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INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 10, October 2025, pp : 514-516

e-ISSN : 2583-1062
Impact Factor : 7.001

VINTAGE CAR AUCTION WEB APPLICATION

Keerthana A.S.[1], Mahalakshmi M.[2]

[1]Student, Department of Computer Application, Maharaja Institute of Technology, Mysore, Karnataka, India.

[2]Assistant Professor, Department of Computer Applications, Maharaja Institute of Technology, Mysore, Karnataka, India.

DOI: https://www.doi.org/10.58257/IJPREMS44207

ABSTRACT

In today's rapidly evolving technological era, the digitalization of traditional business processes has become a necessity rather than a luxury. The auctioning system, which has historically been conducted through physical gatherings and manual bidding, has gradually shifted toward online platforms due to the advancement of internet technologies and the widespread use of web-based applications. The project undertaken in this study focuses on the design and development of a Vintage Car Auction System using modern web technologies, with the intent of creating a secure, efficient, and user-friendly environment where buyers and sellers can interact seamlessly.

Keywords: Vintage Cars, Online Auction, MERN Stack, Web Application, Data Security, User Experience.

1. INTRODUCTION

Auctions have always been more than transactions—they were gatherings of trust, thrill, and human instinct. Art, jewelry, estates, cars—each went under the hammer, carrying stories older than the bidders themselves. But tradition, no matter how grand, eventually meets its limits. Physical venues bound by walls, participants by distance, and transparency—well, sometimes, it faded behind the crowd. Then came technology, not politely but abruptly, demanding a change. And thus, the idea of auctions began its quiet transformation into the digital realm. Simplicity drives the design, but not at the cost of depth. Each role—admin, seller, bidder—operates within a secure, structured dashboard. Authentication is encrypted. Payments are simulated but real enough to capture the tension of a live auction. And when the clock strikes zero, the system itself declares the winner—no human interference, no bias. It's fair, clean, and transparent. Built on the MERN stack (MongoDB, Express.js, React, Node.js), the system's architecture balances speed, scalability, and reliability. In short, this project is a story. A bridge between classic elegance and digital efficiency. It respects the heritage of car auctions while adapting them to the needs of a borderless, tech-driven world. The **Vintage Car Auction System** isn't just software—it's a digital revival of a timeless experience, where passion meets precision, and nostalgia meets now.

2. METHODOLOGY

The methodology used for developing the Vintage Car Auction web Application follows a structured and systematic approach based on the Software Development Life Cycle(SDLC) model. The main objective is to design and implement a secure,transparent,and user-frindly web platform for buying and selling vintage cars online. The project utilizes the MERN Stack(MongoDB,Express.js,React.js,Node.js)to ensure high performance, scalability, and real-time functionality.

Existing System

The idea of auctions isn't new; it's centuries old. Markets have long been buzzing with buyers and sellers competing for rare and valuable items—antiques, artworks, and of course, vintage cars. Back then, you had to show up in person, raise your paddle, and hope for the best. Fast forward to today, and the digital revolution has shifted auctions online. Global participation is now possible. Bidders from Tokyo can compete with collectors in Paris, all in real time. Sounds perfect, right? Not quite. Existing online car auction systems still stumble. They're often clunky, inefficient, and lacking in transparency. User experience suffers. Accessibility is limited. Enthusiasts, sellers, and collectors face frustration rather than excitement. The technology exists—but it's not yet fully harnessed for the vintage car niche.

Proposed System

The proposed system unfolds as a dedicated Vintage Car Auction Platform, carefully crafted using the MERN stack (MongoDB, Express, React, and Node.js). The goal is simple yet powerful—to bridge the gaps noticed in existing auction solutions and bring everything under one digital roof. A space where collectors, sellers, and dreamers can come together to bid, sell, and celebrate classic automotive history.

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3. MODELING AND ANALYSIS

This architecture diagram depicts a high-level design of a College Management System integrated with Bidding Events functionality. It illustrates how various components users, admins, events and databases - interact with the centralized system to perform operations efficiently.

