

COM S/SE 319 : Software Construction and User Interfaces

Fall 2018

HW 1

[Total Points: 50]

Assignment Due: Sunday, September 9, 2018, 11:59 PM

[N.B.:5% penalty per day up to maximum of 7 days from **September 9, 2018**]

1. APPLICATION SECTION: Server Client/Thread

Create a chat application. You will need to create both the server and the client codes. The server and clients should run on localhost. Below are some features that you should incorporate. Note, we may have under-specified what you need to do. If so, make up your own rules on what to do for those situations. In other cases, follow the requirements carefully.

1.1 Connect to Server (15 points)

a) When you start a client, it should come up with a prompt, you should make it entirely text based. **(5 points)**

> Enter your Name: (Type in your name, then press Enter)

b) After the user enters a name, the client should be connected to your server. **(10 points)**

1.2 Send text message to server (25 points)

a) Send user name and message to server. **(5 points)**

b) Then the server broadcast client's text message to every other currently connected clients (i.e. not to the sending client). **(10 points)**

c) Messages should be printed in each client's console and the server's console. **(10 points)**

2. What to Submit:

Submit via Canvas a **compressed file (.zip)** (rename it with your LAST NAME) containing the following:

1. Zip your **Eclipse project** and submit on Canvas along with **README file** and the **report**. Make sure to include all the files that are needed in order to run your program(s).
[All APPLICATION SECTION points = 5+10+5+10+10 =**40 points**]
2. A **README file** explaining how to **compile and run** the program. [**5 points**]
3. A **report** (.docx or .pdf) describing your solution approach and screenshots of every required output. [**5 points**].