WHAT IS A FILE?

At the end of last class, we discussed the difference between Save and Save As, but the difference might not have been very clear. To help learn the difference, we need to talk about what a file is.

Simply put, a file is a collection of information that the computer keeps together as one object. For example, in the case of a document, every letter and every word needs to be remembered, so the computer packages it altogether as one file. Generally speaking, there are three types of files:

1) 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.
2) Programs – programs are what we use to perform any task, but they are also a very complex set of instructions to the computer. This information is stored together as a file. Programs are also sometimes called *applications*.
3) 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.

FILE STORAGE

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. The most common of these is the <u>hard drive</u>, which is the area inside the computer for holding data. Essentially, all programs and support files will be located on your hard drive.

However, you might choose to put your own files someplace else. For example, you should already have a Flash drive to hold some of your work. The hard drive can store hundreds of times the amount of information that a Flash drive can store, but the Flash drive is a useful tool nonetheless.

Similar to a Flash drive, you might also choose to store your work to a *compact disc* or a *floppy disk*.

The size ratings for each of these devices are measured in bytes, kilobytes (kb), megabytes (Mb), and gigabytes (Gb). Each of these units is 1000 of the unit before it, so a megabyte is 1000 kilobytes. A floppy disk will hold a total of about 1.4 megabytes. A byte is the space it takes the computer to store one letter (of the alphabet), so an essay with 500 words that are each 5 letters with one space in-between each would be 3000 bytes, or 3 kilobytes.

ACCESSING DRIVES

Up until now, we have been using programs to open our saved files, programs such as Microsoft Word and Excel. That is a valid method but it requires remembering which program you used to create the exact file that you want to open. For instance, perhaps you used Microsoft Publisher to create a particular document, but you thought you used Word. If you tried to look for your file using the Open command in Word, you would not see your Publisher file at all because Word cannot open a Publisher file. There is another way to open files that will show you a list of all of your files regardless of which program was used to create them. This is accomplished through the use of **Computer**, which is Windows software that allows you to access the drives or storage locations into which you can save files.
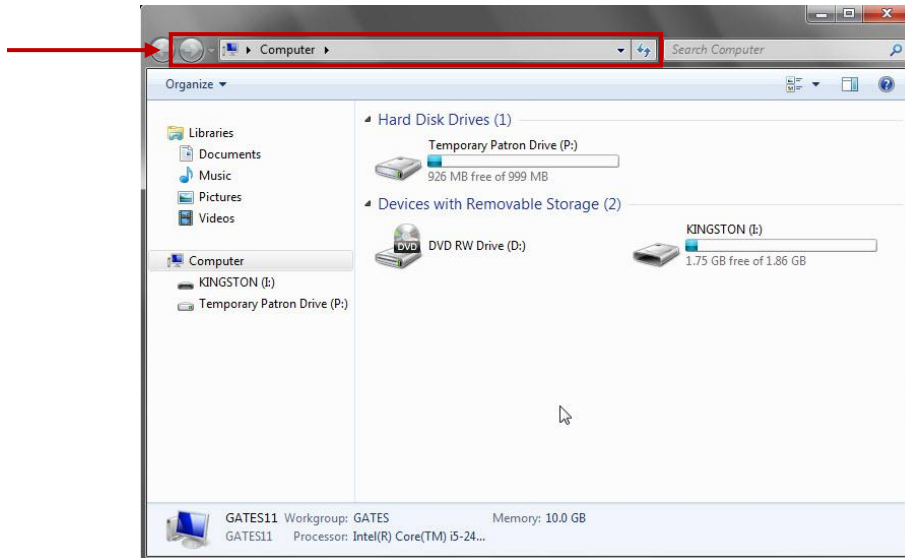
Insert your **Flash drive.**

On the desktop, **find** the icon labeled **Computer**. **Double-click** on it**. Note** the appearance of a new **taskbar button** representing the computer window.

Computer launches a window comprised of two panes. The left pane is called the **navigation** pane. This is where you would select a drive or folder in order to see what it contains. The **contents** of the selected drive or folder will display in the **right** pane. Normally you would see the C drive (hard drive) displayed in the navigation pane but it is blocked by our security. **Note** this window looks like a save as or open dialogue window but lacks a name in the title bar. **Note** that it does have an address field which guides you in your navigation to the drive you want.

