

Chat-Program

The follow points, which are listed below, show or describe my initial requirements. With the aid of the comments (*which have a cursive font style*) I am going to explain what points I actually accomplished. Additionally, I marked the accomplished ones with a green font colour.

Initial Requirements VS. accomplished Requirements

- desktop application / fat client

WPF-Desktop client

- change colour theme

actually, I implemented a function to change the background of the application, by uploading and image

User

- username
- profile picture
- status (shown to other users)
- login
- logout

when a user registers himself, he can add a username, status as well as a profile picture; Also the login and logout was implemented.

Messages

- text
- pictures
- files
- emoji
- information if message is transmitted
- offline storage / re-delivery

currently my chatmessage model only can contain a message, send date, sender id and the chat id to which the message belongs

contact list

- add other contacts/users
 - ask/send an invitation for adding
- remove contact/user
- create groups with added contacts
- blocking of contacts

in my chat program the contacts of the user are shown but unfortunately not the things mention above.

Back-up

- back-up all messages
- if chat is loaded return a chat history (maybe last week)

all messages are backed up in the database, and when the user choses a chat -> all messages will be loaded

Significant hacks & things that took the most of effort.

- Using the MVVM pattern

During my implementation phase I made sure to use the MVVM pattern correctly. Nearly every View has a viewmodel as datacontext and only the viewmodel knows the model. Furthermore, I used a lot the databinding-function. Additionally, I implemented converters to convert images dynamically when they are needed.

- Design

From the beginning I focused one the design because I personally prefer a at least a bit good-looking and pleasing application. Unfortunately, I was focussing a lot on the design and the layout the real-time messaging was moved into the background.

- inherited Get-Method

On my WPF-Client, the restclient classes take over the communication with the webserver's api. To save some lines of code, I implemented in the BaseRestClient class a get-method which the subclasses can use.

- BaseUser class

When I load all contacts of a specific user, I send back a collection of baseusers. That means, I do not send all information of the user to another but only the name, statusmessage and usericon. So, the user only gets a trimmed version of the normal user objects.

- Login by pressing the Enter key

After the user entered his/her credentials, the login process can be started by pressing the enter key. This is a very small and easy-to-implement feature but in my eyes, it is very convenient.