Let’s build a **Full working CRUD app** using **Vite + React + Axios** connected to a **local `json-server` backend**.

□ Step-by-Step Guide

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1. □ Set Up `json-server` (Backend)

□ Install `json-server` globally (if you haven't already):

```
npm install -g json-server
```

□ Create a `db.json` file in your project root:

```
{
  "users": [
    { "id": 1, "name": "John Doe", "email": "john@example.com" },
    { "id": 2, "name": "Jane Smith", "email": "jane@example.com" }
  ]
}
```

□ Start the server:

```
json-server --watch db.json --port 3001
```

This will run a fake REST API at:

```
http://localhost:3001/users
```

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2. □ Set Up Vite + React Project

If you don't already have one:

```
npm create vite@latest my-crud-app --template react
cd my-crud-app
npm install
```

□ Install Axios:

```
npm install axios
```

□ Folder structure (simplified):

```
my-crud-app/
├── src/
│   ├── components/
│   │   └── Users.jsx
│   ├── App.jsx
│   ├── main.jsx
│   └── index.css
├── db.json (outside src/)
```

---

3. □ Full CRUD in `Users.jsx`

□ **`src/components/Users.jsx`**

```
import React, { useEffect, useState } from 'react';
import axios from 'axios';

const API_URL = 'http://localhost:3001/users';

function Users() {
  const [users, setUsers] = useState([]);
  const [newUser, setNewUser] = useState({ name: '', email: '' });
  const [editingUser, setEditingUser] = useState(null);

  // Fetch users
  const fetchUsers = async () => {
    try {
      const res = await axios.get(API_URL);
      setUsers(res.data);
    } catch (err) {
      console.error('Fetch error:', err);
    }
  };

  useEffect(() => {
    fetchUsers();
  }, []);

  // Add new user
  const handleAddUser = async (e) => {
    e.preventDefault();
    try {
      const res = await axios.post(API_URL, newUser);
      setUsers([...users, res.data]);
      setNewUser({ name: '', email: '' });
    } catch (err) {
```

```
      console.error('Add error:', err);
    }
  };

  // Delete user
  const handleDeleteUser = async (id) => {
    try {
      await axios.delete(`${API_URL}/${id}`);
      setUsers(users.filter(u => u.id !== id));
    } catch (err) {
      console.error('Delete error:', err);
    }
  };

  // Edit user
  const handleUpdateUser = async (e) => {
    e.preventDefault();
    try {
      const res = await axios.put(`${API_URL}/${editingUser.id}`,
editingUser);
      setUsers(users.map(u => (u.id === editingUser.id ? res.data : u)));
      setEditingUser(null);
    } catch (err) {
      console.error('Update error:', err);
    }
  };

  return (
    <div style={{ padding: '2rem' }}>
      <h2>React + Axios CRUD</h2>

      {/* Add New User */}
      <form onSubmit={handleAddUser} style={{ marginBottom: '1rem' }}>
        <input
          type="text"
          placeholder="Name"
          value={newUser.name}
          onChange={e => setNewUser({ ...newUser, name: e.target.value })}
          required
        />
        <input
          type="email"
          placeholder="Email"
          value={newUser.email}
          onChange={e => setNewUser({ ...newUser, email: e.target.value })}
          required
        />
        <button type="submit">Add User</button>
      </form>

      {/* Edit User Form */}
      {editingUser && (
        <form onSubmit={handleUpdateUser} style={{ marginBottom: '1rem' }}>
          <input
            type="text"
            value={editingUser.name}
```

```
            onChange={e => setEditingUser({ ...editingUser, name:
e.target.value })}
            required
          />
          <input
            type="email"
            value={editingUser.email}
            onChange={e => setEditingUser({ ...editingUser, email:
e.target.value })}
            required
          />
          <button type="submit">Update</button>
          <button type="button" onClick={() => setEditingUser(null)} style={{
marginLeft: '1rem' }}>
            Cancel
          </button>
        </form>
      )}

      {/* List Users */}
      <ul>
        {users.map(user => (
          <li key={user.id}>
            <strong>{user.name}</strong> ({user.email})
            <button onClick={() => setEditingUser(user)} style={{ marginLeft:
'1rem' }}>
              Edit
            </button>
            <button onClick={() => handleDeleteUser(user.id)} style={{
marginLeft: '0.5rem', color: 'red' }}>
              Delete
            </button>
          </li>
        ))}
      </ul>
    </div>
  );
}

export default Users;
```

