CSE 4226 Network Programming Lab

Assignment 1

Due Date: July 1, 2015

Spring 2015

This is an individual project. In this project, you are required to use socket programming in Java to implement a pair of client and server that can achieve simple password verification. Your client will send a pair of username and password to your server and your server will verify whether the pair of username and password is legitimate or not. Assume the only legitimate pairs of usernames and passwords that will be accepted by your server are as follows.

username	Password
Alice	aaaaaaaaaa
Bob	bbbbbbbbb
Cindy	ccccccccc
David	ddddddddd
Eve	eeeeeeeeee
Frank	fffffffff
George	ggggggggg

More specifically, your client and server need to achieve the following requirements:

1. Your program for client needs to take two arguments that specify the name of server and the port that it is trying to connect to. Your program for server needs to take an argument that specifies the port that it is listening to. (1 point)

2. Your server will start first and keep listening to the specified port. Your client will connect to the port that your server is listening to, and a socket between your client and server is constructed. (1 point)

3. Your client will first prompt a welcome message that asks the user to enter a username using the keyboard. This username will then be sent to the server. Then, your server, after receiving the username from your client, will send an acknowledgment message to the client. (1 point)

4. Your client, after receiving the acknowledgment message from your server, will prompt a message that asks the user to enter the corresponding password. This password will then be sent to the server. Then, your server, after receiving the password from your client, will verify the received pair of username and password against the list of legitimate pairs. If the result is positive, the server will send a success message to the client. If the result is negative, the server will send a failure message to the client. (3 point)

5. Your client, after receiving the result message, will print out the result and close the socket. Your server will close the socket following the client, and keep listening for the next client request. (1 point)

This warm-up project will count for 10 points toward your final grade. You need to submit your java programs, and a README file (1) in a zip folder named according to your ID such as "11.01.04.XXX" via the Dropbox named 'CSE 4226 Assignment 01' before the due day. This project is due on July 1 at 11:59pm.

For submission just go to this link and upload your zip file-

https://www.dropbox.com/request/6GblV8cfMcNs0vYIG8i9

Remember a grade of zero will be given, if your programs cannot be compiled and executed. You should report your projects in a short write up, README file. The README file should contain following information: 0) your name & ID; 1) the programming environment you used; 2) how to compile your programs; 3) how to execute your programs. The programs will be graded based on the amount of the required functionalities that has been implemented (7 points), and the quality of the code (2 points).