Windows 10 Fundamentals

Welcome to People's Resource Center's Windows 10 Fundamentals Course. This course will give you the information and practice needed to demonstrate basic computer skills to potential employers. Also you will obtain skills required to safely use your Personal Computer at home.

Upon completion of this course the participants will:

1. Understand the role of the Windows 10 Operating System

    *   Why does a Computer need an Operating System?
    *   What are the important terms used?
    *   How to using the Mouse and Keyboard.

    *   Know how to use the Windows 10 Operating System:

    *   Use the Start Menu to find and start an application
    *   Change the shape of an application window
    *   Switch between active windows
    *   Shutdown, restart, and lock computer
    *   Search for files, programs, and applications.

2. Understand the Windows 10 file system:

- Find a data file in the file system

- Create and save application data
- Create and save a file folder
- Create and delete a data file desktop shortcut
- Rename and delete data files

3. Understand how to use a removable file.

4. Know how to select the correct application to do work

- Understand how to use Internet Explorer.
- Introduce MS Word 2010, MS Excel 2010, MS PowerPoint 2010
- Snipping Tool and Sticky Notes

5. Learn how to protect your Computer from Viruses

- Practice safe computing using the Internet
- Understand how to keep you system updated

This course is made up of the seven modules listed below:

- Module One –   Windows 10 Basics
- Module Two –   File system introduction
- Module Three –   File system continued
- Module Four –   Using the File System
- Module Five –   Using Applications
- Module Six –   Using Computer Safely
- Module Seven –   Student Exercise

Each lesson contains hands-on exercises and a quiz to review the material covered during the class.

(Instructors Note: Windows 10 File Environment Requirement :)

- Each Week will contain a copy of a quiz covering the week's material.
- Week 3 will contain several pictures and a word document to demonstrate file explorer view options.
- Week 5 will contain sample Document, Excel, and PowerPoint files
- Week 7 will contain a Resume and PowerPoint template
- The Student will create a personal directory in their Documents folder in Module 2.

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Module One: Windows 10 Basics

In Module One we will explore the role of the Windows 10 Operating System in a Personal Computer then learn how to interact with the desktop, start button, and task bar. We will review the use of the Mouse and Keyboard then explore Search features and finally the Action Center and notifications.

Topics

- Role of the Windows 10 Operating System
- Using the Mouse and Keyboard
- Identify the desktop components
- Open an Application
- Manipulate Windows
- Search for an Application
- Windows Shutdown

Exercises

- 1A – Using the right mouse button
- 1B – Start an application
- 1C – Modify the desktop windows

Objectives

At the end of this module you will be able to:

1. Understand why the Computer needs the Operating System
2. Use the Mouse and Keyboard with Windows 10.
3. Identify the Windows 10 display components
4. Open a Windows 10 application
5. Alter the shape and location of a Window on the desktop
6. Use search tool to locate applications
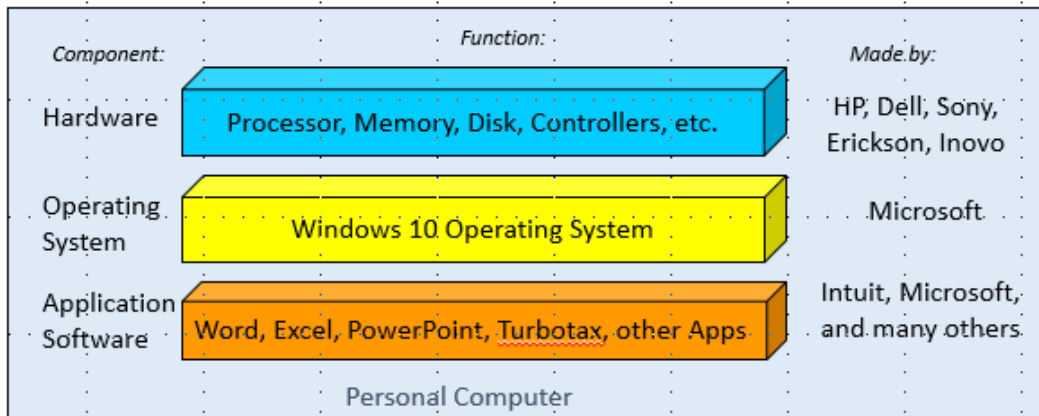7. Shut down Windows 10.

