

## Follow Me Trolley

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**Abstract**---Retail is more and more moving toward online Shopping. I really doubt whether in even next 10 years we are likely to face disappearance of a supermarkets. To make both customers & super markets life easier we planned to make a follow me trolley with integrated chip and sensors that would come along with Display this would make customers life convenient and time saving while the supermarket will get attraction from the customer. We are going to interface with microcontroller to Motor, Barcode reader And Display and As Possible as Printer which Helps Trolley Can follows to Customer. In this system transmitter is used to transmit the signal. A transmitter is given to Any Customer and Transmitter is Moves According to Customer. IR receiver receives this signal and receiver is connected to microcontroller . Motor driver IC is drive the motor. According to Moving if the transmitter the Recover Mover. Receiver is connected with Trolley so trolley also moves. And Barcode reader for Cost Estimating For Customer.

**Key words:** Human follower trolley, Microcontroller interfacing, smart cart.

### I. INTRODUCTION

A shopping cart is a cart supplied by a shop, especially supermarkets, for use by customers inside the shop for transport of merchandise to the check-out counter during shopping. Customers can then also use the cart to transport their purchased goods to their carts.

In many places in the India customers are allowed to leave the carts in the parking lot, and store personnel will return the carts to the storage area. In many European and Canadian premises however, coin (or token) operated locking mechanisms are provided to encourage shoppers to return the carts to the correct location after use. An alternative to the shopping cart is a small hand-held shopping basket. A customer may prefer a basket for a small amount of merchandise. So, We use human follower trolley. This trolley is human follower trolley added extra facility like LCD Display , Barcode scanner .By using this function person can shopping very easily

### II. DESCRIPTION

Most modern shopping carts are made of metal or a combination of metal and plastic and have been designed to nest within each other in a line to facilitate collecting and moving many at one time and also to save on storage space. The carts can come in many sizes, with larger ones able to carry a child. There are also specialized carts designed for two children, and electric mobility scooters with baskets designed for disabled customers.

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### III. BLOCK DIAGRAM OF PROJECT

As show in the fig: 1 there is an infrared transmitter which is shown in the below circuit diagram. The infrared transmitter is the is made from a single 555 timer ic and there is at the receiver side the TSOP series receiver. In there is microcontroller is used to control the all devices. There is a barcode reader and the lcd and the printer is connected with the microcontroller and there is the led indication leds is also connect with the microcontroller. For the following the trolley there is the 1293D motor driver ic is used to control the dc motor.

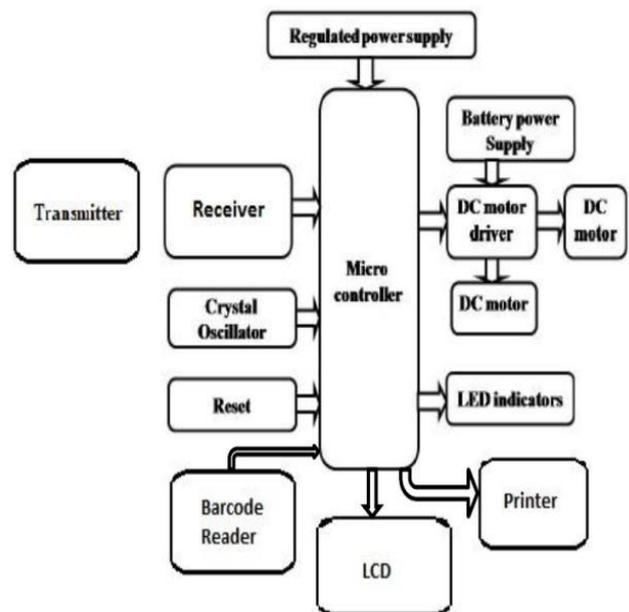


Fig. 1: Block diagram of project

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transmitter is given to Any Customer and Transmitter is Moves According to Customer. And receiver receives this signal and receiver is connected to microcontroller and motor driver is and motor. According to Moving if the transmitter the Receiver Moves. Receiver is connected with Trolley so trolley also moves.

And Barcode reader for Cost Estimating For Customer. The Barcode Is Used To Collects the Barcode Price Of the Product and the Gives To the Microcontroller. The Microcontroller Performs the Different Operation according To the Customer Needed like addition And Subtraction and Division. As the Customer Need. The Printer is use to print the data of the total cost of the Product.

#### IV. LIST OF COMPONENT OF PROJECT

##### A. Hardware

- IR Transmitter
- IR Receiver
- Microcontroller
- L293D motor driver IC
- LCD Display
- Barcode scanner
- Printer

##### B. Software

- Keil uVision 4.0
- Embedded C

#### V. CONCLUSION

As an engineer we should try to help the society by our technical knowledge. So, we decided to make the Human follower Trolley so as to help the customers of supermarket & malls. This smart cart will also help the retailers to gain the attraction of customer.

#### REFERENCES

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