

Shopping With E-Wallet System Using Artificial Intelligence.

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ABSTRACT

An Online shop that has various products needed as per user's needs. The system is built to help users in shopping and shop in their behalf. The system takes users choice and shops on their behalf. The system is proposed to be built on artificial intelligence techniques that ensure hassle free shopping experience for users. The system also includes M-Wallet integration. M-Wallet integration ensures a good mobile shopping experience. The integration of both these system allows users to just enter his choices and the system fetches the best deal for the user within no time.

Keywords

e-commerce wallet, artificial intelligence.

1. INTRODUCTION

Healthcare Every supermarket employs shopping trolley in order to aid customers to select the products which they intend to purchase. At billing counter customer may face many problems like waiting and don't know even they have sufficient money for the products they purchase. The billing process at the counter is a time consuming and also need more human resource in the billing section. To tackle this problem, we have proposed a solution in which a smart shopping cart is used to overcome these problems. It has Barcode scanner and touch screen display, which can be used to scan the products and display the product information, cost and total bill. The customer can pay the bill through any one of online payment options such as Paytm, UPI, Phone Pay etc. This solution will increase the consumer experience and reduces the shopping time.

1.1 Objective

The online AI shopping with M-Wallet system application is an application that will allow the user to shop the products that are present online with great ease. This system provides solution to improve the speed of purchasing of products and faster payment option. The customer can pay the bill through any one of online payment options such as Paytm, UPI, Phone Pay etc. This solution will increase the consumer experience and reduces the shopping time.

2. ANALYSIS OF THE SYSTEM

2.1 Existing System

We have known that most of the cities consist of supermarkets and hypermarkets. Every supermarket. employs shopping trolley in order to aid customers to select the products which they intend to purchase. The customers have to drop every product which they wish to purchase into the shopping cart and then proceed to checkout at the billing counter. At billing counter customer may face many problems like waiting and they don't know even they have sufficient money for the products they purchase. The billing process at the counter is a time consuming and also need more human resource in the billing section.

2.2 Proposed System

This system provides solution to improve the speed of purchasing of products and faster payment option. In this solution we are using Raspberry-Pi, barcode scanner, Raspberry-Pi touch screen display and a button were placed appropriately in the shopping cart. Each and every product has barcode tag on it. Barcode scanner reads the product information before put into the trolley. When the customer wants to remove the product from the cart, a push button is placed in the cart. Then customer presses the button and scans the product then automatically reduces the cost of the product in the total amount and as well as it removes from cart.

3. LITERATURE REVIEW

Although the usage and adoption of e-wallet is on the rise in present scenario, but still many reseraches have been conducted in this area. Majority of Indians now days showing a tendency to shop or spend through digitized methods of payments. Since demonetization played its part in the economy, consumers are shifting their preference to cashless economy and since digital wallets has been a hit amongst people since demonetization of 500 and 1000 legal tender notes, the digital wallet companies have also been introducing cash backs, discounts and coupons to their customers which

can be availed at online as well as offline stores from time to time. This has made the popularity of these wallets touch skies after 2016. Mobile wallets are changing the traditional ways of making and receiving payments, doing shopping, paying bills etc. we are the generation which wants faster ways of getting things done. We are now shifting towards a world with technology, connected with social media networks using their smart phones and tablets for doing everything. Adoption of digital payments methods in a paper currency-oriented country like India has surely helped in attaining and adopting technology for our day to day chores by Rana in 2017 [7]. Our Indian government has proposed many strategies and structures for innovation; the digitization of money was one of the proposed innovations as alternative to cash transactions after demonetization. The demonetization has provided the companies in the portfolio with a platform to accelerate the exchange economy in India, which includes helping small suppliers find alternatives. Buyers have started using computerized payment methods and many portfolios are registered as versatile and secure portfolios, used to expand their relationships with more suppliers, but also with their customers. It acted as a passage to a digital world.

4. PROBLEM DEFINATION

An Online shop that has various products needed as per user's needs. The system is proposed to be built on artificial intelligence techniques that ensure hassle free shopping experience for users. The system also includes M-Wallet integration.

5. ARCHITECTURE

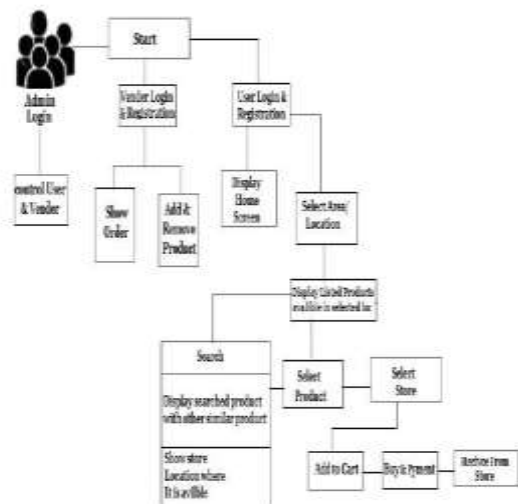


Fig No 1 Architecture

5.1. Implementation Details (Modules)

Admin: The owner of this AI Shopping with Wallet System . One must have a basic understanding of computers and the internet as well as prior knowledge for operating the eclipse and Java programming languages. The administrator is responsible for maintaining all the training documents

required for the system. The administrator can perform the following functions:

- Sign-on/login using a username and password.
- Admin is Control to User And Vender .
- View the history of the customers who purchased the items .