1. What is the Operating System

Figure 1.1- Personal Computer Architecture

The Windows operating system as a layer of services that communicates with the hardware and the applications (apps) like an interpreter. It allows the same applications to run on a wide range of equipment made by many companies. It listens to the mouse and keyboard and controls the monitor. It also manages the file system (to be presented in Weeks 2 through 4) and it displays the desktop graphical interface (**Start Button**, **Task Bar**, **Background**, and **Icons**).

The operating system's function is like Android in the cell phone world where many phone manufacturers (Samsung, HP, LG, etc.) can run a wide range of Apps. The apps are displayed on the screen controlled by Android running on many phone manufacturers.

2. The Mouse and Keyboard

The mouse and keyboard are the primary ways to communicate to your Personal Computer. The keyboard communicates with the operating system using keys and key combinations.
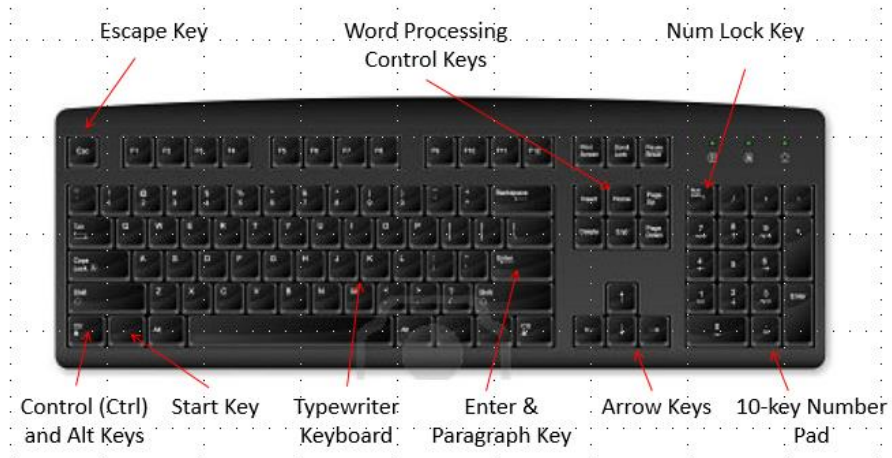
Figure 1.2- 101 Key Keyboard

Glossary of Terms

Key(s)	What does it do?	When do I use it?
Escape Key	Resets the application.	To stop what I've asked the application to do.
Word Processing Keys	Controls the word processor.	When using word or text processing.
Num Lock Key	Switches the 10 key pad from numbers to actions.	When you are entering numbers.
Control and Alt keys	Adds more key combinations to the keyboard.	As a replacement for buttons and services that use the mouse.
Start Key	Opens the Windows 10 start menu.	As a replacement for clicking the Windows 10 start button.
Typewriter Keyboard	Enters text characters.	When using word or text processing.
Enter and Paragraph Key.	Acts like a mouse click or an end of paragraph action.	In windows, to replace a mouse click. In word processing, to end a paragraph.
Arrow Keys	Act like mouse movement.	In Windows, used to move between icons. In word processing used to move between lines.
10 key Number Pad	Enters numbers into the computer or act like word processing keys and arrows.	In applications that require numbers. Depends on the Num Lock setting.

