

## **BCA 1ST Semester**

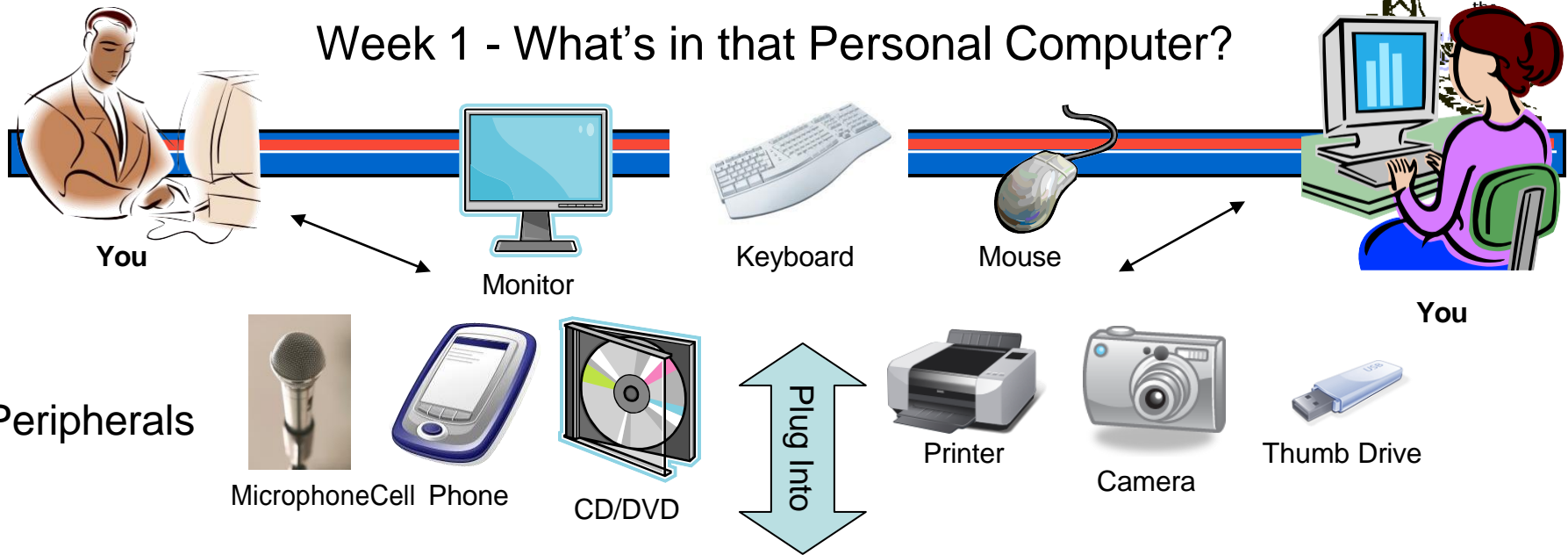
### **BCA -105 Personal Computer Software**

A seven week course to effectively use a Windows 7 PC.

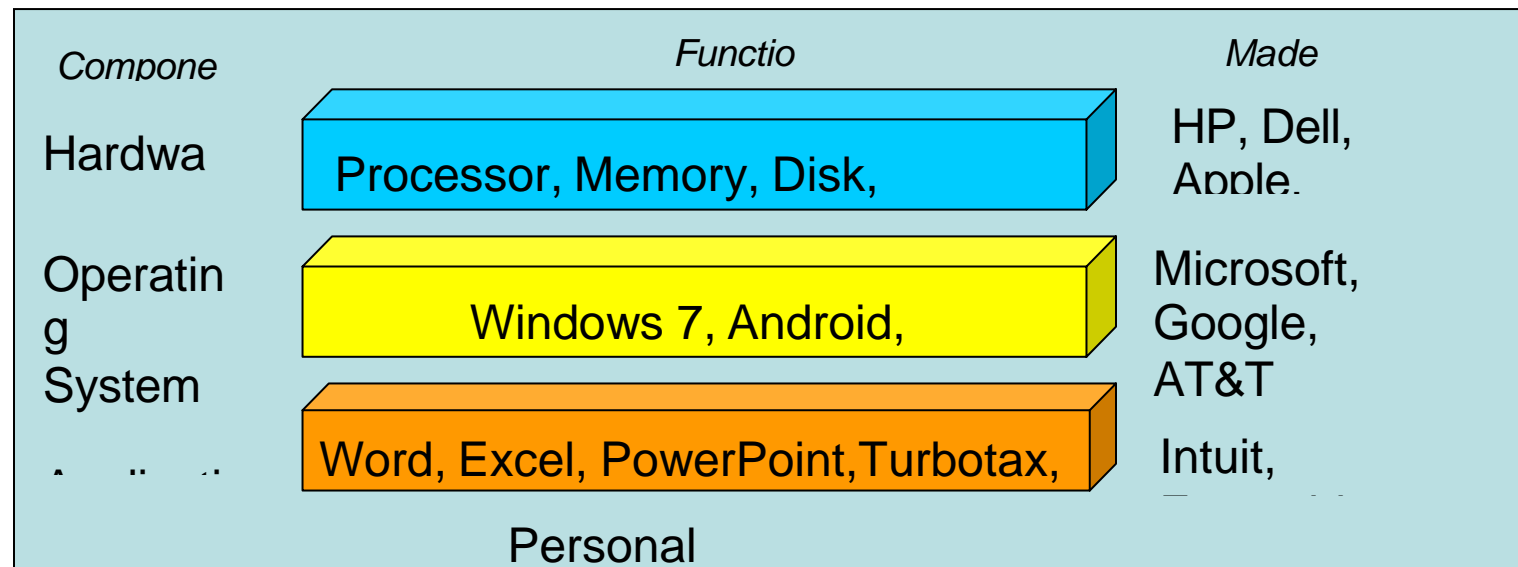
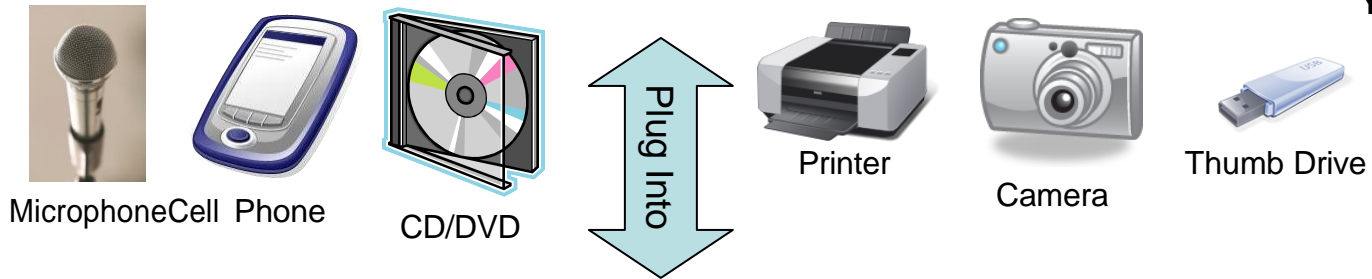
Week	Topic	You will learn
1	Windows Basics	Computer Equipment, Desktop and Start Menu, Switch between Windows, and Shut Down
2	Files & Folders	Drives, File Explorer, Viewing Files and Folders, Creating a new File..
3	Files & Folders Continued	Creating a Folder, Saving and Moving Files, Creating Shortcuts.
4	Libraries	Creating Libraries, Opening and Deleting files, Copying Files, Restoring deleted Files.
5	Windows 7 Applications	Using Windows Utilities: Date and Time, Power Options, Sticky Notes, Internet Explorer
6	Microsoft Office Applications	MS Ribbon, Word, Excel, and PowerPoint document creation.
7	Job Aids and Survey	Overview of E-mail, Computer Safety, Risks, Viruses, Phishing, Recovery, and a class survey.



# Week 1 - What's in that Personal Computer?



## Peripherals





## Week 1 – Using the Mouse



**Single Click** = quick click of the LEFT Mouse Button

**Double Click** = two quick clicks of the LEFT Mouse Button.

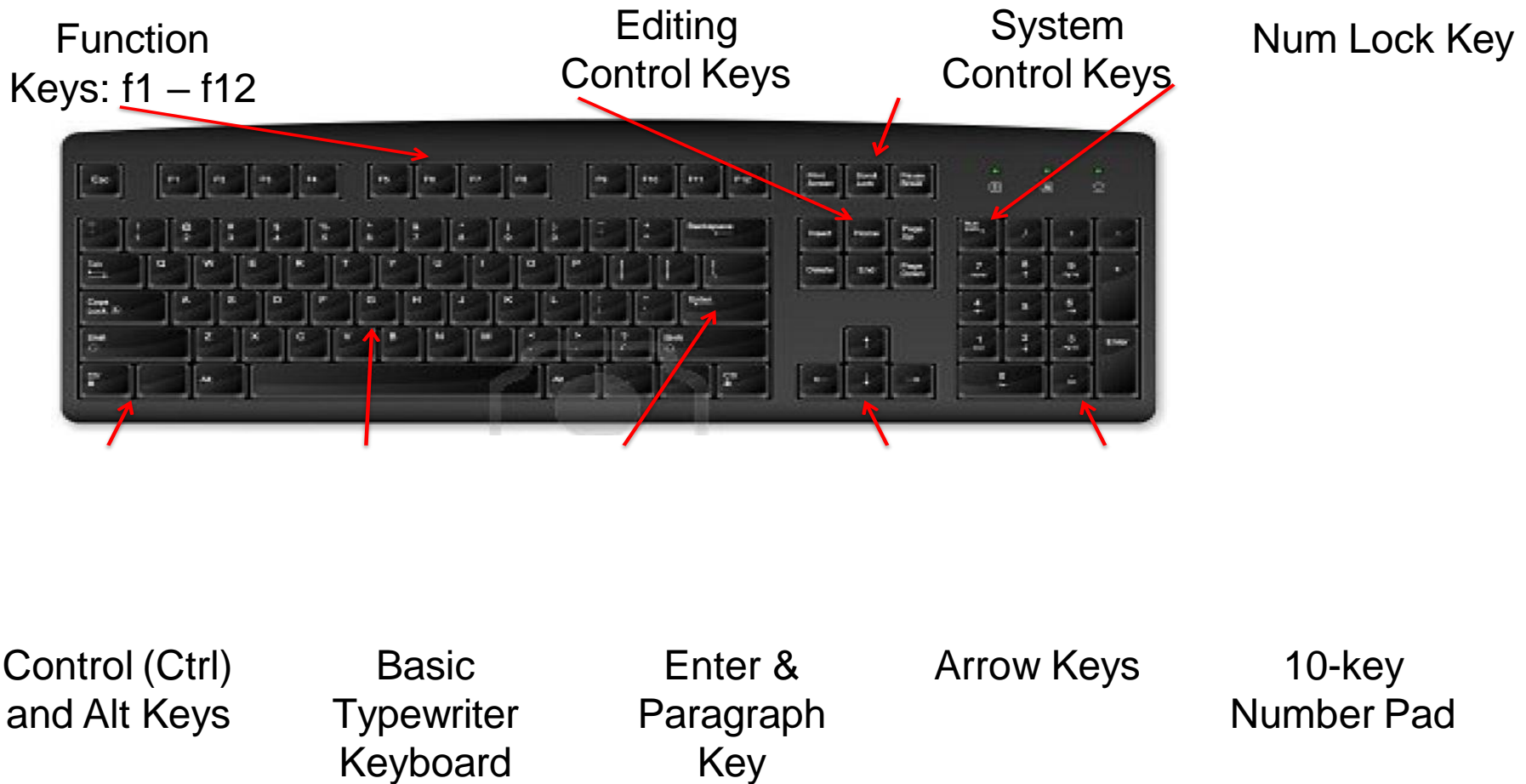
**Triple Click** = three quick clicks of the LEFT Mouse Button.

**Right Click** = quick click of the RIGHT Mouse Button.

**Drag and Drop** = Pressing and HOLDING the LEFT Mouse Button and SLIDING the pointer across the screen.

**Scroll** = Rolling the Scroll wheel when the Window is showing a

# Week 1 – How does the 101 Key Keyboard work?



# Week 1 – How does the 101 Key Keyboard work?



## Week 2 – Key Terms and their definitions



Term	Definition
Data	Computer data is information processed or stored by a computer. This information may be in the form of text documents, images, audio clips, software programs, or other types of data.
File	A file is a collection of data stored in one unit, identified by a <a href="#">filename</a> . It can be a document, picture, audio or video stream, data library, <a href="#">application</a> , or other collection of data
File Type	The special abbreviation added to the end of the filename that tells the Operating System what application to use to open the file. Normally shown in E-Mail attachments.
Folder	An operating system file management object that can contain multiple files and other folders
Hierarchy	All the software and data in a computer are stored on the internal hard disk as "files," and files are organized into "folders" in a hierarchical structure.
Path	A path, also known as a "file path" or "directory path," defines the location of a <a href="#">file</a> or <a href="#">folder</a> .



## Week 2 – How does the Hard Disk work?



Information is recorded and read from the spinning Hard Disk



3.5 inch Disk Surface

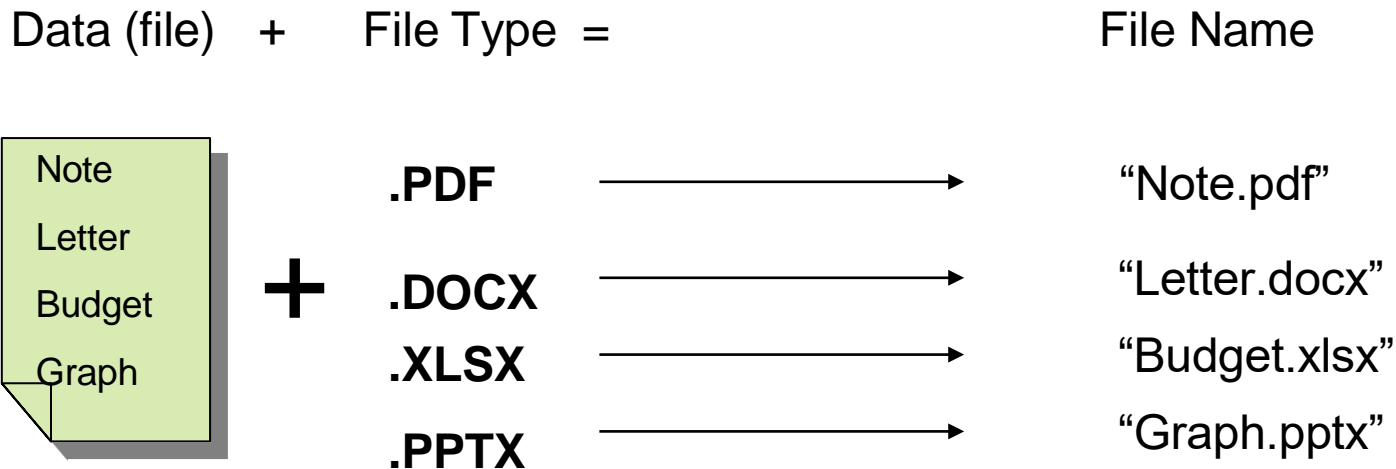
Disk control mechanism

Disk Access Arm

Disk Read Head

© HowStuffWorks.com

## Week 2: How are data files and applications associated?



Windows uses Icons to identify the file type



"Note"



"Letter"

