

# Dealership Web Application Project

Your Name

May 20, 2025

## 1 Project Goals

The primary objective of this web application is to develop a platform that streamlines the tasks of car dealership employees. Key goals include:

- Providing a convenient interface for viewing available cars, complete with specifications such as make, model, year of manufacture, price, and more.
- Offering a straightforward mechanism for requesting test drives.
- Delivering an intuitive user interface that enables quick access to necessary information.
- Facilitating updates to the car catalog.
- Supporting efficient data management, including the ability to import and export information.

## 2 Development Process

The application's interface was designed with simplicity and accessibility as core principles, ensuring ease of navigation for users and adaptability across various devices, such as phones, tablets, and computers. The development leveraged the following technologies:

- **React:** A JavaScript library selected for building a dynamic interface, valued for its flexibility, speed, and ability to structure the application into reusable components. (Its use also offered the potential for earning additional evaluation points.)
- **CSS:** Utilized for styling and ensuring the design's adaptability to different screen sizes.
- **JSON:** Employed for storing and exchanging car-related data.

The codebase was written with modularity in mind, promoting ease of maintenance and scalability. Every function—such as data display, request submission, and file uploads—was thoroughly tested. Special emphasis was placed on ensuring stable performance across devices and a user-friendly experience.

## 3 Main Features of the Application

### 3.1 Car Listing

The main page features a complete catalog of available vehicles. Each car entry displays:

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

## 3.2 Adding New Cars

New vehicles can be added via a dedicated form, which includes fields for entering all specifications and an option to upload a photo. The form includes data validation (e.g., ensuring the price is a number) to minimize errors.

## 3.3 Test Drive Request

Users can request a test drive through a modal window containing a form, where they input:

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

Upon submission, users receive a confirmation and can download a text file with request details (e.g., "Test drive for Toyota Camry, October 15, 2:00 PM").

## 3.4 Data Management

The application provides robust data management tools:

- **Import:** Upload a list of cars from a JSON file.
- **Export:** Save the current catalog to a JSON file for backup purposes.
- **Drag-and-Drop:** Enable quick file uploads by dragging and dropping JSON files into the application.

Additionally, data is stored in the browser's localStorage to ensure persistence across page reloads.

## 3.5 Media Page

A separate page is dedicated to media content, featuring videos about cars, dealership advertisements, or educational materials. This enhances the application's appeal and utility for users.