MOBILE APPLICATION BARCODE BILLING SYSTEM

GUIDE: Mr.P. Hariharan (, Pushpa.A, Sharmila A , Vanmaraiselvi.R)

Dept.of Information Technology of (M.A.M. College of Engineering and Technology),Tiruchirapalli, India.

hariharan.it@mamcet.com (pushpa.it19@mamcet.com, sharmila.it19@mamcet.com,

vanmaraiselvi.it19@mamcet.com,

Abstract—The Smart Shopping methodology is collaborating ease in smart shopping and the sense of security money wise as well as for customer satisfaction while doing shopping offline. This is implemented using an Android application. In Shopping mode, the customer needs to physically pick up his purchase, carry cash, along with them and wait in the long queue to make payments. The application mentioned here would read the Bar code of the product & add it to the shopping cart in the application. It provides methods to change the quantity of product purchased and edit the list. Along with that customer can easily view his cart, bill and amount and products. When we go shopping we generally select the required items and include them into the shopping basket. However, with regards to the last bill installment there are no sufficient counters in the shopping center that can deal with every one of the clients. Additionally examining every last result of all the clients turns into a tremendous errand and prompts extensive line arrangement. Because of this our profitable time is squandered, so by remembering this, we have changed a truck which will contain a scanner tag, catch utilizing advanced mobile phone by which the client can catch the item and naturally the item id, item name, amount and different points of interest are put away in the database which will be bought and shown on the android application. Each standardized tag card has some one of aKeyword-.Barcode scanner,Android.

.

INTRODUCTION

It is a real-time capturing system for consumer supplies using Quick Response Barcode in Android smartphones. In recent years, extensive research has been carried out on vision-based automatic identification technology that recognizes image codes using smartphones to provide various services that can recognize the authenticity of any kind ID; an android application will utilize this ID with the goal that the database can be gotten to by the client through the Wi-Fi module. The shopping center's PC will show all the rundown of items added to the card and the last bill will be produced. This application depends on the android stage as a large portion of the general population utilizes android tel In today's life, going to malls for shopping is increasing rapidly. People take the item and put it into the trolley. After shopping they go for billing at the Billing counter but as there are many people standing in Queue for billing purpose. So the Bar code image uses smartphones to provide various services that can recognize the authenticity of any product. Bar code verifies products by capturing it through the smartphone, then decodes item.The user will scan the item which he wants to product. Using Barcode with special symbols and split the data back to their Barcode pattern where these Barcode patterns can be read by Android smartphones. So Barcode verifies products by capturing it through the smartphone, then decodes and sends it to the server for authentication. In today's life, going to malls for shopping is increasing rapidly. People take the item and put it into the trolley. After shopping they go for billing at the Billing counter but as there are many people standing in Queue for billing purpose. So the Bar code image uses smartphones to provide various services that can recognize the authenticity of any product. Bar code verifies products by capturing it through the smartphone, then decodes the item. The user will scan the item which he wants to purchase with the help of a scanner provided by this app. After scanning the item a web service will get called which will create a connection with the database of the shop. As the connection is established, the user is now synched with the database and information related to that item is provided to him. In this whole procedure, the overall time of scanning individual items is saved and thus reducing the time .In today's life, going to malls for shopping is increasing rapidly. People take the item and put it into the trolley. After shopping they go for billing at the Billing counter but as there are many people standing in Queue for billing purpose. So the Bar code image uses smartphones to provide various services that can recognize the authenticity of any product. Bar code verifies products by capturing it through the smartphone, then decodes the item. The user will scan the item which he wants to purchase with the help of a scanner provided by this app. After scanning the item a web service will get called which will create a connection with the database of the shop. As the connection is established, the user is now synched with the database and information related to that item is provided to him. In this whole procedure, the overall time of scanning of individual items is saved and thus reducing the time of the shopping center ..

1. **ADMIN LOGIN:**Users can create accounts with unique credentials, such as a username and password. This may involve storing user account information in a database.Implement login functionality: In the mobile app's frontend, create a login screen that prompts users to enter their credentials, such as a username and password. Implement the necessary logic to securely send these credentials to the backend for authentication.Validate user credentials: In the backend, implement the authentication logic to verify the entered user credentials against the stored user account information. This may involve checking the entered username and password against the stored values, and possibly using encryption or hashing techniques .

2.USERLOGIN: Set up a user account with administrative privileges in the backend of your mobile app's authentication system. This may involve creating a user record in a database with a designated admin role or flagging a user account as an admin.: In the mobile app's frontend, create a login screen that prompts the admin user to enter their credentials, such as a username and password. Implement the necessary logic to securely send these credentials to the backend for authentication.Validate admin credentials: In the backend,implement the authentication logic to verify the admin user's credentials against the stored user account with admin privileges. This may involve checking the entered username and password against the stored values, and possibly using encryption or hashing techniques for secure authentication.Grant admin access.

