

CT30A3204 Advanced Web Applications

Project documentation

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Technology choices

Frontend

React

I chose React as a frontend framework to use as it was covered in the course. It is used to build the frontend of this application.

Material UI

Material UI was chosen to get already working react components that could be used to make the frontend.

Material Icons

Material Icons was used to get like and dislike button icons.

react-router-dom

react-router-dom was used to handle navigation through different views without the need for reloading every time.

Backend

Express

Express was chosen to build API in the node.js server.

bcryptjs

bcryptjs was chosen for encrypting the users' passwords that would be saved into the databases.

MongoDB

MongoDB was chosen for the database of this application. It is easy to work with and works well with this kind of system.

Mongoose

Mongoose was used to access the MongoDB database. It was used to create, save and edit collections.

express-validator

express-validator was used to check user inputs. It was used to check the validity of emails and passwords

jsonwebtoken

jsonwebtoken was used for authentication of users in the application.

dotenv

dotenv was used for making an environment variable.

concurrently

Concurrently is used to run multiple npm scripts at the same time.

Installation

You can get the repository either from using the command:

git clone <https://github.com/OskariLeh/Web-Dev-Project.git>

or by downloading the files from Moodle manually.

Once you have the files on your local computer you should change directory to the one where the application files are located and run the following command to install all dependencies:

npm install

Once they are done installing you can start the application with the command :

npm run start

If concurrently does not work for some reason you can also use:

npm run server:start

and

npm run client:start

separately.

This starts the server on localhost:5000 and client on localhost:3000.

You should also have MongoDB installed and running on your computer to have the server working correctly.

<https://www.mongodb.com/try/download/community>

User manual

Once you have started to the application you will be prompted to login. From the login page you can also click sign up to make a new account. Once logged in to an account you can click the profile picture icon to go edit your bio or logout. On the home page there will be other accounts shown to you which you can like or dislike. Once you have liked and disliked other accounts you can go to the chats page where you will be listed your matches where you can start messaging them.

You can also view this video where I demonstrate all the functionalities of the project:

<https://youtu.be/J97fB3PEsOo>

Features

Feature	Max points
Basic features (as stated in the previous chapter) with well written documentation	25
Utilization of a frontside framework, such as React, but you can also use Angular, Vue or some other	5
Demo video of functionalities	1
Last edited timestamp is stored and shown within chat	2
User can go into profile and edit bio	1
One can swipe to left or right to dislike or like the profile	2
Total	36

References

In addition to lecture notes and videos the following sources were used for the project.

Material UI <https://mui.com/>

Mongoose <https://mongoosejs.com/>

MDN Web Docs <https://developer.mozilla.org/en-US/>

JWT <https://jwt.io/introduction>

Then the following Stack Overflow thread were used, these will also be in comments of the code:

<https://stackoverflow.com/questions/58101018/react-calling-a-method-on-load-only-once>

<https://stackoverflow.com/questions/14103615/mongoose-get-full-list-of-users>

<https://stackoverflow.com/questions/13104690/node-js-mongodb-objectid-to-string>

<https://stackoverflow.com/questions/51603456/array-includes-to-find-object-in-array>

<https://stackoverflow.com/questions/19263524/how-to-position-an-element-to-the-right-side>

<https://stackoverflow.com/questions/221294/how-do-i-get-a-timestamp-in-javascript>

<https://stackoverflow.com/questions/10123953/how-to-sort-an-object-array-by-date-property>

<https://stackoverflow.com/questions/40463173/swipe-effect-in-react-js>