



# Introduction to Computers

## Module 2

## Module 2

This module focuses on the mouse and keyboard.

### 1. Review Exercise: Turn on and Log In Exercise: Get the computer ready to use

- 1) Turn it on (and wait)
- 2) Log on (Ctrl-Alt-Del; User Name is **student**)

Instructor Note: There is no need in week two to login to the remote PRC session for Windows 10, though you may do it at this time if the class is up to it.

## 2. The Mouse

The computer mouse is a pointing tool that is used to select or move items displayed on the monitor screen.



Figure 1 The Mouse

### 2.1. Holding the Mouse

In the picture above, you can see that the mouse has two buttons. To use the mouse place it on a flat surface with the cord, or mouse tail, facing away from you. Place your right hand on the mouse so that your thumb is on the left side of the mouse; your index finger is on the left mouse button and your middle finger is on the right mouse button. Then place your ring finger on the right side of the mouse. Rest your wrist on the desk.

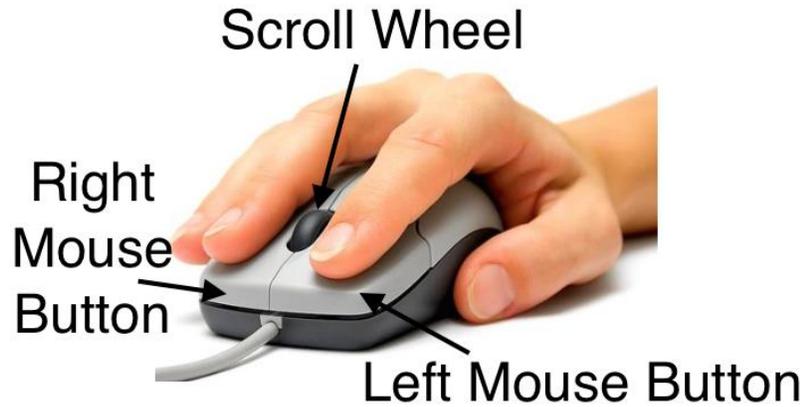


Figure 2 Holding the Mouse

Rest the mouse on a flat surface such as a desktop or mouse pad. To move the mouse, slide it over the surface. You will notice an arrow move across the screen as you move the mouse. This is the mouse pointer, also called the cursor; its shape may change depending which computer window is displayed. In the picture below, it is shown as an arrow.

## 2.2. The Cursor

The mouse cursor can change based on what you are pointing at. Common cursor shapes include:

A full discussion of mouse and pointers is available from:



This represents the normal pointing arrow for selecting icons



This represents a hyper-link. If you click on it, it will open a new page of text related to what is pointed at



This is used to indicate that text is being pointed at, and clicking will allow the text to be selected, or for an insertion point to be positioned where the cursor is pointing



This is used to indicate that the computer is busy performing a task, and that you should wait patiently



This is used to indicate that the computer is performing a task in the background, but that you may still use the arrow to select objects to perform actions.



In some cases when the computer is busy, this hourglass icon is used.



When resizing a window (discussed later in this course), a double-headed arrow will be shown indicating the direction in which the window can be resized.

When text is selected, it is shown with a colored highlighted background, as shown on the following line, where the words “is selected” are shown with a colored background:

When text **is selected**.

## 2.3. Moving the Mouse

To operate the mouse it must be on a flat surface. The mouse will not work if you pick it up and move it around in the air.

Pushing the mouse away from you moves the mouse cursor up on the monitor screen; moving the mouse towards you moves the cursor down on the monitor screen. Moving the mouse to the right moves the cursor to the right; moving the mouse to the left moves the cursor to the left.

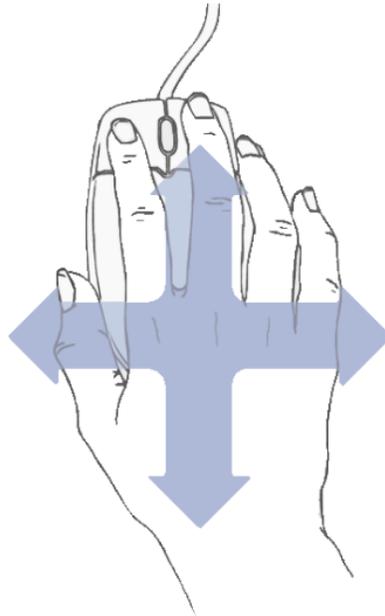


Figure 3 Moving the Mouse

Your mouse movement is limited to the surface area of the desk or mouse pad. If you run out of room before you get the cursor to where you want it on the monitor screen, pick it up and return it to the starting point.