3. FINGERPRINT AUTHENTICATION: This module allows users to create accounts with unique credentials, such as a username, password, and fingerprint data. It may involve capturing and storing the user's fingerprint template or image during registration, along with other user account information. Fingerprint Enrollment:This module enables users to enroll their fingerprints on the mobile device's fingerprint sensor.It may involve capturing multiple samples of the user's fingerprint and storing them securely on the device backend database.Fingerprint Authentication This module performs fingerprint authentication during the login process.

4.PRODUCT DETAIL SCREEN: The product detail screen would typically display comprehensive information about the scanned product.This could include the product name, brand, description,image, price, ratings, and other relevant details that help users make an informed purchasing decision. The screen may showcase one or more images of the product,allowing users to get a better visual representation of the product they scanned. Thetheir images could be displayed in a gallery or a carousel format, with options to swipe or zoom in for closer inspection.The app would provide a detailed description of the product, highlighting its features, specifications, and any other relevant information that users may need to know.So Barcode verifies products by capturing it through the smartphone, then decodes and sends it to the server for authentication. The customer forwards the selected product. list to the server that enables the consumer to decide based on the product's authenticity We are using Multiplexing and Demultiplexing algorithms to recognize Barcode images using smartphones to provide various services that can recognize the authenticity of any product. So Barcode, then decodes and sends it to the server for authentication. The customer forwards the selected product. list to the server that enables the consumer to decide based on the product's authenticity.The customer forwards the selected product. list to the server that enables the consumer to decide based on the product's authenticity We are using Multiplexing and Demultiplexing algorithms to recognize Barcode images using smartphones to provide various services that can recognize the authenticity of any product. So Barcode, then decodes and sends it to the server for authentication. The customer forwards the selected product. list to the server that enables the consumer to decide based on the product's authenticity.verifies products by capturing it through the smartphone, then decodes and sends it to the server for authentication. The customer forwards the selected product. list to the server enables the consumer to decide. payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages and other visual cues to ensure a smooth successful payment, the payment gateway would provide confirmation to the user, indicating that the payment has been processed. Theapp may also generate and provide digital receipts for the purchase, which users can view or download for their records.The app may allow users to view the status of their payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages and other visual cues to ensure a smooth and hassle-free payment experience If the app supports mobile wallets, the payment gateway may integrate with popular mobile wallet apps,allowing users to quickly and easily make payments using their mobile wallet credentials, such as a fingerprint or a for added convenience and security. The payment gateway may also support refund and cancellation processes, allowing users to request refunds for returned or canceled orders. The app may provide options for users to initiate refund requests or contact.

based on the product's authenticityThe screen may showcase one or more images of the product,allowing users to get a better visual representation of the product they scanned. Thetheir payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages and other visual cues to ensure a smooth successful payment, the payment gateway would provide confirmation to the user, indicating that the payment has been processed. Theapp may also generate and provide digital receipts for the purchase, which users can view or download for their records.The app may allow users to view the status of their payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages and other visual cues to ensure a smooth and hassle-free payment experience If the app supports mobile wallets, the payment gateway may integrate with popular mobile wallet apps,allowing users to quickly and easily make payments using their mobile wallet credentials, such as a fingerprint or a for added convenience and security. The payment gateway may also support refund and cancellation processes, allowing users to request refunds for returned or canceled orders. The app may provide options for users to initiate refund requests or contact.The app may allow users to view the status of their payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages and other visual cues to ensure a smooth and hassle-free payment experience If the app supports mobile wallets, the payment gateway may integrate with popular mobile wallet apps,allowing users to quickly and easily make payments using their mobile wallet credentials, such as a fingerprint or a for added convenience and security. The payment gateway may also support refund and cancellation processes, allowing users images could be displayed in a gallery or a carouseformat,

to request refunds for returned or canceled orders. The app may provide options for users to initiate refund requests or contact.Theapp may also generate and provide digital receipts for the purchase, which users can view or download for their records.The app may allow users to view the status of their payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages and other visual cues to ensure a smooth and hassle-free payment experience .

