

A  
Project Report  
On  
**SMART SHOPPING CART**  
Submitted to  
Department of  
**ELECTRONICS & COMMUNICATION ENGINEERING**

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(Approved by AICTE, New Delhi, Affiliated to JNTUH, Accredited by NBA)

Ananthasagar (Vill), Hasanparthy (M), Warangal.

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**CERTIFICATE**

This is to certify that the project entitled "SMART SHOPPING CART" carried out by the following students of III Year B.Tech in Electronics and Communication Engineering during the academic year 2022-23.

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## ABSTRACT

The modern technology has increased the standard of living for the humans. This resulted in large crowds at shopping malls. To handle the large crowd, we must reduce the process of the billing time. This is done using smart shopping system based on RFID. Items that are put in a smart shopping cart are read one by one and the bill is generated and displayed. After the final bill is generated, the customer pays the bill by using their Pre charged cards provided by the shopping mall. The aim is to reduce the time consumption needed for the billing system.

The various items are purchase in shopping mall or markets with help of shopping trolley. This product acquirement is some difficult process. In customer convenience they have to pull the trolley for each time to collecting items and simultaneously. After purchasing, customer want to pay the bill for their purchasing. In that time, they have to wait in a long queue to get their products scanned using RFID reader with help of barcode Scanner and get their billed. To modify that and customer has to purchase in smart way in shopping mall.

Each and every product has to place a RFID barcode to scan the product with RFID reader. The smart trolley will consist of a RFID reader, LCD display and ZigBee transmitter. When customer if want to buy any product is insert in the trolley. It will scan and read the product and display the cost and the name of the product in LCD. The total cost of all the purchased products will be added to the final bill, in that final bill will be saved in the Arduino is will be act as a memory. These are all performed in the transmitter side. In receiver side, it is wireless transmitting process.

It is used to save the customers time and also customer doesn't wait a longtime and long queue. A new concept has been introduced which is the 'SMART SHOPPING TROLLEY'. This project is used to improve the security performance and also the speed.



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