Admin singup, login, logut and manage crud operations:-

Logout				
Add Record				
Name	Email	Phone	City	Add
Records				

To make it a **complete CRUD backend**, you just need to add the **Update** and **Delete** operations.

I'll expand your existing /records route handlers to include:

- 1. GET /records Read all records (Already Present)
- 2. POST /records Create a new record (Already Present)
- 3. GET /records/:id-Read a single record by ID (Add This)
- 4. PUT /records/:id Update a record by ID (Add This)
- 5. DELETE /records/:id-Delete a record by ID (Add This)

☐ Updated Full CRUD Code

```
const express = require('express');
const mongoose = require('mongoose');
const cors = require('cors');
const bcrypt = require('bcryptjs');
const jwt = require('jsonwebtoken');

const app = express();
app.use(express.json());
app.use(cors());
```

```
const JWT SECRET =
'a1b2c3d4e5f60123456789abcdef0123456789abcdef0123456789abcdef0123'; // Change
this in production
// Connect to MongoDB
mongoose.connect('mongodb://localhost:27017/recordsDB', {
 useNewUrlParser: true,
 useUnifiedTopology: true
});
const adminSchema = new mongoose.Schema({
 username: String,
 password: String,
});
const Admin = mongoose.model('Admin', adminSchema);
// Records Schema
const recordSchema = new mongoose.Schema({
 name: String,
 email: String,
 phone: String,
 city: String
});
const Record = mongoose.model('Record', recordSchema);
// Middleware to verify JWT token
function verifyToken(req, res, next) {
  const token = req.headers['authorization'];
  if (!token) return res.status(401).json({ message: 'No token provided' });
  jwt.verify(token, JWT_SECRET, (err, decoded) => {
   if (err) return res.status(403).json({ message: 'Invalid token' });
    req.adminId = decoded.id;
   next();
 });
// Signup (Create Admin Account)
app.post('/signup', async (req, res) => {
 try {
    const { username, password } = req.body;
    if (!username | | !password) {
     return res.status(400).json({ message: 'Username and password are
required' });
    const existing = await Admin.findOne({ username });
   if (existing) {
```

```
return res.status(400).json({ message: 'Username already exists' });
   const hashed = await bcrypt.hash(password, 10);
   await Admin.create({ username, password: hashed });
   res.json({ message: 'Admin created' });
 } catch (err) {
   console.error('Error in signup:', err);
   res.status(500).json({ message: 'Internal server error' });
});
// Login
app.post('/login', async (req, res) => {
 const { username, password } = req.body;
 const admin = await Admin.findOne({ username });
 if (!admin) return res.status(404).json({ message: 'Admin not found' });
 const isMatch = await bcrypt.compare(password, admin.password);
 if (!isMatch) return res.status(401).json({ message: 'Invalid credentials'
});
 const token = jwt.sign({ id: admin._id }, JWT_SECRET, { expiresIn: '1h' });
 res.json({ token });
});
// READ all records
app.get('/records', verifyToken, async (req, res) => {
 const records = await Record.find();
 res.json(records);
});
// READ a single record by ID
app.get('/records/:id', verifyToken, async (req, res) => {
 try {
   const record = await Record.findById(req.params.id);
   if (!record) return res.status(404).json({ message: 'Record not found' });
   res.json(record);
 } catch (err) {
   res.status(400).json({ message: 'Invalid record ID' });
});
// CREATE a new record
app.post('/records', verifyToken, async (req, res) => {
```

```
const newRecord = new Record(req.body);
    await newRecord.save();
    res.json({ message: 'Record added', record: newRecord });
  } catch (err) {
    res.status(500).json({ message: 'Error creating record' });
});
// UPDATE a record by ID
app.put('/records/:id', verifyToken, async (req, res) => {
    const updatedRecord = await Record.findByIdAndUpdate(req.params.id,
req.body, {
     new: true,
      runValidators: true,
    if (!updatedRecord) return res.status(404).json({ message: 'Record not
found' });
    res.json({ message: 'Record updated', record: updatedRecord });
  } catch (err) {
    res.status(400).json({ message: 'Invalid update request' });
});
// DELETE a record by ID
app.delete('/records/:id', verifyToken, async (req, res) => {
 try {
    const deleted = await Record.findByIdAndDelete(req.params.id);
    if (!deleted) return res.status(404).json({ message: 'Record not found'
});
    res.json({ message: 'Record deleted' });
  } catch (err) {
    res.status(400).json({ message: 'Invalid record ID' });
});
const PORT = 5000;
app.listen(PORT, () => console.log(`Server running on port ${PORT}`));
```

