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CAR SHOWROOM MANAGEMENT SYSTEM

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Abstract—
The Car Showroom Management System is a web-based application developed to streamline the operations and management of a car showroom. The system aims to provide an efficient and user-friendly platform for automating various tasks related to listing of cars customer interactions, and reporting. The system is built using PHP as the server-side scripting language and MySQL as the database management system. The combination of these technologies ensures scalability, reliability, and ease of maintenance. The Car Showroom Management System is a robust and scalable solution designed to enhance the efficiency of car showroom operations. By leveraging PHP and MySQL, the system offers a cost-effective and user- friendly platform for managing inventory, sales, and customer interactions, ultimately contributing to the overall success of the car showroom business.
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Keywords:
PHP, MYSQL

I. INTRODUCTION

The Car Showroom Management System is a web-based application developed using PHP and MySQL to simplify and automate showroom operations. It helps manage vehicle inventory, customer details, bookings, and sales efficiently. The system reduces manual work, minimizes errors, and provides a user-friendly interface for both staff and customers. With PHP handling the server-side logic and MySQL managing the database, the system ensures smooth data flow, better accessibility, and improved decision-making for showroom management. This system provides an easy-to-use interface for both administrators and customers. Administrators can add, update, and delete car details, track sales, and generate reports. Customers can browse available vehicles, compare features, and submit inquiries online. All data is stored securely in a MySQL database, allowing for quick access and management. This project not only demonstrates the practical use of web technologies but also highlights the importance of digital solutions in improving business operations and customer service in the automobile industry.

II. LITERATURE REVIEW

Traditional car showroom operations involved manual processes that were time-consuming and prone to errors. With advancements in technology, web-based management systems have become common, offering better efficiency, accuracy, and accessibility. PHP and MySQL are widely used for such systems due to their open-source nature, flexibility, and reliability. Previous studies and systems show that features like inventory management, customer tracking, and sales reporting improve overall performance and customer satisfaction. This project builds on these concepts to provide a simple, efficient, and cost-effective solution tailored for car showrooms.

III. SYSTEM DESIGN

The Car Showroom Management System is built using a three-tier architecture: the front-end (HTML/CSS/JavaScript) for user interaction, the application layer (PHP) for processing logic, and the backend (MySQL) for data storage.

The system includes two main user roles:

- **Admin:** Can manage car listings, view and respond to customer inquiries, manage bookings, and generate reports.
- **Customer:** Can browse cars, search/filter vehicles, and send booking or inquiry requests.

The database includes key tables like **Cars**, **Customers**, **Bookings**, **Inquiries**, and **Sales** to handle showroom operations efficiently.

The modular design ensures easy maintenance, scalability, and a smooth user experience.