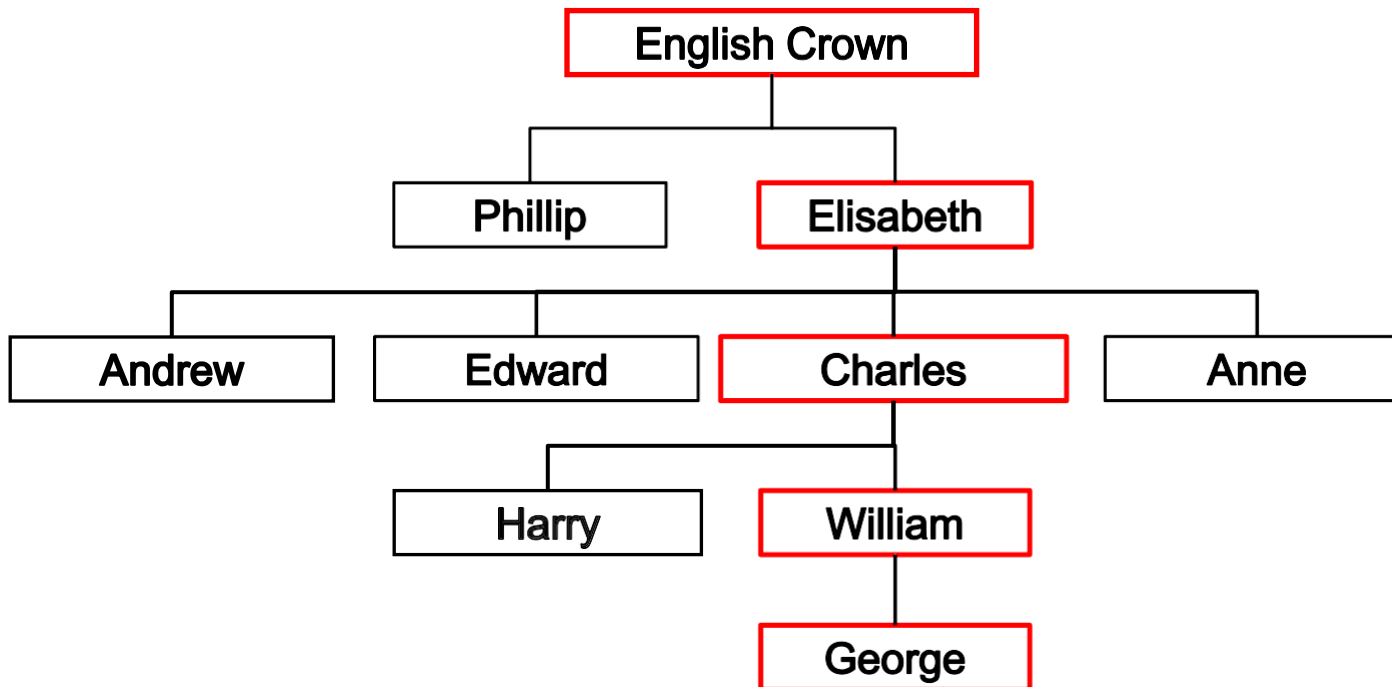


"Budget"



"Graph"

## Week 2 – Example of a Hierarchy



*Line of succession to the crown of England*

## Week 2 – Windows File Hierarchy



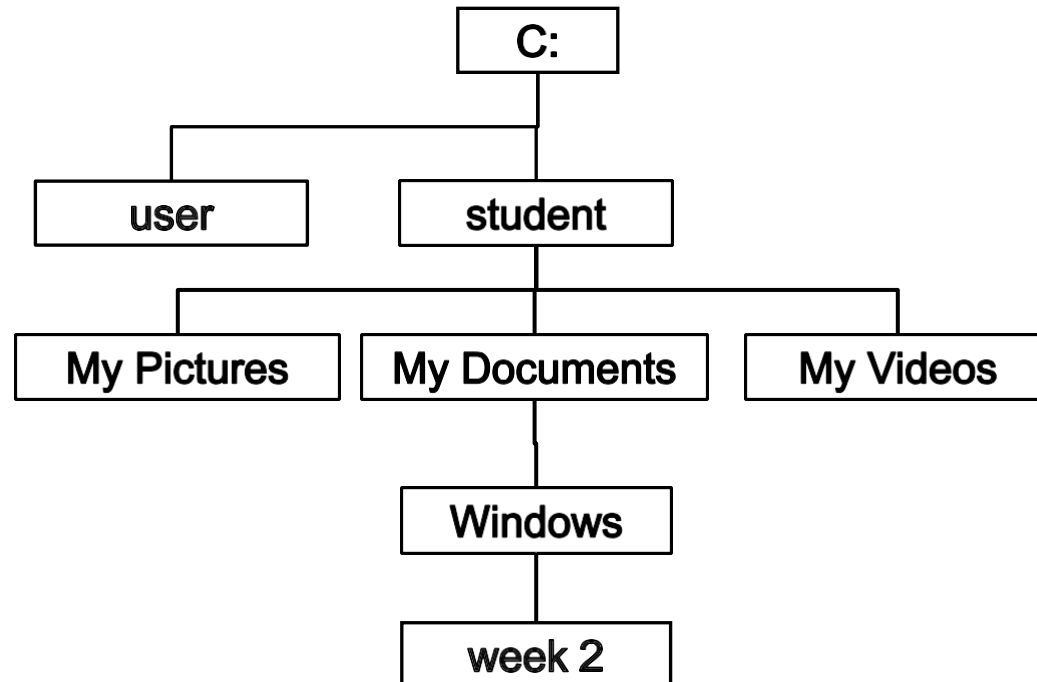
(Drive)

(System User ID)

(From Microsoft)

(User Defined)

(User Defined)



C:>Student>My Documents>Windows>week2



Word 2007  
Document



# Week 2: How do you create a new file?



## Option 1: Create an empty file

Right Click in a folder

- New >
- Microsoft word Document



*Create the Document*



*Enter the data*

File -> Save **"Resume"**

- or -

File -> SaveAs **"New Resume"**

*Save the Document*

## Option 2: Start with the Application

Start -> Open

**MS Office  
Word 2007**



*Open the Application*



*Enter the data*

File -> Save **"Resume"**

- or -

File -> SaveAs **"New Resume"**

*Save the Document*



## Week 3 – Key Terms and their definitions



Term	Definition
Data	Computer data is information processed or stored by a computer. This information may be in the form of text documents, images, audio clips, software programs, or other types of data.
File	A file is a collection of data stored in one unit, identified by a <a href="#">filename</a> . It can be a document, picture, audio or video stream, data library, <a href="#">application</a> , or other collection of data
File Type	The special abbreviation added to the end of the filename that tells the Operating System what application to use to open the file. Normally shown in E-Mail attachments.
Folder	An operating system file management object that can contain multiple files and other folders
Hierarchy	All the software and data in a computer are stored on the internal hard disk as "files," and files are organized into "folders" in a hierarchical structure.
Library	An organizational feature of the Windows 7 file system that provides a top-level view into files and folders. Windows 7 comes with four Libraries (Documents, Music, Pictures and videos) that display at the top of the Explorer hierarchy.
Path	A path, also known as a "file path" or "directory path," defines the location of a <a href="#">file</a> or <a href="#">folder</a> .



# Week 3: Review ways to create a file



## Option 1: Create an empty file

Right Click in a folder  
or Desktop

- New >

- Microsoft word  
Document



Microsoft Word  
Document



File -> Save **"Resume"**

- or -

File -> SaveAs **"New Resume"**

*Create the Document*

*Enter the data*

*Save the Document*

## Option 2: Start with the Application

Start -> Open

**MS Office  
Word 2007**



Microsoft Word  
Document



File -> Save **"Resume"**

- or -

File -> SaveAs **"New Resume"**

*Open the Application*

*Enter the data*

*Save the Document*



# Week 3 – Computer File Hierarchy



(Computer)

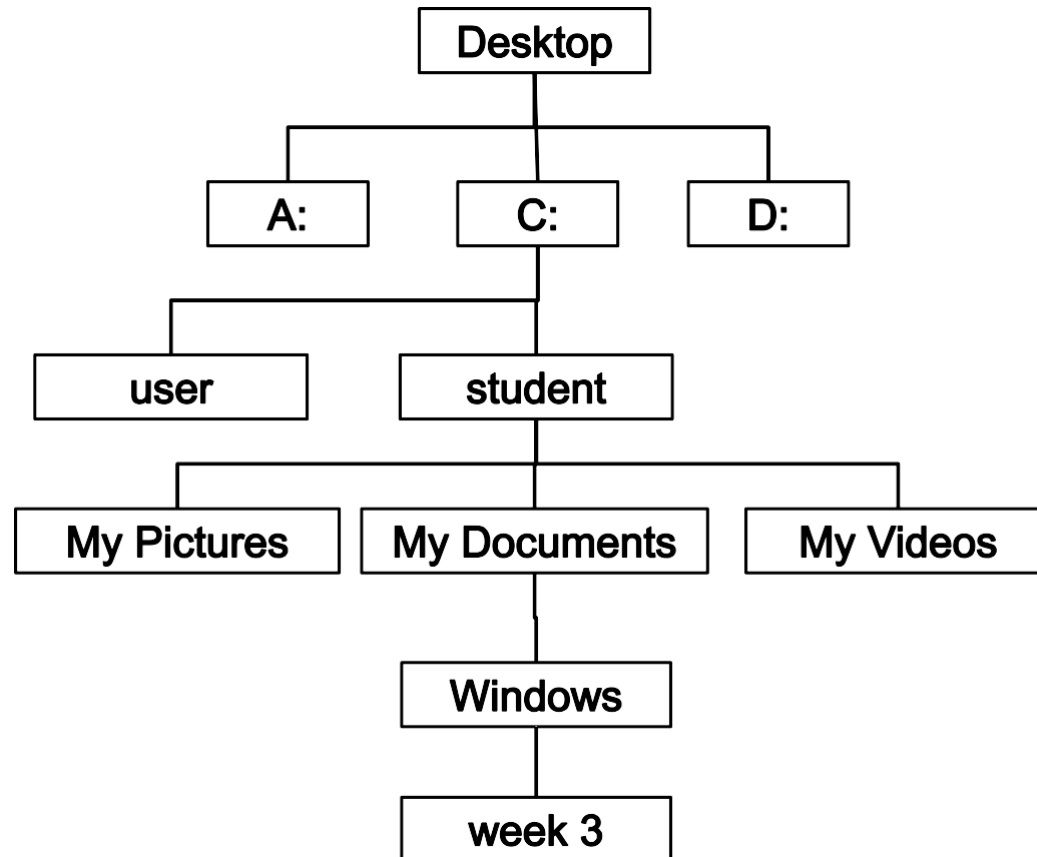
(Drives)

(System User ID)

(From Microsoft)

(User defined)

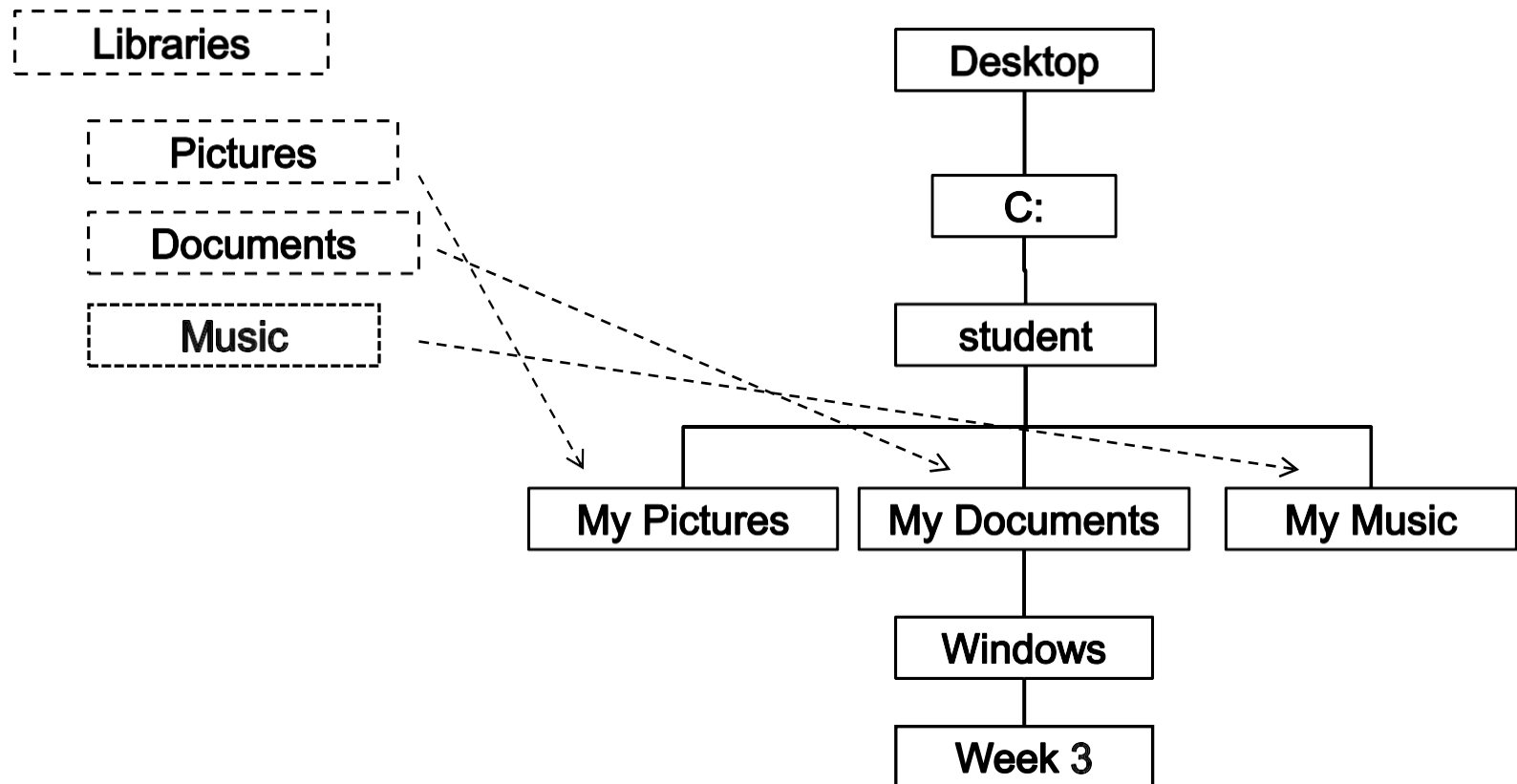
(User defined)



## Week 3 – Library mapping to File Hierarchy



*Windows assigns “default” libraries to the standard library names!*



## Week 3 – Added File Hierarchy



(Drives)

