Chat

Foundations of Distributed Systems
Lab Guide 1

2020/2021

Consider a simple multi-threaded chat server using Java and sockets, where lines sent by any client are broadcast to all currently connected clients.

Steps

1. Implement the server using the simplest strategy possible.

2. Implementt an ineractive client.

3. Implement a non-interactive client to generate load (*bot*) that sleeps a configurable amount of time between sending or receiving messages.

4. Run clients with different delay configurations.

Questions

1. How does one client affect other clients?

2. How do clients affect server memory usage as observed with jconsole?

Learning Outcomes   Recall basic distributed systems programming with Java, sockets and threads. Relate interactive performance and memory usage with server programming.