

# Workshop: Introduction to Computers

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## Topics:

1. Introduction (software, hardware, bits and bytes)
  2. Copying files
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## 1. Introduction

In computer lingo everything you can touch is **hardware** (monitor, CPU, printer, mouse), the rest is **software** (programs like the operating system Windows and applications like Microsoft Word).

### Bits and Bytes

To give you an idea of the amount of data you can store on the different storage media (floppy disk, hard disk, CD-Recordable):

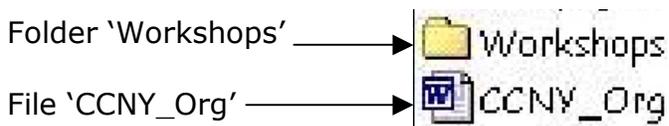
The computer works internally with bits and bytes. Each bit can have a value of either 0 or 1.

1	byte	= 8 bits	
1,000	bytes	= 1 kilo byte	= <b>1kB</b>
1,000,000	bytes	= 1 Mega byte	= <b>1MB</b>
1,000,000,000	bytes	= 1 Giga byte	= <b>1GB</b>

A **3½ floppy disk can hold about 1.44 MB** or 1,440,000 bytes of data. A **CD-R can hold about 650 MB** or 650,000,000 bytes of data or roughly 451 times more data than a 3½ floppy disk can hold. A hard disk can hold several Giga bytes nowadays. A **10 GB hard disk** can hold roughly 15 times more data than a CD-R and 6,944 more data than a 3½ floppy disk.

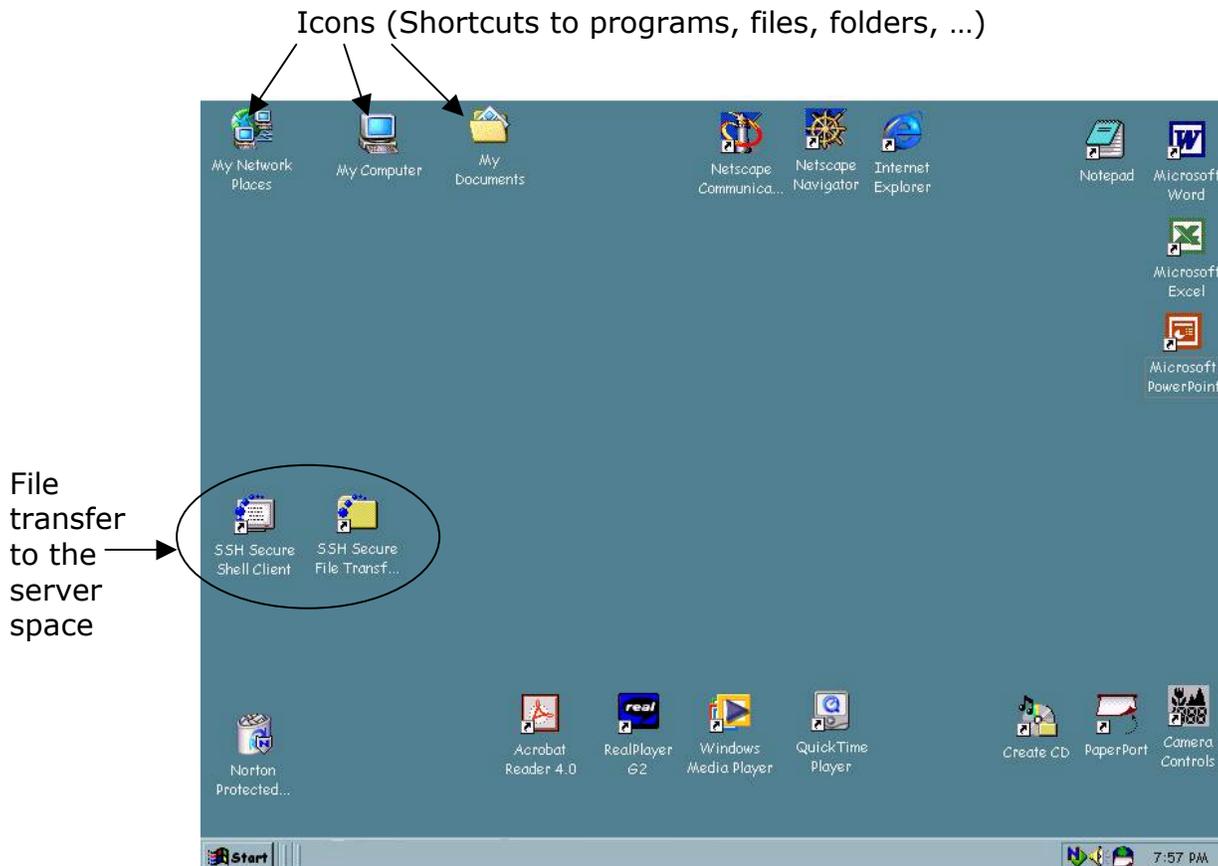
### Files and Folders

Files contain the actual data stored on a storage media (floppy disk, hard disk, CD-R). A file can contain text (.doc, .txt, ...), sound (.wav, .MP3, ...), pictures (.jpg, .gif, .bmp, ...), or programs (.exe, .com, ...). To organize the files on a storage media we put them in folders. You can see a digital folders like paper folders. A picture of a paper folder identifies a folder on a computer.