Most of the keys on the keyboard do a single task like enter an 'A' into the computer but in some cases the combination of keys is needed. To create a "combination key" you need to press both keys at the same time. For example, to copy highlighted text shown on the screen, you need to press the "Ctrl and C" keys together. That creates a new key combination to the computer. It is written as (Ctrl-C).
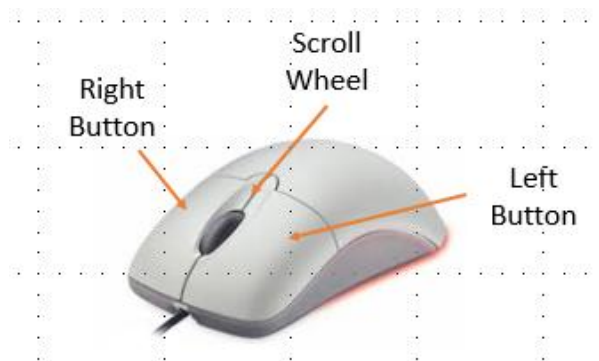

Figure 1.3- Standard Pointing Device

The Mouse communicates with the computer by its movement and the controls: Left button, right button, and Scroll Wheel.

Glossary of Terms

Control	What does it do?	When do I use it?
Movement	Moves the mouse pointer on the desktop.	To direct attention to a Windows display feature (button, taskbar, Icon, word, etc.
Left Button	Tells the computer you want action.	Varies by application but usually means select or highlight.
Right Button	Displays the menu associated with any display object.	To search for the menu of actions allowed by the objected you're pointing to.
Scroll Wheel	Rolls the contents of a display window up or down.	Only when the window has a scrollbar present

Note: If you are left handed and wish to have the mouse buttons reversed, the Windows settings can be used to flip the mouse buttons.

3. Logon to the Windows 10 Server (See Instructor)

Describe how to logon to the Windows server and start a Windows 10 session.

We need some process to manage student ID's and Passwords or everything will stop!

4. The Windows 10 desktop

The Windows 10 desktop is the standard way you will communicate with the PC. The desktop displays a background, a set of desktop Icons representing the standard tools, a task bar, desktop control buttons (Start button, search tool, and Task View), quick access icons, and the Windows status icons.
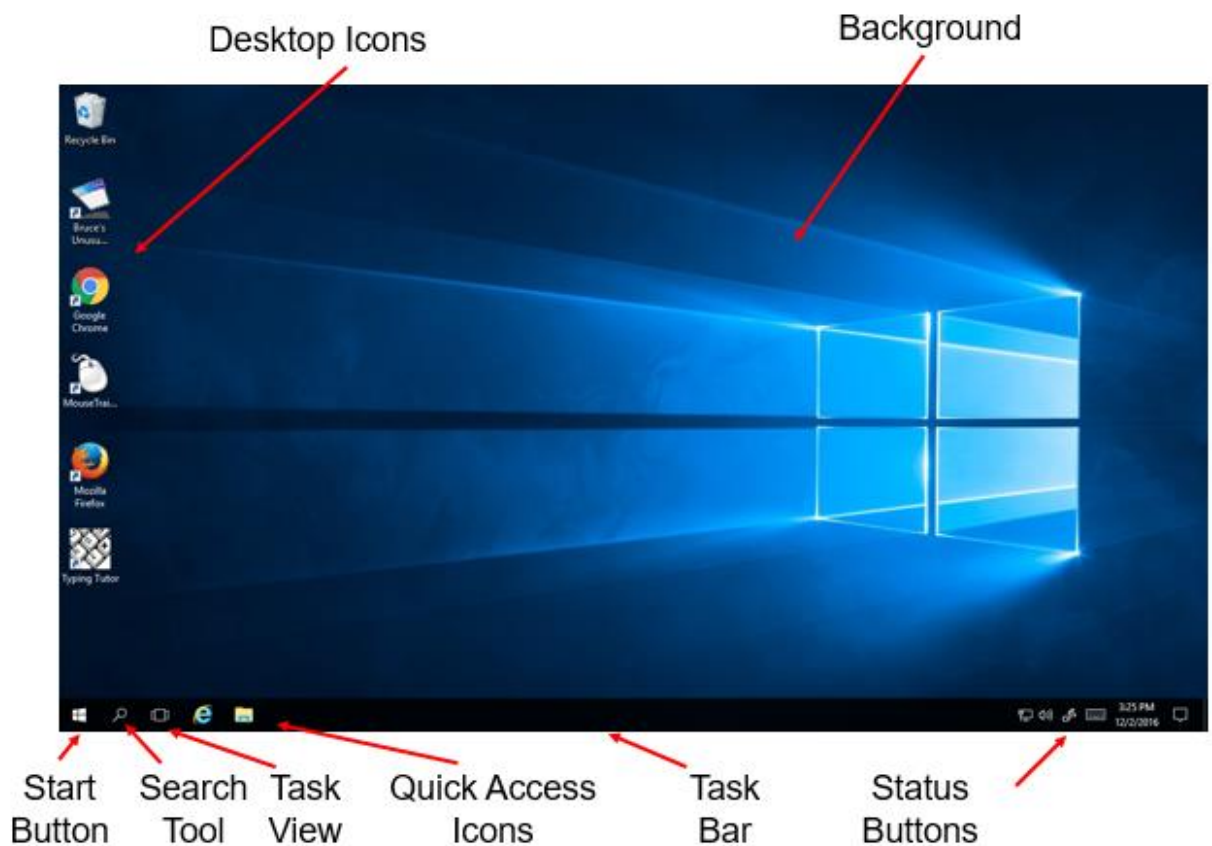

