



CAR SHOWROOM SYSTEM



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PROJECT

car Showroom System – Project Document

1. Project Title

Car Showroom Management System.

2. Project description:

A car showroom management system is a software program designed to streamline showroom operations. It allows customers to browse available car, view detailed specifications, book test drives and ask questions about purchases. For showroom managers, it provides an operator panel to update car details and manage reservations and track sales efficiently.

- The system aims to improve customer experience, enhance business operations, and make car showroom management more organized and accessible.

3. Objectives

The main objectives of this system are:

- User-friendly interface – clean and modern design for customers to easily browse the car.
- Advanced Search and Filter – Allows customers to find their favorite cars based on make, model, price range, and fuel type.
- Efficient Operator Panel:– Allow showroom managers to manage car inventory and customer reservations.
- Secure authentication – Make sure only authorized users (customers and administrators) can access the system.
- Data storage and management – Store customer, car, and reservation information efficiently using databases.

4. Target users:

The system is designed for two main groups of users:

1. Customers

View a list of car with detailed specifications.

Search for car using filters.

Book a trial or ask for a purchase inquiry.

2. Exhibition managers

Manage car inventory (add, update, delete car).

Handling customers' bookings (approving or rejecting trials).

Track showroom performance through sales reports.

5. System Specifications

1. Customer Features:

- User registration and login.
- car list with photos, prices, and details.
- Advanced search and filter options (make, model, price range, fuel type).
- car details page with specifications and high-quality images.
- Test drive booking and purchase inquiry submission.

2. Operator Features:

- Secure login for administrators.
- Manage car inventory (add, update, delete).
- Handle customer bookings (approve, cancel, reschedule).
- View sales reports and track showroom performance.

6. Project Objectives :

1. User-Friendly Interface

- Functionality: Intuitive design for easy navigation.
- Outcome: Enhanced customer engagement and satisfaction.

2. Advanced Search/Filter

- Functionality: Filter car by make, price, fuel type, etc.
- Outcome: Faster discovery of preferred car for customers.

3. Efficient Operator Panel

- Functionality: Dashboard for inventory and booking management.
- Outcome: Streamlined administrative workflows for managers.

4. Secure Authentication

- Functionality: Role-based login with encryption.
- Outcome: Protection of sensitive data.

5. Data Management

- Functionality: Database for storing user/car/reservation data.
- Outcome: Reliable, scalable record-keeping.

7.Target Users :

1. Customers

- Functionalities: Browse car, search/filter, book test drives.
- Outcomes: Informed decisions, hassle-free bookings.

2. Showroom Managers

- Functionalities: Manage inventory, approve bookings, track sales.
- Outcomes: Centralized operations, data-driven strategies.
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Purpose: Allow customers to submit a one-time inquiry or feedback message.

Key Functionality:

Single-Submission Form:

A simple page with fields for:

Subject

Message (text box)

Customers can submit the form once per session.

A confirmation message appears after submission (“Thank you! Your message has been sent.”).

Future Plans for the Reservation System :

1. **Reservation System:** Develop a seamless platform allowing customers to book trial sessions or request price inquiries, ensuring a smooth and efficient booking process.
2. **Booking Management:** Implement a feature to manage customer bookings, enabling admins to approve, cancel, or reschedule trials with ease.
3. **Mobile App Expansion:** Extend the system to Android and iOS, providing customers with the flexibility to book and manage trials on the go.
4. **Web Version Development:** Transform the program into a website for easier access, broader reach, and enhanced user experience, ensuring cross-device compatibility and seamless updates.

Technical Details

1-Programming Languages:swing.

2-Database: MySQL or MongoDB for storing user, car, and reservation data.

3-Security: Implement SSL encryption, role-based access control, and password hashing.

4-Hosting: Cloud-based hosting (AWS, Azure) for scalability and reliability.

ER digram for project:

```
Customer (CustomerID, Name, Email, Phone, Password)
|
| Books (1:N)
v
Reservation (ReservationID, CustomerID, CarID, ReservationDate, Status)
|
| Reserved For (1:N)
v
Car (CarID, Make, Model, Price, FuelType, Specifications, ImageURL)
|
| Manages (1:N)
v
Showroom Manager (ManagerID, Name, Email, Password)

Customer (CustomerID)
|
| Submits (1:N)
v
Inquiry/Feedback (InquiryID, CustomerID, Subject, Message, SubmissionDate)
```