AAVISHKAR

Category : Engineering and Technology

Level : UG

Code :

Smart Store System

Introduction

- The self-checkout store system is a retail solution aimed at revolutionizing the traditional shopping experience. This innovative concept leverages advanced technology and automation to provide customers with a seamless and efficient checkout process.

- The self-checkout store utilizes computer vision, machine learning, Sensor technology, and Digital Payment System to enable customers to shop freely without the need for traditional checkout counters or cashier assistance.

Objectives

- Retailers can reduce Labour costs

- Minimize checkout waiting time

- Improve customer satisfaction

Motivation

- The average person now spends one year, two weeks and a day of their lives stuck in shop queues. That's according to a report by Box Technologies and Intel, which highlights the importance of technology in reducing queues.

- 86% of consumers will avoid a store if they they think that the queue is too long

- The average shopping trip includes 20 minutes queuing time.

- 70% people are less likely to return to a store if they experience long waiting times on just one occasion

Tech Stack

- Machine Learning

- Computer Vision

- Internet of things

- Digital Payment system

Working Model

1. Customer have to scan QR code on the Cart which will link the Cart to his Account.

2. The items added to the Cart will also be added to Customer's Virtual Cart.

3. Bill will be generated and customer can pay through mobile application.

Conclusion

- Improved Customer Satisfaction: With fewer checkout bottlenecks and a user-friendly interface, customers experience higher satisfaction levels when shopping at smart stores. The reduction in human error during the checkout process also contributes to a more positive shopping experience.

- Contactless Shopping: In growing demand for contactless experiences, self-checkout smart stores offer a safer shopping option, minimizing physical interactions.

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