Advanced web application project work

Technology choices

I chose to use Express for the server side and React for the client side. I decided to use these as I was the most familiar with these tools and they seemed quite easy to use. In addition to using React I also used the Material UI in order to make building the front-end easier. I used many node modules for the back-end, including mongoose for database communication, bcrypt for encrypting passwords, jsonwebtoken for authentication, fs for managing files and multer for handling the formdata for images.

For the database I used mongoDB as we had used it on the course before and it felt a bit easier to use than a relational database. Bcrypt was also something we used during the course and I used JWT because I like the idea of token based authentication. Fs felt like the obvious choice for file management since it is so popular. Multer was also used on the course, so that was the first module that came to mind when thinking about handling formdata.

Installation guidelines

To use the server you will need to have mongoDB and node.js installed. After that all you need to do is download the files (git clone https://github.com/ArachnoBot/AWA_Project.git) and run the command "npm start". When the console prints "Server running in production mode" the server for the website is operational and you can access it from address "localhost:5000".

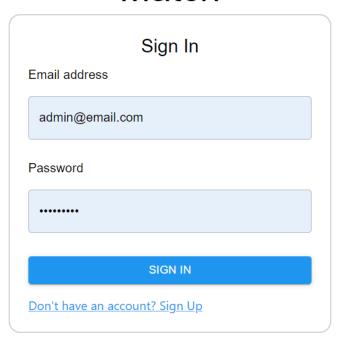
(In case the production build fails, you can run the development version by running command "npm run installAll" and then running commands "npm run dev:server" and "npm run dev:client" in separate terminals. Finally go to address "localhost:3000" to access the development version)

User manual

Here are instructions on how to use the website. I will list all views and their functions.

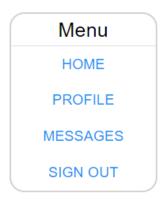
Register and login page:

Match



These two pages are very similar. Fill in the email and password fields and press either the "sign in" or "register" button. The link at the bottom lets you move between the two pages. After registering you will be redirected to the page where you can edit your profile.

Menu:

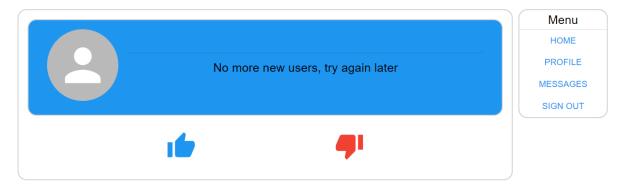


This is the menu for the desktop version. It is always located on top right on every page. The first button takes you to the homepage. The second to the profile page, where you can edit your information. The third takes you to the page where you can send messages to other users. The final button redirects you to the login page and signs you out.



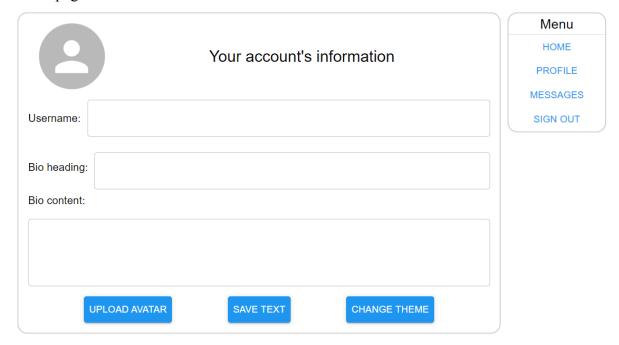
This is the mobile version of the menu. The functionality is the exact same.

Homepage:



On this page a random user will be shown. You have two options, either press the thumbs up icon to like them or the thumbs down icon to dislike them. Like people you want to chat with and dislike people who you do not.

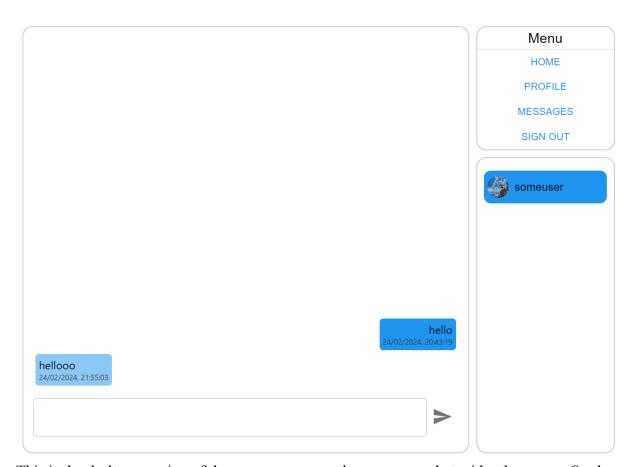
Profile page:



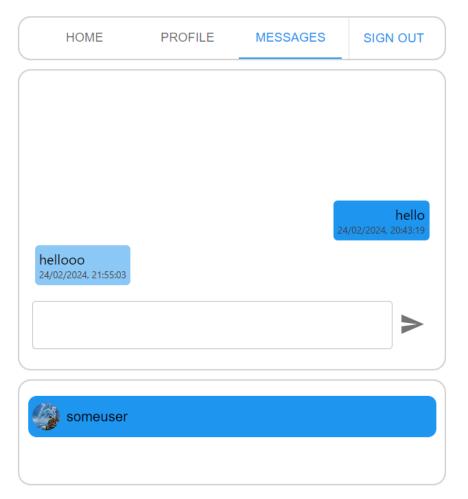
On this page you can view and edit your profile information. The fields are username, which is the name shown to other users. In the bio heading field you can write a short sentence that fits yourself the best. The bio content field is where you can go more into depth about yourself.

The left button on the bottom lets you change your avatar which is shown on the top left. The button opens a window that lets you choose the image file. The button in the middle saves changes to your profile text (username, heading, content). Finally the button on the right lets you cycle between the 3 themes, which are light, dark and black.

Messages page:



This is the desktop version of the messages page where you can chat with other users. On the left is a scrollable list of messages with your messages on the right edge of the window. At the bottom is a text box and a send button for sending messages (you can also send with enter). On the right below the menu is a scrollable list of all users you can chat with.



This is the mobile version of the messages page. It works the same way as the desktop version except that the list of users is at the bottom.

List of features

Basic features: 25p Utilization of React: 5p

User profiles have images: 3p

UI has 3 themes: 2p

Timestamps within chats: 2p

UI layout changes for smaller screens: 1p

Total: 38p