Car Dealership Web Application

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2025

1 Project Goals

The main goal of this web application is to develop a platform to support the work of car dealership employees. Key objectives include:

- Providing a user-friendly interface for viewing available cars with specifications such as name, model, year of manufacture, price, and more.
- Enabling users to submit test drive requests.
- Creating an intuitive interface for quick access to essential information.
- Allowing updates to the car catalog.
- Efficient data management, including importing and exporting information.
- Supporting offline functionality to ensure the application works without an internet connection.

2 Development Process

The application interface was designed with simplicity and accessibility in mind, ensuring easy navigation and adaptability for various devices such as smartphones, tablets, and computers. The following technologies were used during development:

- **React**: A JavaScript library used to build a dynamic interface. It was chosen for its flexibility, performance, and component-based structure.
- **CSS**: Used for styling and making the design responsive.
- **JSON**: Used to store and exchange vehicle data.
- **SVG**: Scalable Vector Graphics were used for icons and illustrations to enhance visual quality without performance loss.

The code was written in a modular way, facilitating maintenance and scalability. All features — data display, request submission, file uploads — were thoroughly tested. Special attention was paid to stable performance, offline usability, and a user-friendly experience. Navigation history was implemented using buttons in the page header, allowing users to easily return to previously visited views.

3 Main Features of the Application

3.1 Car Catalog

The main page displays the full car catalog. For each car, the following information is shown:

- Car and model.
- Year of manufacture.
- Price.
- Additional specifications (e.g., mileage, color, engine type, etc.).

3.2 Adding New Cars

New cars can be added via a dedicated form that includes fields for all specifications and an option to upload a photo. The form includes validation (e.g., checking that the price is a number) to reduce input errors.

3.3 Test Drive Booking

Users can make a test drive reservation through a modal form. The form collects:

- Name and contact details.
- Preferred date and time for the test drive.

After submission, the user receives a confirmation and can download a text file with the request details (e.g., "Test drive for Toyota Camry, October 15, 14:00").

3.4 Data Management

The application provides convenient tools for managing data:

- **Import**: Upload a list of cars from a JSON file. The uploaded data is validated to ensure it matches the required format and contains correct values.
- **Export**: Save the current catalog to a JSON file for backup purposes.
- **Drag-and-Drop**: Supports dragging and dropping JSON files directly into the application.
- **Select**: Allows selecting an existing photo of the car during creation.

Additionally, data is saved in the browser's *localStorage*, ensuring persistence after page reloads and enabling the application to function offline.

3.5 Media Page

There is a separate page containing media content: a promotional video for the dealership.