### **Exercise: Moving the Mouse (without clicking)**

- 1) Place your right hand on the mouse with the cord pointing away from you.
- 2) Move the mouse left, right up and down and observe how this moves the mouse cursor across the monitor screen.
- 3) Pick up the mouse and move it in the air. Does this cause any movement of the cursor on the screen?
- 4) Move the cursor from one side of the monitor screen to the other side of the screen. Did you need to pick up and reposition the mouse to do this?
- 5) As you move the mouse, use it to point at different things on the screen- the desktop background, an icon, different items on the task bar at the bottom of the screen. Notice how it changes shape, or presents different information..

## 2.4. Clicking the Mouse Buttons

### Left Mouse Button

The left mouse button is the one you will most often use.

#### Single Click

Pressing, or clicking, the left mouse button one time quickly and releasing it is called a single click. A single left mouse button click is used to select an object you wish to work on. It can also be used to position the cursor within text for editing or insertion.

#### Double Click

Clicking the left mouse button twice in rapid succession is called a double click. A double left mouse button click requires you to quickly press and release the mouse button twice. This is something that takes practice to accomplish. The double left mouse button click is used to open a program or file that you are pointing at.

#### Drag and Drop

Clicking and holding down the left mouse button lets you select and move an object to a new location on the monitor screen. This is called Drag-and Drop. This same motion can be used to select text within a document.

### Right Mouse Button

Placing the mouse cursor on an object on the monitor screen and clicking the right mouse button once usually causes a menu to appear. The menu gives choices related to what you are working on. The options are specific based on what was pointed to. Examples include:

- Open
- Copy
- Paste
- Rename

### Scroll Wheel

On many models of computer mouse there is a wheel between the buttons. This is called the scroll wheel. It is used to scroll, or move up or down through a document. Moving the wheel towards you moves down; moving the wheel away from you moves up in the document. It only works when you are using a program that is displaying more than one page of information

In this module we will focus on the left mouse button. The right mouse button and the scroll wheel will be covered in future modules.

## 2.5. Exercise: Mouse Trainer

- 1) On your desktop, locate the Mouse Trainer icon



- 2) Move the mouse so the cursor points at the Mouse Trainer icon, then click the left mouse button and release it.
- 3) Hit the Enter key on the keyboard
- 4) Follow the instructions on the screen, step by step, making sure that you do each of the three games before you exit.

## 3. Finding a Program and Opening It: Notepad

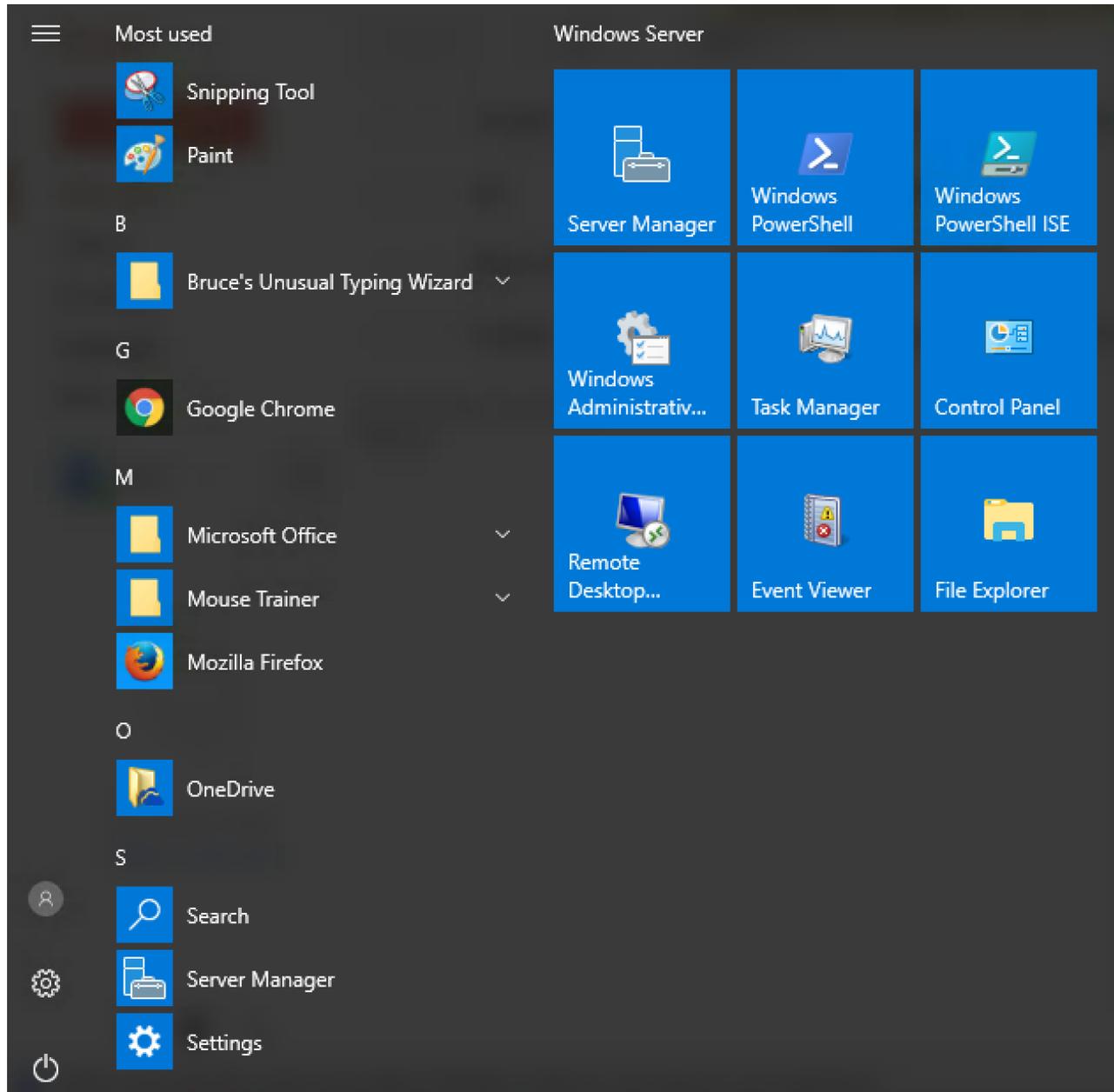
In this section we will learn how to use the mouse to open programs.

