



Private group chat application

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# Team



# Yesim Demir

## Design Lead & Full-Stack Allrounder

- Defined most of the application design; eg. Logo and slogan, color palette, fonts
- Coded both on the client and server side by exchanging ideas with the rest of the team.
- Contributed loads of feature ideas concerning the best UI/UX practices and the accessibility.

Yesim Demir

Senior Front-End

Yesim Demir

Senior Front-End



# Abdulwase Naeemi

## Backend & Socket.io Lead

- Defined server project structure
- Developed RESTful APIs
- Implemented real-time socket.IO connections (client/server).
- Executed database migration
- Collaborated with client team
- Optimized system performance and debugging



# Felix Schmidt

## Frontend Lead & Product Manager

- Defined client-side project structure
- Contributed most of the client-side code
- Helped team to work in a structured way:
  - Led at defining MVP functionality & implementation order
  - Applied and managed agile methods & and tools (Kanban, Trello)



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# Project

# Project story

- Project idea presentation by each team member
- Group vote: group chat application
- Goal: Build a functional product that classmates can use during the final presentation

# Technologies

- **Frontend:**

- React
  - major packages: [emoji-picker-react](#), [react-icons](#), [react-helmet-async](#), [socket.io-client](#), [vite](#)
  - analytics: [piratepx](#)

- **Backend:**

- Node
- Express
- MongoDB
- Socket.io: real-time connection between server and client (instead of request-response)

- **Code:**

- [Project GitHub Repository](#)



# Challenges

- Ambitious scope of the project
- Aligning on MVP functionalities
- 1 developer resigning after having defined MVP
- Flu season
- Working in a team
- Choosing unknown socket.io as core technology
- Write clean, reusable & readable code with valuable comments and JavaScript documentation

# Core functionality

- Design:
  - application looks nice on all devices and has a different structure on smartphones due to limited display size;
  - application has 2 different designs depending on logged-in status of the user
- General:
  - user creation & authentication: JWT token security and automatic logout when token expires
  - group creation and management: users can create groups, add other users (via sharing humanly readable group code or by manually adding them), make users group admins, too and remove non-admin users from groups
  - Continuous sync of users' view and database
- Chat:
  - render all groups of a user and allow seamlessly switching between them , send & delete messages, always display the most recent message but allow browsing the whole group chat history
  - render group info: e.g. list of group members and their admin status, allow users to leave the group
  - display user online status and is typing indicator
  - emoji picker for desktop devices
- Dev tools:
  - Separate development deploy infrastructure (e.g. URL and database) to be able to test on the WEB prior to pushing to production



**get togetha**

# And now: let's get togetha!

<https://gatha.netlify.app/>

Code to join our final presentation gatha group:

6H7X6Y77

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**contact**

# Contact details

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# Questions?

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