

## EXPERIMENT NO. - 05

Roll No.	24
Name	Chaitanya Dinesh Dhayarkar
Class	D15B
Subject	Full Stack Development
Lab Outcome	Create secure, production-ready <b>RESTful APIs</b>
Date of Performance/ Submission	
Signature & Grades	

**Aim:** Create secure, production-ready **RESTful APIs**

**Code:**

App.jsx

```
1  import { Route, Routes, NavLink } from 'react-router-dom';
2  import UsersPage from './pages/UsersPage';
3
4  export default function App() {
5    return (
6      <div className="container">
7        <nav className="navbar">
8          <h1>User Admin</h1>
9          <NavLink to="/" end>Users</NavLink>
10        </nav>
11        <Routes>
12          <Route path="/" element={<UsersPage />} />
13        </Routes>
14      </div>
15    );
16  }
```

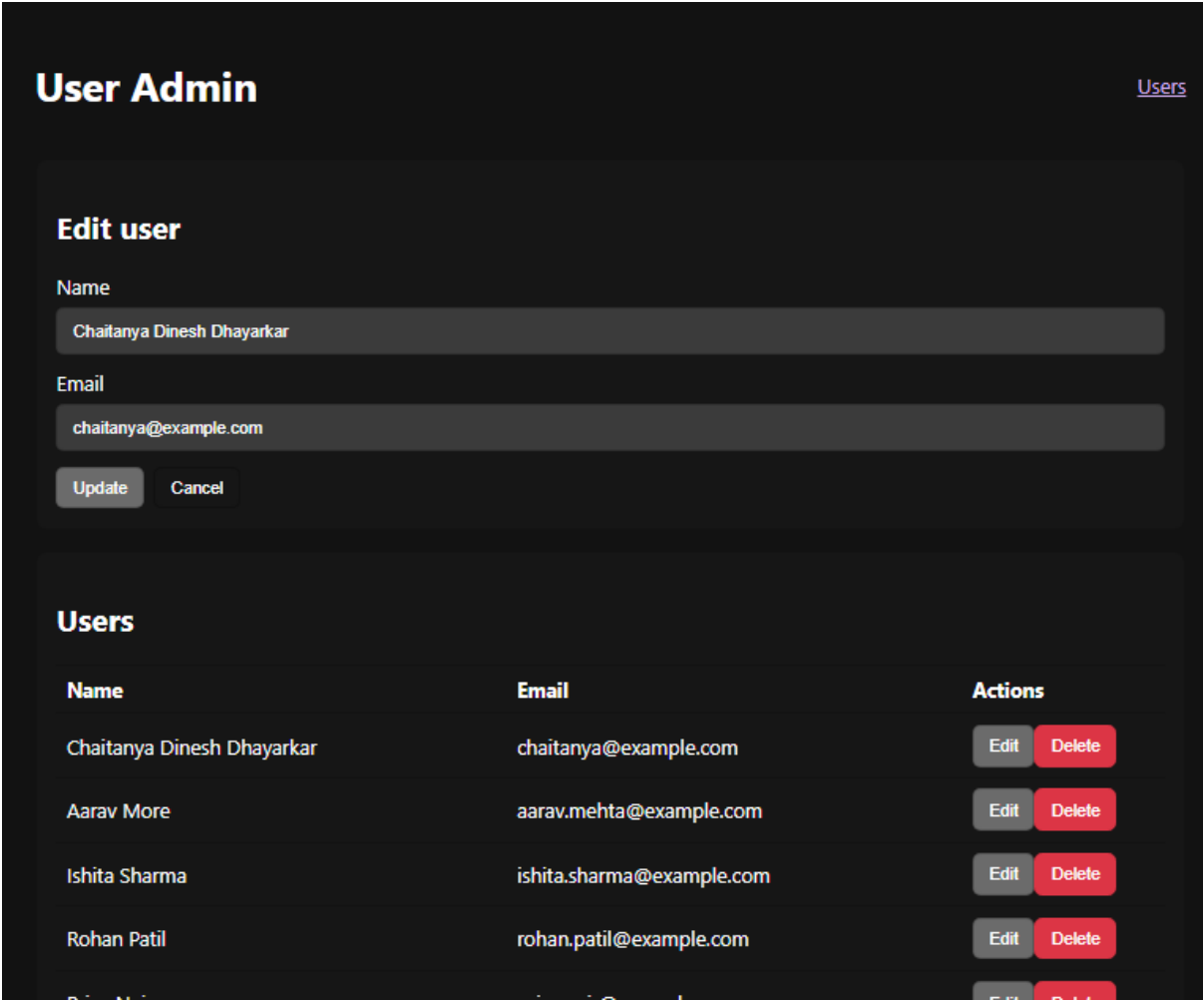
Pages/UserPage.jsx

```
frontend > src > pages > UsersPage.tsx > UsersPage > load
1  import { useEffect, useMemo, useState } from 'react';
2  import { createUser, deleteUser, fetchUsers, updateUser, type User } from '../api/client';
3
4  type FormState = { name: string; email: string };
5
6  export default function UsersPage() {
7    const [users, setUsers] = useState<User[]>([]);
8    const [loading, setLoading] = useState(true);
9    const [error, setError] = useState<string | null>(null);
10   const [editingId, setEditingId] = useState<string | null>(null);
11   const [form, setForm] = useState<FormState>({ name: '', email: '' });
12
13   async function load() {
14     setLoading(true);
15     setError(null);
16     try {
17       const data = await fetchUsers();
18       setUsers(data);
19     } catch (e: any) {
20       setError(e?.message ?? 'Failed to load users');
21     } finally {
22       setLoading(false);
23     }
24   }
25
26   useEffect(() => {
27     load();
28   }, []);
29
30   function onEdit(user: User) {
31     setEditingId(user._id ?? null);
32     setForm({ name: user.name, email: user.email });
```