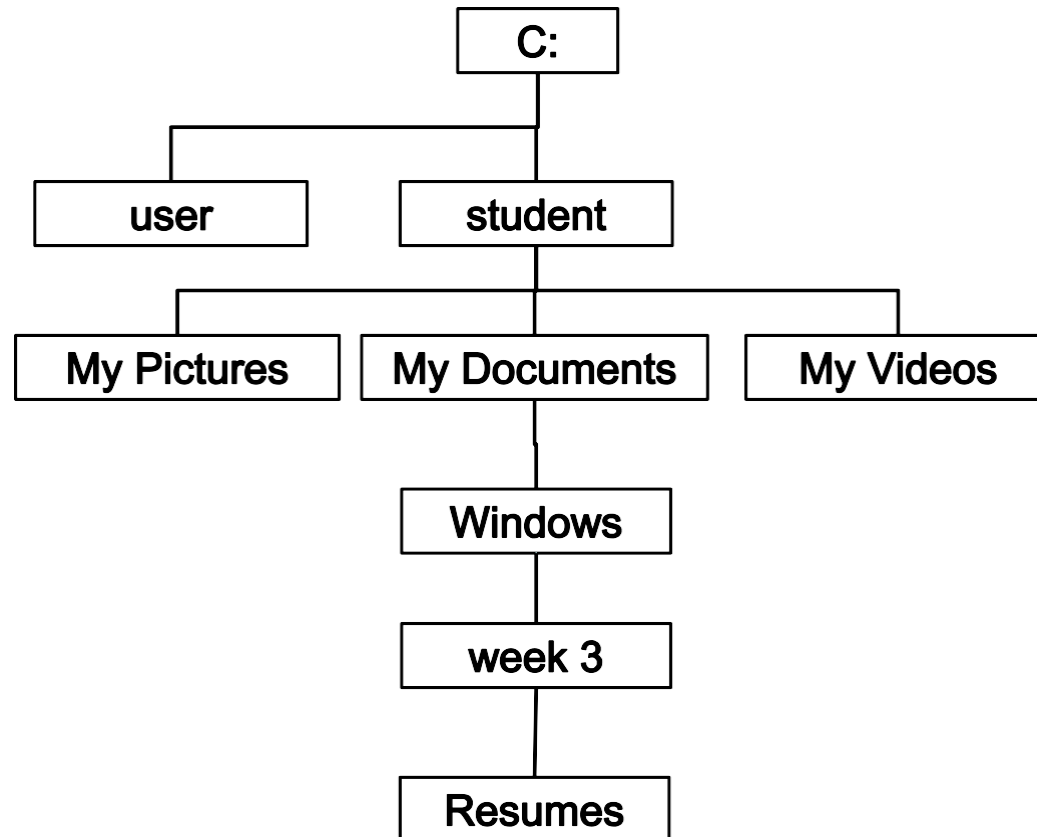
(System User ID)

(From Microsoft)

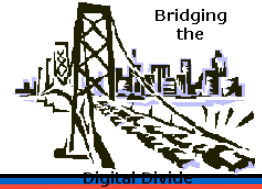
(Existing)

(You define)

(You define)



## Week 3 – Add a File to the Hierarchy



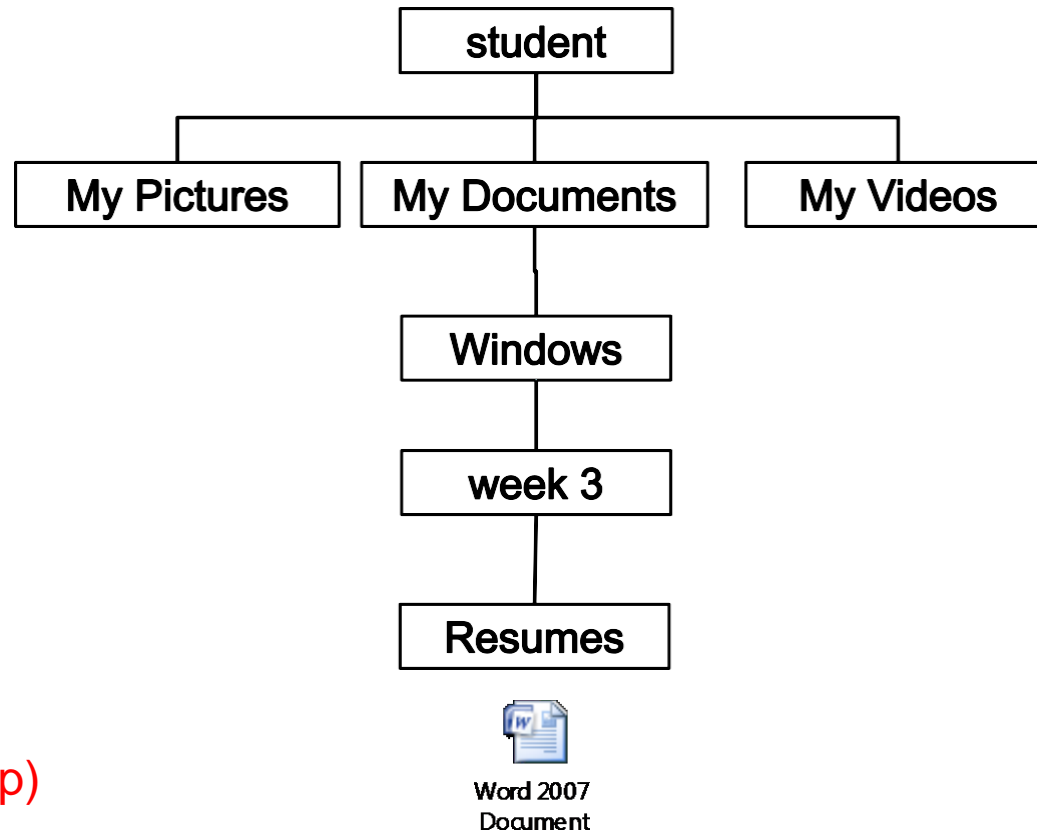
(From Microsoft)

(Existing)

(You define)

(You define)

(Save As from Desktop)



C:>Student>My Documents>Windows>week3>Resumes/ your Resume.docx



## Week 4 – Key Terms and their definitions



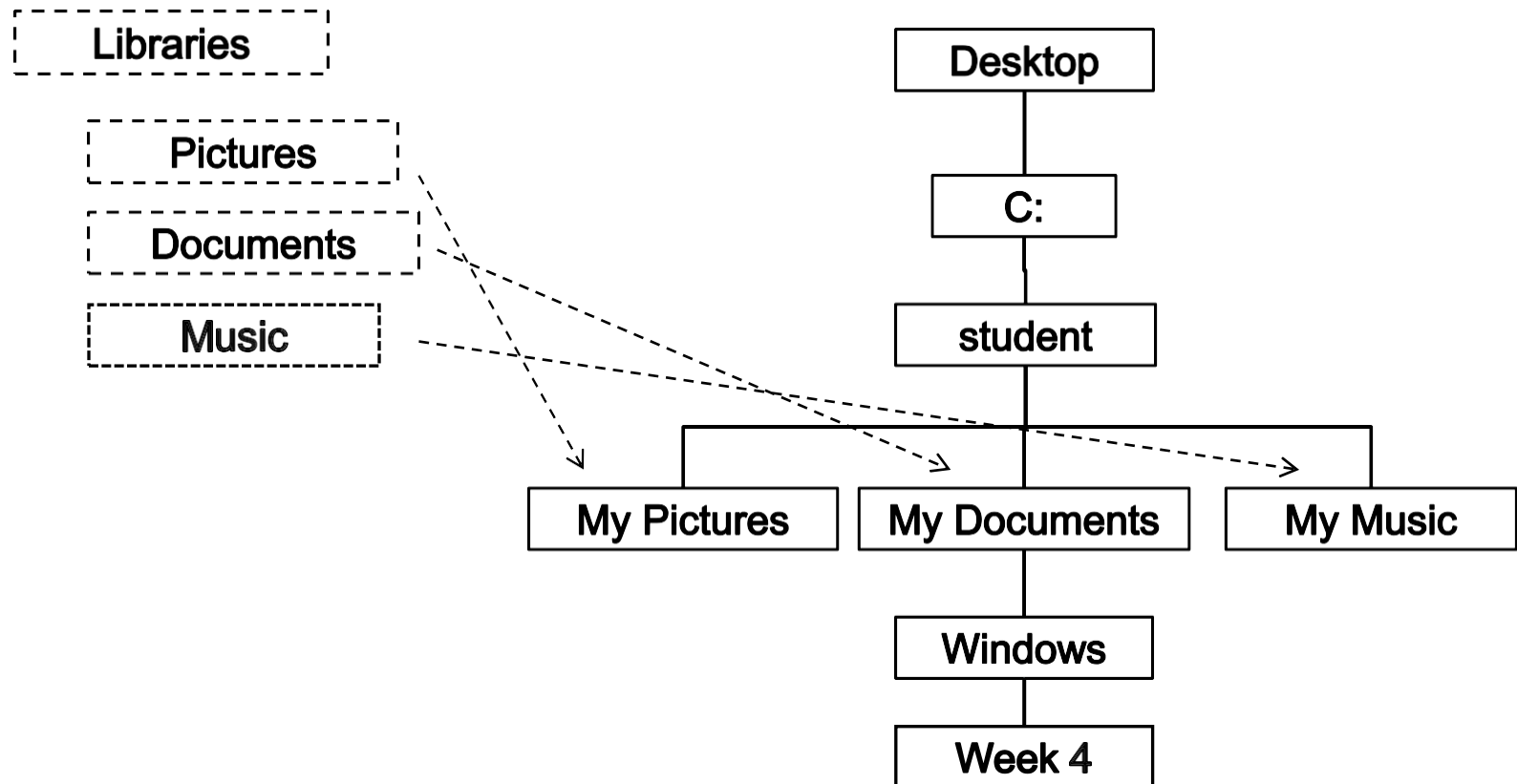
Term	Definition
Flash Drive	Flash drives have many names — jump drives, thumb drives, pen drives, and USB keychain drives. Regardless of what you call them, they all refer to the same thing, which is a small data <a href="#">storage device</a> that uses <a href="#">flash memory</a> and has a built-in <a href="#">USB</a> connection
Library	An organizational feature of the Windows 7 file system that provides a top-level view into files and folders. Windows 7 comes with four Libraries (Documents, Music, Pictures and videos) that display at the top of the Explorer hierarchy.
Path	A path, also known as a "file path" or "directory path," defines the location of a <a href="#">file</a> or <a href="#">folder</a> .
USB	Stands for "Universal Serial Bus." USB is the most common type of computer port used in today's computers.



## Week 4 – Library mapping to File Hierarchy



*Windows assigns “default” libraries to the standard library names!*



# Week 4: How is information stored in Windows 7?



File Cabinet



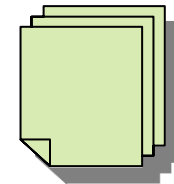
Library



Books



Document (Data)



Devices

Libraries

Folders

Files with Applications

## Hard Disk Drives (1)

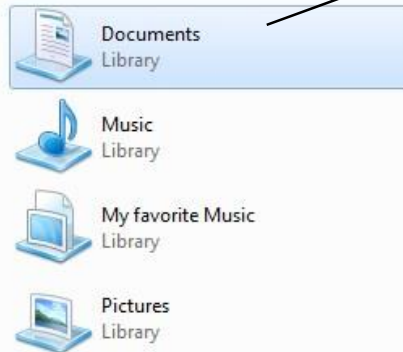


## Devices with Removable Storage (2)



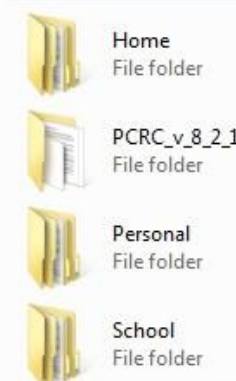
## Libraries

Open a library to see your files and arrange them



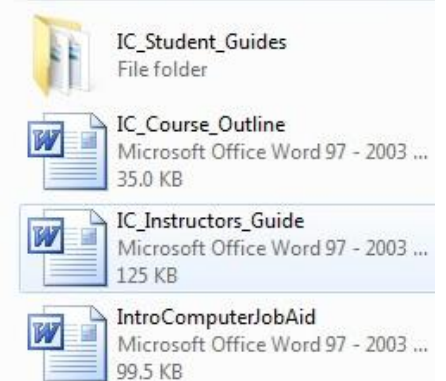
## Documents lib...

