

```
// src/App.js

import React from 'react';

import { BrowserRouter as Router, Routes, Route, Navigate } from 'react-router-dom';

import TodoList from './components/TodoList';

import CreateTodo from './components/CreateTodo';

import UpdateTodo from './components/UpdateTodo';

import Login from './components/Login';

import Signup from './components/Signup';

const App = () => {

  const isAuthenticated = !!localStorage.getItem('token');

  return (

    <Router>

      <Routes>

        <Route path="/login" element={<Login />} />

        <Route path="/signup" element={<Signup />} />

        <Route

          path="/todos"

          element={isAuthenticated ? <TodoList /> : <Navigate to="/login" />}

        />

        <Route

          path="/create"

          element={isAuthenticated ? <CreateTodo /> : <Navigate to="/login" />}

        />

        <Route

          path="/update/:id"
```

```
      element={isAuthenticated ? <UpdateTodo /> : <Navigate to="/login" />}  
    />  
    <Route path="/" element={<Navigate to="/login" />} />  
  </Routes>  
</Router>  
);  
};
```

```
export default App;
```

```
// src/components/UpdateTodo.js  
  
import React, { useEffect, useState } from 'react';  
  
import axios from 'axios';  
  
import { Button, Form, Container } from 'react-bootstrap';  
  
import { useParams, useNavigate } from 'react-router-dom';  
  
const UpdateTodo = () => {  
  const { id } = useParams();  
  
  const [text, setText] = useState("");  
  
  const navigate = useNavigate();  
  
  useEffect(() => {  
    const fetchTodo = async () => {
```

```
try {  
  const token = localStorage.getItem('token');  
  const response = await axios.get(`http://localhost:3000/api/v1/todo/getAllTodo`, {  
    headers: { Authorization: `Bearer ${token}` },  
  });  
  
  const todo = response.data.todoInfo.find((t) => t._id === id);  
  if (todo) setText(todo.text);  
} catch (error) {  
  console.error('Error fetching todo', error);  
}  
};  
  
fetchTodo();  
}, [id]);
```

```
const handleSubmit = async (e) => {  
  e.preventDefault();  
  
  try {  
    const token = localStorage.getItem('token');  
    await axios.put(  
      `http://localhost:3000/api/v1/todo/editTodo/${id}`,  
      { text },  
      { headers: { Authorization: `Bearer ${token}` } }  
    );  
    navigate('/todos');  
  } catch (error) {  
    console.error('Error updating todo', error);  
  }  
}
```

```
};
```

```
return (
```

```
  <Container>
```

```
    <h2>Update Todo</h2>
```

```
    <Form onSubmit={handleSubmit}>
```

```
      <Form.Group className="mb-3">
```

```
        <Form.Label>Todo Text</Form.Label>
```

```
        <Form.Control
```

```
          type="text"
```

```
          value={text}
```

```
          onChange={(e) => setText(e.target.value)}
```

```
          required
```

```
        />
```

```
      </Form.Group>
```

```
      <Button type="submit">Update Todo</Button>
```

```
    </Form>
```

```
  </Container>
```

```
);
```

```
};
```

```
export default UpdateTodo;
```

```
// src/components/CreateTodo.js

import React, { useState } from 'react';

import axios from 'axios';

import { Button, Form, Container } from 'react-bootstrap';

import { useNavigate } from 'react-router-dom';

const CreateTodo = () => {

  const [text, setText] = useState("");

  const navigate = useNavigate();

  const handleSubmit = async (e) => {

    e.preventDefault();

    try {

      const token = localStorage.getItem('token');

      await axios.post(

        'http://localhost:3000/api/v1/todo/addTodo',

        { text },

        { headers: { Authorization: `Bearer ${token}` } }

      );

      navigate('/todos');

    } catch (error) {

      console.error('Error creating todo', error);

    }

  };

};
```

```
return (  
  <Container>  
    <h2>Create Todo</h2>  
    <Form onSubmit={handleSubmit}>  
      <Form.Group className="mb-3">  
        <Form.Label>Todo Text</Form.Label>  
        <Form.Control  
          type="text"  
          value={text}  
          onChange={(e) => setText(e.target.value)}  
          required  
        />  
      </Form.Group>  
      <Button type="submit">Add Todo</Button>  
    </Form>  
  </Container>  
);  
};
```

```
export default CreateTodo;
```

```
// src/components/ToDoList.js
```

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

import axios from 'axios';

import { Button, ListGroup, Container } from 'react-bootstrap';

import { useNavigate } from 'react-router-dom';

const TodoList = () => {

  const [todos, setTodos] = useState([]);

  const navigate = useNavigate();

  useEffect(() => {

    fetchTodos();

  }, []);

  const fetchTodos = async () => {

    try {

      const token = localStorage.getItem('token');

      const response = await axios.get('http://localhost:3000/api/v1/todo/getAllTodo', {

        headers: { Authorization: `Bearer ${token}` },

      });

      setTodos(response.data.todoInfo);

    } catch (error) {

      console.error('Error fetching todos', error);

      if (error.response?.status === 401) {

        navigate('/login');

      }

    }

  };

