User Manual

**Server is set to handle 5 clients for testing purposes. You can** **change that number by going to *server.java (line 10)***

**Steps to Run the Client/Server application :**

- The folders you would like to backup are put inside the User folder

- Run *server.java* found inside the Cloud folder

*-* Run *client.java* that is inside the User folder by providing it the folder name you would like to backup as an argument like the following: java client [folder\_name]

*-* The command line will then ask you to provide a name to your Backup folder

- Backup folder is now created inside the Cloud folder.

**Naming Conventions**

- Client File Names with space were not handled, hence they should not include a *space* because that was used to let the tokenizer know how to tokenize the header.

Protocol

- Client provides backup folder Name for the Server to create using header :

**[folder name] [line feed]**

- If Folder already exists, Server replies with header

**Folder [one space] already [one space] exists [line feed] --- proceeding [space] to [space] check [space] for [space] updates [line feed]**

- Else it sends header : **Backup [one space] Folder [one space] created [one space] successfully [line feed]**.

- Client then sends number of files in the folder it wants to back up using header

**[number of files] [line feed]** so that the for loop can iterate on every client file and upload it before checking for updates

- In every iteration the client sends the file using header :

**[file name] [space] [file size] [line feed]**

- Server reads it and tokenizes it, if file does not exist in the backup folder, server downloads it by requesting the content of that file to the client using header **Send [space] Content [line feed]**

- Client then sends content by writing to the Server.

- Else, if file already exists, Server checks for update by requesting its content using the same header. (compares file content in the backup folder with the file content in the client folder )