

NETWORK PROGRAMMING ASSIGNMENT2P1

Design Document

This is a custom-made file system to store large files on multiple systems.

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Deliverables included: Client.c, fileNameServer.c fileDataServer.c, run.sh, server_address

To run a particular file (file.c): bash run.sh file

Server_address contains the ip address of the fileNameServer

Working of the Code:

- Since the fileNameServer is the main controller, it is run first (bash run.sh fileNameServer).
- Then, all the fileDataServers are run which connect to the fileNameServer (run fileDataServers by running bash run.sh fileDataServer)
- Lastly, Client is run (bash run.sh Client)

Assumption: fileDataServers remain online throughout Client's run and no further connections are accepted after Client is run.

Commands-

1. ls - ls will list all the directory and file names in the current working directory.
Syntax - ls
2. mkdir - Make a directory with name specified
Syntax - mkdir dirname
3. cd - Change the current working directory
Syntax - cd dirname
4. tobigfs - Transfers a local file (not directory) to our custom file system (saved with the same name in current working directory)
Syntax - tobigfs path/filename - Creates filename in bigfs
5. rm - To remove a particular file in the current working directory
Syntax - rm filename - Should be in cwd
6. cat - Display the contents of a file in the current working directory
Syntax - cat filename - Should be in cwd

7. mv - Move a file from one location to another
Syntax - mv source_path destination_path
For renaming a file, mv fileName newFileName
8. cp - Copy a file from one location to another
Syntax - cp sourcePath destinationPath
9. frombigfs - Transfer a file from bigfs to local system
Syntax - frombigfs filepath