Address field ⟶

Look in the **navigation pane** for our flash drive. Some flash drives will have a program on them that will cause the brand name of the drive to populate navigational pathways on your computer. The computer itself assigns the drive letter. The letter could change depending on how many devices are plugged in at the same time. On most computers Drive C: designates the hard drive and Drive A: designates the floppy drive. Other letters get assigned as more

devices get installed. **Click on** **KINGSTON (I:)** in the **navigation pane**. **Note** the change in appearance of the taskbar icon.

Note the **address field** in the **Computer window.** It has updated to reflect the selected drive, which is the (I:) drive, your Kingston flash drive in particular. It even shows the navigational path to your drive. In the **right pane**, you are now looking at a directory of all of the files on your flash drive.
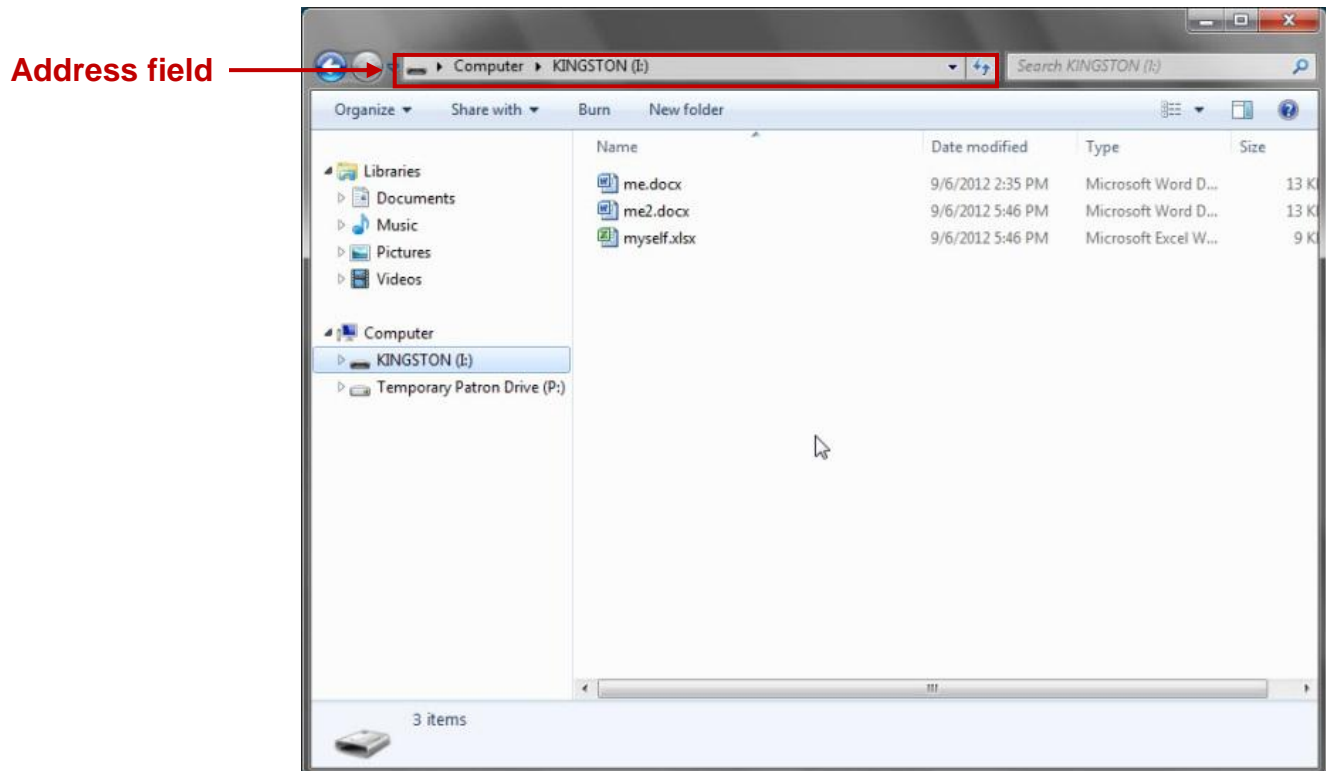
In the right pane, you should see at least three files, among them: **me.docx**, **me2.docx**, and **myself.xlsx**. It is a little hard to see, but notice that Myself displays as an **Excel icon** rather than a **Word icon**, because the computer knows Myself is an Excel file. How?