Includes: 2 locations



## Documents lib...

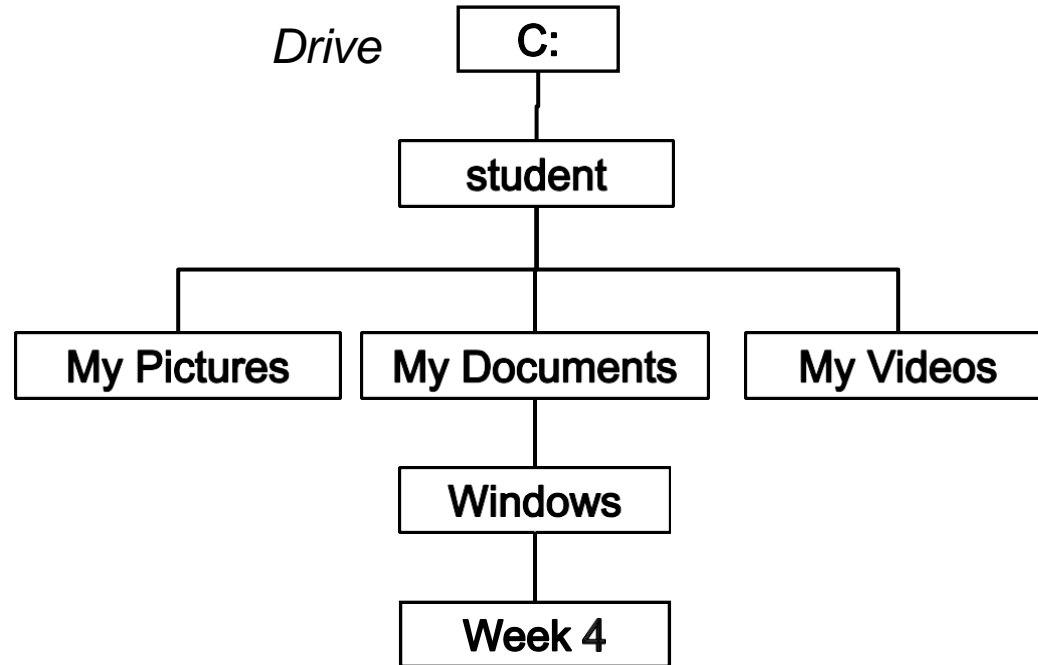
Intro to Computers



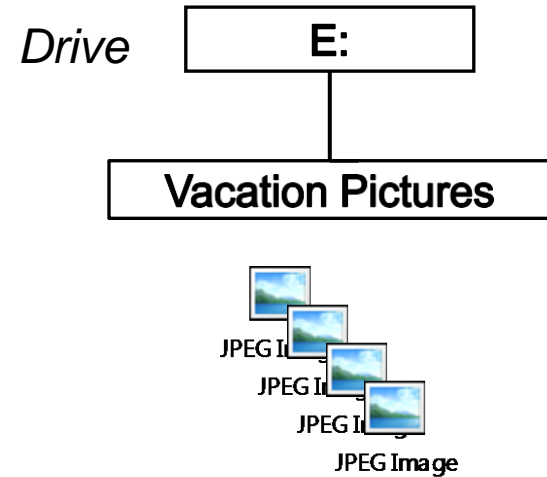
My Computer

In a Personal Computer

## Week 4 – File Hierarchy before copy

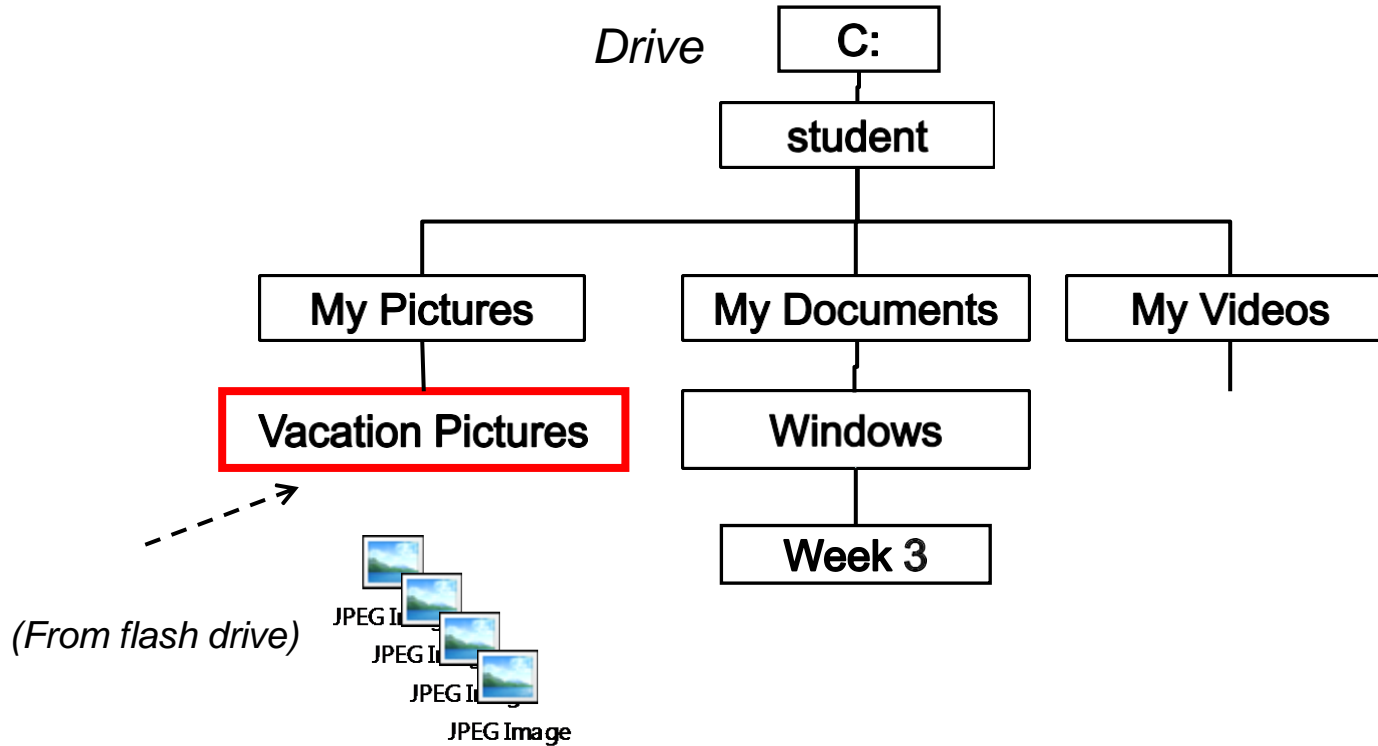


*Computer file hierarchy*



*Flash drive file hierarchy*

## Week 4 – Copy from Flash Drive



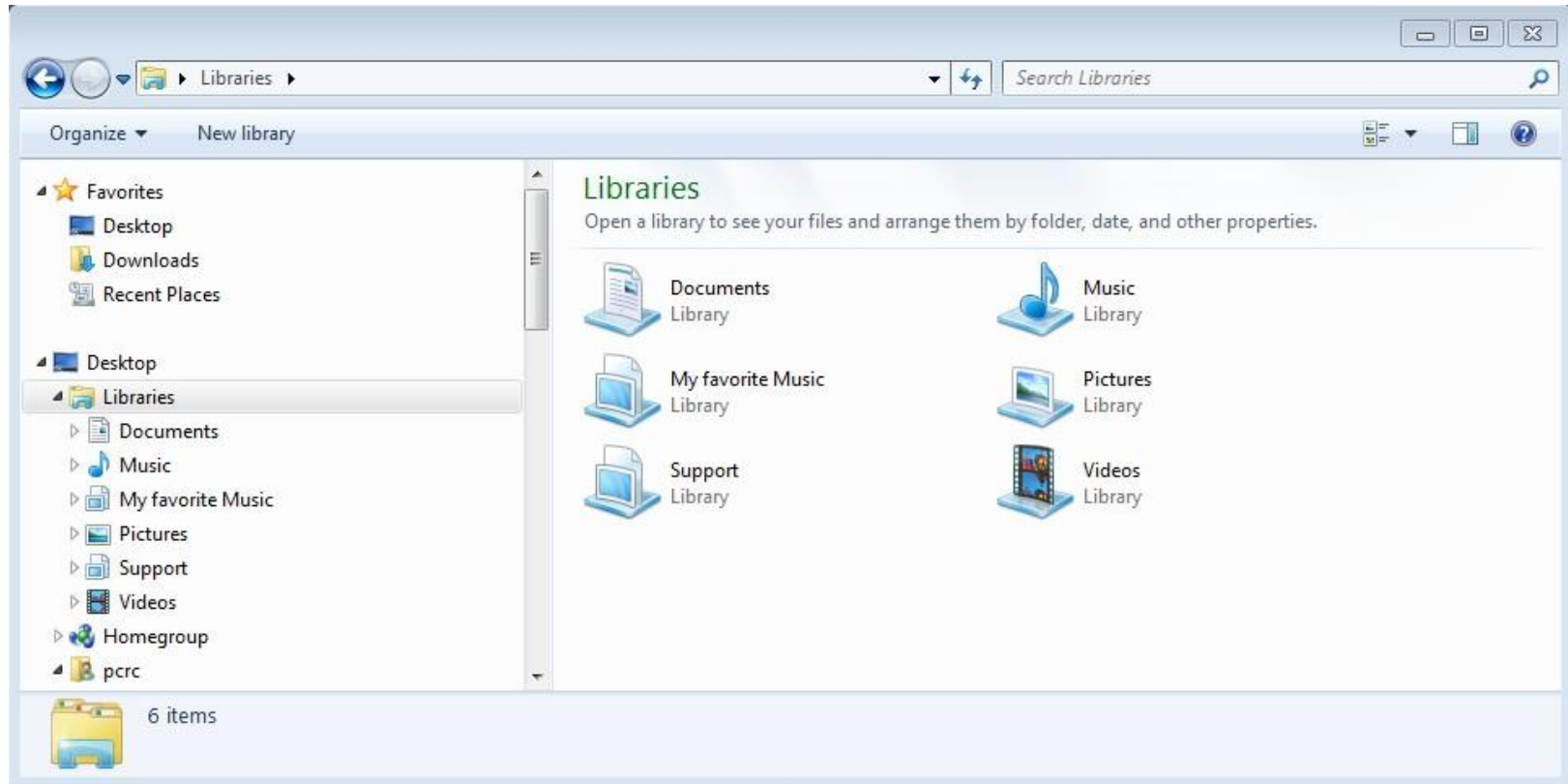
## Week 4: Opening the System Libraries



**Click the  
Folder Icon**



# Week 4– Windows Explorer showing Libraries

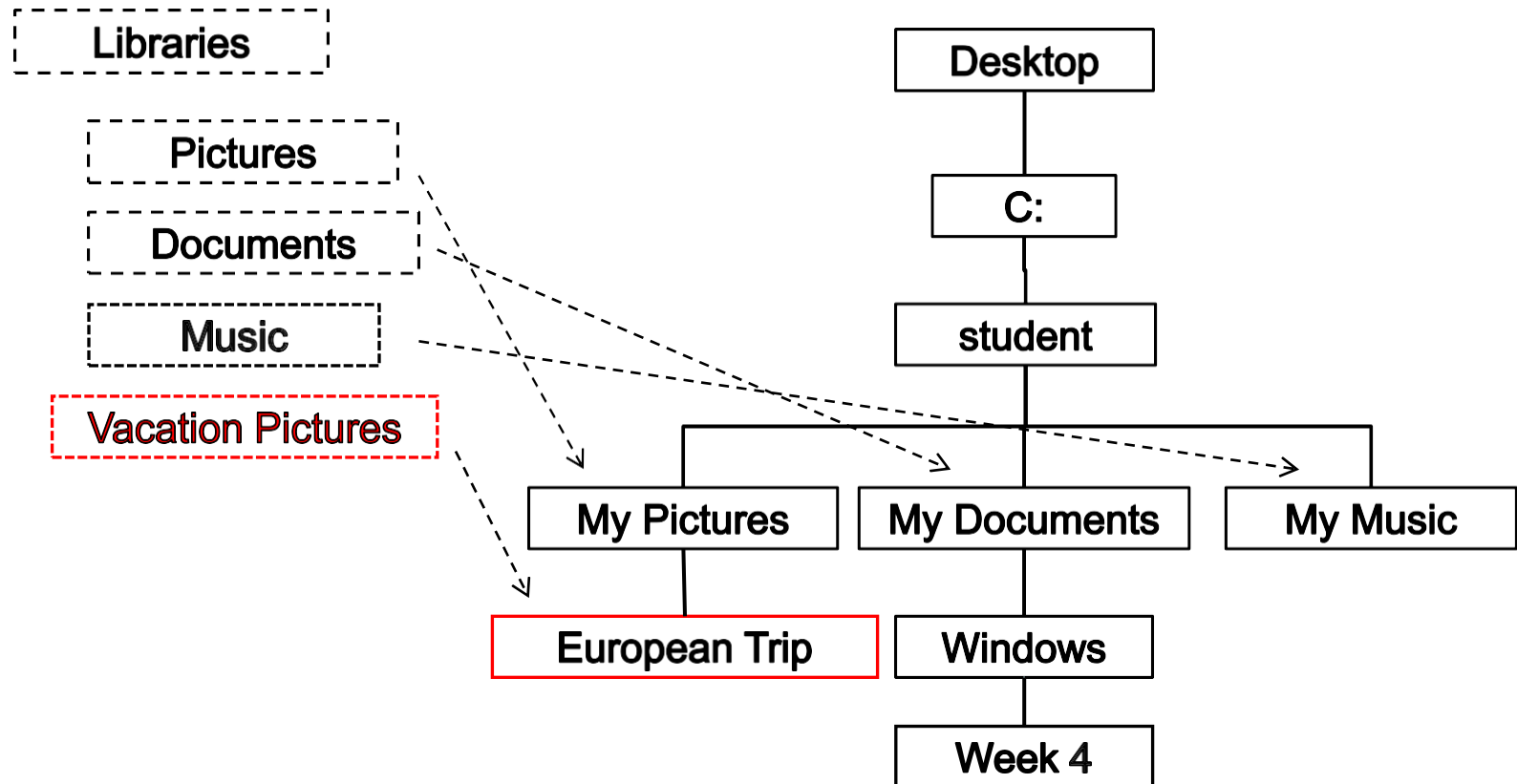


Display of Libraries on the Hard Disk (C:)

## Week 4 – Library mapping after Move



*The new Vacation Pictures Library refers to the European Trip pictures!*



Bridging the Digital Divide

- C: Permanent Hard Drive used for primary data storage
- D: CD or DVD removable devices containing music, movies, new software.
- E: and ↑ Universal Serial Bus (USB) used to connect Flash Drives for backup, Phones, Cameras, etc.

*filename.filetype*

*filename* = unique title for the data (“resume”, “letter to mom 1-3-09”, “picture”, etc.)  
*filetype* = Windows-defined tag used to identify the application. (doc = MS word 2003,  
xlsx = MS Excel 2007, pptx = MS Powerpoint 2007)

Examples: *resume.docx*, *letter to mom.doc*, *my finances.xlsx*, *how to cook.ppt*

The diagram illustrates the mapping of a file system hierarchy to components in Windows Explorer. On the left, a tree structure shows the path: C: → Libraries → Student → My Documents → Resumes → resume.docx. On the right, a list of components is shown: Drive, Library references, User Folder(s), Standard Folders, Folder, and Data File. Dashed arrows connect the hierarchy to the components: C: to Drive, Libraries to Library references, Student to User Folder(s), My Documents to Standard Folders, Resumes to Folder, and resume.docx to Data File. A large curly bracket on the right groups Library references, User Folder(s), and Standard Folders, with a label pointing to it: 'Hierarchy displayed in Windows Explorer.'

File System Hierarchy	Windows Explorer Component
C:	Drive
Libraries	Library references
Student	User Folder(s)
My Documents	Standard Folders
Resumes	Folder
resume.docx	Data File

Hierarchy displayed in Windows Explorer.

C:>Libraries>Documents>Student>Resumes> resume.docx

Shown in “Address” field of Windows Explorer and the “Save As” dialog boxes.



## Week 5 – Key Terms and their definitions

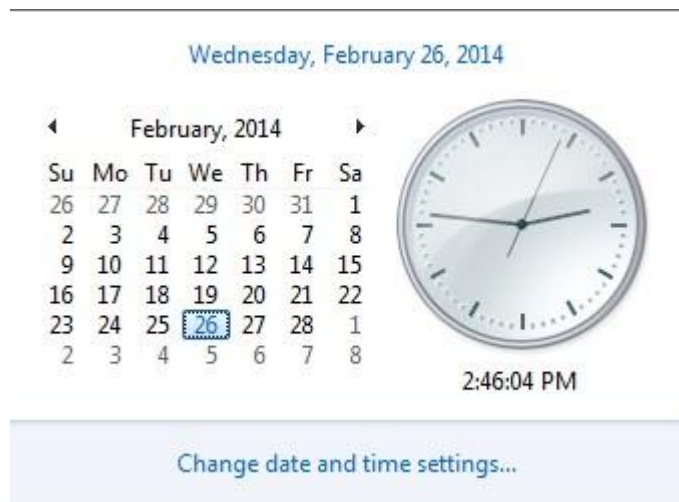


Term	Definition
Data & Time	The date and time settings of the Computer used to schedule activities, date correspondence, e-mails, and control the automatic changes for day light savings..
Power Options	Computer's settings that determine when the display is deactivated and the system enters sleep mode.
Utilities	Several applications considered helpful in many business situations. Utilities include software provided Microsoft as part of the Operating System such as the Calculator. Other utilities are Sticky Notes, Snipping Tool, and Windows 7 Helper.
Calculator	A Microsoft application designed to replicate a limited function calculator used for simple mathematical calculations.
Snipping Tool	An application designed to copy a portion of the displayed screen contents for later insertion into a document.
Windows 7 Helper	An application that displays a set of customized help documents designed to assist the new Windows user complete a range of basic operations. E.g., Switch between windows, Shut down the System, etc.
Sticky Notes	A Microsoft application that creates small note sheets where comments and reminders can be created and saved on the desktop.
Internet Explorer	A Microsoft application that communicates with a World Wide Web site. The Internet Explorer is used to access a web site and display web pages.



