

SMART TROLLEY

ABSTRACT

Shopping mall is a place where people get their daily necessities ranging from food products, clothing, electrical appliances etc. Sometimes customers have problems regarding the incomplete information about the product on sale and waste of unnecessary time at the billing counters. Continuous improvement is required in the traditional billing system to improve the quality of shopping experience to the customers. Now day's numbers of large as well as small shopping malls has increased throughout the global due to increasing public demand & spending. At the time of festivals, special discounts, holidays, etc. there is a huge rush in shopping malls. The use barcode reading technique in such situations always results in waste time since customer has to wait till whole items get scanned. These advantages can be avoided by using IOT based intelligent trolley. This system uses RFID technique instead of barcode. Proposed system uses separate RFID reader for each trolley and RFID Tag for each product. When customer buys any product RFID reader reads the tag which is present on the product. The cost of product and the total bill of shopping items can be displayed on 16*2 LCD. IOT based intelligent trolley presented here is easy to use and does not requires the special training to customers. RFID technique has many advantages over barcode systems. RFID reader reads the tag from a distance greater than that of barcode that can read the information at distance not greater than 15 feet. Also the barcode need one site of propagation. Reading frequency of barcode reads is only two tags whereas reading frequency of RFID is 40 tags. So the use of RFID is more useful than traditional barcode reading technique. Here use of RFID is helpful for customer. Using this system, customer will have the information about price of every item that are scanned in, total price of the item and also brief about the product. In IOT based trolley for shopping mall customer done automatic billing. And this is helpful for economic and efficient shopping. So use of this IOT based intelligent trolley for shopping malls is helpful for customer as well as owners.

BLOCK DIAGRAM