Figure 1.4- Windows 10 Desktop

Glossary of Terms

Control	**What does it do?**	**When do I use it?**
Desktop Icons	Allows quick access to Programs and files.	Whenever you need to open a file or application.
Background	Fills he background of the desktop	You can change it to show a picture or use the standard options.
Start Button	Displays the Start Menu	To find an application, change the settings, or shut down.
Search tool	It searches the Computer for file names, program names, and application names.	When you looking for a file, program, or application. Opens the selection with a left mouse click.
Task View	Displays all of the currently open windows.	When you need to know if an application is currently open and active.
Quick Access Icons	Allows you to quickly open an application with one left mouse click.	When you use a program frequently.
Status icons	Shows the current connections, sound, and actions affecting your PC	To verify your PC is working properly.

5. Opening an Icon

Applications are represented by desktop icons or start panel buttons. To open a desktop Icon there are three options:

1. Double-click on the Icon.
2. Highlight the icon (left-click) and press the "Enter" key on the keyboard.
3. Point to the desktop icon and click the right mouse button. Left click on the "Open" menu option.

To open a quick access Icon on the task Bar:

1. Left-click the icon in the **Task Bar**.

Exercise 1A - Using the Right Mouse Button

Follow Me	Every display object (icon, background, button, etc.) has a built in menu that can be displayed using the right mouse button. To demonstrate this feature: 1. Point the mouse to the center of the Background. 2. Right-click and view the menu. 3. Left-click the "View" entry in the menu. 4. Locate the "Auto arrange icons" entry in the sub-menu. 5. Left-click the "Auto arrange icons" entry and the menu will close. 6. Left-click any desktop icon and hold down the left mouse button. 7. Drag the icon across the **Background** and release the left mouse button. 8. Continue steps 6 and 7 for all of the icons. 9. When finished, right-click the Background. 10. Find and left-click the "Auto arrange icons" menu entry. 11. The icons will return to their original position on the desktop.

