MessageToMe App

Architectural description

MessageToMe use a Client/Side architecture.

Server Side: Node, Express and Apollo Server
Client Side: Apollo Client, React, Javascript

Instead of classic REST Api, MessageToMe use GraphQl Api

Reasons behind my choices

I chose to use GraphQl because it's a new technology that help to reduce data fetching and the number of requests needed for retrieve data required.
Apollo Client and Server because are perfect fit with graphQl api.
Node/React because I'm using every day those technologies ad it was easier coding for me with those.

All assumptions I made

Initially the idea was to use MongoDB as database but I haven't had enough time for it so I used inMemory cache provided by Apollo Client.
The main problem not having a database is that the chat test is available only for the fake users that I create:

```
 1   #user 1
 2   {
 3   username: nico,
 4   password: nico,
 5   }
 6   #user 2
 7   {
 8   username: mari,
 9   password: mari,
10   }
11   #user 3
12   {
13   username: joseph,
14   password: joseph,
15   }
```

I've tried to use websocket/subscriptions that works well server side if I use the graphiql endpoint `http://localhost:4000/graphiql` but I was in trouble client side so for realtime update messages I've used polling option in Apollo Client.
Password it's not encrypted and I check directly during the login if user exist and if the password is wrong. For responsive design I've used media query in css files.