

## React Frontend Developer - Case study

We are happy that you have come this far, it means that we got a good impression of you in the previous interviews and that we are curious about learning more about you

### What is our goal with the case study?

- We want to understand who you are as a programmer
- The implementation is the foundation of our technical interview
  - We will ask you to go through it with us
  - We will ask questions about it
- We expect you to spend about 3-6 hours on the implementation

### Case study

#### Part 1

This is based on a real situation at Qred, it feels more real to talk about the types of things you would be given responsibility for than to talk in the hypothetical. The scenario is as follows:

- 1. Users need to be able to navigate to a profile page
- 2. Some API endpoint should be called to fetch the user's information
- 3. Fields are populated with data fetched from the API
- 4. The user should be able to change the information
- 5. Clicking the save button should send the data back to the same endpoint
- 6. Email and phone number fields should be validated before sending data. In case of invalid format, some error messages should be shown explaining the problem



The following steps of part 1 are optional but a chance to show off your skills a bit more. In this part, you will get less help because you will not be provided with a design of the view or functionality. We will provide a list of further functionalities and you are free to complete as few or as many as you like.

- 1. View with a list of users (You can get this list from the same place as the get user endpoint)
- 2. View with login using email and password
- 3. Get and save a token from the auth provider you choose
- 4. Prepare and show how to use the token and why using tokens is important

#### Part 2

As a "React Developer" applicant you have probably seen these challenges before. Based on the requirements listed above, please prepare a working code sample using React considering the following concepts:

- 1. Take some consideration to think about how you would architect the application in terms of maximum code reuse.
- 2. At Qred we rely on Redux with RTK as our state management tool. Consider using Redux to save the user's information.
- 3. Think about the possibility of API failure and other errors and how to handle it if it happens. Also, be prepared to show this error handling during the case.
- 4. Feel free to prepare techniques, processes, mindsets and implementation patterns you would rely on to address the above
- 5. Feel free to use the CSS solution of your choice in your implementation.
- 6. Appendix 1 shows a proposed design but you can change this in any way you like.
- 7. Appendix 2 shows a proposed design for how it should look when a field is invalid but feel free to do it in any way you feel would be good.
- 8. Use the following endpoints to fetch the data:



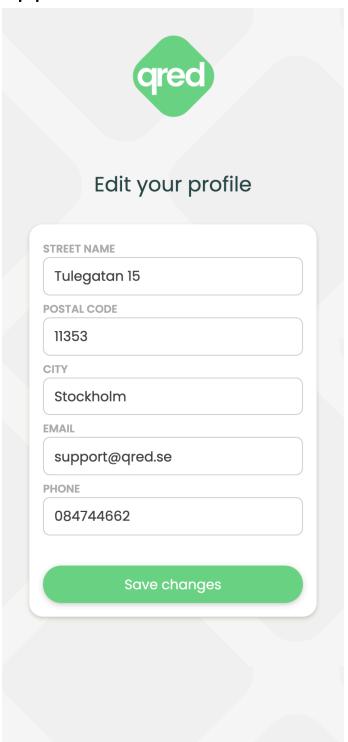
GET: <a href="https://jsonplaceholder.typicode.com/users/\$[id]">https://jsonplaceholder.typicode.com/users/\$[id]</a> to get one user by id.

PUT: <a href="https://jsonplaceholder.typicode.com/users/\$[id]">https://jsonplaceholder.typicode.com/users/\$[id]</a> to update one user by id.

- 9. Further considerations
  - a. Consider how to improve the user experience.
  - b. Assume you have an unlimited budget, and complete control of direction and implementation, with backing from senior management.
  - c. Think on Qreds values
    - i. Transparency
    - ii. Passion
    - iii. Innovation



# Appendix 1





## Appendix 2

