



Problem: (Where to save the Folder content)

- On first thought it would seem coorect to save the contents of the folder in the object of the folder
- The folder object would contain an Array of type IFolderContent that hold all folder sub-files and sub-folder.
- When we save a folder object we first serialized it to string and then save it.
- In order to save it I used the JavaScriptSerializer with the method Serialize
- The JavaScriptSerializer parser thorws exception when parsed object pass the MaxJsonLength.
- I wasn't able to save the large folder object with all the content

Solution: (Where to save the Folder content)

- Each folder will hold the content in IFolderPage object on an Array of IFolderContent.
- Since we cant save too big object each folder will hold several IFolderPage objects that will contain constant number of elements.
- The combination of all the IFolderPage Arrays will give us all the content of the folder
- I called this IFolderPages Physical page in order to distinguish them from the logical page. The logical page is number of all elements divided by the number of elements the user decided to show on page

We can see that the folder has $4 \times x$ elements.
Since I defined that each physical page can hold at most x elements, the content of the folder must split between 4 physical pages

In this example the user defined that he want to see $2 \times x$ element on page for **this folder**. So the logical page contains $2 \times x$ elements and consists of 2 physical pages.

If the user will change the number of elements he want to see in page to $3 \times x$ then the logical page will be $3 \times x$ and will consists of 3 physical pages

