Assignment 2

File Sharing And Management System

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Code Files

- Server.java
- Client.java

Execution

=> Change server ip,port on corresponding machine.
=> Compile both server and client code by running commands.
  => **javac Client.java**
  => javac Server.java
=> Run Server code on the server machine.
=> Run client code on the client machine.
=> Command for running
  => **java Client**
  => java Server
=> Commands will be run as per the assignment document.
=> when client want to exit then command to be run is
  "exit"

Implementation Details

=> After running both server and client,server will handle the commands that were fired by client.
=> Server will fired new thread for habdling the command activities of the specific client.
=> Multiple thread at server end will map to the corresponding client activities.
=> Message will be displayed at both server and client end after the execution of command.
=> Server will trace the client activities by storing the metadata in hashmap which can be extended to dumping metadata and can be read.
  => Mapping is done between client to a group.
  => Active clients details were stored.
  => Current directory specific to user is stored at server end.
=> Implementation specific to commands is as follows:

  => **cmd: create_user `username`**
    On execution of this command,folder structure is created at server end for that group.

=> **cmd: upload `filename`**

On execution of command,file is uploaded to corresponding client folder at server.File is send in chunks.

=>**cmd : upload_udp `filename`**

On execution of command,file is uploaded to corresponding client folder at server.File is send in chunks.Udp port is created at client for execution.

=> **cmd: create_folder `foldername`**

On execution folder is created at server at corresponding client directory.

=>**cmd: move_file `source_path` `dest_path`**

On excecution file is transfered at client folder at server by the mentioed path.

=> **cmd: create_group `groupname`**

On excution a group is created,folder structure is created at server for handling group specific activity.

=> **cmd: list_groups**

On execution list of groups were listed that were created.

=>**cmd: join_group `groupname`**

On execution user is joined to specific group ,also a folder is created at server in that group folder for handling group specific activity.

=> **cmd: leave_group `groupname`**

On execution user is removed from specific group ,also a folder is emoved at server in that group folder .

=> **cmd: list_detail `groupname`**

On execution details were displayed by scanning directory structure of corresponding groups.

=> **cmd: share_msg `message text`**

On execution message were shared in a group.As we have stored connection details,server will transfer message to specific user in a group.

=> **cmd: get_file `groupname/username/file_path`**

On execution files from specific group can be downloaded.File transfer is in form of chunks.