

Summer of Tech 2016

Properly Coding Challenge

Part of Properly's growth strategy is integrating our cleaners on third party websites. For example we could build an integration with management software property manager use. They could then schedule a cleaning via Properly, without leaving their existing software.

To make it easier for you to get started we prepared this project. You can build your code in this project. You can run

```
npm install
```

And then

```
npm run dev
```

to launch the project on localhost:3000

The page will refresh automatically when you change a code file. Instead of using a real database, you can read sample data from database/database.json.

When a part of the specification does not seem clear to you, feel free to develop according your best assumption.

Please don't spend more than three hours on part 1, and not more than three hours on part 2. If you don't have enough time to implement all required functionality, that's ok.

Part 1: Backend

Please extend the file src/server.js to build two json api endpoints:

/cleaners/nearby

Should take two parameters:

- Latitude
- Longitude

Based on those parameters filter cleaners from the "database" that are within a radius of 2 kilometers of the provided parameters. To keep it simple, you can assume that 1km equals a change of 0.01 in latitude or longitude. The result should be sorted descending by rating and only include the fields "name" and "rating".

As example:

```
[{
  name: 'Linda',
  rating: 4.5
}, ...]
```

/cleaners/best

This api method should find the very best cleaners in the “database”.

The list needs to be sorted by rating (descending) and average response rate (descending).

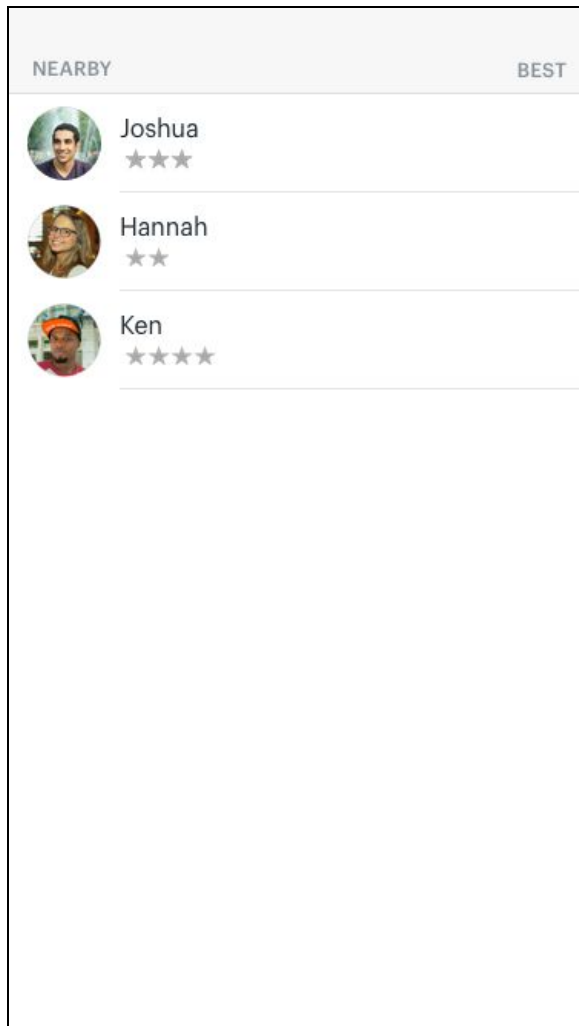
- 1) all cleaners with rating ≥ 4 , ordered by response rate DESC
- 2) all cleaners with rating ≥ 3 and rating < 4 , ordered by response rate DESC
- 3) all cleaners with rating ≥ 2 and rating < 3 , ordered by response rate DESC

Cleaners with rating < 2 should not be included in the list.

Part 2: Frontend

Second part of this challenge is integrating the cleaners into the react frontend. This includes creating a react component, calling the API and writing some CSS. By clicking the two buttons you can show either cleaners nearby or the best cleaners. For nearby you can take latitude/longitude of San Francisco as sample location.

The screen should look like the following wireframe. As the sample database does not include pictures, you can use a picture you find online as profile picture. To display the stars, you can round the rating to the next number. You can use public/star.png.



Bonus Exercise:

Show “nearby” cleaners based on the actual location of the user.