Assignment2　　Programming Assignment

Socket Programming—File Share Client/Server

You will implement a client and a server using TCP/UDP Socket APIs. The client could upload/download files to/from the server side. Functions include but not limited to:

1. List the objects in current directory
2. Change directory
3. Download objects from server side
4. Upload objects to server side
5. Delete objects on server side
6. (optional) If you select TCP Socket API, please try to implement according FTP protocol (http://tools.ietf.org/html/rfc959), and try to use your client to talk to SJTU Portal FTP server.
7. (optional) If you select UDP Socket API, please try to implement error control (packet loss and dis-order).
8. UI design is very flexible. Please concentrate on the Socket API programming instead of time-consuming UI.

Language recommended: Java or C/C++.

Note:

1. For C/C++ programmers, the Winsock tutorial can be found at: http://msdn.microsoft.com/en-us/library/windows/desktop/ms740673(v=vs.85).aspx
2. For java programmers, the java Socket API tutorial can be found at: http://docs.oracle.com/javase/7/docs/api/java/net/Socket.html

Submission:

1. Please submit to ftp://lpshen:public@public.sjtu.edu.cn/upload/assign2
2. Due date: 24:00 20 April. 2015
3. Filename: assign2-xxxxxxxxxx.zip/rar(xxxxxxxxxx is your student ID) including source codes and project report
4. The project report at least includes:
   - ✓ System function, runtime environment description
   - ✓ System design (architecture, UI, classes diagram, files description, security feature)
   - ✓ Build and Run (how to build, release and run)
   - ✓ Problems and experiences (troubleshooting experiences, comments and suggestion for the project or lectures are welcome)