Reference: <http://pc.net/glossary>

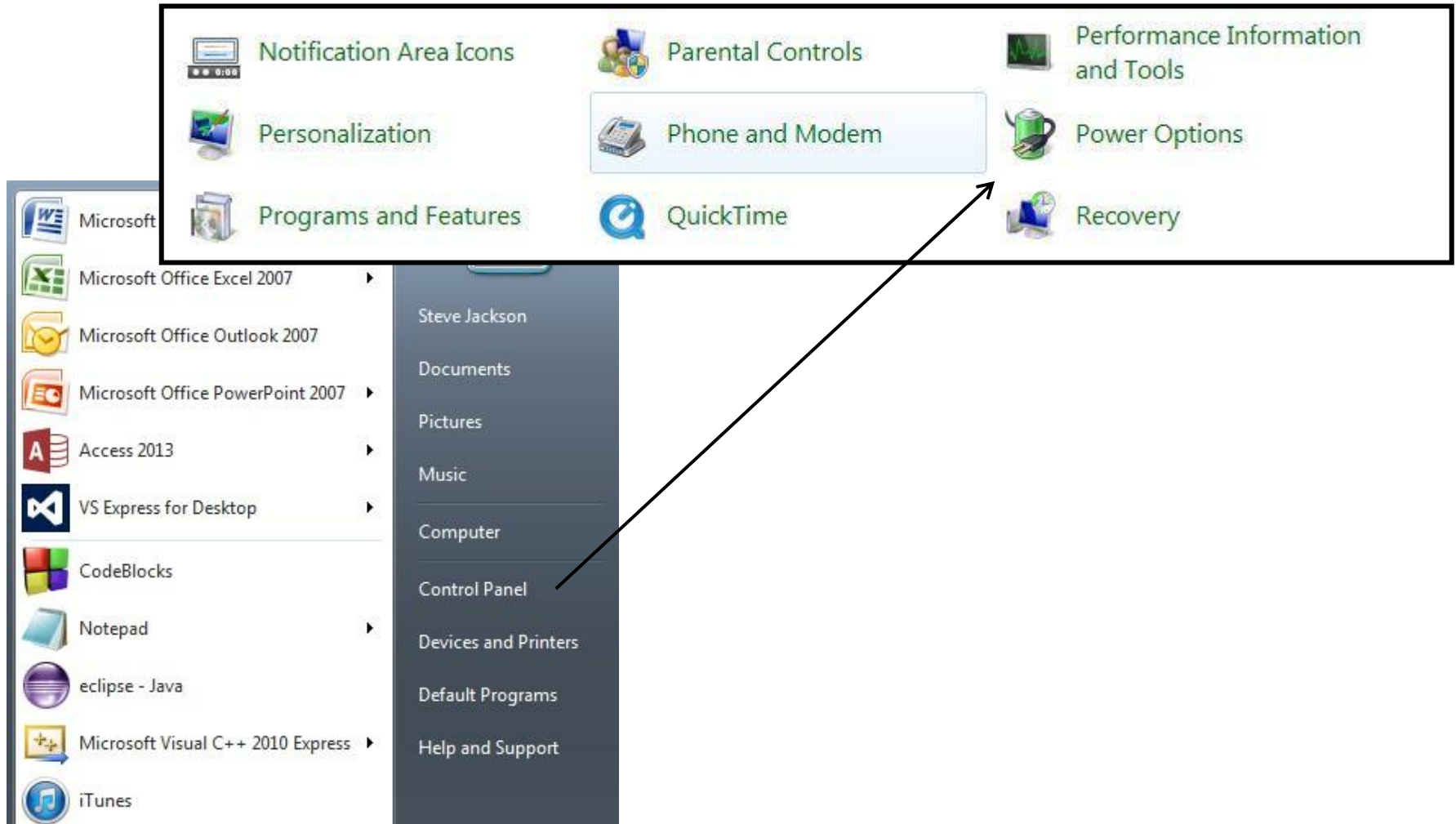
## Week 5 – Date and Time Setting



Click on  
Date/Time



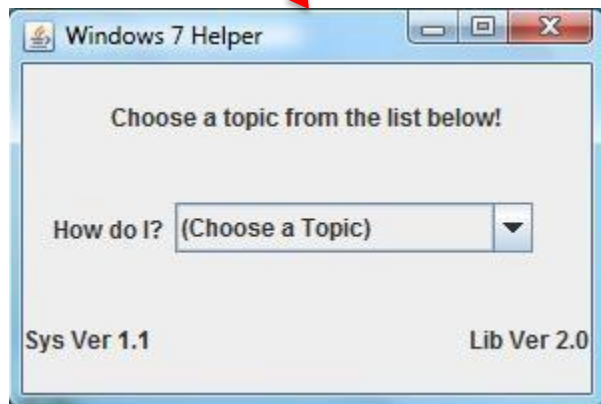
# Week 5 – Power Options



# Week 5 – Using the Windows 7 Helper



Left  
Click



## Getting Started with Windows 7

The Windows 7 Operating System environment is very similar to previous releases of Windows with several exceptions and enhancements. The visual aspects of Windows 7 are similar to Windows XP. Your Computer will be faster and easier to manage.

What do you want to do?

- [Explore the Task Bar](#)
- [Look at the Start Menu](#)
- [Pinning an Application to the Task Bar](#)
- [Using the Jump List](#)
- [See the new Window Format](#)
- [Adding Gadgets](#)

## Explore the Task Bar

The Windows 7 Task bar is very similar to the Windows 7 XP Task Bar with several enhancements.

1. The Start Button is replaced with by the **Windows button** that operates the same.



# Week 5 – Internet Explorer



Menu Options

URL site name



Favorites Bar

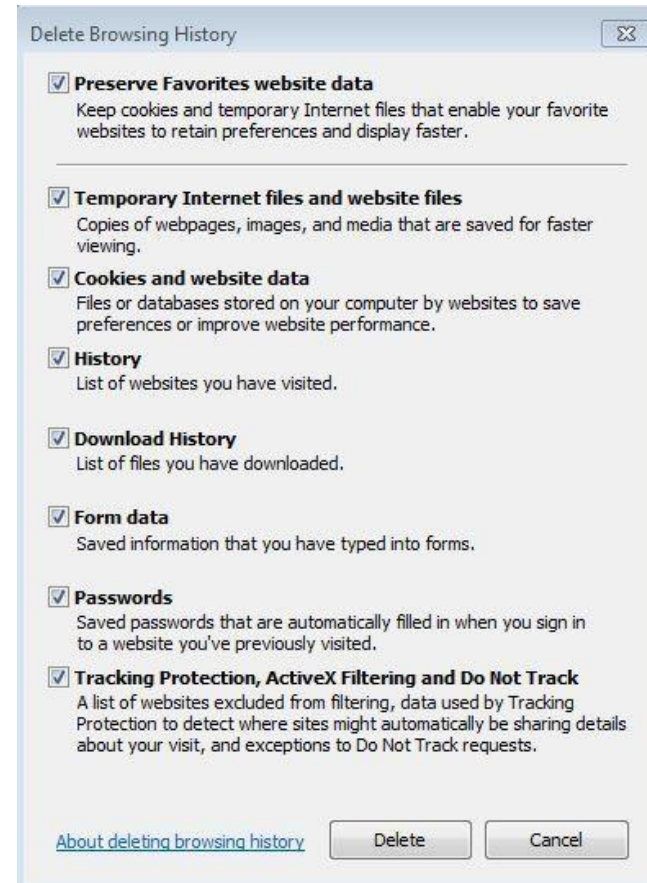
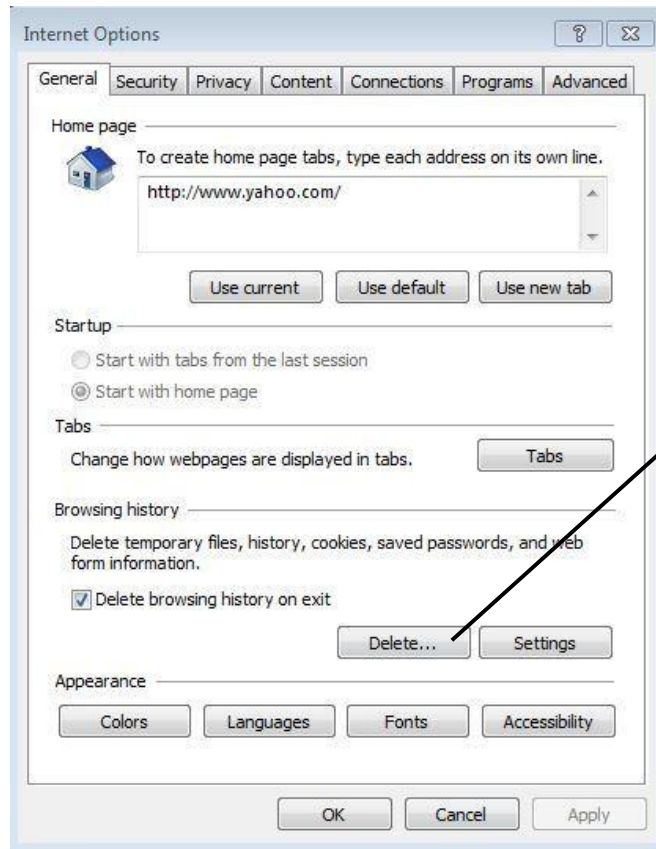
Home Page Request

Favorites Select

Browser Tools



# Week 5 – Internet Explorer Options



## Week 6 – Key Terms and their definitions



Term	Definition
MS Office	Group of application programs developed and supported by Microsoft that are designed as an integrated set of office automation tools..
MS Word	MS Office Word processing application designed to create letters, reports, pamphlets, newsletters, handouts, and other printed or viewed documents. .
MS Excel	MS Office spreadsheet application designed to create, calculate, manipulate, and maintain numerical data representing accounts, expenses, inventory, lists, etc.
MS PowerPoint	MS Office presentation application designed to create and display information in a visual or summary format suitable for rapid information exchange..
Quick Access Bar	A row of small Icons located in the top frame of the MS Office application. The icons represent tools that are readily available for action separate from the display ribbon tools. Quick access tools include: "Save", "Undo", "Restore", etc.
Office button	Object located in the upper left corner of all MS Office applications. A left mouse button click on the Office button will display the data file processing options for the current document.
Ribbon	Row of one or more groups of buttons associated with a general application processing topic for the MS Office application. Examples include "Home", "Insert", "View", etc..
Group	Framed area containing one or more buttons located in the Ribbon. The group name is shown at the bottom of the frame. Group names include: "Clipboard", "Font", etc.
Button	Object located in an MS Office Ribbon that displays an icon and text. When clicked with the left mouse button, an action is performed as described by the button text.



Reference: <http://pc.net/glossary>

# Week 6 – What's an Application?



MS Office  
Applications

Word, Excel, PowerPoint, Access, Outlook

Letters, Expense  
Reports, Presentations.

Windows 7  
Operating  
System

Desktop, File System, Start Menu, Task Bar

File Names,  
Windows, Internet  
access

PC  
Hardware

Processor, Memory, Disk, Controllers, etc.

