Windows Files Worksheet

**File Names & File Extensions**

1. Sketch and summarize the "myFile.txt" presentation slide below. Make sure to label the following parts:

a) File Name

* User defined
* Should reflect the purpose or contents of the file
* May be any string
* Some limitations on length / special characters

b) Separator

* System defined
* Must be a period

c) File Extension

* Application and System defined
* Usually 3 or 4 characters
* Identifies the application used to open or edit the file

2. Summarize the presentation slide on how to enable viewing of file extensions for files listed in your folders.

Click on a folder on your desktop and click on the bulleted list icon titled, “*change your view*”. This allows you to change your viewing perspective on the files in the folder.

3. Create a file called "myFile.txt" in your student ID folder on the school network.

· Use Right Click => New => File to create a new text file.

· Open “notepad” and use “File => Save As…” to create the text file

· Double click to open the file. What application is automatically used to open the file?

Notepad.

· Type some text into the file and save and close the file.

4. Change the extension of "myFile.txt" to "myFile.doc" for the file you just created.

· Make sure that View => File extensions is set for your folder.

· Single click on your file and change the file extension to "doc".

· Double click to open the file. What application is automatically used to open the file?

Microsoft Word.

· What else happens? Can you still see the text file contents?

Yes, you can still see the text file contents.

5. Research the limitations that apply to user defined Windows file names.

· File name length:

260 characters

· Special (or reserved) Characters:

NTFS does not allow the following chars:

/ \ : \* ? " < > |

6. Research the file extensions used for some common Windows applications:

· Word (list the variations):

* doc – Legacy Word document; Microsoft Office refers to them as "Microsoft Word 97 – 2003 Document"
* .dot – Legacy Word templates; officially designated "Microsoft Word 97 – 2003 Template"
* .wbk – Legacy Word document backup; referred as "Microsoft Word Backup Document"

· PowerPoint (list the variations):

* .ppt – Legacy PowerPoint presentation
* .pot – Legacy PowerPoint template
* .pps – Legacy PowerPoint slideshow

· Image Files (list the variations):

#### JPEG/JFIF

#### GIF

#### BMP

#### PNG

· Sound Files (list the variations):

* **.aac**
* **.flac**
* **.m4a**
* **.mp3**

· Executable Files (list the variations):

* APK (Android executable)
* BAT (Windows Batch File)
* BIN (Windows, macOS and Linux binary executable)

7. Find three less common Windows applications and list the file extensions associated with the applications.

1. XLSB: which stands for Excel Binary Workbook, behaves more or less like the XLSX format, except that it saves data in the binary format. Its main advantage over XLSX is that the former chops down the file size by a significant margin, and consequently speeds up read-write operations.

b) Macro: Microsoft Excel

c) PPS, PPSX: PPS or PowerPoint Slide is the presentation mode for PPT (PowerPoint Template) files. This means that when you click on a PPS file, it’ll open as a slideshow directly — quite convenient when you want to **launch into a presentation without fumbling around to get to the slideshow option.**

**Disk Drive Letters & Partitions**

*Download and read the "Windows Files Introduction" presentations slides package form the class GitHub repository (in folder Topic A).*

1. Sketch and summarize the "Windows File Path Format" presentation slide below. Make sure to label the following parts:

a) Drive Letter

* System defined
* Refers to the disk drive or device storing the file
* May be any letter A to Z
* Always includes “:\”

b) Folder Name(s)

* User defined
* Should reflect the purpose or contents of the Folder
* May be any string
* Some limitations on length / special characters
* NOTE: Multiple Folders may be listed to form a path
* Folders are separated by “\” or “/”

c) File Name

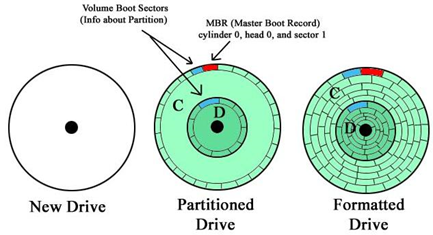
* User defined
* Should reflect the purpose or contents of the file
* May be any string
* Some limitations on length / special characters

2. Summarize the "Attached Disks & Devices" presentation slide below. Clearly indicate how to find the available device letters and names using Windows File Explorer.

588171 (Student number) > Computer (listed on the left hand side). Your attached disks and devices will be stored by clicking on “Computer”.

3. Summarize the "Windows Disk Partition" presentation slides below. Include a diagram that shows how a physical disk can be partitioned into two logical disk drives.

* The storage space on a single *physical* Hard Disk Device may be partitioned (sub-divided ) into a number of *logical* drives
* Each logical drive has a unique drive letter and operates as a separate device.
* The size of the logical drives is smaller than the original physical drive.
* Drives may also have a MBR Boot Partition
* The MBR is hidden from users (does not have a drive letter)
* The MBR contains critical configuration information for starting up Windows
* The MBR is a frequent target of virus malware.



4. List the advantages of partitioning a large physical disk into smaller logical disks.

* Separation of user data from system and application files for improved security and file permission and access management.
* Separation of user data from system and application files to ensure that users are prevented from using too much memory that could impact system performance.
* Improved efficiency related to the way Windows uses disk drive memory.

5. Research the Windows "Disk Defragmentation System Tool" and report on the following:

a) Summarize why you would use this tool.

When a file or folder is deleted from the hard disk, the occupied space becomes free for new files.

b) Summarize when you should use this tool.

When a new file gets saved, the first available free space that is large enough for the file is used and the remaining part is saved in consecutive available free spaces or fragments.

Summarize how the tools works.

Defragmentation is the process of consolidating fragmented files on the user's hard drive. Files become fragmented when data is written to disk, and there is not enough contiguous space to hold the complete file. Storage algorithms break the data apart so that it will fit into the available space.

The process of defragmentation moves the data blocks on the hard drive around to bring all the parts of a file together. Defragmentation reduces file system fragmentation, increasing the efficiency of data retrieval and thereby improving the overall performance of the computer. At the same time, it cleans the storage and provides additional storage capacity.

Defragmentation is the opposite of fragmentation, which is an inefficient use of computer storage.