

CNT4403- Final Project

Topic: A secure chatroom

Objectives:

- **Obj1:** To Create an SSL connection between a web server and a client. (50 points)
- **Obj2:** To create a secure chatroom (50 points)

Group: Maximum 3 students

- Just one student: 10 points extra credit
- Two students: 5 points extra credit
- Three students: No extra credit

Deadline: Apr 5, 2020

Submission:

- In a word file (or pdf), provide a complete report about the project including:
 - introduction
 - implementation
 - list and explain the steps and add enough screenshots to show that you have followed the steps correctly.
 - A short instruction manual explaining how to compile and use the final product.
 - The screenshots of the outputs or a short video showing how the product works and what is the output.
 - Limitation (if any)
 - Conclusion
 - A zip file including the source code and all related files (with enough comments explaining the steps and the code)

Introduction: There are many people who want or need to have a connection between a browser and the Web server encrypted but haven't been able to set it up. In this project you will learn how to make a secure connection using SSL, then as an application, you will create a secure chatroom.

Obj1: Creating SSL connection and certificate using Java

Use the following Java Security Tutorial to create SSL connection and certificates. ([Link](#))

Obj2: Secure Chatroom

You can use the starter codes and references in the following links (or any other codes) to create the chatroom:

- <https://www.youtube.com/watch?v=uYRTpMGdf1g>
- <https://www.youtube.com/watch?v=kqBmsLvWU14>
- <http://cs.lmu.edu/~ray/notes/javanetexamples/> (Links to an external site.)

To make your chatroom secure, please use the method you learned in part 1. If you use another method, don't forget to reference the sources you used.