Key clicks, Mouse  
movements,  
Screen display,  
Printer fonts



Keyboard



Mouse



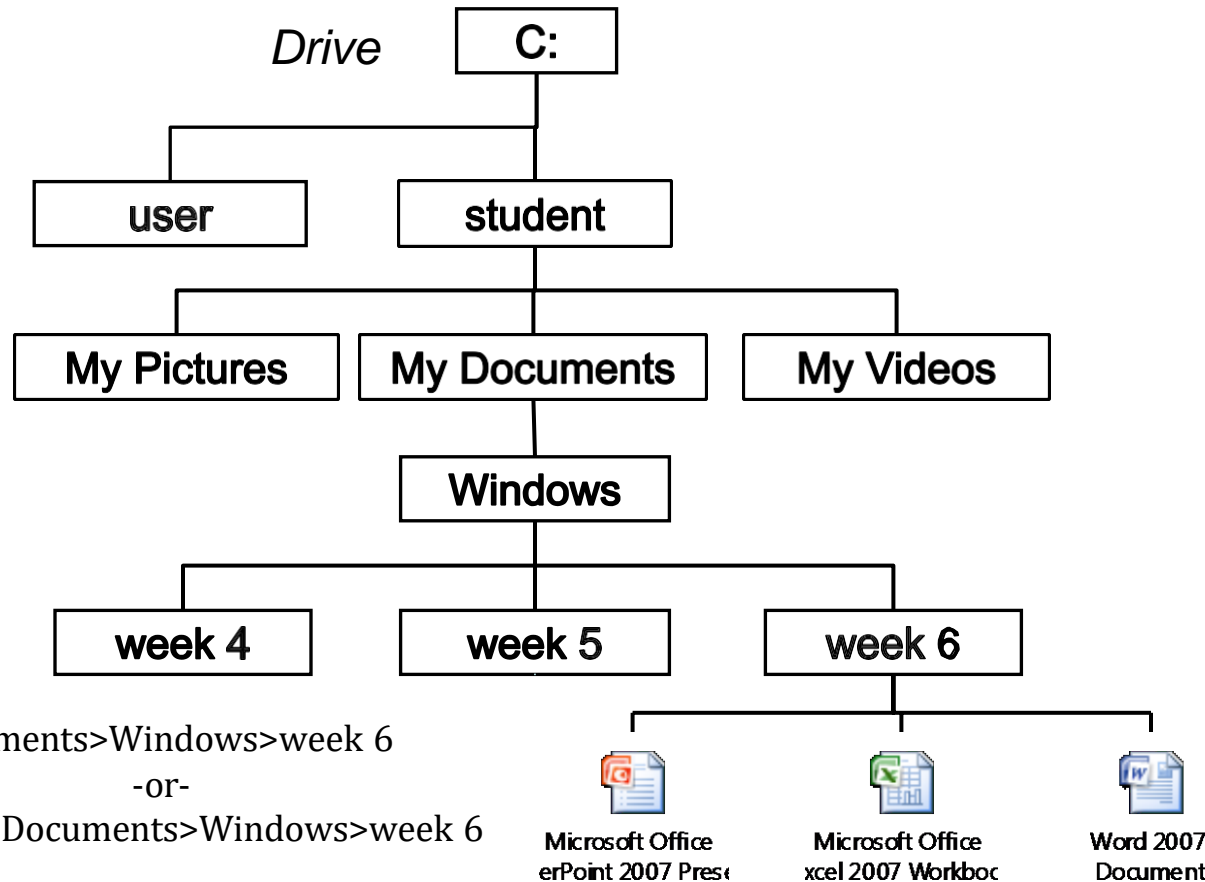
Monitor



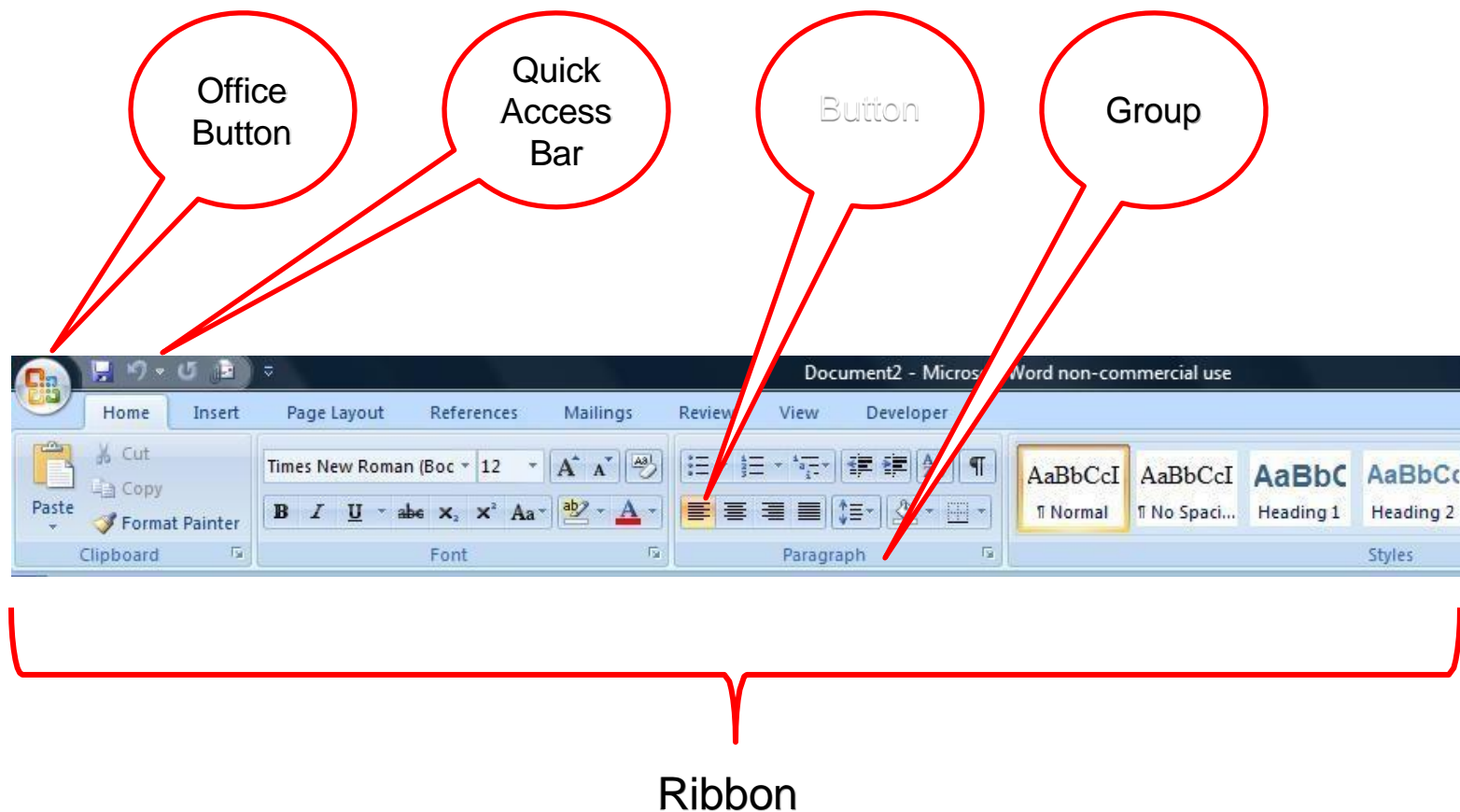
Printer



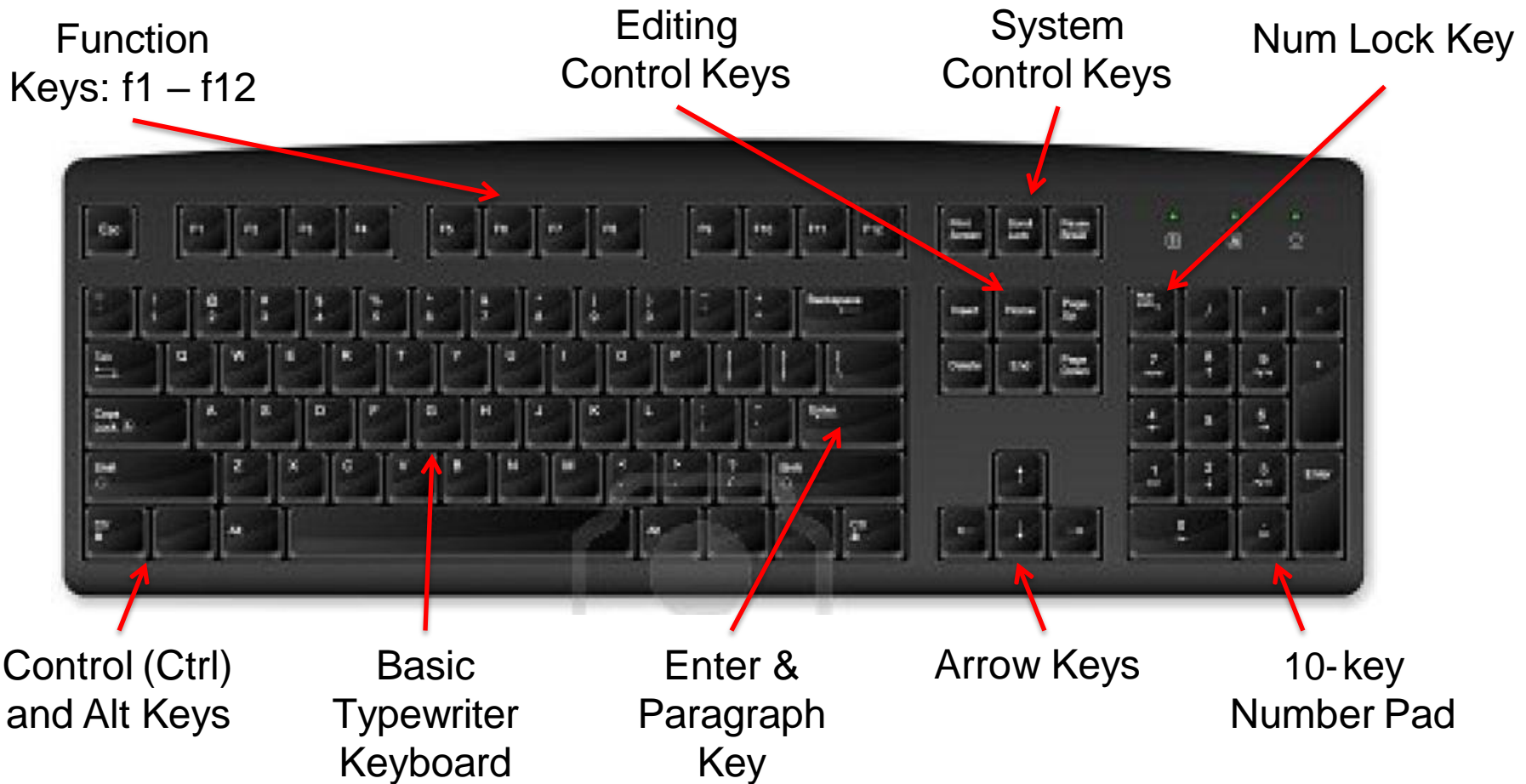
## Week 6 – File Hierarchy



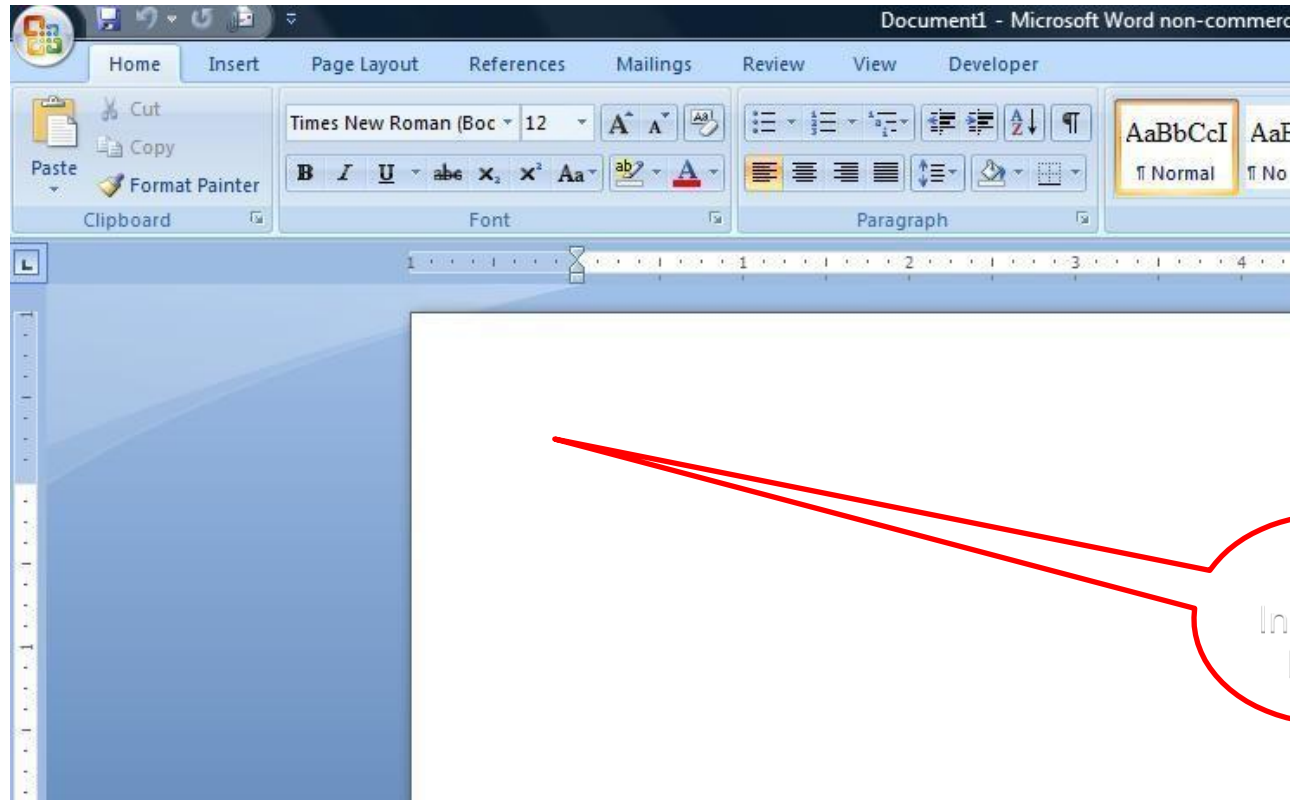
# Week 6 – MS Office Application Controls



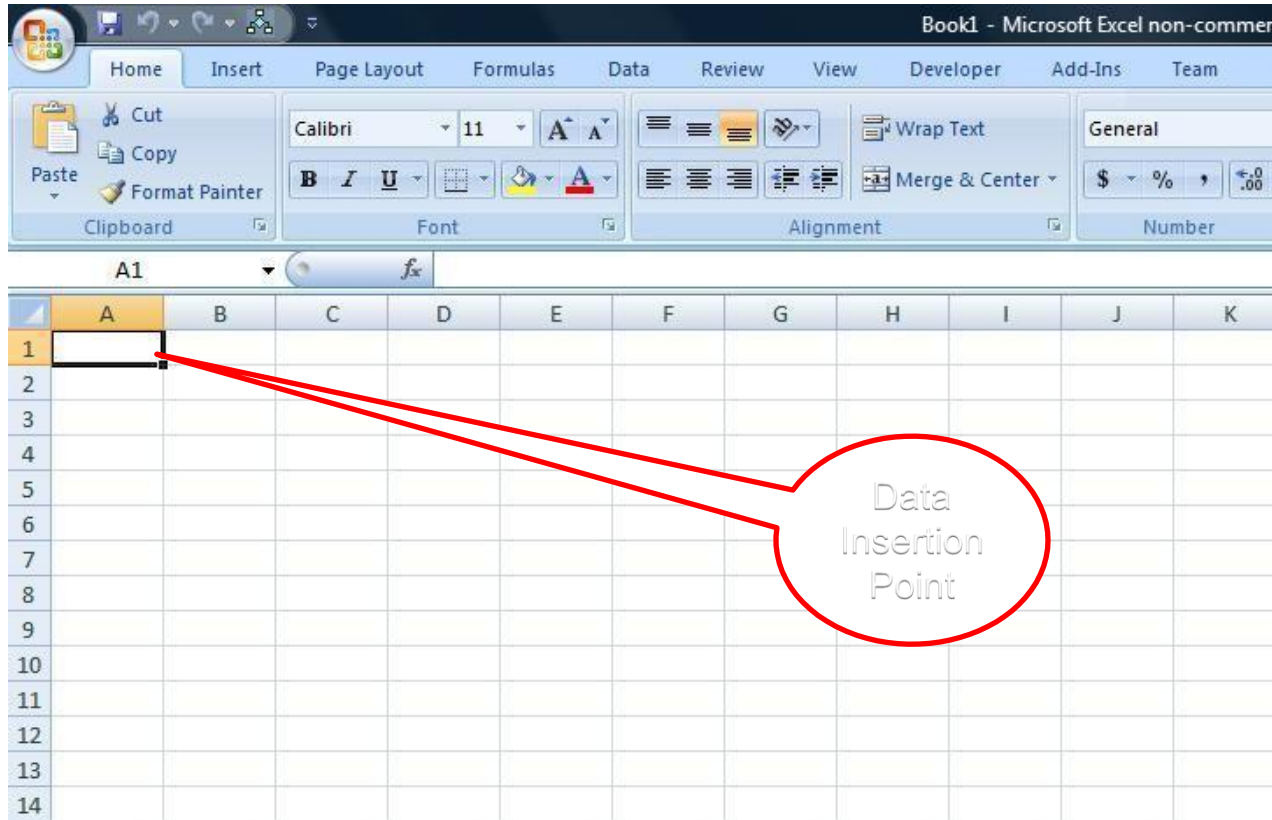
# Week 6 – Word Processing keyboard



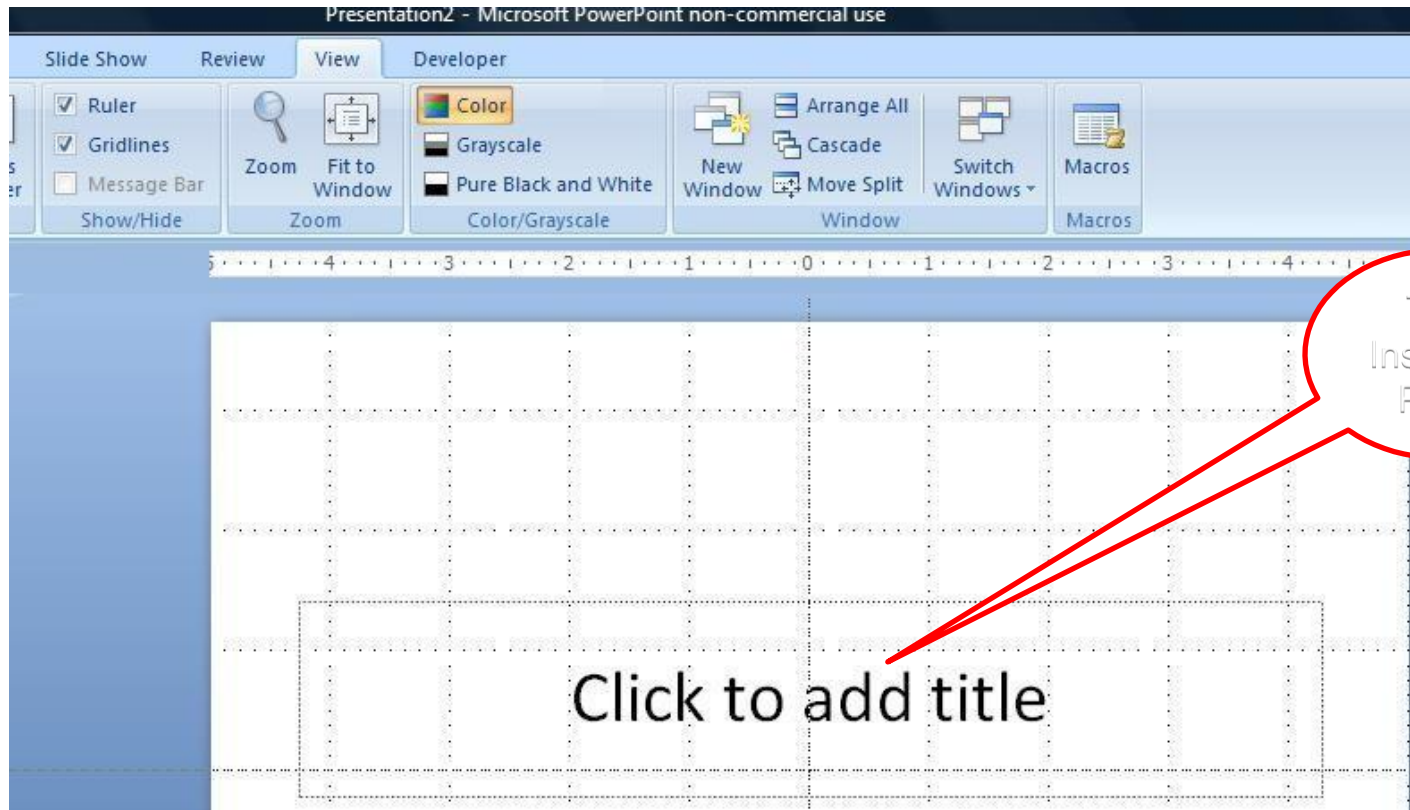
# Week 6 – MS Word Interface



# Week 6 – MS Excel Interface



# Week 6 – MS PowerPoint Interface



## Week 7 – Key Terms and their definitions



Term	Definition
Internet	Internet was created in 1969, during the Cold War, by the United States military. It was meant to be a "nuke-proof" communications network. The Internet spreads across the globe and consists of countless networks and computers, allowing millions of people to share information.
ISP	Stands for "Internet Service Provider." In order to connect to the Internet, you need an ISP. You pay a monthly fee to in order to use the Internet.
Web Site	Web site is a collection of Web pages. For example, Amazon.com is a Web site, but there are millions of Web pages that make up the site.
Firewall	A computer firewall limits the data that can pass through it and protects a networked server or client machine from damage by unauthorized users.
IP Address	Also known as an "IP number" or simply an "IP," this is a code made up of numbers separated by three dots that identifies a particular computer on the Internet. For example "66.72.98.236" or "216.239.115.148"..
Virus	Computer viruses are small programs or scripts that can negatively affect the health of your computer. Opening an infected e-mail attachment is the most common way to get a virus.
Spyware	As the name implies, this is software that "spies" on your computer. Spyware can capture information like Web browsing habits, e-mail messages, usernames and passwords, and credit card information.
Updates	Software corrections and new features available from the Software vendor. They are typically delivered via the Internet upon request from your PC.