Method	Endpoint	Description
POST	/signup	Create admin account
POST	/login	Admin login, returns token
GET	/records	Get all records
GET	/records/:id	Get a specific record
POST	/records	Create a new record
PUT	/records/:id	Update an existing record
DELETE	/records/:id	Delete a record

Below, I'll give you the **modified App.** js code that includes:

- Edit mode toggle
- Prefilled form on edit
- PUT request to update
- DELETE request to remove

Src/Signup.js file code:-

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

const API = 'http://localhost:5000';

function Signup({ onSignupSuccess }) {
  const [form, setForm] = useState({ username: '', password: '' });
  const [message, setMessage] = useState('');

const handleChange = (e) => {
    setForm({ ...form, [e.target.name]: e.target.value });
  };

const handleSubmit = async (e) => {
    e.preventDefault();
```

```
try {
      const res = await axios.post(`${API}/signup`, form, {
        headers: { 'Content-Type': 'application/json' }
      });
      setMessage(res.data.message || 'Signup successful');
      setForm({ username: '', password: '' });
      if (onSignupSuccess) onSignupSuccess();
    } catch (err) {
      console.error('Signup error:', err);
      if (err.response) {
        // server responded with a status outside 2xx
        setMessage(`Signup failed: ${err.response.data.message ||
err.response.statusText}`);
      } else if (err.request) {
        // request was made but no response
        setMessage('Signup failed: No response from server');
      } else {
        // other errors
        setMessage('Signup failed: ' + err.message);
  };
  return (
    <div style={{ padding: '20px' }}>
      <h2>Admin Signup</h2>
      <form onSubmit={handleSubmit}>
        <input</pre>
          name="username"
          placeholder="Username"
          value={form.username}
          onChange={handleChange}
          required
        <input</pre>
          name="password"
          type="password"
          placeholder="Password"
          value={form.password}
          onChange={handleChange}
          required
        <button type="submit">Sign Up</button>
      {message && {message}}
    </div>
```

```
}
export default Signup;
```

☐ Updated App. js with Full CRUD

Replace your current App. js with this:

```
import React, { useState, useEffect } from 'react';
import axios from 'axios';
import Signup from './Signup';
const API = 'http://localhost:5000';
function App() {
 const [form, setForm] = useState({ name: '', email: '', phone: '', city: ''
});
 const [records, setRecords] = useState([]);
  const [auth, setAuth] = useState({ username: '', password: '' });
  const [token, setToken] = useState(localStorage.getItem('token') || '');
  const [showSignup, setShowSignup] = useState(false);
  const [editId, setEditId] = useState(null); // ID of record being edited
  const headers = { Authorization: token };
  const handleLogin = async () => {
    try {
      const res = await axios.post(`${API}/login`, auth);
      localStorage.setItem('token', res.data.token);
      setToken(res.data.token);
    } catch (err) {
      alert('Login failed');
  };
  const handleLogout = () => {
    localStorage.removeItem('token');
    setToken('');
    setRecords([]);
  };
  const fetchRecords = async () => {
    try {
     const res = await axios.get(`${API}/records`, { headers });
```

