

Smart Trolley for Surya Janti Supermarkets Slahung District Based on ATmega 328p

Troli Pintar untuk Swalayan Surya Janti Kecamatan Slahung Berbasis ATmega 328p

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Shopping in terms of shopping is an activity of the community that purchases a need either in the market or in the market. According to the Director-General of Domestic Trade, Suhanto, the growth of consumption of retail goods or referred to as FMCG (Fast Moving Customer Goods) from April 2018 to April 2019 in Indonesia grew positively by 1.8% compared to the previous year with details for the minimarket format growing by 12,1%. With the increasing number of buyers in supermarkets, there will be queues at the cashier when scanning goods during payment. In addition, buyers often have difficulty in knowing product descriptions and total spending, so they cannot estimate total spending with the money owned by buyers, as happened at Surya Janti Supermarket, Slahung District. Ponorogo Regency. From this research, the Smart Trolley for Surya Janti Supermarkets, Slahung District Based on ATmega 328p solves problems in supermarkets. This smart trolley is equipped with a barcode scanner as data input, an LCD that will display a description of the goods and the total shopping, and an ATmega328p Microcontroller as the main control of the trolley. This trolley is also equipped with a door that will open by pressing the keypad to minimize fraud during the scanning process and is integrated with a telegram as storage for transaction data that will be checked again by the cashier.

References

1. A, Rausan Fikri. (2018). Desain Produk Banley (Barcode Scanner Trolley) Terhadap Fleksibilitas Layanan Pembelian Produk. Jawa Timur: IPTEKS Journal of Proceedings Series. No. 5. ISSN: 2354-6026
2. Indiatuti, R., F. Hastuti, dan Y. A. (2008). Analisis Keberlanjutan Pasar Tradisional dalam Iklim Persaingan Usaha yang Dinamis di Kota Bandung. *Sosiohumaniora*, 10(2).
3. Kadir, Abdul. (2017) Pemrograman Arduino dan Processing. Jakarta. P.T. Elex Media Komputindo. ISBN : 978-602-04-3628-9.
4. Kementerian Perdagangan: Industri Ritel Modern Masih Menunjukkan Tren Positif. Retrieved 18 November, 2020, from Rezha Hadyan Media Corner Bisnis Web site: <https://www.kemendag.go.id/id/newsroom/media-corner/kemendag-industri-ritel-modern-masih-menunjukkan-tren-positif-1> in text citation : Kemendag: Industri Ritel Modern.
5. Koentjaraningrat. (2009). Pengantar Ilmu Antropologi. Jakarta: Rineka Cipta.
6. Malik, Moh. Ibnu. (2006). Pengantar Membuat Robot. Yogyakarta. Gava Media. ISBN : 979-3469-82-X.
7. Mufida, M. K., S. Silfia, T. Novianti (2016). Virtual Shopping Assistant. Dipresentasikan pada seminar Applied Business and Engineering Conference 7 September 2016. Politeknik Caltex Riau Pekanbaru.
8. Pitowarno, Endra. (2006). Desain, Kontrol, dan Kecerdasan Buatan. Yogyakarta. C.V. Andi Offset.
9. Raharja, NM. (2015). Mikrokontroler, Teori dan Praktik Atmega 16. Yogyakarta: Deepublish. ISBN : 978-602-453-169-0.
10. Sigit, Riyanto. (2007). Robotika, Sensor dan Aktuator. Yogyakarta. Graha Ilmu. ISBN :

978-979-756-239-7.

11. Wirdyanto Hadi, S. Desriyanti, Rhesma Intan. (2020). Cooling System for Field Service Clothes Pt. Pln Persero based on Arduino Nano. Jawa Timur: Journal of Electrical and Electronic Engineering. Vol. 4 No. 2.