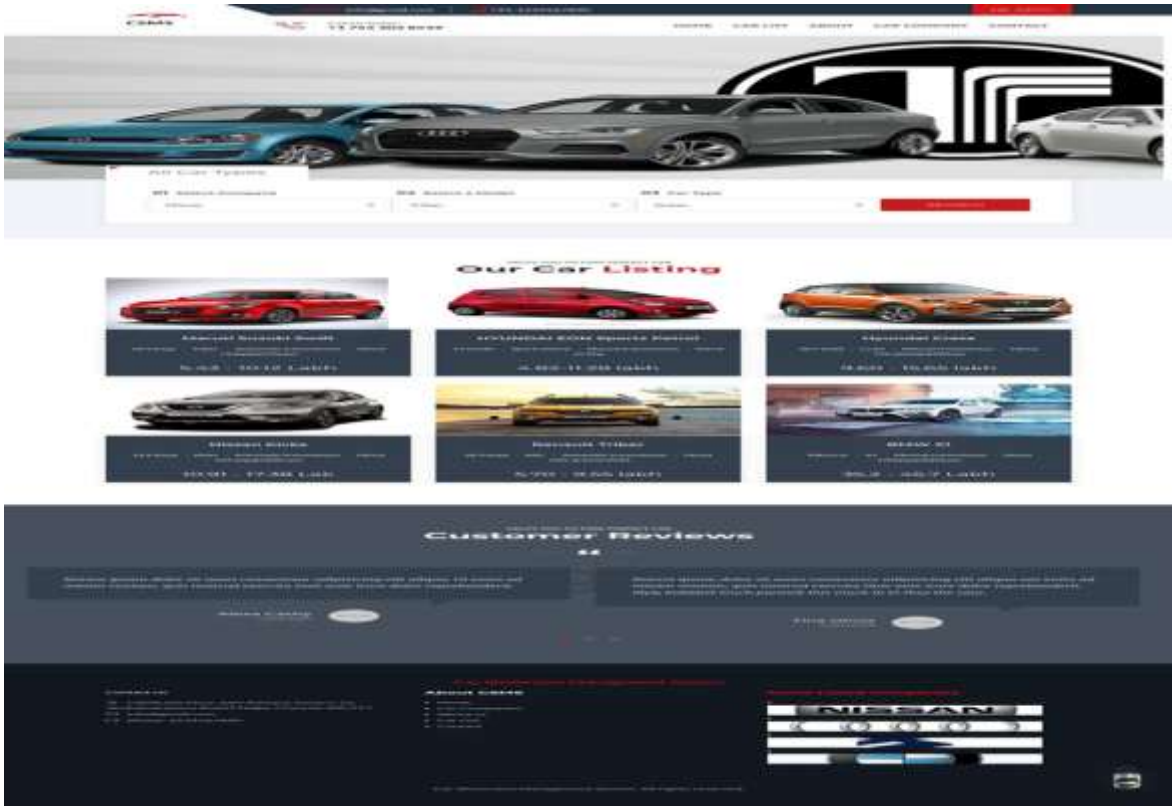
IV. IMPLEMENTATION

The Car Showroom Management System was implemented using PHP for the server-side scripting and MySQL for backend database. HTML, CSS, and JavaScript were used to build the front-end interface for user interaction.

Key Steps in Implementation:

1. **Database Setup:**
   A MySQL database was created with tables for Cars, Customers, Bookings, Inquiries, and Sales. Relationships between tables were defined using foreign keys to ensure data integrity.
2. **Admin Panel:**
   Admins can log in to manage car listings, view customer inquiries, approve or reject bookings, and generate sales reports. All admin actions are handled via secure PHP scripts.
3. **Customer Interface:**
   Customers can browse available cars, search and filter based on brand or price, and submit inquiries or booking forms. PHP scripts process these requests and update the database accordingly.
4. **From Handling and Validation:**
   All input forms include basic validation using JavaScript on the client side and PHP on the server side to ensure security and correctness.
5. **Testing and Debugging:**
   The system was tested for functionality, data accuracy, and user experience. Errors were debugged and performance was optimized for better speed and responsiveness.

The implementation ensures that both admins and customers have smooth, secure, and efficient experience while using the system.



V. RESULTS

The Car Showroom Management System achieved its objective of automating and simplifying daily operations within a car dealership. The implementation of PHP and MySQL allowed for efficient management of vehicle inventory, customer data, inquiries, and bookings. Admin users were able to perform tasks such as updating car listings, tracking sales, and generating reports with ease, leading to better decision-making and time savings. On the customer side, the system provided a smooth and user-friendly interface to view available cars, compare features, and submit inquiries or booking requests online. Overall, the system enhanced accuracy, reduced dependency on manual records, and improved communication between the showroom and its customers.

VI. CONCLUSION

The Car Showroom Management System successfully streamlines the various operations of a car dealership, including vehicle inventory management, customer handling, sales tracking, and employee management. By automating routine tasks and centralizing data, the system enhances overall efficiency, reduces human error, and provides better user experience for both staff and customers. Through the development and implementation of this system, we have demonstrated the importance of integrating technology into business operations to achieve operational excellence. The system not only helps in day-to-day management but also offers insightful reports and analytics for informed decision-making. In conclusion, this project has laid the foundation for a scalable and customizable solution that can be further enhanced with features like online booking, customer relationship management (CRM), and integration with third-party finance and insurance services to meet the evolving needs of modern car showrooms.

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