

## React JS code

```
import React, { useState, useEffect } from 'react';
import { BrowserRouter as Router, Switch, Route, Link } from 'react-router-dom';

function CarSharingPlatform() {
  const [cars, setCars] = useState([]);
  const [bookings, setBookings] = useState([]);
  const [currentUser, setCurrentUser] = useState(null);

  useEffect(() => {
    // Fetch cars and bookings data from server
    fetch('/api/cars')
      .then(response => response.json())
      .then(data => setCars(data))
      .catch(error => console.log(error));

    fetch('/api/bookings')
      .then(response => response.json())
      .then(data => setBookings(data))
      .catch(error => console.log(error));

    // Set the current user from local storage
    const storedUser = localStorage.getItem('currentUser');
    if (storedUser) {
      setCurrentUser(JSON.parse(storedUser));
    }
  }, []);

  function handleLogin(user) {
    setCurrentUser(user);
  }
}
```

```
localStorage.setItem('currentUser', JSON.stringify(user));  
}
```

```
function handleLogout() {  
  setCurrentUser(null);  
  localStorage.removeItem('currentUser');  
}
```

```
function handleCreateBooking(carId, bookingDate) {  
  const booking = {  
    carId,  
    bookingDate,  
    userId: currentUser.id  
  };  
}
```

```
fetch('/api/bookings', {  
  method: 'POST',  
  headers: { 'Content-Type': 'application/json' },  
  body: JSON.stringify(booking)  
})  
  .then(response => response.json())  
  .then(data => {  
    setBookings([...bookings, data]);  
  })  
  .catch(error => console.log(error));  
}
```

```
return (  
  <Router>  
    <div>  
      <nav>
```

```

<ul>

  <li>

    <Link to="/">Home</Link>

  </li>

  <li>

    <Link to="/cars">Cars</Link>

  </li>

  {currentUser ? (

    <>

      <li>

        <Link to="/bookings">Bookings</Link>

      </li>

      <li>

        <button onClick={handleLogout}>Logout</button>

      </li>

    </>

  ) : (

    <li>

      <Link to="/login">Login</Link>

    </li>

  )}

</ul>

</nav>

<Switch>

  <Route exact path="/">

    <HomePage />

  </Route>

  <Route path="/cars">

    <CarListPage cars={cars} onCreateBooking={handleCreateBooking} />

  </Route>

```

```

    <Route path="/bookings">
      <BookingListPage bookings={bookings} />
    </Route>

    <Route path="/login">
      <LoginPage onLogin={handleLogin} />
    </Route>
  </Switch>
</div>
</Router>
);
}

```

```

function HomePage() {
  return (
    <div>
      <h1>Welcome to Car Sharing Platform</h1>
      <p>Share your car with others and earn money!</p>
    </div>
  );
}

```

```

function CarListPage({ cars, onCreateBooking }) {
  return (
    <div>
      <h2>Cars</h2>
      <ul>
        {cars.map(car => (
          <li key={car.id}>
            <h3>{car.make} {car.model}</h3>
            <p>{car.description}</p>
            <p>Price per day: ${car.pricePerDay}</p>

```

}