

Goal:

The goal of this project is to implement a Client-Server application using Sockets

Task:

The task is to develop a chat tool that should consist of a Server and a Client component.

The server should allow clients to

- Create chat-rooms
- List all existing rooms
- Join existing chat-rooms
- Leave a chat-room

Once created, chat-rooms store all data (messages sent to the room) for as long as they exist. If a chat-room has not been used for more than 7 days, it should be destroyed. The server should support up to 10 concurrent clients.

The client should provide an interface that enables a user to

- Create a room
- List the existing rooms
- Join one or more existing chat-rooms
- Send messages to chat-rooms
- Leave one or more rooms

If the user connects to a chat-room all previously sent messages of that room should be displayed. New messages sent by the user or other connected users should be shown to the user with a maximum delay of 1.5 seconds. To simplify the development of the client software, you can request the user to provide the location and name of the server object.

Implementation:

The chat application (Client & Server) should be implemented using TCP Sockets and the languages Java & C#. The client and the server part should be implemented in different languages, with the Client implemented in C# and the Server in Java.