**Assumptions**

1. Each user has one account.

2. Must enter a USER, otherwise ACCT command invalid.

3. Must resend account and password in order to change directory.

4. Upon invalid commands (-) user must re-enter command. E.G CDIR = valid, then PASS or ACCT invalid - > therefore user must enter CDIR again

5. USER ACCT and PASS must be specified to login. Otherwise cannot login.

6. For STOR and RETR full file is always written. If file size is 300000Bytes and user specifies 30Bytes, full file is still written.

7. Only one person can be logged in. If another user is needing the service, the first user must enter DONE in order to let user2 use the service.

8. For STOR, file must exist on the client side in order to send. Otherwise server crashes.

9. CDIR assumes you can go into any directory. I assume server is running on a server computer.

**RUN ON UBUNTU**

To Compile: Enter Directory and run “javac \*.java”

To Run: Open 2 terminals. On one, run “java TCPServer.” On Other, run “java TCPClient.”

Enter commands on tcp client terminal.

S = Command Sent, R = Response from server (commands are not case sensitive except list arguments are)

Note\* if specified files are not in directories, alternatives can be used.

Default server directory is in Server folder.

TEST USER,ACCT,PASSWORD:

R: +MIT-XX suhan-GE62-2QL Service

S: USER user1

R: +User-id valid, send account and password

S: ACCT acc1

R: +Account valid, send password

S: PASS pass1

R: ! Logged in

S: USER user1

R: !user1 logged in

S: ACCT acc1

R: ! Account valid, logged-in

S: PASS pass1

R: ! Logged in

S:

(ALL preceeding commands assume you have logged in)

TEST LIST:

...

S: LIST F

R: +/home/suhan/Desktop/725\_ass1/Server/:

test12.txt

vegitoblue.png

test1.txt

USERS.txt

vegito.png

S: list V

R: +/home/suhan/Desktop/725\_ass1/Server/:

test12.txt 500 2017-08-28 23:53:51

vegitoblue.png 446465 2017-08-29 00:21:01

test1.txt 500 2017-08-29 11:07:13

USERS.txt 84 2017-08-28 19:58:06

vegito.png 442369 2017-08-29 11:00:53

S: list F /home/suhan/TestDir

R: -This directory does not exist

S: list F /home/suhan/Desktop/TestDir

R: +/home/suhan/Desktop/TestDir:

posts8.py

posts6.py

test12.txt

c1\_py

posts5.py

S: list V /home/suhan/Desktop/TestDir

R: +/home/suhan/Desktop/TestDir:

posts8.py 500 2017-08-29 12:10:50

posts6.py 1058 2017-06-02 21:00:04

test12.txt 0 2017-08-29 11:47:59

c1\_py 39871 2017-06-09 10:09:38

posts5.py 1058 2017-06-02 21:00:04

S:

TEST CDIR:

...

S: cdir /home/suhan/Desktop/725\_ass1/ChangeToThisDir

R: +directory ok, send account/password

S: acct acc1

R: +account ok, send password

S: pass pass1

R: !Changed working dir to /home/suhan/Desktop/725\_ass1/ChangeToThisDir

S: cdir /home/suhan/Desktop/725\_ass1/Chnagetodisdir

R: -Can't connect to directory because: this is not a valid directory

S:

TEST KILL: //test killing in killdir

...

S: cdir /home/suhan/Desktop/725\_ass1/killdir

R: +directory ok, send account/password

S: acct acc1

R: +account ok, send password

S: pass pass1

R: !Changed working dir to /home/suhan/Desktop/725\_ass1/killdir

S: kill test1.txt

R: +test1.txt deleted

S: kill test2.txt

R: +test2.txt deleted

S: kill nothere.txt

R: -Not deleted because not found

TEST NAME: //test naming in changedir

...

S: cdir /home/suhan/Desktop/725\_ass1/changedir

R: +directory ok, send account/password

S: acct acc1

R: +account ok, send password

S: pass pass1

R: !Changed working dir to /home/suhan/Desktop/725\_ass1/changedir

S: name test3.txt

R: +File exists

S: tobe test7.txt

R: test3.txt renamed to test7.txt

S: name test77.txt

R: -Can't find test77.txt

TEST RETR: (all files that are retreived are stored in Client folder)

...

S: LIST F

R: +/home/suhan/Desktop/725\_ass1/changedir/:

test6.txt

test5.txt

test4.txt

test7.txt

S: RETR test7.txt

R: 92

S: send

R: File Sent

TEST STOR: (implemented only STOR OLD <filename>. Dont understand protocol for NEW or APP) (MAKE SURE FILE IS IN CLIENT FOLDER TO STORE ON SERVER)

...

S: stor old vegito.png

R: +Will write over old file

S: size 400000 (make sure 2nd argument is a number for size)

R: +ok, waiting for file

R: +Saved vegito.png

S: list f

R: - Invalid second parameter

S: list F

R: +/home/suhan/Desktop/725\_ass1/Server/:

test12.txt

vegitoblue.png

test1.txt

USERS.txt

vegito.png

TEST TYPE:

...

S: type a

R: +Using Ascii mode

S: type b

R: +Using Binary mode

S: type c

R: +Using Continuos mode

S: type sads

R: -Type not valid

TEST DONE:(always works. Just type DONE)

Other testing can be performed as per protocol. Error checking in place.