CNT5106c (Computer Networks)

Project
Deadline to Canvas November 26

There will be one team project. Each team consists of one to two students. For local students, you are expected to set up a demo time with the TA during a designated week for demo.

For remote students, the TA will do the demo for you.

Write an Internet chat application with a server program and a client program. The server manages a chat group, allowing any number of clients to join the group with a user name at any time.

(1) Broadcast: Any client is able to send a text to the server, which will relay it to all other clients for display.
(2) Broadcast: Any client is able to send a file of any type to the group via the server.
(3) Unicast: Any client is able to send a private message to a specific other client via the server.
(4) Unicast: Any client is able to send a private file of any type to a specific other client via the server.
(5) Blockcast: Any client is able to send a text to all other clients except for one via the sever.

Other Information

1. **Programming Environment**

   Programming language: Java, C, C++, C#
   Operating System: Windows or Linux
   Programming Tool: Jcreator, Kawa, Eclipse, Netbeans ... whatever you like.
   To use eclipse, please go through the following list:
    1. Download JDK from
       http://java.sun.com/javase/downloads/widget/jdk6.jsp

    2. Download Eclipse from http://www.eclipse.org/downloads/

    3. Here is a link for eclipse tutorial:

       http://eclipsetutorial.sourceforge.net/totalbeginner.html

    4. Here is a tutorial for socket programming in Java:
       http://java.sun.com/docs/books/tutorial/networking/sockets/

2. **Submission (Deadline: November 26)**

   If you use Java, you will need to submit the following files: server.java, client.java, server.class, client.class, README.txt in a zipped directory, e.g., project1.rar. Please make sure to include server.class and client.class in the submission.

   If you use C/C++/C#, please put all source files and executables in a zipped directory. Submit the project through Canvas:

   1) go to https://lss.at.ufl.edu/
   2) click e-Learning Login
   3) login with your gator link username/password
   4) submit your project through Canvas

Local Students:

You must sign up for a demo slot during December 7-9 with the TAs, who will post a google doc for you to sign up.

Edge Non-Local Students:

Here is a guideline for project submission. Since remote students cannot come to demonstrate the project in person, our TAs will do the demonstration for you. They will use the CISE computers (http://www.cise.ufl.edu/help/access/index.shtml). You are also able to access these machines using Telnet or SSH. We do not limit the programming environment that you use. But to eliminate the possibility that you lose some points because the TAs cannot successfully run your projects, you are required to run and test your projects on these computers before submitting. Your submission must include executable/compiled files, Makefile, README and source files. In the README file, please write clearly and concisely the steps on how you want the TA to execute your program on your behalf. Note that it is your responsibility to make it sure that your executable/compiled files are run-able or compilable on CISE computers. If you have any more questions regarding the submission, please send an email to the TA Ms. Huiling Zhang (huilingzhang@ufl.edu).