6. Display the Start panel and most used and all programs
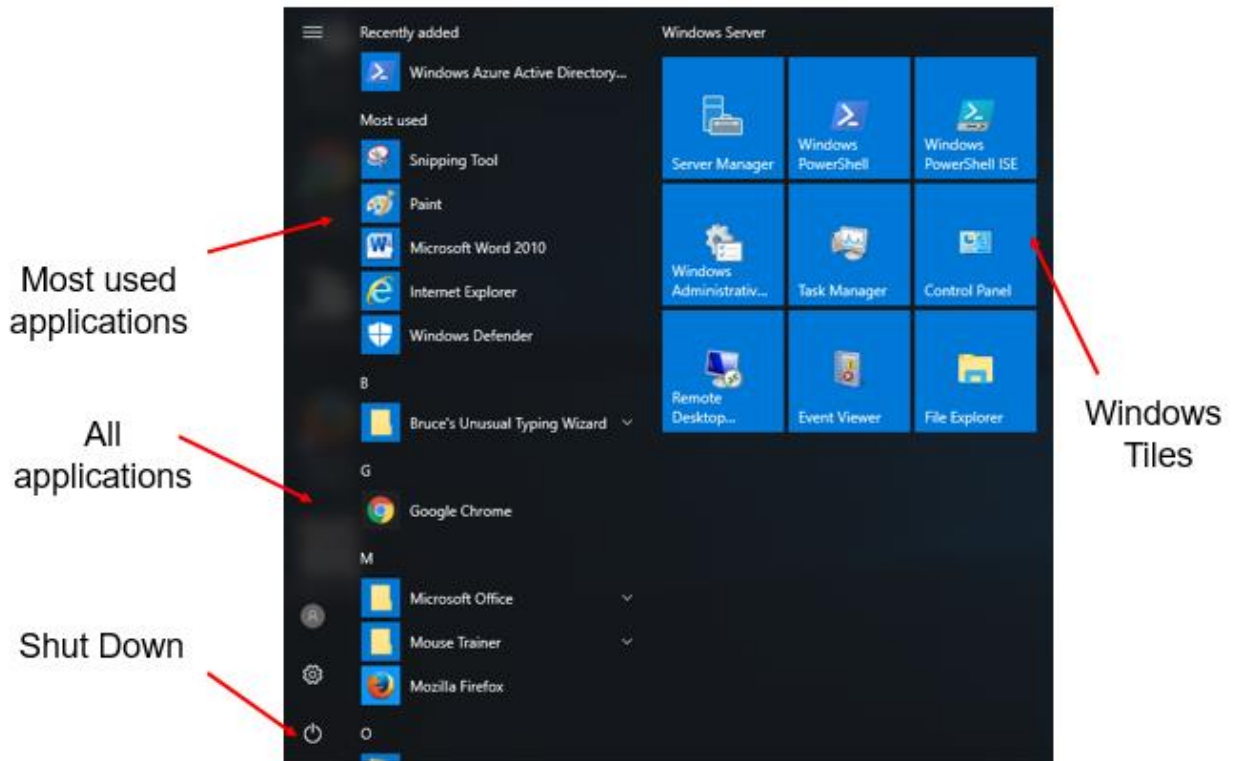
Click the **Start Button** and the Start Panel will appear.

Figure 1.5- Start Panel

Glossary of Terms

Control	What does it do?	When do I use it?
Most Used Applications	Shows the most recently used applications	As a quick access if the applications are not already as Icons
All Applications	List of all the installed application in alphabetical order.	To find an application if not already an icon or app.
Shut Down	Displays three options: Sleep, Shut Down, and Restart	To shut down the computer or set the PC in sleep mode.
Windows Tiles	Displays the applications currently active in cell phone display mode.	To locate an application if not an Icon.

Exercise 1B – Start an application

Follow Me	*In this exercise you will use the start menu to locate and start the Paint application.*
	1. Open the start panel.
	2. Look in the Windows Accessories Folder for the Paint application.
	3. If not found, look in the Windows Tiles section.
	4. Left-click the Paint program reference.
	5. Select a brush from the Brush pull down and a color
	6. Place your mouse in the white drawing surface.
	7. Hold the left mouse button down and draw your name.