Style.css

```
frontend > src > styles.css > ...
1  :root { color-scheme: light dark; }
2  * { box-sizing: border-box; }
3  body { margin: 0; font-family: system-ui, Arial, sans-serif; }
4  .container { max-width: 960px; margin: 0 auto; padding: 24px; }
5  .navbar { display: flex; align-items: center; justify-content: space-between; margin-bottom: 16px; }
6  .page { display: grid; gap: 16px; }
7  .card { border: 1px solid #00000015; border-radius: 8px; padding: 16px; background: #f5f5f5; }
8  .form { display: grid; gap: 12px; }
9  label { display: grid; gap: 6px; }
10 input { padding: 10px 12px; border: 1px solid #0000002; border-radius: 6px; }
11 .actions { display: flex; gap: 8px; }
12 button { padding: 8px 12px; border-radius: 6px; border: 1px solid #0000002; cursor: pointer; }
13 button.secondary { background: transparent; }
14 button.danger { background: #dc3545; color: #fff; border-color: #dc3545; }
15 .table { width: 100%; border-collapse: collapse; }
16 .table th, .table td { padding: 8px; border-top: 1px solid #0000001; text-align: left; }
17 .error { color: #dc3545; }
18
19
```

Output:



## Delete User

## User Admin

### Edit user

Name

Email

### Users

Name	Email	Actions
Chaitanya Dinesh Dhayarkar	chaitanya@example.com	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

localhost:5173 says

Delete this user?

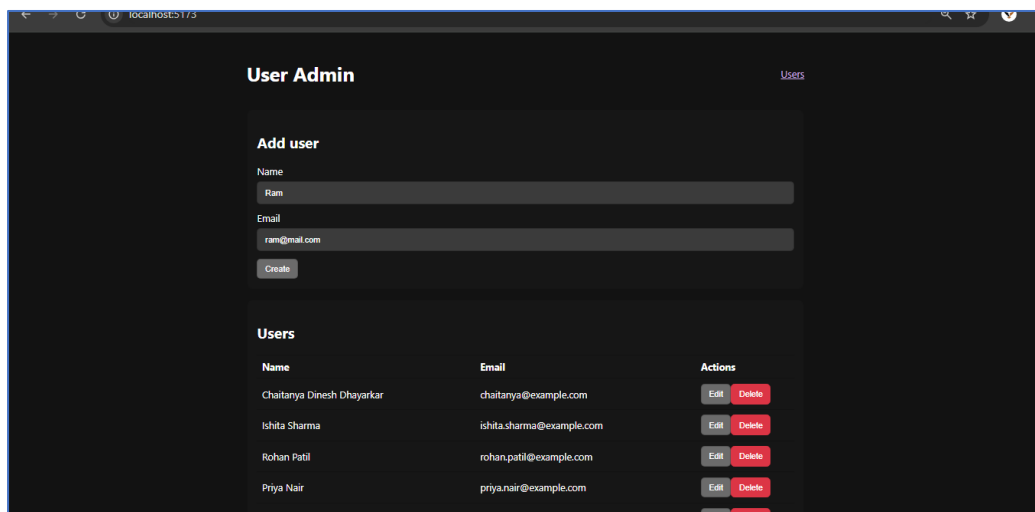
## Add User

### Add user

Name

Email

## Host on GitHub



## Conclusion:

We have successfully implemented and executed Create secure, production-ready RESTful APIs