PURCHASING IN SHOPPING MARTS USING QRCODE

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Abstract - I*n the evolved world technology online shopping has become a part of our life. Henceforth building a convenient & fast shopping mode would be use for both merchants and customers. We have built two different apps through which we can scan the QR code and an app for generating the QR code. That is automated for future new products. Once the customer purchases the product they can pay through online like bank transaction, Google Pay, paytm. This ideology is to run a supermarket on smartphones, with the help of QRcode generation. Which saves customer's time and increase sales.*

*Key Words***:** QR Code, Quick Response Code, image, QR Code generator, QR Code Reader.

INTRODUCTION

In urban culture, everyone is running on a busy schedule where they cannot waste time on shopping in supermarkets, as grocery is most essential it spoils the day- to-day activity when purchased from Supermarket. We in order to prevent this have come up with an ideology of saving time and making thing easy & quick along with online shopping through our app along with touch and feel. This will also be useful in this pandemic situation to prevent overcrowding and reduces manpower. For the urban community we have we have, come up with an idea where our app will help in saving time and making things easy for customers and they can shop online along with touch and feel of the desired products and can directly pay the bill amount and carry on with their work. This will in turn reduce manpower, give a clear database to the shopkeeper and will facilitate the customer in every other way.

There are some of the modules in this proposed system they are:

- Login
- Authentication
- Scan the product
- Add to cart
- Product Curation
- Payment Gateway

HARDWARE AND SOFTWARE SPECIFICATION:

- ➢ Processor : Pentium P4
- ➢ Motherboard : Genuine Intel
- ➢ RAM : Min 16 GB
- ➢ Hard Disk : 80 GB

SOFTWARE REQUIREMENT:

- ➢ Operating System: Windows XP
- ➢ Technology Used: Android Studio
- ➢ Emulators: AVD
- ➢ Plug-in: ADT plug-in
- ➢ Tools used: Android SDK.

TECHNICAL FEASIBILITY:

This project needs a smartphone during which the application can be installed and a hardware device consisting of the camera, which will scan the QR, code in the product and then it will add it to the shopping cart. It will be connected to the online transaction through which the customer can pay the amount.

ECONOMICAL FEASIBILITY:

The implementation of this application can be done with the help of open-source environments. In this application, the internet is required in the android mobile device. It will be very easy and less costly to implement this application on the android device. Since the cost of the system is only the implementation cost of the system. There's no need to spend any monthly thereafter. It is economically feasible.

SOCIAL FEASIBILITY:

The facet of the study is to check the level of acceptance of the system by the user. This includes the method of coaching the user to use the system efficiently. The user should not feel vulnerable by the system, instead must accept it as a necessity. The amount of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him

familiar with it. His level ofconfidence should be raised so that he is also able to make some constructive criticism, which is welcomed, as he is the final user of the system.

EXISTING SYSTEM:

The QR filtering process is used to safely get the information concealed within the QR code. The notion of OTP is also applied in the security of QR codes [1]. When a consumer scans a product, he or she will be able to see all of the product's features, including cost, color, size, shape, and uses, before adding it to their basket [2]. Ditch irrigation, terraced irrigation, drip irrigation, and sprinkler systems are some of the available ancient traditionalapproaches. Increased demand for increased agricultural output, poor performance, and limited water supply for agriculture characterize the worldwide irrigation scenario. When we employ a machine-driven irrigation system, theseproblems are frequently resolved [3]. They have proposed that which aids a person in everyday shopping by reducing the amountof time spent acquiring goods. The major objective is to provide a technology-based,cost-effective, easily expandable, and durable solution to help with in-person shopping [4-5]. n the existing system, Bar codes should be browsed victimization pc vision techniques and code will hold info, it makes this vision task in shopper situations is difficult. The code decoder will provide the vision algorithmic feedback, and develop a progressive strategy for the product. As per the existing system, wehave to wait in the queue to pay this, which makes the customer spend more time in the queue that is the most time- consuming in this existing system. Thus, we have overcome this drawback in our project

3.1.1 DRAWBACKS:

More consumption of time while waiting in the queue to pay the billing amount

3.2 PROPOSED SYSTEM:

We have proposed a methodology for purchasing in shopping marts through an app that scans QR codes and pays online. The customer has to download the app on their mobile and log in before shopping. After login customer can scan the QR codeof the respective products and add them to the cart. After shopping, the customers cancheck out their products in their cart and pay online. At last, customer can show the successful payment page at the bill counterwithout waiting in the queue.

