



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

CREATING APPLICATION FOR AUTOHUB CAR MANAGEMENT SYSTEM

AUTHOR: Mrs. C. MERCY PRABA M.C.A., M. Phil.

ASSISTANT PROFESSOR

DEPARTMENT OF COMMERCE WITH COMPUTER APPLICATIONS

Dr.N.G.P ARTS AND SCIENCE COLLEGE, COIMBATORE-48

CO-AUTHOR: HEMA SRI. B

DEPARTMENT OF COMMERCE WITH COMPUTER APPLICATIONS

Dr.N.G.P ARTS AND SCIENCE COLLEGE, COIMBATORE-48

ABSTRACT

The Autohub Car Management Application is a user-friendly online platform designed for viewing and purchasing cars from a virtual showroom. Built using PHP, MySQL, HTML, CSS, and JavaScript, it offers a seamless experience with features like registration, login, a shopping cart, and a secure payment gateway. Users can search for cars based on make, model, price range, and other specifications. An admin panel allows easy management of cars, users, and orders, including adding, editing, or deleting cars, and updating order statuses. The comprehensive solution for anyone looking to buy cars online, offering efficiency and convenience with its intuitive interface and robust functionalities.

Keywords: Application, User Management, Backend, data management.

OVERVIEW OF THE PROJECT

The Autohub Car management system Application is a PHP-based project that aims to provide users with an online platform to view and purchase cars from a virtual showroom. The application utilizes a MySQL database to store the information about the cars, users, and orders.

The project includes a registration and login system that allows users to create an account and log in securely to access the application's features. Users can search for cars based on their make, model, price range, and other specifications. They can add cars to their shopping cart and make payments using different payment options.

The application also includes an admin panel that allows the admin to manage the cars in the showroom, add, edit or delete them. The admin can also manage the users of the application, view their orders, and update the status of their orders.

The Autohub Car management system Application is designed with a user-friendly interface, and it is easy to navigate. Its features are well-organized, and users can easily find what they are looking for. The project is suitable for anyone looking to buy cars online, as it provides a comprehensive and efficient platform for online car shopping.

SYSTEM REQUIREMENTS

INTRODUCTION

System requirements are the configuration that a system must have a hardware or software application to run smoothly and efficiently. Failure to meet these requirements can result in installation or performance problems. It specifies the minimal and recommended hardware, software, and external combinations required for a computer system to run a given software programme execution, operating system, or hardware component. These requirements serve as guidelines for users, developers, and manufacturers to ensure compatibility and optimal performance.

Hardware and software requirements are essential specifications that outline the necessary configurations and capabilities for running specific software applications on a computer system. These requirements ensure optimal performance, compatibility, and a smooth user experience.

Hardware and software specifications refer to detailed information about the capabilities, features, and requirements of computer systems, components, and applications. Hardware specifications provide detailed information about the physical components of a computer system. Software specifications provide details about the software applications or systems.

Software Specifications

Software requirements outline the setups and parts of software that a computer system needs in order to properly run a specific application or system. Software is a term used to describe a collection of programs, data, or instructions that allow a computer to carry out particular operations. It is a group of instructions in a programming language that tells a computer how to function. Depending on the kind of software being utilized, there can be significant differences in the specific requirements. The following specifications are suggested:

- Operating System: Windows 10
- Front End: HTML, CSS, Bootstrap
- Language: PHP
- Database: MySQL
- Tool: Android studio

Hardware Specifications

Hardware requirements outline the parts and setups that a computer system needs in order to support a specific software program or system. The following specifications are suggested:

- Processor: Intel Core i5
- RAM: 8 GB
- Hard Disk: 1TB
- Device name: IdeaPad L340-151RH (Lenovo)

SYSTEM STUDIES

EXISTING SYSTEM

There is limited knowledge available on PHP-based car management systems that are currently in use, and their market share may shift when new alternatives become available. There is a notable deficiency in this field with regard to a specific platform that would promote commercial exchanges. Several difficulties disrupt the promotion and implementation of efficient car management systems, which emphasises the need for comprehensive platforms to address these difficulties and promote creativity in the business.

DRAWBACKS OF THE EXISTING SYSTEM

- **Limited user-friendliness:** The current system may lack intuitive interfaces or easy-to-understand processes, making it challenging for users to navigate or perform tasks efficiently. This limitation can lead to frustration among users and may result in decreased productivity.
- **Uncertain accuracy:** There might be concerns regarding the reliability and precision of the data or information provided by the existing system. This uncertainty can arise due to outdated data, manual errors, or inadequate validation processes, undermining the trust users have in the system's outputs.
- **Inaccessibility for Remote Users:** If the existing system is not designed to accommodate remote access or lacks robust remote connectivity features, users who need to work from different locations or outside the office may face difficulties accessing essential resources or performing their tasks effectively.
- **Insufficient coordination in data management:** The current system may struggle to efficiently manage and coordinate data across different departments or functions within the organization. This can lead to duplication of efforts, inconsistencies in data storage, and challenges in ensuring data integrity and security.
- **Reduced chances of brand recognition:** A system that does not provide a seamless and positive user experience can reflect poorly on the organization's brand image. Users may associate frustrations with using the system with the overall quality and competence of the organization, potentially impacting its reputation and market competitiveness.

PROPOSED SYSTEM

The drawbacks, which are faced during existing system, can be eradicated by using the proposed system. The main objective of the existing system is to provide a user-friendly interface. The system, which is proposed, now computerizes all the details that are maintained manually. Once the details are fed into the computer there is no need for various persons to deal with separate sections. Only a single person is enough to maintain all the reports. The security can also be given as per the requirement of the users.

