Your task is to write a real-time chat room web app interface.

#### Boilerplate

Search for "demo chat boilerplate" on GitHub

https://github.com/SpotIM/demo-chat-boilerplate

You will find the relevant resources in the *resources.txt* file at the root of the project.

### Spec

#### 1. Message Creation Area

- a. Area will be fixed to the bottom of the screen.
- b. Text field for username.
  - i. Should be persistent across browser refreshes.
- c. Textarea for text.
  - i. Should be cleared after each message is sent.
- d. Send button to send text messages.
- e. An avatar image
  - i. Each user will randomly receive one of 5 avatar images.
  - ii. Avatar images should be persistent across browser refreshes
- f. Users can't send empty messages

## 2. Message List Area

- a. You'll render a list containing incoming chat messages, including your own messages.
- b. Rendered chat messages should show the avatar, username and chat message.
- c. Your own messages will have a different background color than other chat messages.

## 3. Socket.IO integration

- a. You will use the Spot.IM Socket.IO chat server in order to send and receive messages. Endpoint and chat event name is found under *resources.txt* of the boilerplate.
- b. When the user sends a message you should use socket io to send messages in the following format: {avatar:"...",username:"...",text:"..."}
  - i. You may add additional fields if you like.
- c. You should listen for and render incoming chat messages.

# 4. Testing

- a. Write meaningful tests of your source code with whatever framework you'd like.
- b. Testing Should include **one or two** of the following test types:
  - i. Business logic unit tests.
  - ii. Component snapshot tests.
  - iii. End to end tests.
- c. Should run by writing "npm test"

#### Submission

- 1. Push your finished work to a public GitHub repository under your account, named *chat-ui*.
  - a. Leave the GitHub description field empty
- 2. Send an email with the subject **Exercise Submission** with a GitHub link to **dor@spot.im.**
- 3. In the email, honestly mention how long did it take you to complete the exercise.
- 4. Leave at least 1 screenshot in the screenshots folder.
- 5. Be sure to fill the *comments.txt* file if you have relevant comments

## **Key Points and Tips**

- 1. You should use whatever JavaScript stack you're most comfortable with. We want to see you at your best.
- 2. You don't have to use the provided boilerplate. Be sure to copy **resources.txt** and the **screenshots** folder if you're using something else.
- 3. Make sure your components and business logic are designed reasonably. They will be reviewed.
- 4. Write coherent code and meaningful comments where necessary.
- 5. Your UI should look somewhat presentable and logically positioned. It doesn't have to be perfect by any means however.
  - a. We recommend using a library like Bootstrap, Semantic UI, Material UI or whatever you feel comfortable with.