7. Controlling the desktop windows

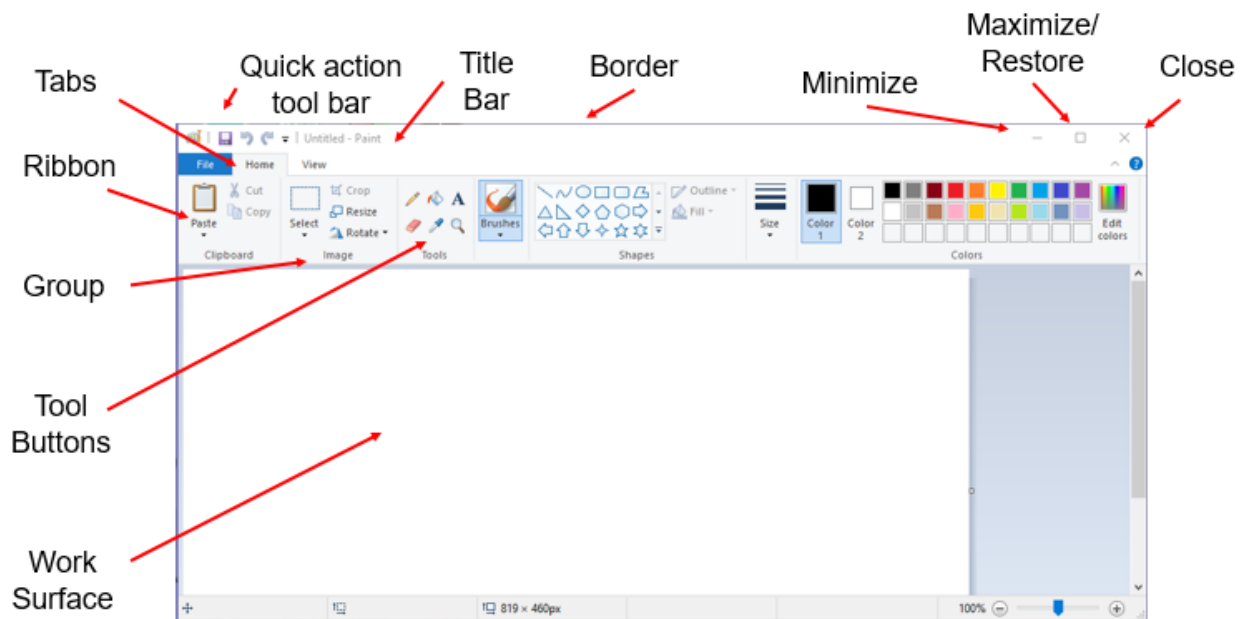Let's review the Paint application opened in the previous exercise.

Figure 1.6- Paint Application

Glossary of Terms

Control	What does it do?	When do I use it?
Quick Action Tool Bar	Contains commonly used tools like Undo and Save	Used when needed as a quick resource.
Title Bar	Contains the current file name and the application name.	To confirm the file name that the application is working on
Border	Edge of the Application Window including the corners.	Used when the window size is manually adjusted.
Minimize	Removes the window from the desktop and minimizes it on the Task Bar.	To keep the application active but not visible.
Maximize / Restore	Expands the window to full screen size (maximize) or reduces the window to the previous size (restore).	When it's easier to work in a full screen mode.
Close	Removes the window from the desktop. If changes were made, it will ask if you want to save the file	When you are finished working with the application
Tabs	Used to select the Ribbon containing tools related to the tab name.	When you are selecting tools for use with the application.
Ribbon	A set of tools displayed when you select the Application Tab.	To display tools needed to work with application.
Group	A set of tools associate with a specific action or topic within the application.	When you need a specific tool from the ribbon.
Tool Button	A button the does a specific task within the application.	When you need create or change the workspace.
Work Surface	An area within the application window where you perform the work.	Whenever you are working with the application.

