

Assignment 4 -- VFolder  
CSE231/506, Fall 2014  
Due: 11:55PM October 31, 2014

In this project, you will create a VFolder, a folder that stores a list of files using doubly circular linked list.

There are two classes in this task, VFolder and VFile. I have put the three source files for the two classes in bitbucket repo (<https://bitbucket.org/YonghongYan/cse231project/>), in the src/secs/cse231/project/vfolder folder. Again, you can clone the source folder from there using git utilities. For those who do not want to bother to learn using git, there is a download button on the webpage that you can click to download the zipped source tree. If you clone the repo before, you can use git pull to update your local copy with these three classes. It won't overwrite your local copy since I only changed a specific folder of the project.

Your task is to implement the methods that add and delete VFile in the VFolder. All the files of a folder are stored in a doubly circular linked list. Files should be sorted in the alphabetic order according to file names, so your implementation of add/delete methods should handle this to make sure the order is maintained. The doubly circular linked list of a VFolder has a header, which store the object for the VFolder itself. But the VFolder object itself is not a file contained in the VFolder.

- 1). There are seven methods you need to implement for the VFolder class (each worths 10 points for the grade of this assignment): containsFile(VFile file), getFile(long fileID), getFile(String name), addFile(VFile file), deleteFile (VFile file), deleteFile(long fileID), deleteFile(String name).
- 2). You will also need add code pieces in the main method to test each of the seven methods you implemented. (30 points).

For your reference, I have provided an addFileMess (add file to the list but not sort them), readLocalFolder(read files from a local folder and put them into a VFolder) and the main method to test these functions.

Your submission should include the following: a doc for the output of your main methods when testing the 7 methods; and your source codes include a brief readme.txt file describing how to compiler and run your program. They should be zipped in a single file named Assignment\_4\_<LastName><FirstName>.zip and submitted to Moodle.