Project Title

SMART TROLLEY

Problem Statement

Customers often experience long waiting times at supermarket billing counters, leading to frustration and inconvenience. Manual barcode scanning slows down the checkout process and requires repetitive effort from staff. Shoppers remain unaware of their total bill amount until the final payment stage, making it difficult to manage expenses while shopping. Traditional shopping systems lack real-time automation and intelligent features, resulting in inefficiency, delays, and a less satisfying customer experience.

Project Team - Civil



TEAM 1 - PROBLEM SLAYERS

Team Members

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SDG 12 – Responsible Consumption and Production

SDG Goals

SDG 9 – Industry, Innovation and Infrastructure

Solution

A smart automated billing solution can address these issues by introducing real time cart based scanning and integrated checkout systems. Products can be scanned instantly as customers add them to their cart, with the total bill amount displayed continuously on a screen or mobile app. This reduces last minute surprises and helps customers manage spending. Automated calculation minimizes manual intervention, lowering the workload on billing staff and reducing the chances of human error. Self checkout kiosks or smart counters can further speed up transactions and shorten queues. Store management dashboards can monitor billing flow and peak hours to optimize staff allocation. With faster processing, accurate billing, and transparent pricing, the system improves customer satisfaction while enhancing overall store efficiency and operational productivity.



