# 🚗 Car Finder Web App

This is a Car Finder Web App built using \*\*React.js\*\* and \*\*Material-UI\*\*, fulfilling all the requirements for the assignment.

## Features

- 🔍 \*\*Search cars\*\* by name

- 🏷️ \*\*Filter cars\*\* by brand, fuel type

- 💵 \*\*Sort cars\*\* by price (Low to High, High to Low)

- 📄 \*\*Pagination\*\* (10 cars per page)

- ❤️ \*\*Add to Wishlist\*\* (stored in LocalStorage)

- 🌗 \*\*Dark Mode toggle\*\*

- ⚡ \*\*Real-time updates\*\* for search, filters, sorting

- 🖼️ Display car \*\*images, names, fuel type, seating capacity, price\*\*

- 🚀 \*\*API\*\* fetched using \*\*JSON Server\*\* (Mock API)

- ⏳ \*\*Loading Spinner\*\* when fetching cars

- 🖱️ \*\*Hover animations\*\* on car cards

## Technology Stack

- \*\*React.js\*\*

- \*\*Material-UI\*\*

- \*\*Axios\*\*

- \*\*JSON Server\*\* (Mock API)

- \*\*Vite\*\* for development build

## How to Run Locally

### 1. Clone the repository

```bash

git clone <your-repo-url>

cd car-finder

**2. Install dependencies**

bash

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npm install

**3. Start JSON Server**

bash

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npx json-server --watch db.json --port 3001

API will run at http://localhost:3001/cars

**4. Start React App**

bash

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npm run dev

React App will run at http://localhost:5173

**Folder Structure**

css

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src/

components/

Navbar.jsx

CarCard.jsx

pages/

Home.jsx

Wishlist.jsx

context/

(optional Wishlist Context - if needed)

App.jsx

Main.jsx

db.json

README.md

**API Sample**

* Endpoint: GET http://localhost:3001/cars
* Example query params:
  + q=toyota
  + brand=Honda
  + fuelType=Petrol
  + \_sort=price&\_order=asc

**Notes**

* Wishlist stored locally using **LocalStorage**.
* Fully **responsive** UI.
* **Debounced Search** (waits 0.5s after typing).
* **Sorting** and **Filters** update results without page reload.
* Dark mode preserved across pages.

**📌 Full installation in one go**

If you want to install all project dependencies quickly:

bash

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npm install @mui/material @mui/icons-material @emotion/react @emotion/styled axios react-router-dom

and separately for **JSON Server**:

bash

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npm install -g json-server

or if you prefer not installing globally:

bash

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npx json-server --watch db.json --port 3001

**✅ Summary**

| **Purpose** | **Libraries Installed** |
| --- | --- |
| UI Components | @mui/material, @emotion/react, @emotion/styled |
| Icons | @mui/icons-material |
| HTTP Requests | axios |
| Routing | react-router-dom |
| API Mock Server | json-server |

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