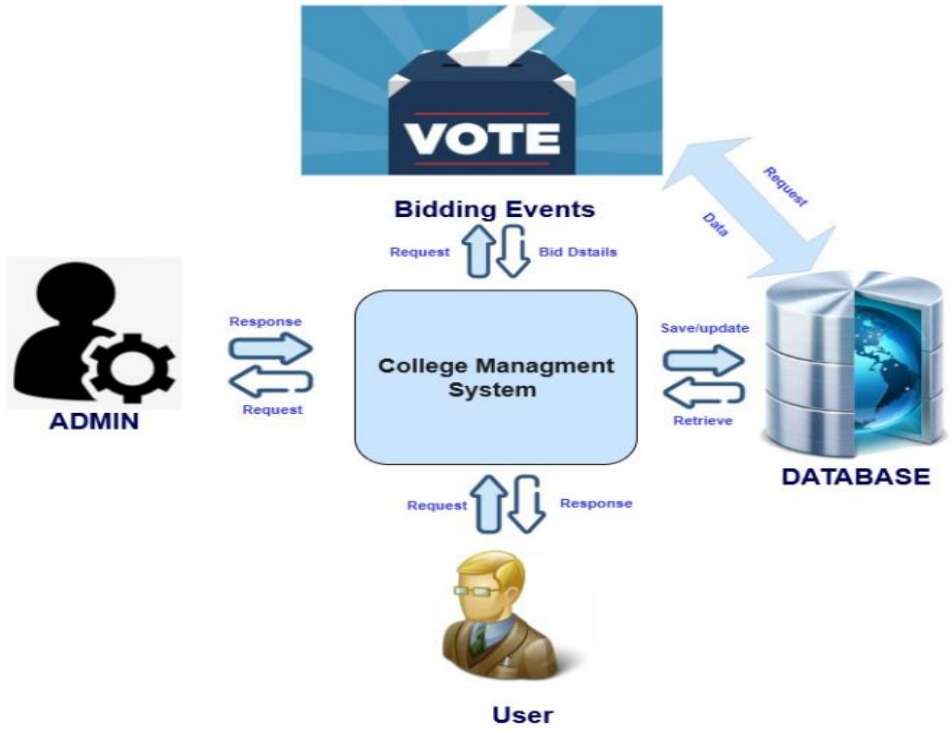

Figure 1: System Architecture Diagram

4. REAL WORLD APPLICATION

The Vintage Car Auction web app isn't just another online platform — it's a small world where car lovers, buyers, and collectors meet. It kind of breaks the old barriers, letting people from anywhere jump into global auctions without much fuss. The system makes the whole buying and selling part smoother, almost effortless, while keeping things transparent and fair. What's more, it helps in figuring out the real worth of those timeless machines — not just by numbers but by value. And somewhere in between, it celebrates the charm of classic cars, keeping their stories alive by linking enthusiasts and collectors under one digital roof.

5. TEST CASES

TC ID	Module	Test-- Description	In--put	Expected--Output
TC01	-Registration-	Registration With -- Valid Details	-Name, -Email, Password	Account--Created
TC02	Login	Valid Login	Registered Email +Password	Redirected To User
TC03	Login	Invalid Login	Wrong Password	Validation Message Show
TC04	Logout	Logout Functionality	Click Logout	Session Ends And Redirect To Login Page
TC05	Create Auction	Create Auction With Valid Data	Title,Desc, Image	Auction Saved And Visible In Listings
TC06	View Auction	View Active Auction	Go To Auction List	All Active
TC07	Place Bid	Valid Bid	Bid>Current Price	Bid Accepeted

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TC08	Auction Close	End Auction	Wait For End Time	Closed
TC09	Image Upload	Valid Image	Jpg/Png File	Preview Shown And Saved
TC10	Security	Password Encryption	Register	Password Stored

6. CONCLUSION

The development of the Vintage Car Auction System stands as a striking proof of how modern web technologies can gracefully merge into something both functional and soulful. It's not merely a website; it's an experience. A digital space where nostalgia meets innovation, where car lovers and dreamers find common ground. The platform doesn't just bridge distances—it connects stories, memories, and passions under one secure, transparent roof.

7. REFERENCES

[1] Pressman, R. S., & Maxim, B. R. --(2020). Software-- Engineering: --A Practitioner's Approach --(9th Edition). --McGraw-Hill Education.
[2] Flanagan, D. -(-2020). --JavaScript: The Definitive --Guide --(7th Edition). O'Reilly Media.
[3] Sommerville, I. --(2016). Software-- Engineering (10th Edition). --Pearson Education.
[4] W3Schools. --(2025). React.js Tutorial.-- Retrieved from https://www.w3schools.com/react/
[5] Freeman, E., & Robson, --E. (2018). Head First React: A --Brain-Friendly Guide. --O'Reilly Media.