## 2. Copying files

After you have **booted** (turned on the computer and MS Windows opened) you will see something similar to the following, which we call the **desktop**:



If you **click the left mouse button one time** on an icon representing a folder or file, you will have selected that item. If you **double-click** on an icon (left mouse button) you will open the folder or file; in case of a program it will begin to run.

In general, the difference between left and right mouse click is the following:

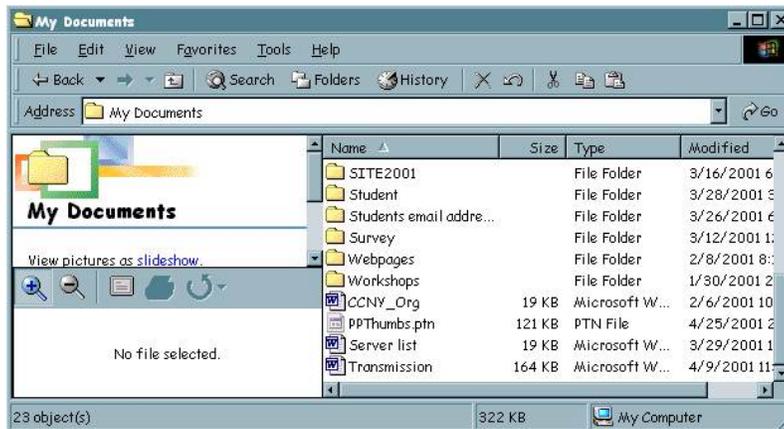
- **Left click:** to select.
- **Right click:** to open a pop up window.

## Copying a file from the Hard Disk to a Floppy Disk

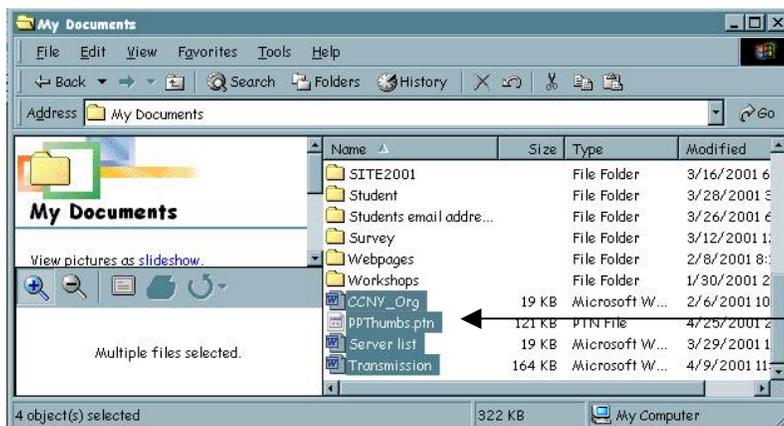
Presuming that the file you want to copy is stored on the hard disk in the folder 'My Documents' you will need to follow these steps:



- On the desktop double-click on the icon labeled 'My Documents' and a window will open up with files and folders:



- Select the files and folders you want to copy:



- **Highlight one file or folder:** click on the file or folder
- **Highlight more than one file or folder:** click on the first file on the top, hold down the shift key and press the cursor down key until all files you want to copy are highlighted
- **Highlight selected files or folders:** hold the Ctrl key and click on all files and folders you want to copy
- **Highlight all files and folders:** click on 'Edit' on the Menu bar and choose 'Select All'



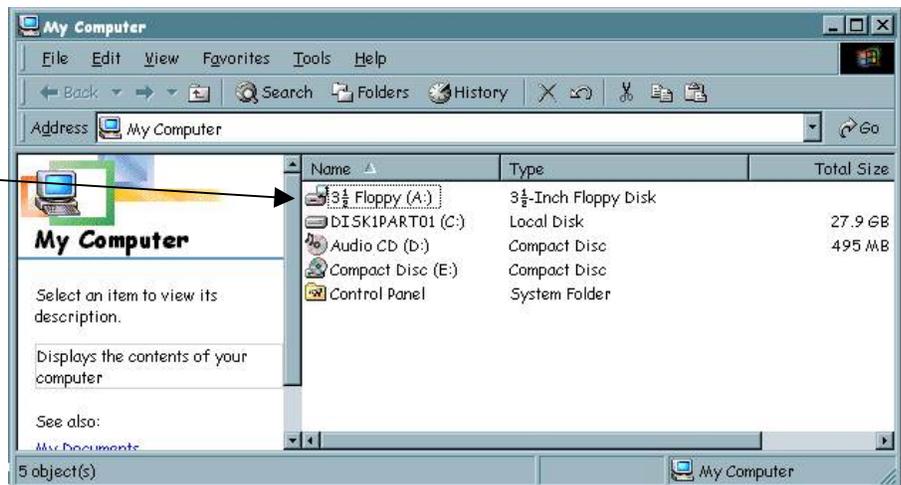
- Click on the copy icon on the toolbar top of the window. The copy option is also available by clicking on 'Edit' in the Menu bar.

- Minimize all windows to see the icons on the desktop.



- Double-click on the icon 'My Computer'

- Double-click on '3½ Floppy (A:)'



- Click on the paste icon  on the toolbar on the top of the window. The paste option is also available by clicking on 'Edit' in the Menu bar. The files and folders will be copied to the floppy drive.

If you want to copy files from the floppy drive to the hard drive you will need to start at the '3½ Floppy (A:)' and follow the above steps.