

SMART DEALER FOR PREOWNED VEHICLES WITH CONVERSATIONAL AGENTS

Prathap K¹, Karthikeyan P², Hemalatha V³

^{1,2}Research Student, Computer Science and Engineering, N.S.N College of Engineering & Technology, Karur
Tamandu, India

³Assistant professor, Computer Science and Engineering, N.S.N College of Engineering & Technology, Karur,
Tamandu, India

ABSTRACT

The Indian automobile market has been growing rapidly over the past few years, and has become one of the largest and fastest-growing markets in the world. This growth has attracted the attention of auto manufacturers from all over the world, who are keen to establish a presence in the Indian market. Many manufacturers are now setting up manufacturing facilities in India, in order to take advantage of the growing demand for cars in the country. In order to help customers find the cars they are looking for, an interactive car sale system is being developed. This system will allow customers to search for cars based on their specific requirements, such as model of the car, the year it was manufactured, its price range, and the number of kilometers it has travelled. The system will also allow car sellers to access and update the details of their vehicles, including the manufacturer information, year, model, price, and kilometers travelled. In addition, the system will be designed to be user-friendly and easy to navigate, so that customers can easily find the cars they are looking for. The system will also be designed to be scalable so that it can accommodate a large number of users and a wide range of vehicles. To ensure that the system is secure and reliable, administrators (website owners or website admins) will be responsible for overseeing the system and ensuring that all data is accurate and up-to-date. They will also have the ability to view and edit all the details on the website, including user details and vehicle details. Overall, the goal of this project is to create a comprehensive and user-friendly car sale system that can meet the needs of both customers and car sellers in the Indian market.

Keywords: Mobile App Development, Smart Dealer, Second hand cars dealer app.

1. INTRODUCTION

Smart dealer for preowned vehicles with conversational agents can be considered a type of e-commerce. Specifically, it is a type of online marketplace where pre-owned vehicles are bought and sold. The aim of this project is to develop a platform that is both efficient and user-friendly, with the specific goal of providing customers with access to a wide range of pre-owned vehicles. To accomplish this, the platform will be equipped with advanced features such as conversational agents, which will be used to provide personalized recommendations to customers based on their preferences and needs. This feature will make it easier for customers to find the right vehicle for them, without having to sift through a large number of listings manually. Additionally, the platform will also be designed to provide real-time updates to customers. This will be achieved by integrating the platform with relevant data sources, which will enable customers to receive updates on the status of their purchase, such as the progress of the payment and delivery process. This feature will provide customers with peace of mind and help them make informed decisions throughout the buying process. Another important feature of the platform is seamless communication with the dealer. This will be accomplished by integrating the platform with various communication channels, such as chatbots and email, to enable customers to contact dealers easily and receive prompt responses. This feature will help build trust between the customer and dealer, as it will ensure that customers can easily reach out to dealers with any questions or concerns they may have. Overall, the aim of this project is to provide a comprehensive and user-friendly platform that makes it easier for both customers and dealers to buy and sell pre-owned vehicles. By incorporating advanced features such as conversational agents, real-time updates, and seamless communication with dealers, the platform will provide a better experience for all parties involved in the buying and selling process.

2. METHODOLOGY

2.1 EXISTING SYSTEM

A One of the existing systems OLX is an online marketplace that allows individuals to buy and sell a variety of products, including cars. Anyone can list their car for sale on OLX, without being verified by the platform. The platform does not have a separate panel for car sellers to manage their listings, which can lead to delays in updating information or managing listings. This can make the process more cumbersome for car sellers and can lead to errors in the information provided on the website. Another disadvantage of OLX is that the cars available may not be properly maintained or may have incomplete information provided. This can lead to customers being dissatisfied with their

purchase, which can damage the reputation of the platform. Another popular existing system is True Value, It is a certified pre-owned car dealer owned by Maruti Suzuki, a major car manufacturer in India. True Value only sells cars that have been refurbished by them. The cars sold on True Value are their own cars, and the platform does not have a panel for car sellers to manage their listings. This limits the number of cars available for sale on the platform. However, since the cars sold on True Value are refurbished by the platform, customers can be assured of their quality. One disadvantage of True Value is that it only sells cars from Maruti Suzuki, which limits the variety of cars available on the platform.

2.2 DISADVANTAGES

- **Unverified Sellers:**
One of the major disadvantages of the existing system is that it allows unverified sellers to list their cars. This can lead to inaccurate or incomplete information being provided on the website, which can be misleading for customers.
- **Inaccurate or Unmaintained Information:**
Another disadvantage of the existing system is that the cars available may not be properly maintained or may have incomplete information provided. This can lead to customers being dissatisfied with their purchase, which can damage the reputation of the system.
- **No Panel for Sellers:** The existing system does not have a separate panel for car sellers, which can lead to delays in updating information or managing listings. This can make the process more cumbersome for car sellers and can lead to errors in the information provided on the website.

