# ONLINE SUPERMARKET SYSTEM USING QR SCAN

Dr . S. M. UMA, Ph.D,

M.GOKUL, A.VISWA, N.MURALIDHARAN – IV/CSE

KINGS COLLEGE OF ENGINEERING,PUNALKULAM, NEAR THANJAVUR-613303

## ABSTRACT

This project aims to develop This web application is designed for an online supermarket where users can easily shop for their groceries by scanning the QR codes on the products. The application has been developed to enhance user experience and make shopping hassle-free. The primary feature of the web application is the ability to scan the QR code of the product to add it to the user's cart. The user can then view the products added to the cart and proceed to checkout. The application has also been developed to indicate if a product has an expiry date. There are two points where the application will indicate if a product has an expiry date. Firstly, when the user scans the QR code of the product, the application will display the expiry date if it is available. Secondly, when the user views the cart, the application will display a warning message if any of the products in the cart have expired or are expiring soon. Another key feature of the application is its ability to generate a bill for the user based on the products added to the cart. The user can view the bill before proceeding to checkout to ensure that they are satisfied with their purchases. Overall, this web application provides a user-friendly and convenient shopping experience for users who prefer to shop online. The QR code scanning feature saves time and eliminates the need to manually search for products, while the expiry date warning ensures that users only purchase fresh products.

## I.INTRODUCTION

In this project every customer can bill their products by themselves and can know the availability of the products from their location and order the product by online and can bill their products without standing in queue. Every user can bill their products without standing in the queue by scanning their products in the application using their mobile phones bar scanner. This will also help the user to know the expiry date of an product using the QR scan.

| YEAR | TITLE NAME | AUTHOR NAME | SURVEY |
|---|---|---|---|
| 2021 | Development of Smart Trolley | Alexander, A. S. G., Valdi, S., Albertus, F., Heri, N., Widodo, B., Herman, T., Muhammad, A. (2022) | Technologies that are considered including Smart Trolley, VR Shopping, and Just Walk Out Shopping also supported by related researches and literature. . |
| 2020 | Product Customisation: Virtual Reality and New Opportunities for Luxury Brands Online Trading | Product Customisation: Virtual Reality and New Opportunities for Luxury Brands Online Trading | This technology opens great opportunity for luxury names to engage customers into the experience and maintain the distinctive level of services provided across different channels. |
| 2022 | Inside Amazon surveillance-powered, no-checkout convenience store. | Coldewey, D | The images captured from these cameras are sent to a central processing unit |
| 2022 | Amazon Go: Disrupting retail | Ives, B., Cossick, K., Adams, D. | One retailing expert described Amazon Go as potentially hugedisruption. |

## II.LITERATURE SURVEY

### ALGORITHM

QR Code Scanning Algorithm: This algorithm can be used to scan the QR codes on the products and retrieve the product information such as name, price, and expiry date from the server. This information can be used to update the user's shopping cart in real-time.

Database Management Technique: A database management technique can be used to store the product information, such as name, price, and expiry date, in a database. This database can be accessed by the server to retrieve the product information and update the user's shopping cart.

Real-time Notification System: A real-time notification system can be used to alert the user if a product has an expiry date. This

system can be implemented using push notifications or email notifications. The system can be integrated with the database to retrieve the expiry date information and send the notification to the user.

User Interface Design: A good user interface design is essential for a web application that is easy to use and navigate. The design should be intuitive and user-friendly, with clear and concise instructions for scanning the QR codes, adding products to the cart, and checking out.

**PROPOSED SYSTEM :**

1. Each product is assigned a unique QR code that contains information about the product, such as its name, price, and any relevant discounts or promotions.
2. Customers use their smartphones to scan the QR codes of the products they want to purchase and add them to their virtual cart in the app or website.
3. As each product is added to the cart, the app or website updates the total cost of the transaction in real-time.
4. Once the customer has finished shopping, they proceed to the checkout and pay using a payment method of their choice.
5. The system records the transaction details, deducts the purchased items from the inventory, and generates a receipt for the customer.

**SYSTEM REQUIREMENTS:**

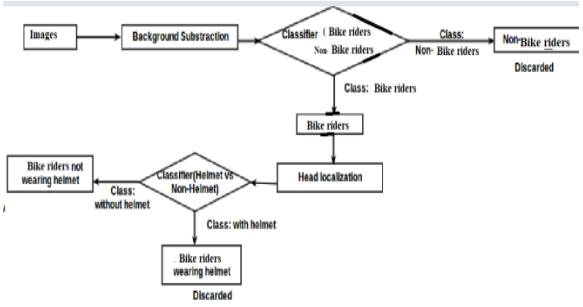
**H/W System Configuration :**

- Processor - Pentium –IV
- RAM - 4 GB (min)
- Hard Disk - 20 GB

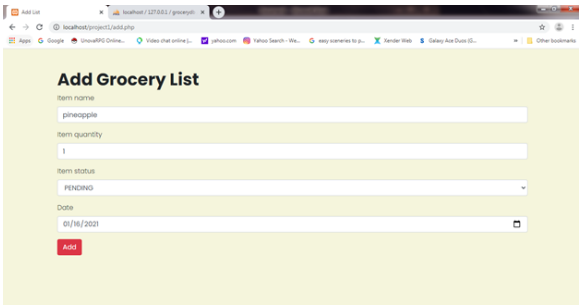
**S/W System Configuration :**

- Operating System : Windows 8 or 10
- Application Server : XAMPP SERVER
- Front End : HTML ,CSS ,Java Script
- Back End :SQL

**ARCHITECTURE DIAGRAM :**




**OUTPUT:**


**REFERENCES:**

[1] Farley, A., Stevanus, V. (2018) "Swarm Android Mobile Robot: Smart Trolley Application" School of Computer Science Universitas Bina Nusantara.

[2] Ives, B., Cossick, K., Adams, D. (2019) "Amazon Go: Disrupting retail?" Journal of Information Technology Teaching Casenotes, Association for Information Technology Trust 2019. 1-11

[3]Kapusy, K., and Lógó, E. (2017) "Values Derived from Virtual Reality Shopping Experience among Generation Z" 8th IEEE International Conference on Cognitive Infocommunications, Debrecen, Hungary: 237-242.

[4]Karsten, J. and West, D. M. (2018) "Amazon Go store offers quicker checkout for greater data collection". Retrieved from: https://www.brookings.edu/blog/techtank/2018/02/13/amazon-go -store-offers-quicker-checkout-for-greater-data-collection/

[5]Lau, K. W., Lee, P. Y., and Lau, H. F. (2014) "Shopping Experience 2.0: An Exploration of How Consumers Are Shopping in an Immersive Virtual Reality," Advances in economics and business (2:2): 92-99.

[6]Martínez-Navarro, J., Bigné, E., Guixeres, J., Alcañiz, M., and Torrecilla, C. (2018) "The Influence of Virtual Reality in E-Commerce" Journal of Business Research, In Press. doi: 10.1016/j.jbusres.2018.10.054.

[7]MarketWatch (2019) "Smart Shopping Carts Market 2019 – Global Industry Analysis, Size, Share, Growth, Trends and Forecast 2019 - 2024". Retrieved from: https://www.marketwatch.com/press-release/shopping-cart-market-size-and-share-2019-top-leading-countriescompanies-consumption-drivers-trends-forces-analysis-revenue-challenges-and-global-forecast-2022-2019-07-11.