Protocol - TW-Mailer – basic version

Client and server architecture

- **Communication**
    - The communication between client and server is established by sharing one port. Both, client and server, write string-messages to the client-socket and process the string independently.
- **Statelessness**
    - Every message a client transmits to the server is independent from any previous messages the client has sent.

Used technologies

- network communication
- socket communication
- directory operations
- string handling

Development strategy and needed adaptations

Our development strategy is based on the provided course materials. We have one server class and one client class, which are compiled and started independently. Following methods/logic has been added:
- **menu logic**
    - getting/processing SEND, LIST, READ, DEL, QUIT
- **handling of buffer**
    - allocated on the heap
    - both, client and server have a separated buffer for saving messages
    - parsing of the buffer to get the username, subject,...
- **storing messages**
    - only on the server-side
    - performing directory operations with <dirent.h> and <sys/stat.h>
    - every user has one folder
        - this folder contains his messages
        - every message has a unique message-number

The one and only adaptation/correction we made: Instead of passing a local buffer on the stack between functions, we implemented the buffer on the heap as a class variable.