

# Shopping Redefined: An Innovative System with Barcode Scanning and Bill Display

Aneesh Deshmukh, Anurag Deshmukh, Akanksha Deshmukh, Anand Deshmukh,  
Asawari Deshmukh, Amogh Deshmukh

Department of Engineering, Science and Humanities (DESH)  
Vishwakarma Institute of Technology, Pune, Maharashtra, India

**Abstract:** *This paper presents the development of automated shopping cart for supermarkets. This automated shopping cart reduces the shopping time of customer. This project works on Arduino UNO microcontroller, bar code scanner for scanning the products and LCD to display the billing. Hence it works with low cost, low power consumption. So that customers can enjoy shopping without pushing trolley themselves.*

**Keywords:** Arduino UNO microcontroller, LCD Display, Bar code scanner

## REFERENCES

- [1]S. R. Subudhi and R. N. Ponnalagu, "An Intelligent Shopping Cart with Automatic Product Detection and Secure Payment System," 2019 IEEE 16th India Council International Conference (INDICON), Rajkot, India, 2019, pp. 1-4, doi: 10.1109/INDICON47234.2019.9030331.
- [2]P. K. Khairnar and D. H. Gawali, "Innovative shopping cart for smart cities," 2017 2nd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), Bangalore, India, 2017, pp. 1067-1071, doi:10.1109/RTEICT.2017.8256762.
- [3]Mane, M. R., Amane, N. G., Patil, S. D., &Lakesar, A. L. (2016). Electronic shopping using a barcode scanner. Int. Res. J. Eng. Technol., 3(4), 1-5.
- [4] Gangwal, U., Roy, S., & Bapat, J. (2013, August). Smart shopping cart for automated billing purposes using wireless sensor networks. In SENSORCOMM 2013: The Seventh International Conference on Sensor Technologies and Applications(Vol.7,pp.168-172).
- [5] T. Sarala, Y. A. Sudha, K. V. Sindhu, C. Suryakiran and B. N. Nithin, "Smart Electronic Trolley for Shopping Mall," 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information & Communication Technology (RTEICT), Bangalore, India, 2018, pp. 2422-2427, doi: 10.1109/RTEICT42901.2018.9012466.