BENEFITS OF THE PROPOSED

- **User-friendly interface:**

A user-friendly interface ensures that interacting with the system is intuitive, efficient, and enjoyable for users. This means designing interfaces that are visually appealing, easy to navigate, and provide clear instructions or prompts. By prioritizing user experience, organizations can enhance productivity, reduce user errors, and improve overall satisfaction. Regular updates and user feedback are crucial for keeping the interface up-to-date and aligned with users' evolving needs and preferences.

- **Streamlined planning through computerization:**

Computerizing the planning process involves leveraging digital tools and automation to simplify and optimize planning tasks. This includes everything from data collection and analysis to resource allocation and scheduling. With computerization, organizations can achieve greater accuracy, efficiency, and agility in their planning processes. Updates to software and systems are essential to ensure compatibility with evolving technologies and to incorporate new features or functionalities that enhance planning capabilities.

- **Time-saving:**

Time-saving measures, such as automation and digital workflows, are essential for maximizing productivity and efficiency. By automating repetitive tasks and streamlining processes, organizations can free up valuable time for employees to focus on more strategic or creative endeavours. Regular reviews and optimizations of workflows and procedures help identify areas for further time savings and efficiency gains. Additionally, staying current with technological advancements enables organizations to leverage new tools and techniques for even greater time savings.

- **Easy access to up-to-date information:**

Access to accurate and up-to-date information is critical for informed decision-making and efficient operations. By maintaining a centralized database or information repository, organizations can ensure that all relevant stakeholders have access to the latest data and insights. Regular updates and data synchronization are necessary to prevent discrepancies or inaccuracies in the information provided. Furthermore, implementing robust security measures helps safeguard sensitive information and maintain data integrity.

FEATURES

1. HTML (Hyper Text Markup Language):

- **Structure:** HTML provides the structure for web pages using elements like ``<html>``, ``<head>``, ``<body>``, ``<header>``, ``<footer>``, etc.
- **Semantics:** It offers semantic elements like ``<article>``, ``<section>``, ``<nav>``, ``<aside>``, etc., for better organization and accessibility.
- **Content Presentation:** HTML allows the presentation of various types of content including text, images, videos, forms, and more.
- **Hyperlinks:** Enables the creation of hyperlinks using ``<a>`` tags to navigate between different web pages or resources.
- **Compatibility:** HTML is supported by all web browsers and platforms, ensuring cross-platform compatibility.

2. CSS (Cascading Style Sheets):

- **Styling:** CSS is used for styling HTML elements, including layout, colors, fonts, spacing, and more.
- **Selectors:** It provides selectors to target specific HTML elements for applying styles, including classes, IDs, and element types.
- **Responsiveness:** CSS facilitates the creation of responsive web designs that adapt to different screen sizes and devices.
- **Flexibility:** Supports various layout techniques like flexbox and grid for creating complex and responsive layouts.
- **Modularity:** CSS enables the organization of styles into separate files for easier maintenance and scalability.

3. PHP (Hypertext Preprocessor):

- **Server-Side Scripting:** PHP is primarily used for server-side scripting, enabling dynamic web page generation.
- **Database Integration:** Supports integration with databases like MySQL for retrieving and storing data in web applications.
- **Form Handling:** PHP facilitates the processing of form data submitted by users, including validation and sanitization.
- **Session Management:** Allows the creation and management of user sessions for maintaining state across multiple requests.
- **Extensibility:** PHP offers a vast ecosystem of libraries and frameworks for building applications efficiently.

4. Android Studio:

- **Integrated Development Environment (IDE):** Android Studio provides a comprehensive IDE for developing Android applications.
- **User Interface Design:** Offers a visual layout editor for designing user interfaces using drag-and-drop components.

- Code Editing: Features advanced code editing capabilities, including syntax highlighting, code completion, and refactoring tools.
- Emulator: Includes an emulator for testing applications on different Android devices and versions.
- Debugging: Provides debugging tools for identifying and fixing errors in Android applications.

5. Bootstrap:

- Responsive Design: Bootstrap is a front-end framework that facilitates the creation of responsive and mobile-first web designs.
- Pre-designed Components: Offers a collection of pre-designed UI components like buttons, forms, navigation bars, and cards for rapid development.
- Grid System: Bootstrap's grid system enables the creation of flexible and responsive layouts using rows and columns.
- Customization: Allows customization of styles and components to match the design requirements of the project.
- Cross-Browser Compatibility: Bootstrap ensures consistency and compatibility across different web browsers.

6. MySQL:

- Relational Database Management System (RDBMS): MySQL is a popular RDBMS for managing relational databases.
- Data Storage: Allows the storage of structured data in tables with predefined schemas, supporting various data types.
- Query Language: Supports SQL (Structured Query Language) for querying and manipulating data in the database.
- Security: Provides features for user authentication, access control, and encryption to ensure data security.
- Scalability: MySQL is scalable and can handle large volumes of data and high traffic loads efficiently.

CONCLUSION

The project titled as Autohub Car Management System was deeply studied and analysed to design the code and implement. Autohub Car management system is used for daily operations in any organization to maintain or access employee related information for internal administration purposes. The Application was designed in such a way that future changes can be done easily. The following conclusions can be deduced from the development of the project.

- Automation of the entire system improves the productivity. It provides a friendly graphical user interface which proves to be better when compared to the existing system. It gives appropriate access to the authorized users depending on their permissions. It effectively overcomes the delay in communications.
- Updating of information becomes so easier. System security, data security and reliability are the striking features. The System has adequate scope for modification in future if it is necessary.