Reference: <http://pc.net/glossary>

## Week 7 – More Key Terms and their definitions

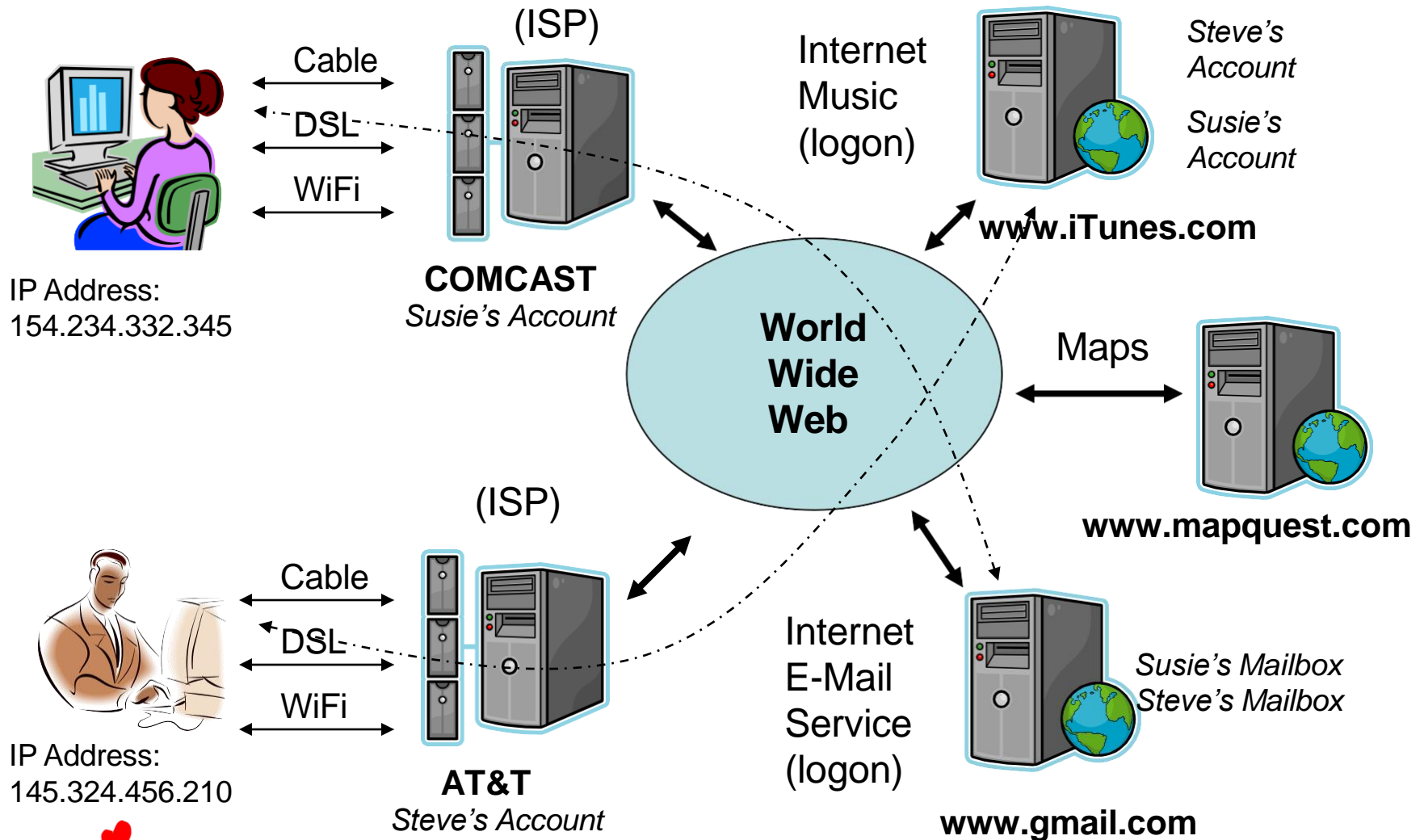


Term	Definition
Malware	Malicious software written by both pranksters and thieves to harm or compromise your computer. The presence of Malware in your computer will cause it to run slowly or behave strangely.
Phishing	Software specifically written to impersonate a business or the government with the express purpose of stealing your personal or financial information for illegal activities. .
Virus	Software specifically designed to disrupt, modify, or extract information from your computer for both annoyance and financial gain.
Worm	Malware designed to operate without your authorization and perform tasks that use your computer or personal information for annoyance or financial gain. Sending unsolicited e-mails using your list of contacts is an example of a worm.
Spyware	Malware designed to collect information about you and your computing activity typically associated with the Internet Browser. Spyware can both display unwanted information as well as extract your viewing history for use by a third party agent.
Trojan Horse	Malware that installs itself into one or more computer files and operates outside of your control. Trojan Horses can generate e-mail, search for your personal information, and track your web browsing.
Access Control	Employing a feature of Windows OS that describes and controls the extent of operating system services available to a user based on a specific ID and password.



Reference: <http://pc.net/glossary>

# Week 7 - How does the Internet work?



# Week 7 – Your mailbox on Gmail



Gmail ▾

1-4 of 4 < > ⚙

**COMPOSE**

**Inbox (4)**

Starred

Important

Sent Mail

Drafts

**Chat** ▾

Search people...

● Steve Jackson

Set status here ▾

0% full  
Using 0 GB of your 10 GB

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**\$25 Unlimited Phone Plan** - [www.FamilyVirtue.com/CellPhone](http://www.FamilyVirtue.com/CellPhone) - (Free) Smartphone: Unlimited Minutes, Texting & Data. See Now! ... [Why this ad?](#)

<input type="checkbox"/>	<input type="star"/>	<input type="dropdown"/>	Google+ team	Getting started on Google+ - Visit Google+ Hey Steve, Welcome to Google+ - we're glad you're here! Here's	5:35 pm
<input type="checkbox"/>	<input type="star"/>	<input type="dropdown"/>	Gmail Team	Customize Gmail with colors and themes - To spice up your inbox with colors and themes, check out the Th	5:33 pm
<input type="checkbox"/>	<input type="star"/>	<input type="dropdown"/>	Gmail Team	Get Gmail on your mobile phone - Access Gmail on your mobile phone The days of needing your computer t	5:33 pm
<input type="checkbox"/>	<input type="star"/>	<input type="dropdown"/>	Gmail Team	Import your contacts and old email - You can import your contacts and mail from Yahoo!, Hotmail, AOL, and	5:33 pm

