

# In-class Assignment

## Sockets - Echo Service

Jaap Geurts

24 November 2017

## 1 Introduction

In this assignment you'll build an echo service. An echo service is an internet service that replies with the message it has received.

You'll build this application in two steps. First you'll make the server program. You can test the server program with a telnet client. After that you'll build a client program to connect to the service.


## 2 Assignment

You are given a skeleton Netbeans project in which you'll implement the missing functionality. In the project you'll find the `EchoService` and the `TelnetClient` class. All the code for reading and writing to the sockets and console has already been implemented for you. You have to implement the socket code to make the connections.

- Implement the missing code in the `EchoService` class.
- Implement the missing code in the `TelnetClient` class.
- Add a feature to the `EchoService` class so that it quits when you type: QUIT
- Handle exceptions where necessary and add checks to make sure that no unnecessary exceptions are thrown.

## Hints

To test your server code you can connect to the service using a 'telnet' program. On Linux you can use the following command: `telnet localhost <port>`. The default port is 1974. You can change the port in the `EchoService` class.

To quit on Linux you can type `^D` or on Windows `^Z`. You can also force close telnet by typing: `^] close` . Alternatively, on Windows, you can use a program such as [Putty](https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html)<sup>1</sup> to connect to your service.

---

<sup>1</sup><https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html>