

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 1, November 2023

## **Product Recommendation and Billing System Using Smart Trolley Based on IOT**

Akshada A. Thorat<sup>1</sup>, Sakshi S. Thorat<sup>2</sup>, Gayatri L. Pokharkar<sup>3</sup>, Prof. Priyanka S. Bramhane<sup>4</sup>

Student<sup>1,2,3</sup> and Guide<sup>4</sup>

Samarth Group of Institution and College of Engineering, Belhe, Maharashtra, India

Abstract: In this modern twenty-first century almost all families like to spend time shopping in malls, shopping complexes, and retail stores. In all these shops people usually carry trolleys on their own in which they collect the desired items and then locomote the trolley to the billing counter where they have to wait in long queues, but nowadays there is a need to convert the old traditional trolley with a modern automatic trolley, which is exactly our project. The main idea of the project is to automate the process of shopping in such a manner that we will scan the products using RFID attached to the products and an RFID reader attached to the trolley as well as display the total amount on the Android mobile screen. We also have included a feature to send a message to the customer's registered mobile number. This process not only helps in reducing the waiting time in the long queues and moving the trolley automatically but also helps in managing and checking the budget while shopping which indeed provides a huge difference in their shopping experience as well.

Keywords: Smart Trolley, IOT

## REFERENCES

[1] Mr. Manikandan and Mr. Mohan "RFID Based Shopping Trolley for Supermarket", JCHPS,8 June 2022.

[2] Mr. S. Balamurugan and Mr. S. Balaji "Smart Shopping Cart", International Conference on Microelectronic Devices, Circuits, and Systems (ICMDCS) 10-12 August 2021

[3] Mr Kumar and Mr Gupta. A "Smart Trolley using Arduino", International Journal of Advanced Research in Computer Engineering & Technology (IJARCET),12 December 2020.

[4] R.O' Neil "Smart trolley for shopping malls". European Journal of Molecular & Clinical Medicine, November 2020 [5] Mr. Inamdar, Mr Singh "Smart cart using automatic billing, product information, product recommendation using RFID,2015.

[6] Mr. P. Chandrasekar and Ms. T. Sangeetha "Smart shopping cart with automatic billing system through RFID and transmitter and receiver", IEEE, 2014.

[7] Leena Thomas, Renu Mary George "Smart Trolley with Advanced Billing System" International Journal of Advanced Research in Electrical, 3, March 2017