ARCHITECTURE DIAGRAM:
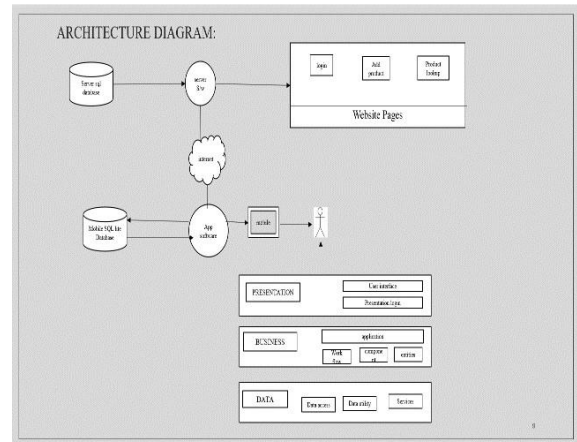
Figure 1:

The system architecture of the proposed system consists of sixmodules: Login

- ➢ Authentication
- ➢ Scan the product
- ➢ Add to cart
- ➢ Product curation
- ➢ Payment Gateway

- The Login module helps the customer to log in to the e-commerceapplication on the android device.

- The Authentication module is used to check whether the login is a customer or the owner of the shop.

- The Scan product module will helpto scan the QR code present in the product which the customer purchased using the camera in the android device.

- The Add cart module is used to add the scanned product into the cart and it can be viewed in the cart.

- The Product Curation module will help the customer to remove or check the purchased product, which is added into the cart.

- The Payment Gateway module will be used to pay the amount for the purchased product through the online transaction through gpay, Paytm….so on.

3.3 IMPLEMENTATION MODULES

- ➢ Login
- ➢ Authentication
- ➢ Scan the product
- ➢ Add to cart
- ➢ Product curation
- ➢ Payment Gateway

MODULES DESCRIPTIONLOGIN:

The Login module is used to start the e- commerce application, which is in their android device in which they can create their account with their details, like phone number and password. The customer should remember the password, which youhave entered, when they are login into this e-commerce application.

AUTHENTICATION:

The Authentication module is used to verify whether the login details belong to the customer or the shopkeeper. Thismodule has another feature where the given details are secured that unauthorized person cannot able to access.

SCAN THE PRODUCT:

Scan the product module allows the customer to scan the QR code which isavailable in the customer-purchased product. They can scan that QR code with the help of the camera on the android device. They can scan the QR code as many products they want to purchase. Thus this will redirect you to the next page where you can see the shopping cart.

ADD TO CART:

The Add to cart module helps the customerto view their entire product purchased by scanning the QR code present in the purchased product. This will show the customer about their purchased product with the id, product name, quantity, price and so on.

PRODUCT CURATION:

The Product Curation module will help thecustomer to update their cart by scanning the QR code of the updated product. They can also able to remove the unwanted product, which is added to the cart. This is the best feature where the customer canrecheck their purchased items. Then it will automatically show the final amount, which the customer has to pay.

PAYMENT GATEWAY:

The Payment Gateway module allows the customer to pay their amount for the purchased item through this module. The payment can be done through an online transaction. The online transaction can be done through many ways like GPAY, PAYTM, credit card, and debit card, .soon.

CONCLUSION:

In our proposed system, We make it easy for customers to select their required products and pick them and bill it without the help of shopkeeper this in turn will save time and reduce manpower. This not only is useful for customer but also to the shopkeeper where the shopkeeper need not depend on the workers to get details about stock and accountancy related queries and will also reduce manpower. Our project is beneficial for both Customers and shopkeeper and makes things easy and quick for both.

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