

React Coding Challenge: User Management Dashboard

Problem Statement:

You are tasked with building a simple User Management Dashboard using React, React Router, and Bootstrap. This dashboard will simulate a basic admin interface for managing users in a system.

You'll consume a public fake API to:

1. Fetch and display user data
2. Add new users
3. Delete existing users

This case study will test your ability to use:

- Functional Components
- React Router
- useEffect and useState hooks
- Axios for API interactions
- Bootstrap for layout and tables

Public API to Use:

Use the JSONPlaceholder API – it's free and doesn't require authentication.

Base URL: **<https://jsonplaceholder.typicode.com>**

You'll use the following endpoints:

Method	Endpoint	Purpose
GET	/users	Fetch all users
POST	/users	Add a new user (it won't persist but will return a response)
DELETE	/users/:id	Simulate user deletion (won't actually delete on backend)

Project Structure Guidelines:

You can structure the project as:

```
/src
├── components/
│   ├── UserList.jsx    # Component to show users in a table
│   └── AddUser.jsx     # Form to add a user
├── App.jsx             # Configure routing
└── main.jsx            # React DOM render setup
```

Functional Requirements

1. User List View (/users)

Use GET /users to fetch data.

Display data in a Bootstrap table.

Each row should show:

Name

Email

Phone

Company Name

Action button (Delete)

Clicking "Delete" will trigger a DELETE request to /users/:id.

You can optimistically remove the user from UI even though it's not deleted on the backend.

2. Add User View (/add-user)

Create a form with the following fields:

Name

Email

Phone

Company Name

On Submit:

Send a POST request to /users.

Log the response in console (you can also show a success toast).

Optionally navigate back to /users.

3. Routing

Set up basic routing using react-router-dom.

Use NavLink or Link to create a header with:

"User List"

"Add User"