```
setRecords(res.data);
    } catch (err) {
      console.error(err);
 };
 const handleSubmit = async (e) => {
    e.preventDefault();
   if (editId) {
     // UPDATE record
     try {
       await axios.put(`${API}/records/${editId}`, form, { headers });
        setEditId(null);
        setForm({ name: '', email: '', phone: '', city: '' });
       fetchRecords();
      } catch (err) {
        alert('Failed to update record');
    } else {
     // CREATE record
     try {
       await axios.post(`${API}/records`, form, { headers });
        setForm({ name: '', email: '', phone: '', city: '' });
       fetchRecords();
     } catch (err) {
       alert('Failed to add record');
 };
 const handleEdit = (record) => {
    setEditId(record. id);
   setForm({ name: record.name, email: record.email, phone: record.phone,
city: record.city });
 };
 const handleDelete = async (id) => {
   if (!window.confirm('Are you sure you want to delete this record?'))
return;
   try {
      await axios.delete(`${API}/records/${id}`, { headers });
     fetchRecords();
   } catch (err) {
      alert('Failed to delete record');
 };
 useEffect(() => {
```

```
if (token) fetchRecords();
}, [token]);
// ☑ Not logged in
if (!token) {
  return (
    <div style={{ padding: '20px' }}>
      {showSignup ? (
          <Signup
            onSignupSuccess={() => {
              setShowSignup(false);
              alert('Signup successful! You can now log in.');
            }}
            Already have an account?{' '}
            <button onClick={() => setShowSignup(false)}>Login</button>
          <h2>Admin Login</h2>
          <input</pre>
            placeholder="Username"
            value={auth.username}
            onChange={(e) => setAuth({ ...auth, username: e.target.value })}
          <input</pre>
            placeholder="Password"
            type="password"
            value={auth.password}
            onChange={(e) => setAuth({ ...auth, password: e.target.value })}
          <button onClick={handleLogin}>Login</button>
            Don't have an account?{' '}
            <button onClick={() => setShowSignup(true)}>Sign Up</button>
          )}
    </div>
  );
// 2 Logged in
return (
 <div style={{ padding: '20px' }}>
```

```
<button onClick={handleLogout}>Logout</button>
     <h2>{editId ? 'Edit Record' : 'Add Record'}</h2>
     <form onSubmit={handleSubmit}>
       <input</pre>
         name="name"
         placeholder="Name"
         value={form.name}
         onChange={(e) => setForm({ ...form, name: e.target.value })}
       <input</pre>
         name="email"
         placeholder="Email"
         value={form.email}
         onChange={(e) => setForm({ ...form, email: e.target.value })}
       <input</pre>
         name="phone"
         placeholder="Phone"
         value={form.phone}
         onChange={(e) => setForm({ ...form, phone: e.target.value })}
       <input</pre>
         name="city"
         placeholder="City"
         value={form.city}
         onChange={(e) => setForm({ ...form, city: e.target.value })}
       <button type="submit">{editId ? 'Update' : 'Add'}</button>
       {editId && <button onClick={() => { setEditId(null); setForm({ name:
<h2>Records</h2>
     <u1>
       {records.map((rec) => (
         key={rec._id}>
           {rec.name} | {rec.email} | {rec.phone} | {rec.city}{' '}
           <button onClick={() => handleEdit(rec)}>Edit</button>{' '}
           <button onClick={() => handleDelete(rec._id)}>Delete
       ))}
     </div>
 );
export default App;
```

\square Optional Improvements

- Sort or paginate records
- Use a table instead of a list
- Add form validation (with libraries like Formik or Yup)
- Use a UI framework (e.g., Material UI or Bootstrap)

$\hfill\Box$ Summary of Features in This Code:

Feature	☐ Implemented		
Admin Signup	\square via <signup></signup>		
Admin Login	☐ With JWT		
Create Record			
Read Records			
Update Record			
Delete Record			
Logout			
Token Storage	□ localStorage		