If the program you want to open is on the taskbar, you can open it with a single click.

If the program you want to open has an icon on the desktop, you can open it with a double click.

You can get to all the programs on your computer from the Start Screen.

Pointing at the Windows logo in the lower left-hand corner of the screen, a single click will open the Start Screen.



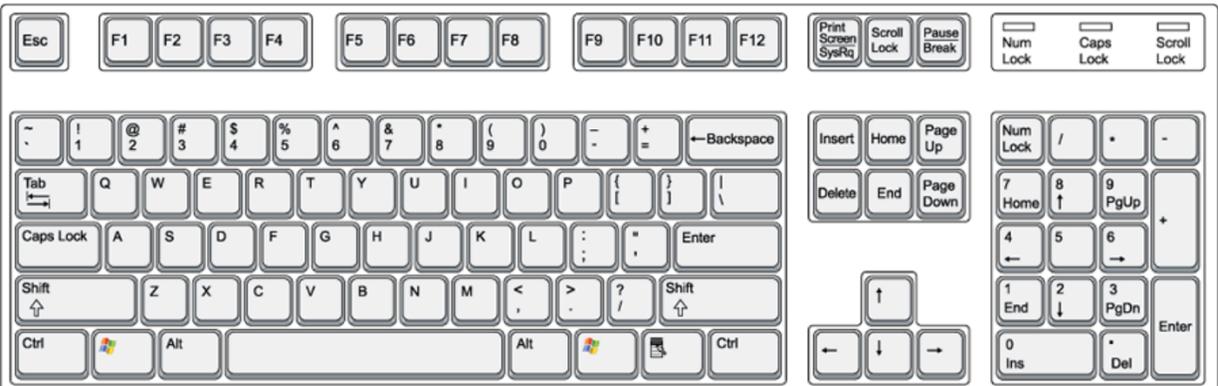
On the Start Screen, you will see many things. On the lower left side of the Start Screen you will see an icon for the user account, an icon for settings, and the power button icon. We will explain these in a future module.

The next section of the Start Screen shows programs available on this machine. At the top are those that were recently used, and below that is a list in alphabetical order. Note that they don't all fit on the screen at once, so a scroll bar is available to scroll down.

On the right side of the Start Screen is a set of tiles which can be customized based on your interests.

We came here to look for a program, so we could scroll down the list of programs until we find it, but there's an easier way. If you start to type, Windows will search on the computer for a program with the name you are looking for. I'm going to type **note** and Windows will find suggestions for me, including **notepad**. If I click on that, it will open a program that allows me to type simple notes. Another option is to click on the magnifying glass icon on the Task bar and start typing. A third way, available on a local Windows 10 machine is to use Cortana. Within the instructions for this class, we will use the Start menu.

## 4. Using the Keyboard



### Main section of the keyboard

On the main section of the keyboard are keys for all the letters and numbers and punctuation, as well as a collection of keys for special purposes.



The special keys sometimes have different effects based on when they are used. Text is when you are typing on a page that can have multiple paragraphs. Forms are when you have a collection of separate fields that can be entered, like in a pop-up dialog box or a spreadsheet.