Exercise 1C – Modify the desktop windows

Follow Me	*In this exercise you will open another application on the desktop select and manipulate the windows.* 1. While the Paint application is still open from Exercise 1A, do the following: 2. Click the Start menu to enter the text "Notepad". 3. Left-click the "Notepad application app" name. 4. Enter the text "Learning Windows will be fun!" into the Notepad application. 5. Minimize the Paint Application. 6. Minimize the Notepad Application. 7. Left-click the Paint Application in the Task Bar. 8. Left-click the Notepad Application in the Task Bar. 9. Adjust the width of the Paint application window by moving the mouse to the left and right borders of the application until two arrows appear. 10. Hold the left mouse button down and drag the sides of the window until the Paint application occupies one half of the screen. 11. Repeat steps 9 and 10 on the Notepad application window until the two windows are positioned side by side. 12. Move the mouse pointer to the center top border of the Paint application until the up and down arrows appear. 13. Hold the left mouse button down and gently guide the window border to the top of the desktop display. Release the button and the window will expand to fill the top and bottom of the desktop. 14. Do the same to the Notepad application. The two applications will be full screen side to side. 15. Right-click on the Task Bar and the select the "*Show windows side by side*" entry. The windows will move slightly. 16. Left-click the "Task View" tool in the Task Bar and the two window applications will appear in a panoramic view. 17. Close both application and do not save the results.

8. Using Search Tools to locate an application

Windows 10 has two ways to search for an application or file. One is the Search Tool located on the left of the Task Bar. The other appears after you select the Start Menu and begin typing. We will use both in this course.

The search feature available with the Azure server is limited to locating application only! It cannot be used to locate a data file by title or contents!

Note: Cortana is the Windows 10 help feature that includes both the contents of the PC and the Internet. You can use Cortana to search for an application or data file but it is not available in the PRC Windows 10 environment at this time, but you will be able to do on your computer from the PRC. Try it at home!

9. Shutdown Windows when using the Azure Server

To shut down the Azure Server, follow these steps:

1. Left-click the Start button in the Task Bar.

2. The start panel control button will appear.
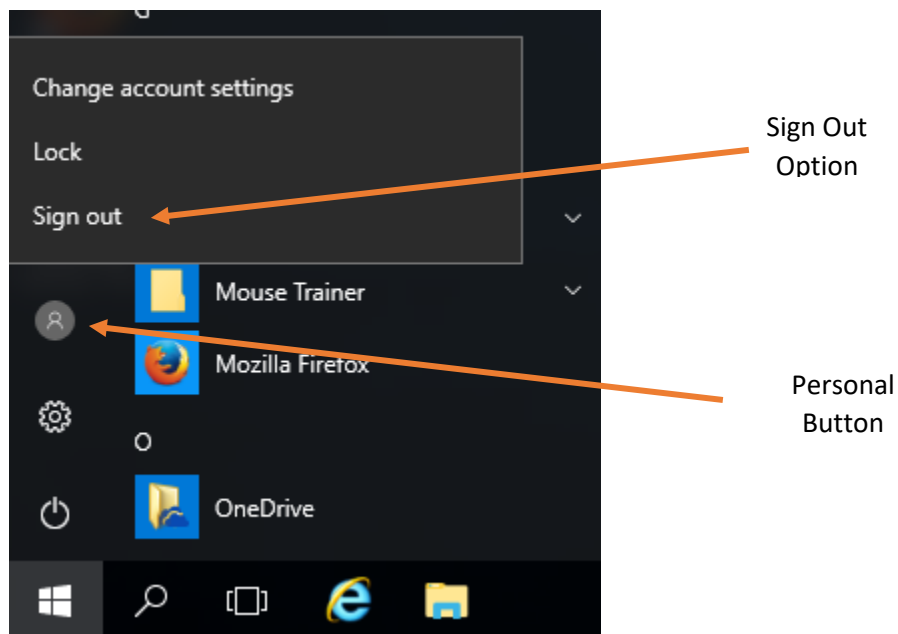
3. Left-click the "personal" button.

