<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Route Management</title>

<script src="https://unpkg.com/react/umd/react.production.min.js"></script>

<script src="https://unpkg.com/react-dom/umd/react-dom.production.min.js"></script>

<script src="https://unpkg.com/babel-standalone/babel.min.js"></script>

</head>

<body>

<div id="root"></div>

<script type="text/babel">

class Leg {

constructor(source, destination, cost) {

this.source = source;

this.destination = destination;

this.cost = cost;

}

}

class RouteManager extends React.Component {

constructor(props) {

super(props);

this.state = {

legs: []

};

}

addLeg = () => {

const source = prompt("Enter the source city:");

const destination = prompt("Enter the destination city:");

const cost = parseFloat(prompt("Enter the cost:"));

const leg = new Leg(source, destination, cost);

this.setState(prevState => ({

legs: [...prevState.legs, leg]

}));

};

updateLeg = (index) => {

const { legs } = this.state;

const source = prompt("Enter the updated source city:");

const destination = prompt("Enter the updated destination city:");

const cost = parseFloat(prompt("Enter the updated cost:"));

const updatedLeg = { ...legs[index], source, destination, cost };

legs.splice(index, 1, updatedLeg);

this.setState({ legs: [...legs] });

};

deleteLeg = (index) => {

const { legs } = this.state;

legs.splice(index, 1);

this.setState({ legs: [...legs] });

};

getTotalCost = () => {

const { legs } = this.state;

return legs.reduce((totalCost, leg) => totalCost + leg.cost, 0);

};

handleMenuSelection = (choice) => {

switch (choice) {

case "1":

this.addLeg();

break;

case "2":

this.updateLeg(parseInt(prompt("Enter the index of the leg to update:")));

break;

case "3":

this.deleteLeg(parseInt(prompt("Enter the index of the leg to delete:")));

break;

default:

console.log("Invalid choice!");

}

};

render() {

const { legs } = this.state;

return (

<div>

<h2>Route Management</h2>

<div>

<h3>Options:</h3>

<p>1. Add Leg</p>

<p>2. Update Leg</p>

<p>3. Delete Leg</p>

<p>4. Calculate Total Cost</p>

<p>Choose an option (1-4): <input type="text" id="menuChoice" /></p>

<button onClick={() => this.handleMenuSelection(document.getElementById("menuChoice").value)}>

Submit

</button>

</div>

<h3>Leg List</h3>

<ul>

{legs.map((leg, index) => (

<li key={index}>

Source: {leg.source}, Destination: {leg.destination}, Cost: {leg.cost}

<button onClick={() => this.updateLeg(index)}>Update</button>

<button onClick={() => this.deleteLeg(index)}>Delete</button>

</li>

))}

</ul>

<p>Total cost of the trip: {this.getTotalCost()}</p>

</div>

);

}

}

ReactDOM.render(<RouteManager />, document.getElementById("root"));

</script>

</body>

</html>