The four letters after the file name, separated by a period, are called the **extension**. The extension is an identification system for the computer so it knows what kind of file it is looking at. The '**docx**' extension indicates a Word 2007 or 2010 document; the '**xlsx**' is an Excel 2007 or 2010 spreadsheet. Every file type has its own unique extension. Whenever you save a file, the computer will automatically add the appropriate extension, unless we specify a different extension, which is not a common occurrence.

We can also *open* our files from within the flash drive window. **Double-click** on the **icon** portion of the **me.docx** file listing, and the computer will open Word to that file. This method of double-clicking file names within **Computer** is an alternate way to open files. **Close** Word and **open myself.xlsx.** The computer will open Excel. **Close Excel.**

INTRODUCING FOLDERS
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.

USING THE NAVIGATION PANE
Point your mouse to the list of locations on the **left** side of the **Computer** window**.** Then **point** to the **right** pane. **Try again.** Do you notice something happening as you point to the left (**navigation**) pane?

The marks that appear are called **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 chevrons indicate a list that has been expanded to show sub-directories. The light gray chevrons represent a directory that has not been expanded or that does not contain any sub-directories.

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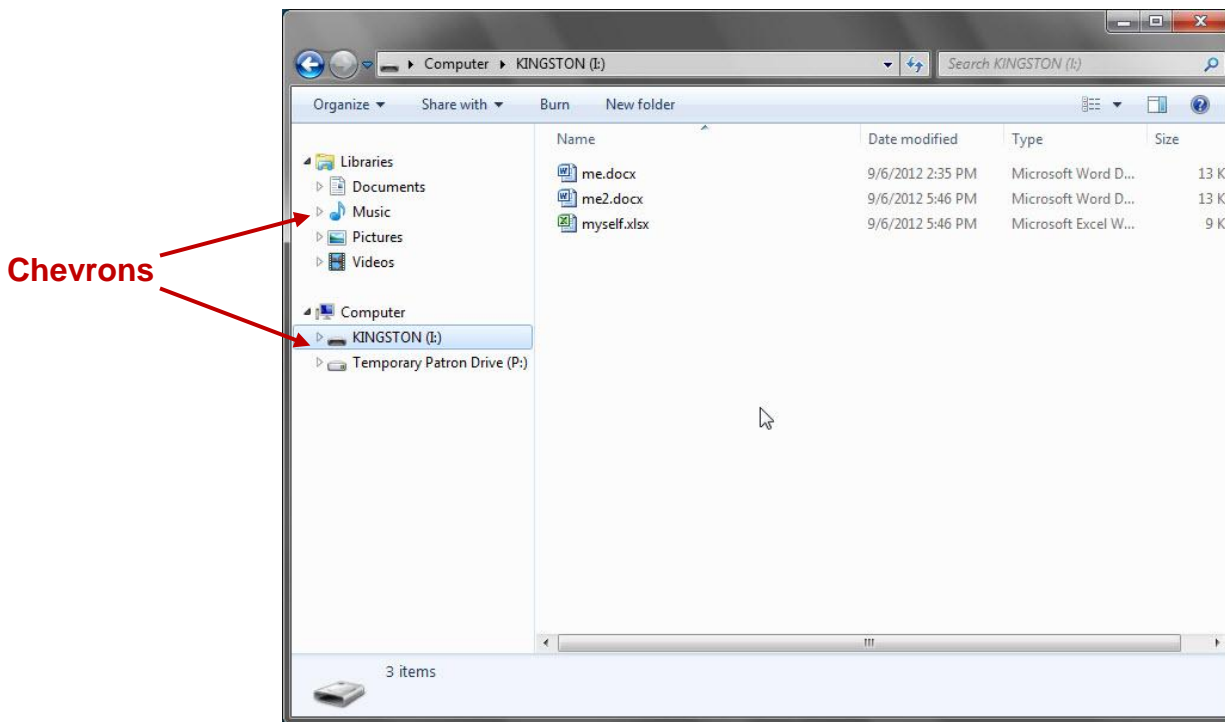
MAKING A FOLDER

