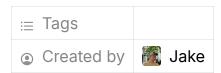


# **Fullstack Coding Task**



Develop a basic messaging app similar to facebook messenger or whatsapp.

### **Required features**

- 1. Login page:
  - a. Users can log in with a username and a password
- 2. Messaging page:
  - a. List of open threads, an option to create a new thread and a chat-view of the current thread
  - b. Users can start new threads with each other using their username (DMs)
  - c. Within each thread, messages are shown in chronological order with the latest message at the bottom
  - d. New messages should appear in the threads automatically in real-time (i.e. user does not have to refresh page to receive new messages)
- 3. A readme with instructions for how to run it

#### Tech stack

- 1. Frontend: React with Typescript and Tailwind
- 2. Backend:
  - a. Either Nodejs or Python

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- b. The API between backend and frontend should be type-safe (e.g. gRPC or tRPC, graphql)
- 3. Database: RDBMS like Postgres (preferred), MySQL etc.

#### **Notes**

- 1. You should not create an admin page, registration page, forgot password page etc. Just hard code some users or add a seeding script
- 2. While it's great if the app looks good, the focus of this case is code, not design. Don't spend time making it pretty
- 3. You can use any libraries and dependencies you like

## **Delivery**

- 1. Create a github repository and give Jacse , Jakob-em , kaifatdet , sundeqvist and ZinoKader access
- 2. An oral presentation/discussion of the above, including motivations for technology picks and design choices. The discussion may broaden to more general technical questions.

Expected time spent on the task is  $\sim$ 4 hours +/- an hour. If you get to 5-6 hours, please stop with the progress you made and we can discuss what you would've done if you had more time. **Do not spend more than 6 hours on this.** 

You can use LLMs to generate code, but please make sure you understand all code and

you are proud of it. We care a lot about maintainability of code and if you hand in poorly written LLM generated code we will reject you

#### Good luck!

Fullstack Coding Task 2