---

4. □ App Setup

□ `src/App.jsx`

```
import React from 'react';
import Users from './components/Users';

function App() {
  return (
    <div>
      <h1>Vite + React + Axios + JSON Server</h1>
      <Users />
    </div>
  );
}

export default App;
```

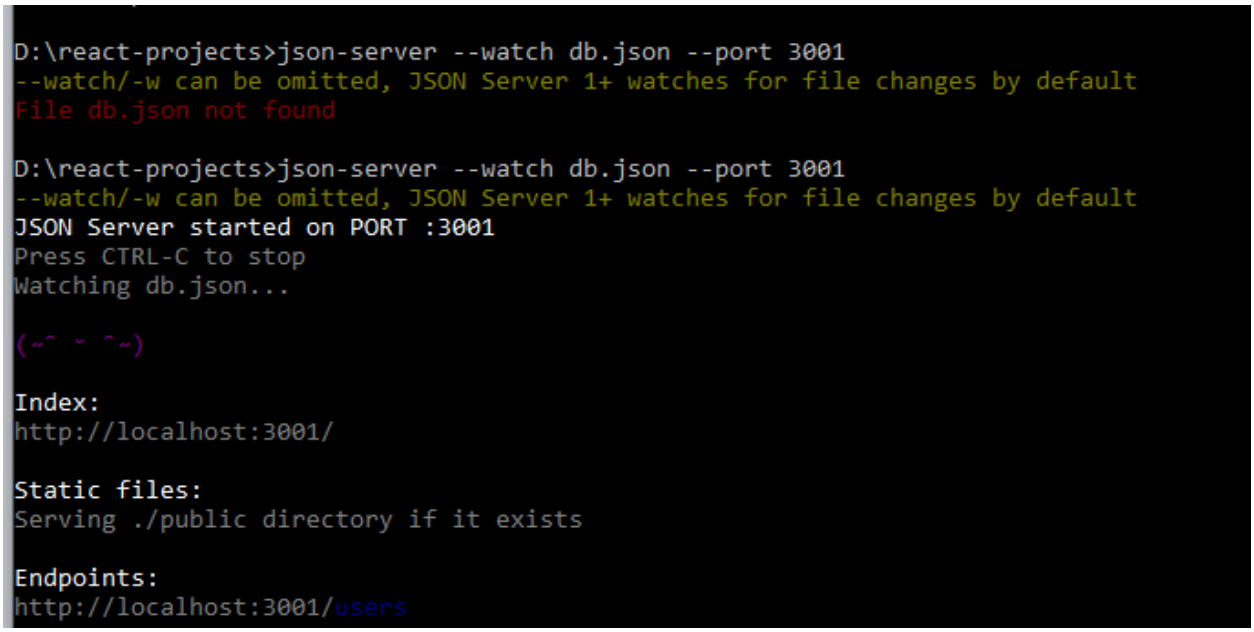
---

5. □ Run the Project

□ Start `json-server`:

```
json-server --watch db.json --port 3001
```

as shown below



□ Start the Vite React app:

```
npm run dev
```

