IMPLEMENTATION OF SMART SHOPPING CART

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ABSTRACT:-

In this project the development of smart trolley and billing system. Here first the RFID reader will read the information and then buzzer give indication. After the trolley door will be opened with the help of door motor. The information is displayed on the LCD for the billing member to give the receipt. Smart Shopping Cart with Automatic Billing System through RFID creates an automated central bill system for supermarkets and mall. Using RFID, customers no need to wait near cash counters for their bill payment. Since their purchased product information is transferred to central billing system. Customers can pay their bill through credit/debit cards or by cash at the end of your purchesing.The8microcontroller used here has the capability of receiving 8-bit data from RFID reader. Hence the project gives effective result.

Keywords:- *8051 microcontroller, RFID, LCD, Porteus software and keil software, Door motor, Transmitter, Receiver*

INTRODUCTION:-

Now a days all people choose the shopping malls and D marts for the shopping because in malls all products are get together. Every shopping mall, supermarket give a trolley or a cart facility to drop the product which the customer want to purchase. In a modern trolleys a barcode reader facility is available. Barcode reader scan the barcode and store the product price in a memory. Also the count of products and a total amount of it is displayed on the LCD display. At the time of shopping customer can fix their budget at starting. They enter their budget using keypad and when the budget is overflow the buzzer make the sound. So we can add or remove the products by checking our budget. The total bill is also displayed at last. At the billing side the data is transfer to the computer using Wi-Fi module. Using this system customer have spent very less time at counter. They don't need to stand for a long time to pay the bill.

People prefer easy shopping.when they enter in the mall every person takes product put into trolley. After the shopping is done that person have to stand in the queue for billing. In the billing process a sell person scan barcode of each and every product and gives final bill. This process takes a lot of time . To avoid this problem we design smart trolley. In smart trolley we use different techniques. There have been a number of methods designed for smart spending trolleys in order to make shopping easier for the customers in malls/shops

PROPOSED SYSTEM:-
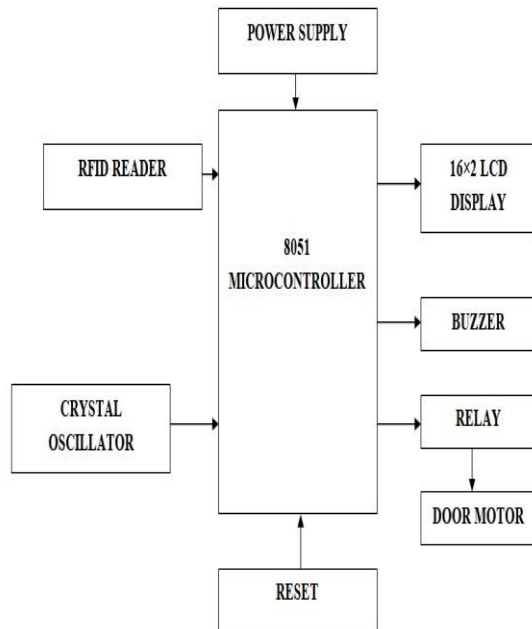
- The figure shows the block of proposed system.
- In this we use 8051, RFID reader,, LCD Display, Crystal oscillator, buzzer, relay, door motor.
- Here first the RFID reader will read the information and then buzzer give indication
- After that trolley door will be opened with the help of door motor.and place the product into to the trolly.
- The information is displayed on the LCD screen for the billing member to give the receipt. so by this we can avoid of standing in aqueue for a long time.

RESULT:-
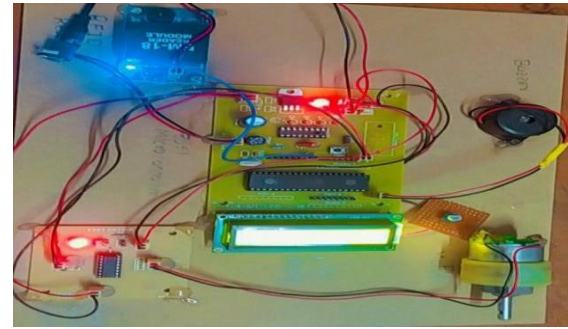
CONCLUSION :-

Since the technology around the world is improving fast, The proposed model is easy to use, low-priced and does not require any special training. This model keeps an account and uses of the existing developments and various types of radio frequency identification and detection technologies which are used for item recognition, billing and inventory update. As the whole system is becoming smart, the requirement of manpower will decrease, thus benefiting the retailers. Theft in the mall will be controlled using this smart system, which further adds to the cost efficiency. The time efficiency will increase phenomenally since this system will eliminate the waiting queues. More customers can be served in same time thus benefiting the retailers and customer.

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