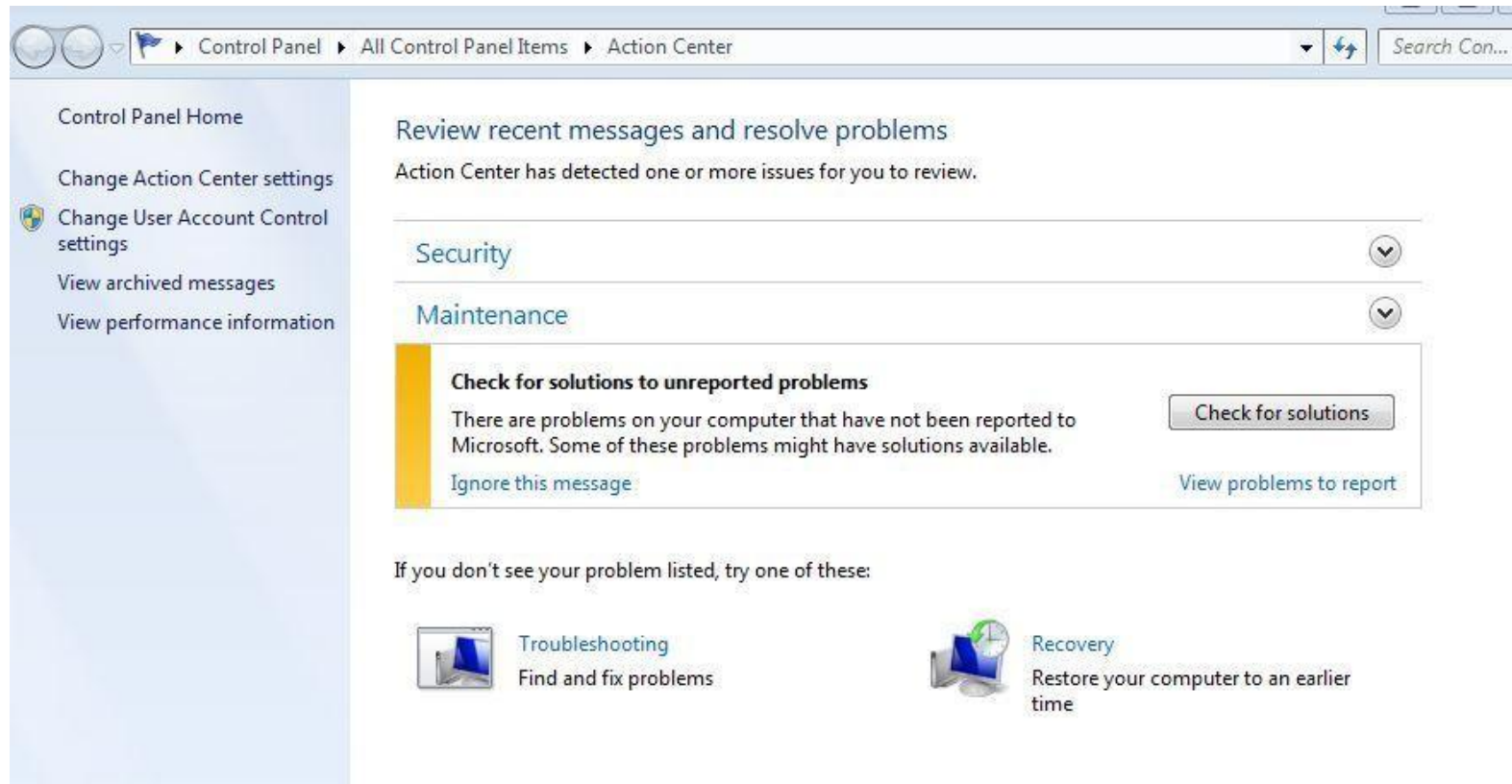
One of many advertisements

Your mailbox size

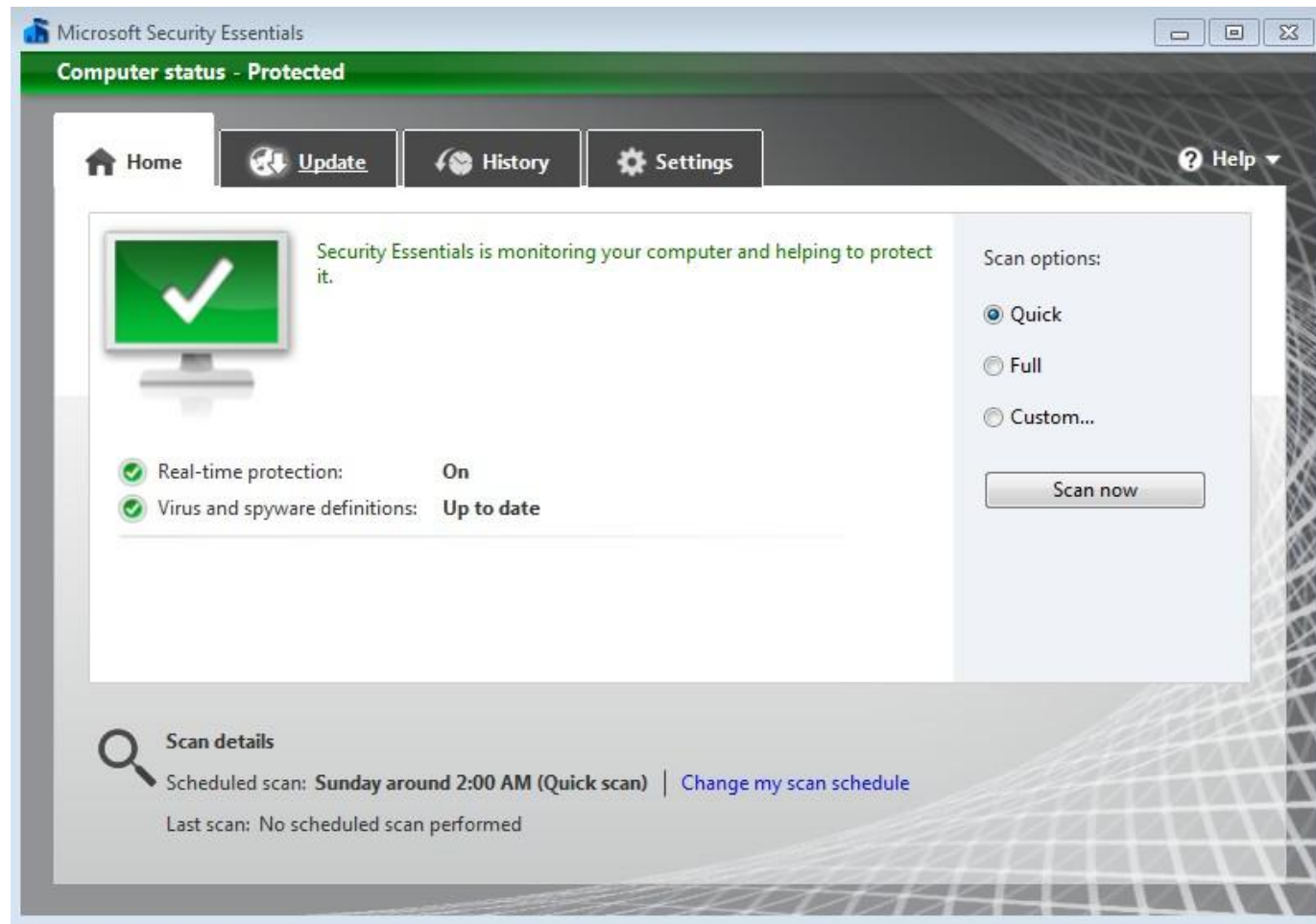
1<sup>st</sup> time e-mails from Google



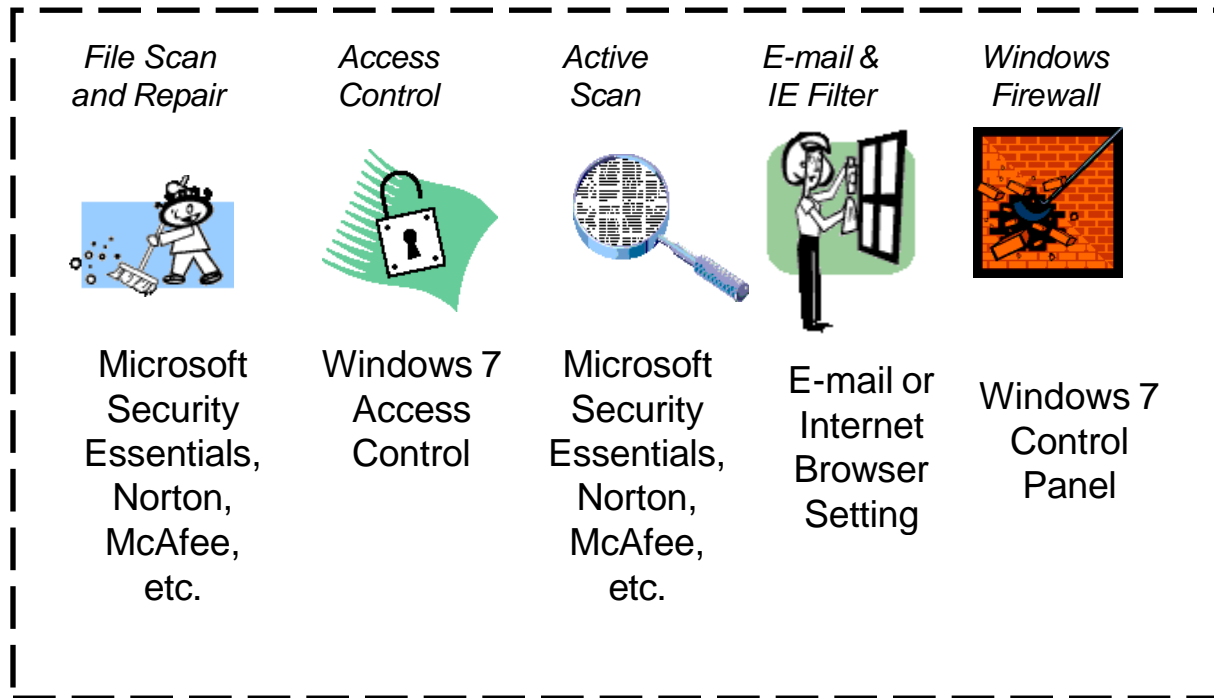
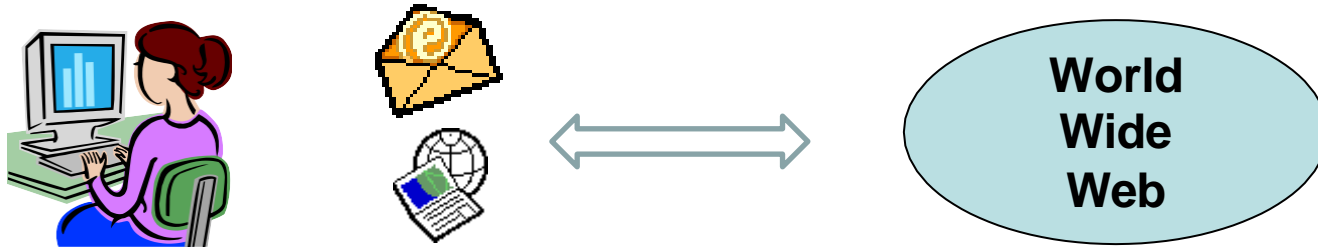
# Week 7 – The Action Center



# Week 7 – Microsoft Security Essentials



# Week 7 – PC Safety Environment



## Usage Threats:

- Viruses
- Phishing
- Worm
- Spyware
- Trojan Horse

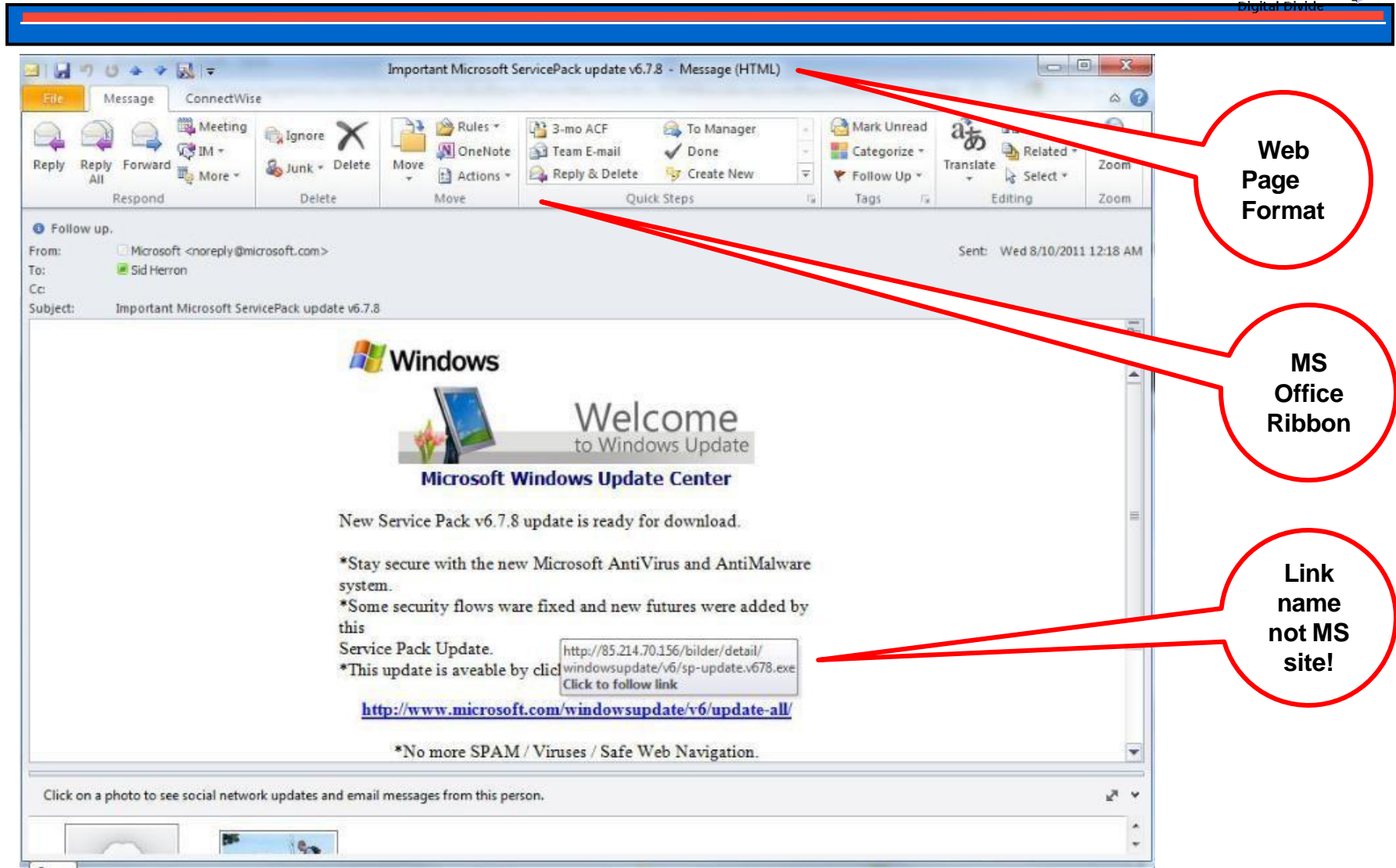
## Access Threats:

- Pedophiles
- Pornography
- Cyber bullying
- Identity theft

PC Security Environment



# Week 7 – Unsolicited Web Phishing Example



Microsoft does not solicit updates!

# Week 7 – Website Phishing Example



**CHASE**

Dear Chase Online<sup>SM</sup> Customer: **Chase Online<sup>SM</sup> Payment Pending.**  
**You have an unconfirmed payment Pending on your account**  
**Please verify your account information for payment approval**  
**We implore you to follow the link below to verify your account details.**

[Account Verification](#)

**NOTE: You are strictly advised to match your information correctly to avoid service suspension.**

**Thank you for your co-operation.**

To start the Re-activate process click on [Chase Online<sup>SM</sup>](#).

**You May Visit Our Web** [www.chase.com](http://www.chase.com)

Once you have completed the process, we will send you an email notifying that your account is available again. After that you can access your account online at any time.

The information provided will be treated in confidence and stored in our secure database.  
**If you fail to provide required information your account will be automatically deleted from Our online database**

Sincerely,

Cathy J. Marinelli  
Senior Vice President  
Online Banking Team

**Authentic looking!**

**Link to criminal site!**

**No Bank will ask you to validate personal information during a Web session!**

# Week 7 – E-Mail Phishing Example



This e-mail has been sent by JPMorgan Chase & Co to Youremailhere  
(May 9th, 2012)

Dear Chase Customer (Youremailhere) ,

This e-mail has been sent to inform you that your account will be deactivated within the next 24 hours due to several unsuccessful login attempts on your account.

To prevent this to happen please login securely to our activation link below  
<https://www.chase-online.chase.com/olbtxn/authentication/SignOn.chase&to=Youremailhere>

If you have already confirmed your information then please disregard this message.

Regards,  
JPMorgan Chase member services.  
© 2012 JPMorgan Chase & Co. (9 May, 2012 )

Looks like its official!

Link to criminal site!

No financial organization will request personal information via e-mail!



# Week 7 – Safe E-mail Usage



To keep in mind while using E-mail:

1. Don't reply to e-mail messages from unknown sources.
2. Don't "click" on links to unknown URL addresses.
  - *Look at the URL address under the link!*
3. Don't open attachments with the following file types (filename.xxx):
  - ".eml", ".url", ".exe", ".dll", ".lnk", ".vb", ".C++", ".Class"
4. Don't forward messages to all of the recipients. (Reply All)
5. Keep your Inbox free of unwanted messages.
6. Don't "unsubscribe" to e-mail messages from unknown senders.
7. Don't send personal information.
8. Delete messages that you do not want to permanently save.
9. Don't share your e-mail with friends and family members.
10. Change your password every 60 days.



# Week 7 – Safe Surfing



To keep in mind while Surfing the Internet:

1. Don't send money when asked by a stranger.
2. Don't respond to requests for personal information.
3. Don't save Passwords in your browser.
4. Don't play games that involve payment over the Internet.
5. Read you monthly Internet bills and question any unexpected charges.
6. Don't send money to unfamiliar charities.
7. Don't buy products that are from unfamiliar companies.
8. Don't be drawn into investments and opportunities that are too good to be true!
9. Remember, the Internet is public domain. Nothing is private.



## Week 7 – Major risks for your concern



What risks do your kids face:

- ✓ Pedophiles
- ✓ Pornography
- ✓ Cyberbullying
- ✓ Identity Theft

What can you do?

- Monitor you kid's Internet Usage (Tools available)
- Know the web sites they visit.
- Keep your Virus SW current.
- Take an active role in their usage and monitor their activity.

*The Internet can be of immeasurable assistance but has significant risks that you will encounter if you don't pay attention!*





## Week 7 - Options available to counter the Internet Threats

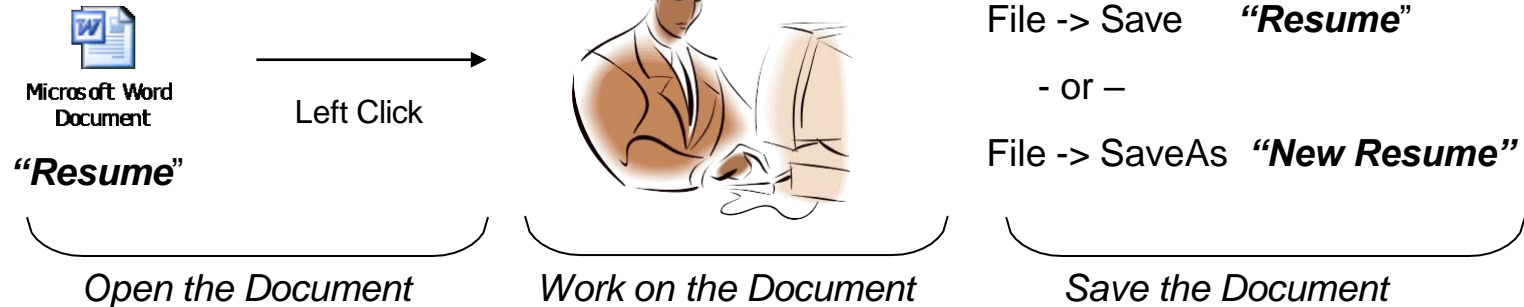
Threat	Response
Viruses	Keep Microsoft Security Essentials or other anti-virus software current and scan often.
Phishing	Do not click unknown links. Do not provide personal information to unknown sites.
Worm	Keep Microsoft Security Essentials or other anti-virus software current and scan often.
Spyware	Clear Internet Browsing history often. Keep Microsoft Security Essentials or other anti-virus software current and scan often.
Trojan Horse	Keep Microsoft Security Essentials or other anti-virus software current and scan often.
Cyber Bullying	Use Windows Access Control and Filter site access.
Access	Use Windows Access Control and Filter site access in E-Mail and Internet Browser software.
Identity Theft	Never store passwords in the Browser! Change your passwords often. Practice safe computing!

# End of Presentation

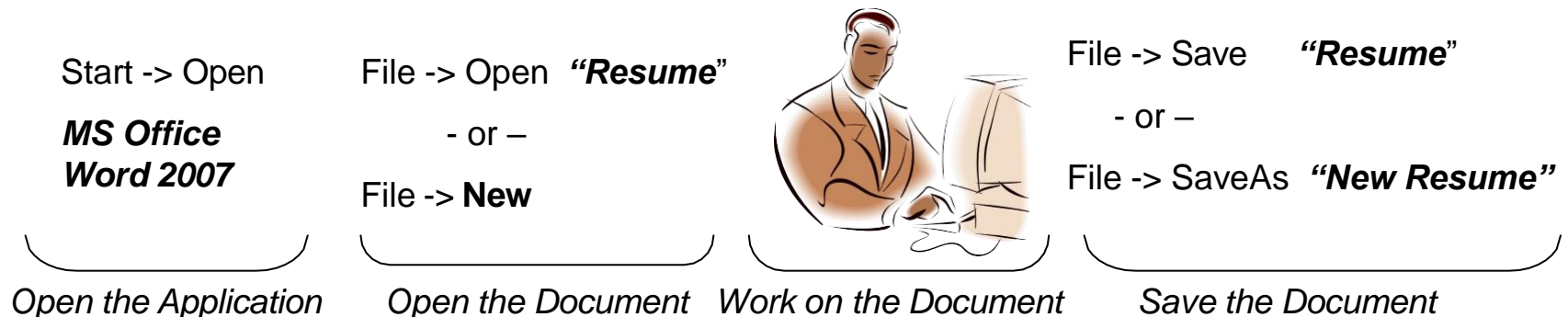
# Week 2: How do you open and work with a file?



## Option 1: Open the Document



## Option 2: Open the Application



# Week 4 – Library concepts in Windows 7



## Documents

## Pictures

## Movies

## Russian Trip

My Documents

My Pictures

My Movies

Notes

Pictures

Movies

Other documents

Other Pictures

Notes:

- Only permanent drives (C:, etc.)
- Must start with a folder.
- Holds all of a folder's contents
- Acts like a shortcut to the files
- No removable (flash) drives!