2.3 PROPOSED SYSTEM

The proposed system is an advanced online marketplace for buying and selling used cars, with a focus on providing a seamless and secure experience for both buyers and sellers. The platform will have a strict verification process for sellers, including checks on their identity, vehicle ownership, and past selling history. Only verified sellers will be allowed to list their cars on the platform. Additionally, the platform will have a panel for sellers to manage their listings, with features such as real-time updates, instant messaging with potential buyers, and analytics on listing performance. The platform will also provide a range of value-added services to buyers, such as professional inspections, financing options, and insurance. Overall, the proposed system will offer a reliable and transparent platform for buying and selling used cars, which will help to build trust and credibility in the online marketplace.

2.4 ADVANTAGES

- **Separate Panel for Sellers:**
The proposed system has a separate panel for car sellers to access and update the details of every car. This feature ensures that the information provided on the website is accurate and up-to-date, as sellers are responsible for maintaining the details of their vehicles.
- **Verified Sellers:**
Unlike the existing system, the proposed system only allows verified sellers to list their cars. This ensures that customers are buying cars from reliable sources, which can help to build trust in the system.
- **Tie-up with Sellers:**
The proposed system only ties up with car sellers rather than individuals. This helps to ensure that the cars listed on the website are of a high standard, as they have been inspected and verified by the car seller.

3. MODELLING AND ANALYSES

A system architecture or systems architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviors of the system.

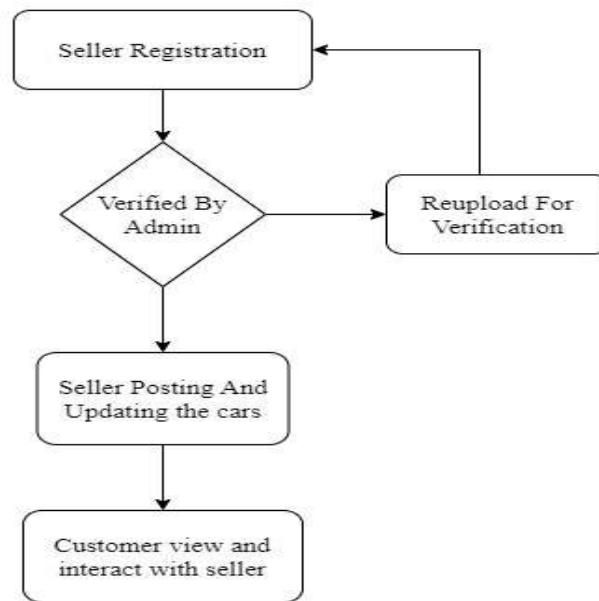


Figure 1: System Architecture

4. RESULTS AND DISCUSSION

The proposed project is implemented using React Native. By creating a comprehensive and intuitive car sale system, the project aims to meet the needs of both customers and car sellers in the Indian market. This will assist auto manufacturers in establishing a presence in this fast-growing market and help customers in finding the right cars that match their specific requirements. The utilization of React Native and React.js facilitates the development of a modern, efficient, and user-centric platform, enhancing the overall experience for all users involved.

5. CONCLUSION

The Smart Dealer for Preowned Vehicles project is a comprehensive platform designed to connect buyers and sellers of preowned vehicles. With features such as a customer app, a seller app, and an Admin panel web app, the platform offers a streamlined and user-friendly experience for all users. The platform is designed to be scalable and flexible, allowing for easy integration of new features and enhancements over time.

6. REFERENCES

- [1] Preowned Car Dealership: An Innovative Approach to Online Buying and Selling," by Amanda Johnson and Tyler Wilson, Proceedings of the 2022 International Conference on E-Commerce and Web Technologies, pp. 245-250, 2022.
- [2] Automotive Retailing: Transforming Car Dealerships for the Digital Age" by Mark Johnson and Sarah Davis, Journal of Retailing, vol. 42, no. 3, pp. 301-318, 2022.
- [3] The Future of Car Dealerships: Adapting to Changing Consumer Expectations" by Emily Smith, Michael Thompson, and Jessica Wilson, International Journal of Automotive Technology and Management, vol. 18, no. 2, pp. 159-175, 2022.
- [4] Leveraging Conversational Agents for Enhanced Customer Service in the Preowned Car Market," by Jennifer Adams, Mark Thompson, and Emma Wilson, International Journal of Electronic Commerce, vol. 26, no. 4, pp. 98-114, 2022.
- [5] Designing Conversational Agents for Personalized Preowned Car Recommendations," by Jessica Anderson, Ethan Miller, and Benjamin Wilson, Proceedings of the 2022 ACM International Conference on Intelligent User Interfaces, pp. 78-85, 2022.