INTRODUCTION

Project Name : Automated Car Catalog System for Enhanced Showroom Management

1. Project Objective

To develop an automated system that digitizes and streamlines the management of car catalogs in a showroom. The system will allow easy car entry, search, filtering, and reporting while enhancing customer interaction and reducing manual errors.

Key Goals:

- Centralized car catalog management.
- Improved sales efficiency and reporting.
- Real-time data access for staff and customers.
- Enhanced customer experience through search and comparison.

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2. User Story

- **As a Salesperson**, I want to quickly search available cars by model, price, and features so that I can provide accurate information to customers.

- **As a Customer**, I want to browse and compare car models online/offline so that I can make better purchase decisions.

- **As an Admin**, I want to manage car details, update stock, and generate reports so that showroom operations run smoothly.

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3. Functional Requirements

Core Features:

1. Add, update, and delete car details (model, variant, price, availability, features).

2. Search and filter cars by parameters (brand, type, fuel, price range).

3. Role-based login (Admin, Salesperson, Customer).

4. Generate sales and inventory reports.

5. Customer inquiry/quotation generation.

6. Integration with CRM and payment systems.

Advanced Features (optional):

1. Analytics dashboard for showroom performance.

2. Automated notifications for low stock or promotions.

3. AI-powered car recommendation to customers.

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4. Technology Stack

- **Frontend (UI):** React.js / Angular / Vue.js
- **Backend (API & Business Logic):** Node.js / Python (Django/Flask) / Java (Spring Boot)
- **Database:** MySQL / PostgreSQL / MongoDB
- **Deployment:** Cloud (AWS / Azure / GCP) or On-premises Server
- **Authentication:** JWT / OAuth 2.0
- **Reporting & Analytics:** Power BI / Tableau / Custom dashboards
- **Optional:** AI/ML for car recommendations