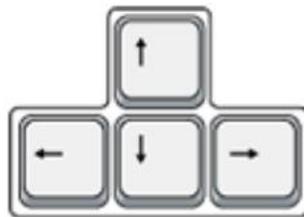
The special keys on the main section of the keyboard are:

Key	Text	Form
Tab	Inserts a “tab” character, which moves text to the right	Advances to the next entry field
Shift (2)	When you hold it down and strike a letter key, it provides a capital letter. If you hold it down and strike a number or punctuation key, it provides the upper punctuation mark.	
Caps Lock	When you tap it, it puts the computer into all capital letter mode, so every letter is capitalized. A light at the top of the keyboard will tell you if it is in Caps Lock mode. Tapping it a second time will take it out of Caps Lock mode.	
Enter	Used to start a new paragraph.	Will move to the next row in a spreadsheet, or act as “Done” or “Okay” on most forms.
Backspace	Will delete any selected text or the character to the left of the insertion point (the character typed most recently)	
Ctrl (2)	When you hold it down and strike another key, it will perform a special function. The function may depend on the application program that is active on your screen.	
Alt (2)	When you hold it down and strike another key, it will perform a special function. The function may depend on the application program that is active on your screen. Sometimes used at the same time as Ctrl key.	
Windows (2 sometimes)	Used to display the Start menu	
Menu {some keyboards}	Equivalent to a right-click, showing the menu options for the selected object	

The (2) notation indicates that there are two of these keys on the keyboard, one on the lower left and one on the lower right.

## Navigation Keys

Shown below are the keys found near the middle of the keyboard. They are called the navigation keys because they let us move around in a document. They can be used as an alternative to pointing with the mouse.



### **Up/Down Arrows**

The Up and Down arrow keys move us up or down one row in a document.

### **Right/Left Arrows**

The Right and Left arrow keys move right or left one character in a document.

### **Page Up/Page Down**

The Page Up and Down keys moves the display up or down one page in a document.

### **Home/End**

The Home and End keys move us to the beginning or the end of a line in a document.

### **Delete**

The Delete key removes the character to the right of the insertion point or any selected text.

The **Print Screen, Scroll Lock, and Pause** are rarely used and will not be covered here.

The arrow keys can also be used to move between windows icons and within menus in Window applications.

## Number Keys

To the right of the Navigation Keys you will find the Number Keys. These are keys which are also found elsewhere on the keyboard, but are arranged for one-handed rapid use.



This section of keys operates in two modes. In number mode (when the Num Lock light on the keyboard is lit), they act as a numeric keypad (upper value on the keys). In navigation mode (when the Num Lock light on the keyboard is not lit), they act as a navigation keypad (lower value on the keys).

To change between the modes, tap the Num Lock key in the upper left-hand corner of this section.

Also found with the number keys are the arithmetic symbol keys / \* - +, and an Enter key which work like the equivalent keys in the main section of the keyboard, regardless of mode.

## Function Keys



On the top row of the keyboard are the Function Keys labeled F1 through F12.

These keys are programmed to perform specific functions. The one most useful to us is F1. Depressing this key opens Help for the currently active window.

To the left of the Function keys is the Esc key. It acts like a cancel button.

We are going to use Notepad to review some of the special keys on the keyboard and see how they work.

## **Exercise: Using the Keyboard**

1. On your desktop, open the Start Screen
2. Type **note** to locate the notepad program
3. Click on the Notepad program
4. Type “My name is Bob” (don't forget the shift key for capital letters)
5. Use the backspace to erase “Bob” and type your own first name
6. Type your last name
7. Point the cursor between your first name and last name.
8. Hit the delete key to remove your last name
9. Hit the Enter key
10. Type “My age is”
11. Using the keys at the top of the keyboard, type a number.
12. Find the “Num lock” key on the keyboard and tap it so that the light is on
13. Find the numeric keypad section of the keyboard
14. What happens if you hit a number on that section of the keyboard?
15. Find the “Num lock” key on the keyboard and tap it so that the light is off.
16. Now what happens if you hit a number on the numeric section of the keyboard?
17. Find the X in the upper right corner of the Notepad window
18. Single click the X
19. When prompted, say that you do not want to save your changes.

## **5. Exercise: Opening and Using Paint**

Open the Paint Program using what you've learned. Practice your drag and drop skills as you draw lines. Click on the items at the top of the screen and experiment with what kind of pictures you can make.

## **6. Typing Practice**

**Exercise: Find Typing Tutor on your Desktop, Open it, and start using it.**

On your desktop, locate the Typing Tutor icon.

Double click the Typing Tutor icon and follow the instructions on the screen.

## **7. Review Exercise: Shut down the computer**

## **8. Homework**

Practice what we did in class today.

Practice typing