

React Hackathon:-

1. Project Setup (5 Marks):

- Create a new React project using create-react-app.
- Install **React Router v6** and **Bootstrap** for UI styling.

2. Login Page (10 Marks):

- Create a simple login page where users must enter their username and password.
- On successful login (use the default credentials: admin/admin), store the login status in **localStorage** and redirect to the **Home Page**.
- If login fails, show an error message.
- **Code Tips:**
 - Store username and password in state.
 - Use `localStorage.setItem('isLoggedIn', true)` on successful login.
 - After login, use `useNavigate()` to redirect to the Home page.

3. Routing Setup (10 Marks):

- Use **React Router v6** to define routes for the following:
 - `/login`: Renders the Login page.
 - `/home`: Renders the Home page (after login).
 - `/view-inventory`: Displays the list of vehicles.
 - `/add-vehicle`: Allows adding a new vehicle.
 - `/logout`: Logs the user out and redirects back to the login page.
- **Code Tips:**
 - Use `BrowserRouter`, `Routes`, and `Route` components.
 - Make sure the routes are protected. If a user is not logged in, redirect them back to the Login page.

4. Home Page (5 Marks):

- After a successful login, show a **Home Page** with navigation links for:
 - View Inventory
 - Add Vehicle
 - Logout
- **Code Tips:**
 - Use Bootstrap for a navigation bar or simple buttons.

5. View Inventory Page (10 Marks):

- Create a page to display a list of vehicles. Each vehicle should have:
 - **ID, Model Name, Type, Price.**
- Initially, show 3 default vehicles in the inventory (hardcoded or stored in a variable).
- **Code Tips:**
 - Use `useState` to manage the inventory array.
 - Use `Bootstrap` to style the vehicle list.

6. Add Vehicle Page (5 Marks):

- Create a form to add a new vehicle to the inventory.
- Input fields: **Model Name, Type, Price.**
- After adding, the new vehicle should be displayed on the View Inventory page.
- **Code Tips:**
 - Use controlled inputs with state to handle form values.
 - On form submit, push the new vehicle object into the inventory state.

7. Delete Vehicle Functionality (5 Marks):

- Each vehicle in the list should have a **Delete** button.
- On clicking the Delete button, the selected vehicle should be removed from the inventory.
- **Code Tips:**
 - Use the `filter()` function to remove the selected vehicle from the inventory array.

8. Logout Functionality (5 Marks):

- Create a **Logout** link on the Home page that will:
 - Clear the login status from **localStorage**.
 - Redirect the user back to the Login page.
- **Code Tips:**
 - Use `localStorage.removeItem('isLoggedIn')` to clear the login status.
 - Use `useNavigate()` to redirect the user after logout.