On the **toolbar, click** on the **New Folder button.** The computer will place a folder icon in the main window display area.
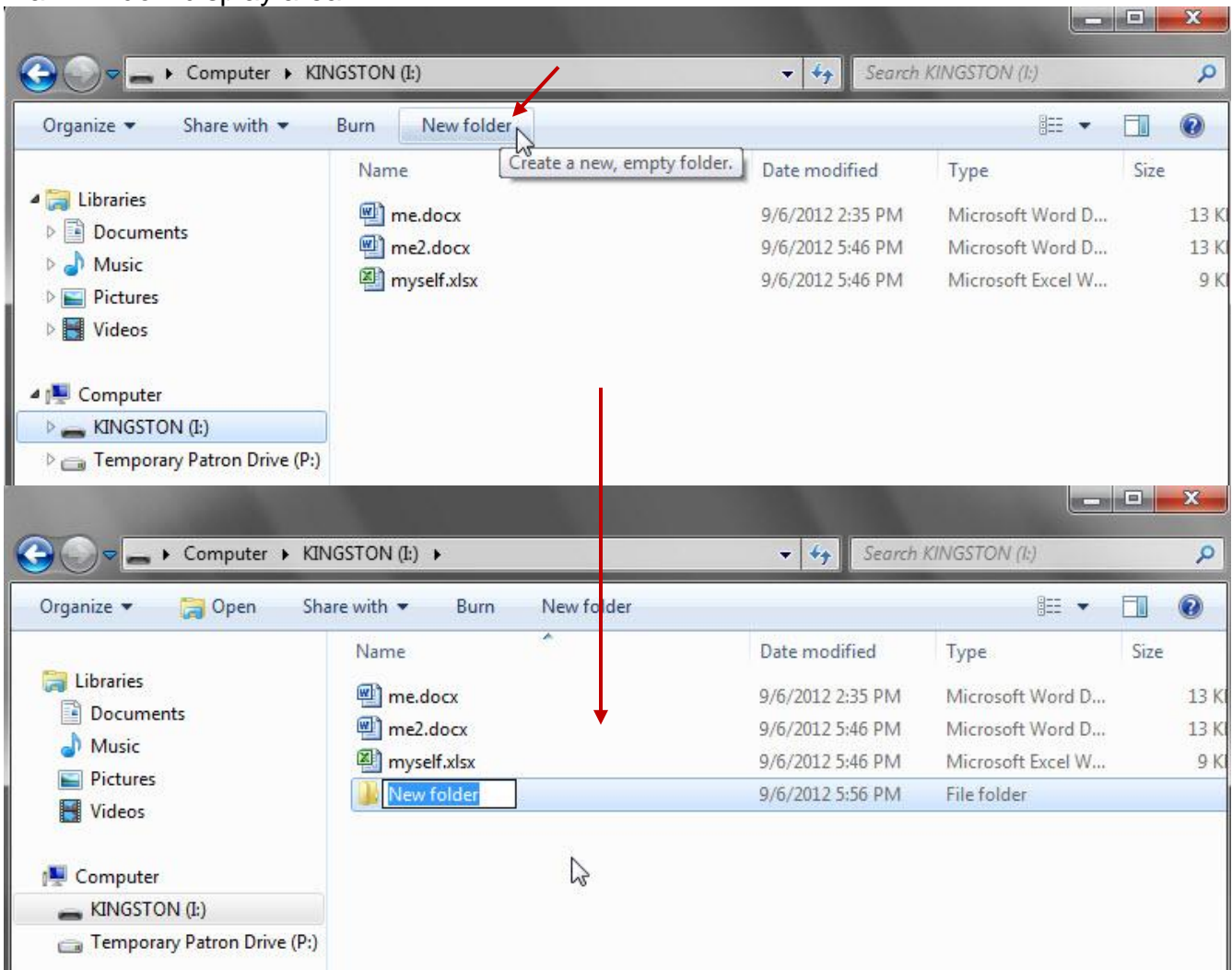
The folder icon has a label which is in **edit mode** with a temporary name of New Folder. Since we are in edit mode, you can simply start typing and a new name will go in. **Type Personal** and then **click** in a **clear area** (which gets you out of edit mode). **Create** a second **folder** and **name** it **"Business".** In the **Navigation** pane, **click** on the **chevron** next to the **Flash Drive location and notice how you can see the *folders* in the navigation pane but not the *files*.**
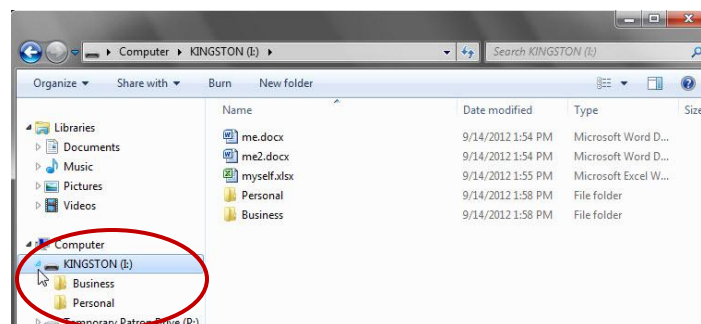
FILE AND FOLDER TASKS

