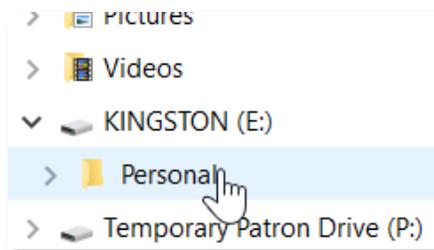
7. **Note** the **file path** listed in the address field.

8. **Name** the file **dream job.docx** and then **click Save**.

9. **Close Word** and **close File Explorer**.

Start with File Explorer

1. **Insert** your flash drive if it isn't already.

2. **Open File Explorer** and **expand** the **ribbon**.

3. In the navigation pane, **use** the **arrow** to expand the flash drive directory and **click** the **Personal** folder.

4. **Click** the **Home** tab.

5. In the **New** group, **click New item**.

6. **Click Microsoft PowerPoint Presentation**.

7. In the file name box, **type Worst Job** and **tap** Enter to commit the typing.

8. **Open Worst Job.pptx**, **click** where it says "Click to add first slide". Click into top text box ("Click to add title") and **type** the worst job you ever had.

9. **Close** PowerPoint and **click Save**.

To prepare for the exercises, finish deleting **all files and folders** from the flash drive.

1. **Open** File Explorer.

2. **Click** the flash drive in the navigation pane.

3. **Delete** the Personal folder.

4. **Delete** the files at the root of the flash drive.

5. **Close** File Explorer.

Managing your Computer Storage Space (supplemental)

Computer storage devices, such as hard drives and flash drives, can store vast amounts of data. But even though this amount is very large, it is still <u>finite</u>, so it's important to be aware of how much storage space you are using so that you don't run out.

1. **Open** **File Explorer** and **navigate** to **This PC**.

2. **Note** the **bar** that is underneath each drive (except for the DVD drive). The entire bar represents the drive's total storage space. The blue part on the left represents how much space is actually being used.

KINGSTON (E:)
1.82 GB free of 1.86 GB

3. **Notice** how there is just a **sliver** of blue in our flash drive's storage bar. We are only using a small portion of the drive's total storage space.

4. **Also notice** what it says below the bar: **1.82 GB free of 1.86**. GB stands for **gigabyte**, which is a unit of measurement for computer storage space.

5. One gigabyte equals roughly **1 billion bytes**. A byte is the smallest unit of measurement for computer storage space. See the table below for more units of measurement.

Show Slide 16

1 byte or **1 B**	The smallest amount of measurable space. A single character in a text file uses **1 byte** of storage space.
1 kilobyte or **1 KB**	1,024 bytes An email takes **10-15 KB**.
1 megabyte or **1 MB**	1,024 kilobytes A song takes **4-5 MB**. A high resolution photo takes **4-5 MB.**
1 gigabyte or **1 GB**	1,024 megabytes Our flash drives hold **2 GB**. A Blu-ray movie takes **25-50GB.**
1 terabyte or **1 TB**	1,024 gigabytes Many new computers today come with hard drives that can hold **1 TB**.

?

<u>Why does 1 KB equal 1,024 bytes and not an even 1,000 bytes?</u>

Computer storage is measured in **powers of 2**. So, 1 KB equals 2^{10} bytes (1,024).

However, hard drive manufacturers like to round down to make things easier. They treat 1 KB as 1,000 bytes instead of 1,024. This means that hard drives are advertised as having slightly more storage space than they actually have. For example, a 1 TB hard drive actually has only 931 GB.