Vender: The Vender of this AI Shopping with Wallet System its show the order and add & remove product of the system.

- Sign-on/login using a username and password
- Show the Orders .
- View, add, and remove product.

Users: The users of this AI Shopping with Wallet System are all customers who would shop to test the application. These users are anyone with shopping experience and the know-how to browse through a AI Shopping with Wallet System. They must have basic understandings about computers and the internet. The users should be able to perform the following functions using this system:

- Sign-on/login using a username and password.
- View, add, and update items in the cart
- Delete items from the cart.
- Check out the items from the application or continue shopping.
- Place the order by completing the order form

6. METHODOLOGY

The algorithm in which every operation is uniquely defined is called deterministic algorithms. The algorithm in which every operation may not have unique result, rather there can be specified set of possibilities for every operation, such algorithms are called Non deterministic algorithms. Non deterministic means no particular rule is followed to make guess.

System works as follows: -

The online AI shopping with Wallet system application is an application that will allow the user to shop the products that are present online with great ease. The customer can pay the bill through any one of online payment options such as Paytm, UPI, PhonePay etc. This solution will increase the consumer experience and reduces the shopping time

6.1 Algorithm

Step 1: Initiate

Step 2: Registration/Login

if
first time User visits application at that time Registration required

else
direct Login process

Step 3: User can buying products

Step 4: Search Products

Step 5: Finding Store locations

Step 6:

if
there is buying products

Step 7: then select store which you want receive from

Step 8: Payment

Step 9: Receive from store

Step 10: User can Logout

6.2 Application

- Can be used in Super markets
- Any retail Store
- Clothing showrooms.

CONCLUSION

The Smart Shopping Trolley helps the customers to shopping, billing and payment in less time in easy way. By simply scanning the barcode the customer can pay the bill. Supermarket owners get benefit with respect to time saving, less manpower and space which reduces the investment. The smart shopping trolley can be used in all retail shopping malls, supermarkets, hypermarkets, clothing showrooms. Artificial Intelligence and Machine Learning-based solutions can help your retail business grow. Stay relevant and surpass your competitors in the market! Automated processes, better insights for your business, and stronger relationships with customers will result in increased revenue. Technology has made significant progress over the years to provide consumers a better online shopping experience and will continue to do so for years to come. With the rapid growth of products and brands, people have speculated that online shopping will overtake in-store shopping. While this has been the case in some areas, there is still demand for brick and mortar stores in market areas where the consumer feels more comfortable seeing and touching the product being bought. However, the availability of online shopping has produced a more educated consumer that can shop around with relative ease without having to spend a large amount of time.

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REFERENCES

- [1] "Natural Language Processing." Natural Language Processing RSS. N.p., n.d. Web. 25 Mar. 2017.
- [2] Q.Q. Qu Design and research of supermarket intelligent shopping cart service terminal "Smart Buy" Beijing Institute of Graphic Communication 2017.
- [3] Rana, S. S. (2017). A Study Of Preference Towards The Mobile Wallets Among The University Students In Lucknow City. Scholedge International Journal Of Management & Development
- [4] Ankush Yewatkar Faiz Inamdar Raj Singh Ayushya Amol Bandal "Smart Cart with Automatic Billing Product Information Product Recommendation Using RFID & Zigbee with AntiTheft" Procedia Computer science 2016.
- [5] Mrs.R.R.Aparna. (Nov-Dec 2015). Overview of Digital wallets in India. International Journal of Advanced Research in Computer Science , 28- 31.
- [6] B. Liu X.P. Liu X.L. Zeng "Design of smart shopping cart based on barcode recognition technology" Forest Engineering 2012.
- [7] Zhang Yuheng and N.Ch.S.N. Iyengar, "Agent Based Architecture Media On Demand With Service Continuity" International Journal of Advances in Science and Technology, Vol. 2, No. 1, 2011.
- [8] Zeng Zi-ming and Meng Bo, "An Intelligent Shopping System Based on Multi-agent Collaborative Working Model" 2011
- [9] Courtney McTavish, Suresh Sankaranarayanan, "Intelligent Agent based Hotel Search & Booking System", Proceedings of the 9th WSEAS International Conference on Telecommunications and INFORMATICS, 2009
- [10] L. Chen J.W. Song W. Zhou "Research on smart shopping system in shopping mall" Journal of systems simulation vol. 28 no. 12 pp. 2966 2006.
- [11] Kwang Hyoun JOO, Tessuo KINOSHITA, Nario SHIRATORI, "Design and Implementation of an Agent Based Grocery Shopping System", IEICE, Vol.E83-D, NO.11, November 2000.
- [12] Howe, A. von Mayrhauser, and Mraz, R. T. Test case generation as an AI planning problem. Automated Software Engineering, 4:77-106.