Figure 1.7 -Session sign-out option

4. Left-click the *Sign Out* entry and the session will close.

If you have a Windows 10 Computer at home, you can shut down the computer as follows:

1. Left-click the Start Menu button in the task bar.
2. Left-click the Shutdown Button in the Start menu.
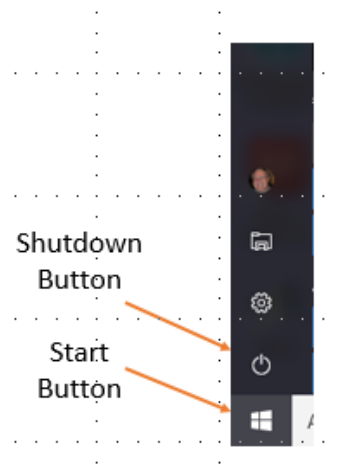3. Left-click "*Shut down*" from the menu displayed.

Figure 1.7- Start Panel Control Bar

10.   Weekly Quiz

Each Module will have a document containing a quiz covering the material presented in the lesson. The quiz document can be found in the current week's folder within the "*Training resources > Windows Fundamental > Week 1*" Folder on the *Shared drive (S:)*
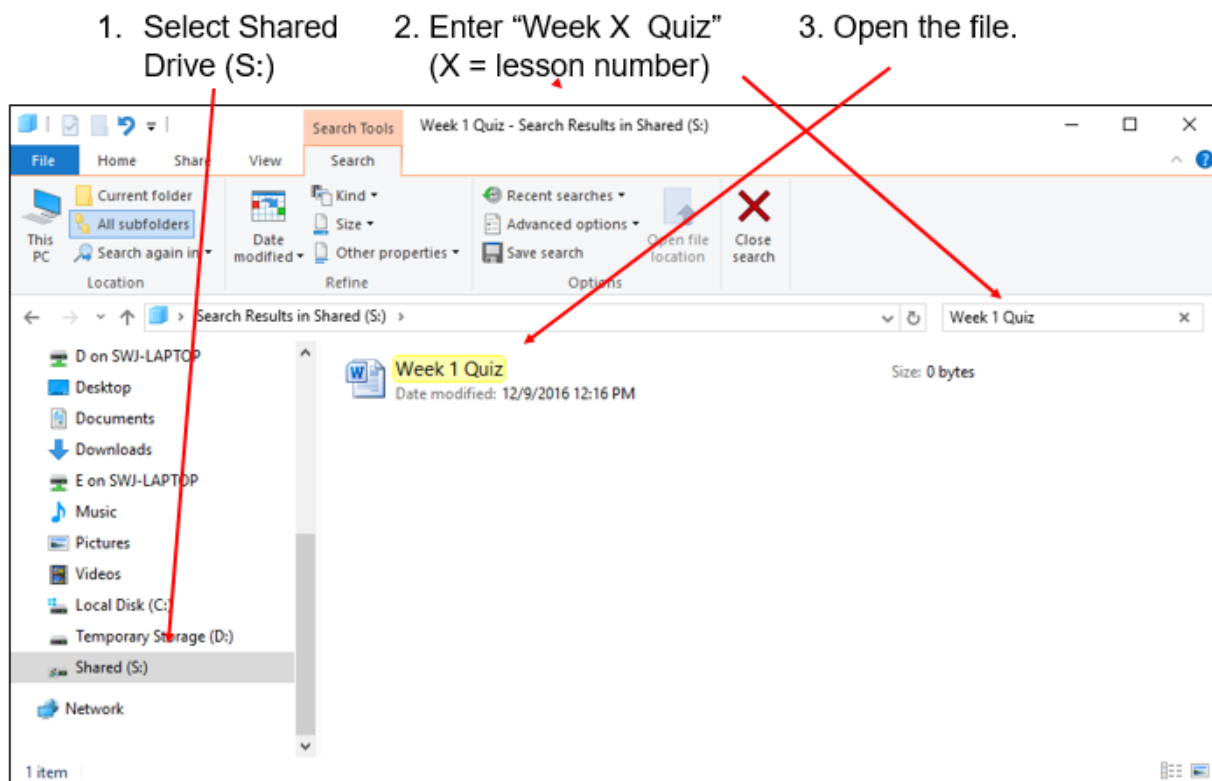
Use the File Explorer to locate the current Week's quiz.

Figure 1.9- Locate Weekly Quiz