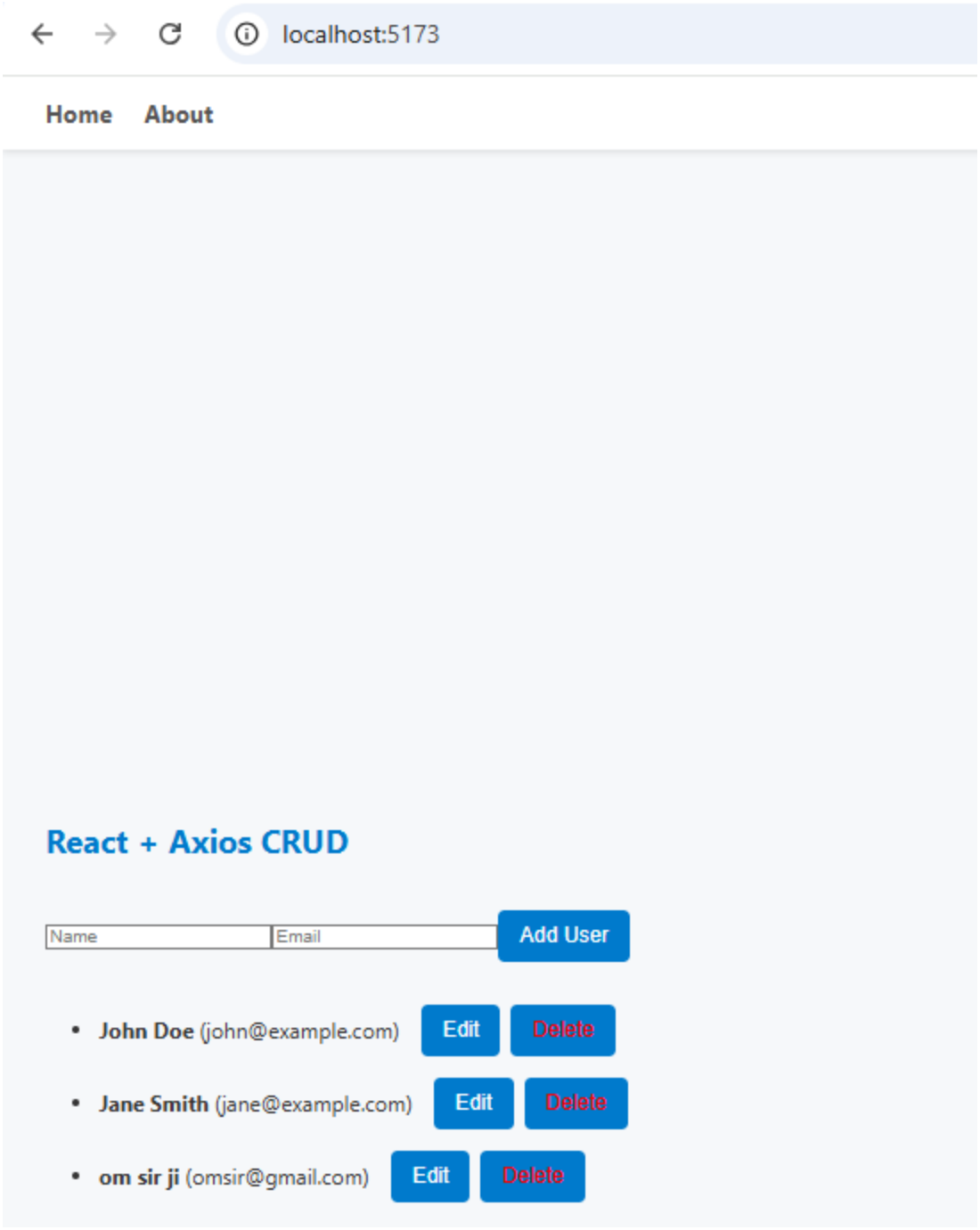
Then open your browser:
□ `http://localhost:5173`

□ Result

You now have full **Create, Read, Update, Delete** functionality:

Action	Backend Response	UI Reflects
Add user	POST to /users	□
Edit user	PUT to /users/:id	□
Delete	DELETE /users/:id	□

Output will be like this :-


localhost:5173
Home
About
React + Axios CRUD
Name
Email
Add User
John Doe (john@example.com)
Edit
Delete
Jane Smith (jane@example.com)
Edit
Delete
om sir ji (omsir@gmail.com)
Edit
Delete