Navigating between files and folders
In the **navigation pane, single-click** on the **Personal folder** to **look inside. Notice**, by **looking** in the pane on the right, there is nothing in it. We are going to move our 3 files into it. To start, **click** on KINGSTON (I:) in the **navigation pane.** You can now see **all the files and folders** contained on the flash drive on the right. This save location is often referred to as the **root** of (I:).

Moving files by dragging from the right pane to the navigation pane
Left click on **me.docx** and**,** keeping the mouse button held down**; drag** the file to the vicinity of the **Personal folder** in the **navigation pane** While dragging you will **notice**, as you pass over the drive and folder names, a **tip will display** indicating where the file would be moved to if you let go of the mouse button. Release the mouse button when the screen tip says 'Move to Personal.' **Drag me2.docx** and **myself.xlsx** into the **Personal folder. Click** on the **Personal folder** in the **navigation pane** to **see** the contents**.**
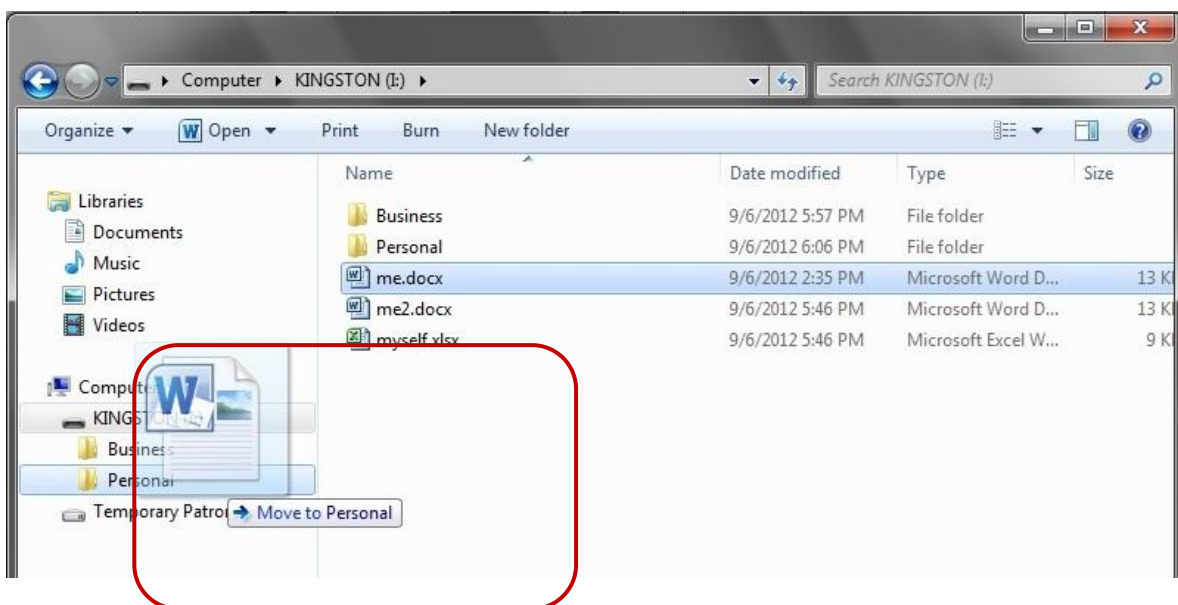
Moving a file from one folder to another

