

# React Interview Questions - Coding Interview

## Section 1: Introduction

- Pros and Cons of React
  - Q1: What are the pros and cons of React?
  - Q2: How you can compare it to Angular?
- How to create React application?
  - Q1: How do you prefer to generate your React application?
  - Q2: What are the ways?

## Section 2: Basic knowledge

- What is virtual DOM?
  - Q1: What makes React so powerful?
  - Q2: What is virtual DOM?
  - Q3: What is the difference between virtual DOM and shadow DOM?
- What is JSX?
  - Q1: What is JSX?
  - Q2: Is JSX a part of React?
- Why do we use className and not class?
  - Q1: Why can't we write class inside our JSX markup?
- What are functional components and props?
  - Q1: How to create functional components?
  - Q2: How to pass props to the components?
- What are class components, props and state?
  - Q1: How to create class components?
  - Q2: How to pass props to class components?
  - Q3: How state is working in class components?
- What are dumb vs smart components?
  - Q1: What are dumb and smart components?
  - Q2: What are presentational vs container components?
- What is a key index map?
  - Q1: How to render a list inside React?
  - Q2: What is key and why it is bad to use index for it?
- What is React.Fragment?
  - Q1: What is React fragment?
  - Q2: Do you know the short version?
- What is conditional rendering in React?
  - Q1: What do you know about conditional rendering in React?
- How to apply styles in React?
  - Q1: How to apply styles in React?
  - Q2: How to add several classes conditionally?
- How parent child communication is working in React?
  - Q1: How parent and child components can communicate in React?
  - Q2: Can we mutate props?

## Section 3: Advanced knowledge

- What is useState hook?
  - Q1: What do you know about useState hook?
- What is useEffect hook?
  - Q1: What do you know about useEffect hook?
- What is useReducer hook?
  - Q1: What do you know about useReducer hook?
- What is useContext hook?
  - Q1: What do you know about useContext hook?
- What is useRef hook?
  - Q1: What do you know about useRef hook?
- What is useMemo hook?
  - Q1: What do you know about useMemo hook?
- What is useCallback hook?
  - Q1: What do you know about useCallback hook?
- Write React custom hook useFetch
  - Q1: Write a custom hook useFetch which works like this

```
const [{response, error, isLoading}, doFetch] =  
useFetch('http://localhost:3004/posts')
```

- Write React custom hook useLocalStorage
  - Q1: Write a custom hook useLocalStorage which works like this. It must be fully synchronized between local storage and local values.

```
const [name, setName] = useLocalStorage('name', 'Jack')
```

- React.memo - rendering optimisation in React
  - Q1: Do you know how React.memo works?
  - Q2: How to add a comparator to it?
- What is the best React file structure?
  - Q1: What ways of structuring files in React applications do you know?
- How does React router work?
  - Q1: What do you know about routing?
  - Q2: How react-router is working?
- What is React portals?
  - Q1: What do you know about react-portals?
  - Q2: Create an example
- What is React lazy and React suspense?
  - Q1: What do you know about React lazy and suspense?
- How does Typescript work in React?
  - Q1: Do you know how to use Typescript together with React?
- What are high order components? (HOC)
  - Q1: Do you know what are high order components?
- Write an example of form inside React
  - Q1: How would you create a register form in React?

- Why does strict mode renders twice in React?
  - Q1: What is strict mode?
  - Q2: Why does string mode renders twice in React?
- Do I need to rewrite all my class components with hooks?
  - Q1: Do you want to rewrite all our classes components with hooks?
  - Q2: Will it make our application faster?
  - Q3: What are the benefits?
- Can you force a component to re-render without calling setState?
  - Q1: How to do re-render in class components and functional components?
- What is React fiber?
  - Q1: What is the main gold of React Fiber?
- What is server side rendering in React?
  - Q1: What is server side rendering? (SSR)
  - Q2: How does it work?
  - Q3: What is the difference between client rendering, server rendering and server side rendering?

## Section 4: State management

- React Query
  - Q1: Do you know something about React Query?
- How Redux works in plain Javascript?
  - Q1: Can you show how Redux is working with vanilla Javascript?
- How does Redux work together with React?
  - Q1: Can you show me on example how Redux works with React without Redux toolkit?
- How does Redux toolkit work?
  - Q1: Can you show me on example how Redux works with React with Redux toolkit?