};
```

```

const deleteTodo = async (id) => {
  try {
    const token = localStorage.getItem('token');
    await axios.delete(`http://localhost:3000/api/v1/todo/deleteTodo/${id}`, {
      headers: { Authorization: `Bearer ${token}` },
    });
    fetchTodos(); // Refresh the list
  } catch (error) {
    console.error('Error deleting todo', error);
  }
};

```

```

return (
  <Container>
    <h2>Todo List</h2>
    <Button onClick={() => navigate('/create')}>Add Todo</Button>
    <ListGroup className="mt-3">
      {todos.map((todo) => (
        <ListGroup.Item key={todo._id}>
          {todo.text}
          <Button className="mx-2" onClick={() => navigate(`/update/${todo._id}`)}>Edit</Button>
          <Button variant="danger" onClick={() => deleteTodo(todo._id)}>Delete</Button>
        </ListGroup.Item>
      ))}
    </ListGroup>
  </Container>
)

```

```
    </Container>

  );
};

export default TodoList;
```

```
// src/components/Signup.js

import React, { useState } from 'react';
import axios from 'axios';
import { Button, Form, Container, Card, Row, Col } from 'react-bootstrap';
import { useNavigate } from 'react-router-dom';

const Signup = () => {
```

```
const [formData, setFormData] = useState({
  firstName: "",
  lastName: "",
  email: "",
  password: "",
});

const navigate = useNavigate();

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

const handleSubmit = async (e) => {
  e.preventDefault();
  try {
    await axios.post('http://localhost:3000/api/v1/auth/signup', formData);
    navigate('/login'); // Use navigate instead of history
  } catch (error) {
    console.error('Error signing up', error);
  }
};

return (
  <Container className="d-flex align-items-center justify-content-center" style={{ minHeight: '100vh' }}>
    <Row className="w-100">
      <Col md={{ span: 6, offset: 3 }}>
```

```
<Card className="p-4 shadow-sm">

  <Card.Body>

    <h2 className="text-center mb-4">Signup</h2>

    <Form onSubmit={handleSubmit}>

      <Form.Group controlId="formBasicFirstName" className="mb-3">

        <Form.Label>First Name</Form.Label>

        <Form.Control

          type="text"

          name="firstName"

          value={formData.firstName}

          onChange={handleChange}

          placeholder="Enter first name"

          required

        />

      </Form.Group>

      <Form.Group controlId="formBasicLastName" className="mb-3">

        <Form.Label>Last Name</Form.Label>

        <Form.Control

          type="text"

          name="lastName"

          value={formData.lastName}

          onChange={handleChange}

          placeholder="Enter last name"

          required

        />

      </Form.Group>

      <Form.Group controlId="formBasicEmail" className="mb-3">
```

```
<Form.Label>Email</Form.Label>
```

```
<Form.Control
```

```
  type="email"
```

```
  name="email"
```

```
  value={formData.email}
```

```
  onChange={handleChange}
```

```
  placeholder="Enter email"
```

```
  required
```

```
</Form.Group>
```

```
<Form.Group controlId="formBasicPassword" className="mb-3">
```

```
  <Form.Label>Password</Form.Label>
```

```
  <Form.Control
```

```
    type="password"
```

```
    name="password"
```

```
    value={formData.password}
```

```
    onChange={handleChange}
```

```
    placeholder="Password"
```

```
    required
```

```
</Form.Group>
```

```
<Button variant="primary" type="submit" className="w-100">
```

```
  Signup
```

```
</Button>
```

```
<div className="text-center mt-3">
```

```
  <small>
```

```
    Already have an account? <a href="/login">Login</a>
```

```
        </small>

      </div>

    </Form>

  </Card.Body>

</Card>

</Col>

</Row>

</Container>

);

};
```

```
export default Signup;
```

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

import axios from 'axios';

import { Button, Form, Container } from 'react-bootstrap';

import { useNavigate } from 'react-router-dom';

const Login = () => {

  const [credentials, setCredentials] = useState({ email: '', password: '' });

  const navigate = useNavigate();

  const handleChange = (e) => {
```

```
const { name, value } = e.target;

setCredentials({ ...credentials, [name]: value });

};
```

```
const handleSubmit = async (e) => {

  e.preventDefault();

  try {

    const response = await axios.post('http://localhost:3000/api/v1/auth/login', credentials);

    localStorage.setItem('token', response.data.token); // Store token in localStorage

    navigate.push('/'); // Redirect to todos after login

  } catch (error) {

    console.error("Error logging in", error);

  }

};
```

```
return (

  <Container>

    <h2>Login</h2>

    <Form onSubmit={handleSubmit}>

      <Form.Group controlId="formBasicEmail">

        <Form.Label>Email</Form.Label>

        <Form.Control

          type="email"

          name="email"

          value={credentials.email}

          onChange={handleChange}

          placeholder="Enter email"
```

```
        required

    />

</Form.Group>

<Form.Group controlId="formBasicPassword">

    <Form.Label>Password</Form.Label>

    <Form.Control

        type="password"

        name="password"

        value={credentials.password}

        onChange={handleChange}

        placeholder="Password"

        required

    />

</Form.Group>

<Button variant="primary" type="submit">Login</Button>

</Form>

</Container>

);

};

export default Login;
```