Using the same dragging method as above, **move me.docx** from the **Personal folder** to the **Business folder. Click** on the **Business folder** to **see** that it has been moved there.

Creating A New File And Saving Into An Existing Folder
Open Word (using the Start Menu) and **type** your occupation into this new document. (Make something up if you're unemployed!) **Click** on the **File tab**, then **click** on **Save As. Navigate** to your save location by **clicking** on the **chevron** next to the **Kingston listing** in the **navigation pane**. Then **click** on the **Business folder**. **Note** the **file path** listed in the address field. (see Fig 1)
Lastly**, change** the file name to **job** and then **click** Save. **Close** Word and **return** to the flash drive window. **Find** your file in the **business folder**.
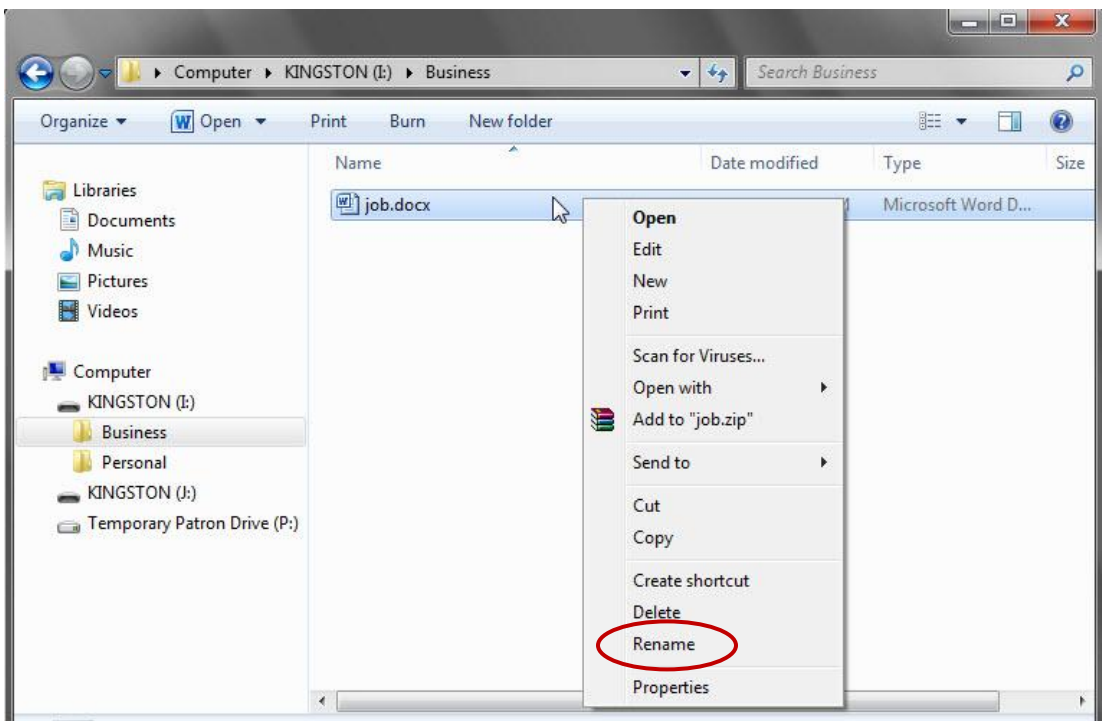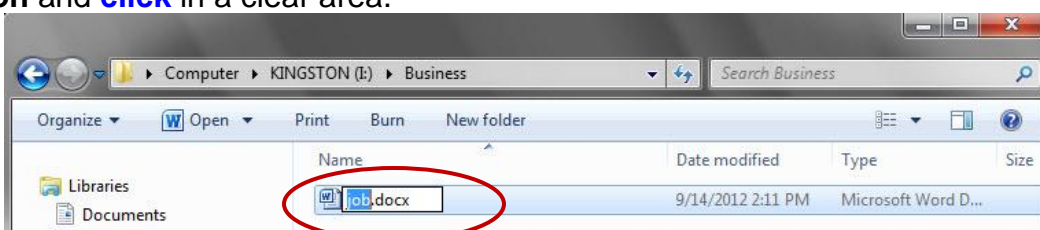
Figure 1 – Save to Business folder
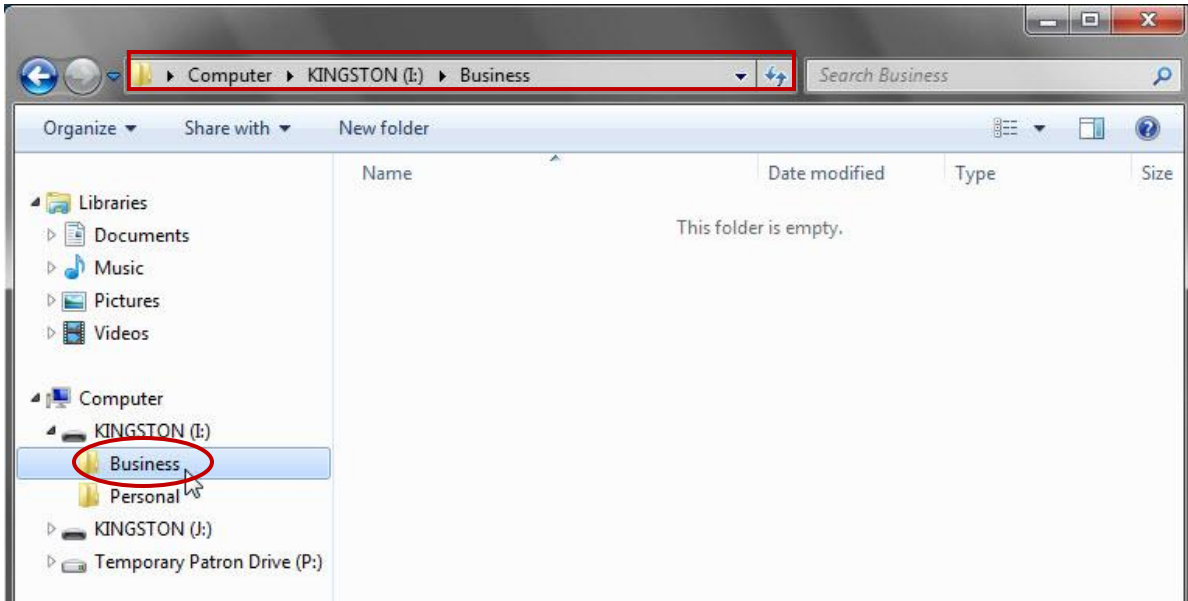
Renaming Files

In your **Business folder, right-click** on **job.docx** to get a **menu** of file tasks. **Select Rename.**

The file name is now in **edit mode** just as when we first created our two folders. **Type in occupation** and **click** in a clear area.

At this point in the lesson, you should have:
- Two folders on the root of (F:), **Personal** and **Business**
- Two files in the Personal folder, **me2.docx** and **myself.xlsx**
- Two files in the Business folder, **me.docx** and **occupation.docx**

Call a proctor to have your results checked. Then follow the last set of instructions below.

Deleting Files And Folders

Click on the **Personal folder** in the **Navigation pane**. **Right-click** on **me2.docx** in the right pane and **select** "Delete". **The computer will pop up a box asking you if you are sure you want to permanently delete it: click** on **"yes"** to remove the file.

Note: Deleting files from a location *other than removable media* will first send them to the recycle bin, where they can be recovered from, should you change your mind, but deletes from removable media are PERMANENT.

Right-click on the **Personal folder** in the Navigation Pane and **select** **delete** to remove the folder *along with any remaining files inside it.*