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FINAL YEAR PROJECT REPORT

SBUR: A SMART CART

In fulfilment of the requirement for the degree of

BEE (Electrical)

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SBUR: A SMART CART

ABSTRACT

An inventive product with societal acceptance is the one that supports the ease, expediency and productivity in everyday life. In this report we've discussed about "Smart Cart", developed to help a person in regular shopping by lessening the time spend while acquiring. The principle idea of this project is to give an advancement masterminded, insignificant exertion, successfully flexible, and intense system for helping shopping in person.

To avoid this entire headache of pulling the trolley, waiting in billing queue, thinking about budget, we've designed a smart trolley that would reduce the customer's effort and make shopping easier. The smart trolley follows the customer while purchasing items and it maintains a safe distance between customer and itself. When a product is kept in the trolley, it automatically calculates the bill. The final billing will be a lot easier as no separate billing counter will be required. This system liberates old and handicapped individuals from the weight of pushing shopping trolley in light of the fact that our proposing shopping trolley is basically a kind of self-governing portable robots that perceives its proprietor and pursues her.

This automatic trolley is controlled by Arduino with integrated circuit of ultrasonic and Magnetometer. The 12V DC worm gear motor is used to move trolley. The trolley is equipped with a billing system consisting of RFID reader and LCD to allow users to self-checkout, operating through Arduino Mega. Ultrasonic sensors are used to avoid obstacles whereas Magnetometer is used to obtain information about the moving direction of a human.

TABLE OF CONTENTS