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BSIT – 301

1. Reanalyze the five (5) different file structures that were discussed and search for other file structures that are available in books, the Internet, and other resources. Closely analyze the components, attributes, structure, and operations or implementation guidelines of each file organization. Note: Illustrations or design figures are also available on the Internet. These will help you to better conceptualize your ideal file management structure.

- Indexed sequential file structure is used. In this the records of the file are stored like in a sequential file. But in addition to this, some index of the records is (are) maintained. Due to smaller size of the index, it can be structured in a way that facilitates efficient search.

2. After gathering all the essential ideas and concepts, propose a unique file organization structure or a file management system using the guidelines/questions below. Use 3 to 5 sentences in answering each item. (5 items x 5 points)

a. Enumerate all your desired attributes/features/functionalities for your file organization design.

- Name - Every file carries a name by which the file is recognized in the file system. One directory cannot have two files with the same name.

- Identifier - Along with the name, Each File has its own extension which identifies the type of the file. For example, a text file has the extension .txt, a video file can have the extension .mp4.

- Type - in a File System, the Files are classified in different types such as video files, audio files, text files, executable files, etc.

- Location - in the File System, there are several locations on which, the files can be stored. Each file carries its location as its attribute.

- Size - The Size of the File is one of its most important attribute. By size of the file, we mean the number of bytes acquired by the file in the memory.

- Protection - The Admin of the computer may want the different protections for the different files. Therefore, each file carries its own set of permissions to the different group of Users.

- Time and Date - Every file carries a time stamp which contains the time and date on which the file is last modified.

b. Which specific file system property would you like to focus on: long-term existence, sharable between processes, or good internal structure? Why?

- good internal structure. Because Successful organizational structures specify the duties of each employee and how they relate to the larger system. A decentralized organization gives nearly every

employee a high amount of personal agency in contrast to a centralized system, which has a clearly defined line of command.

c. Select a particular industry (i.e., education, entertainment, health services, and manufacturing industry) that would greatly benefit from your file organization design, and explain how it will be beneficial for your selected industry. Elaborate on your answer.

- Health service. I think it will benefit to my file organization because Indexed sequential file structure is used. In this the records of the file are stored like in a sequential file.

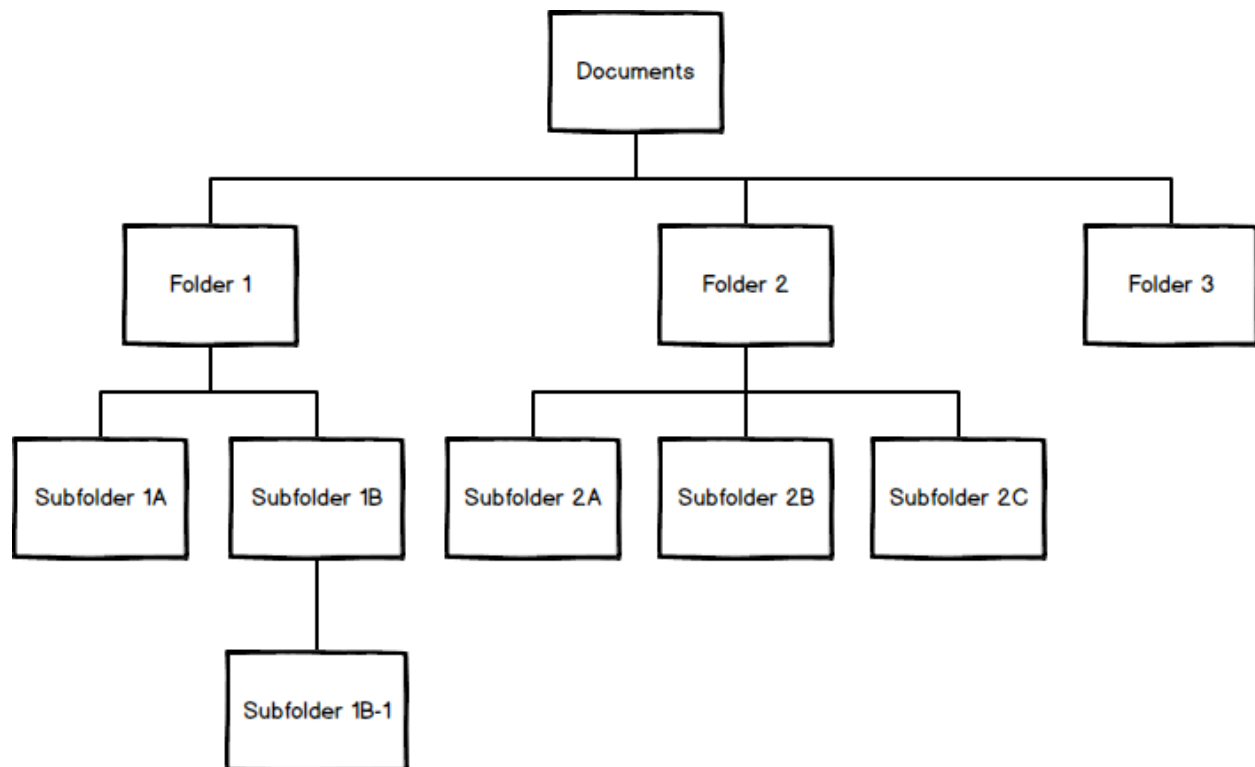
d. Identify what type of records or files would be involved in your design. Elaborate on your answer.

- Indexed sequential file, would be involved in my design because in this case, records are stored in the file with the help of the primary key.

e. What makes your file organization design unique? Rationalize your answer.

I think what my file design unique is the file contains records ordered by a record key. A record key uniquely identifies a record and determines the sequence in which it is accessed with respect to other records.

3. Create a simple illustration of your proposed file organization structure. (10 points)



4. List down possible recommendations to improve your file organization structure design. (5 points)

- Use the Default Installation Folders for Program Files
- One Place for All Documents

- Create Folders in a Logical Hierarchy
- Follow the File Naming Conventions
- Be Specific

5. Properly cite all relevant references that you have utilized. (5 points)

<https://zapier.com/blog/organize-files-folders/>

<https://www.liveabout.com/computer-file-management-tips-2948083>

<https://www.javatpoint.com/os-attributes-of-the-file>

<https://www.ibm.com/docs/en/cobol-aix/5.1?topic=mode-indexed-file-organization>