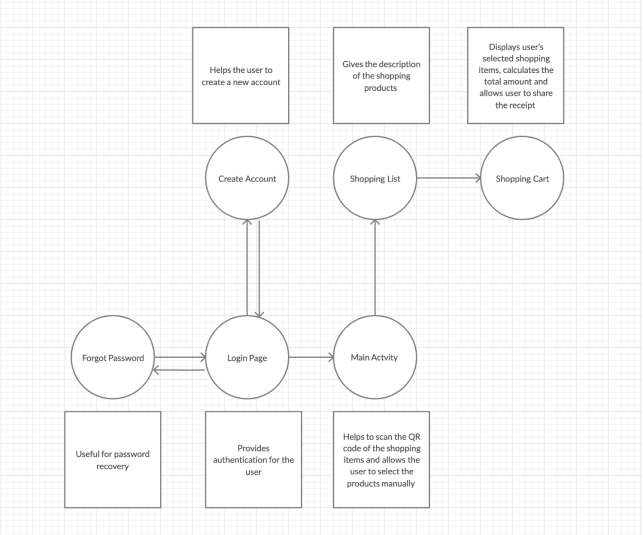


FIGURE 1

The app may allow users to view the status of their payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages, and other visual cues to ensure a smooth and hassle-free payment experience If the app supports mobile wallets, the payment gateway may integrate with popular mobile wallet apps.

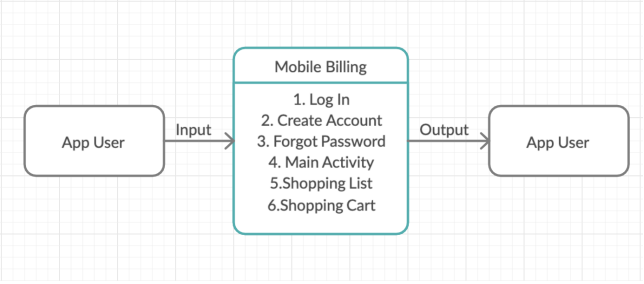
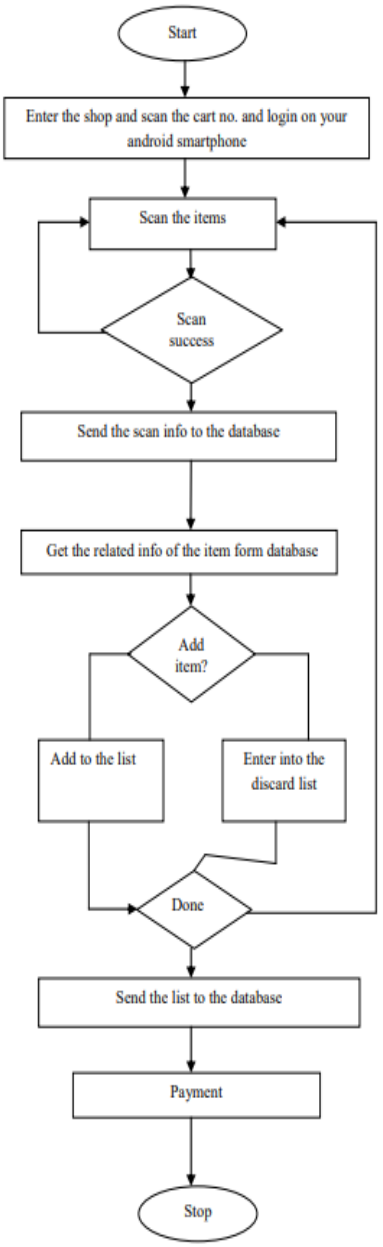


FIGURE 2

5. PAYMENT GATEWAY:to select their preferred payment method, enter their payment information, and complete the payment within the app without being redirected to external websites or apps Upon successful payment, the payment gateway would provide confirmation to the user, indicating that the payment has been processed. Theapp may also generate and provide digital receipts for the purchase, which users can view or download for their records.The app may allow users to view the status of their payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gatewaYwould likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages and other visual cues to ensure a smooth and hassle-free payment experience If the app supports mobile wallets, the payment gateway may integrate with popular mobile wallet apps,allowing users to quickly and easily make payments using their mobile wallet credentials, such as a fingerprint or a for added convenience and security. The payment gateway may also support refund and cancellation processes, allowing users to request refunds for returned or canceled orders. The app may provide options for users to initiate refund requests or contact.

FLOWCHART DIAGRAM

In this undertaking is to propose an ongoing catching framework for customer supplies utilizing Barcode cards in Android advanced mobile phones. As of late, broad research has been done on vision-based programmed ID innovation that perceives picture codes utilizing advanced mobile phones to give different administrations that can perceive the validity of any item. Utilizing Barcode with uncommon images and split the information back to their Barcode design where this Barcode example can be perused by Android brilliant phones. Standard picture codes like one dimensional scanner tags and two-dimensional codes with highly contrasting examples distinguishes an item for its esteem and essential highlights however does not confirm it, more finished few out of every odd item is utilized for verifying the maker's guarantee. So Barcode confirms items by catching it through the advanced mobile phone, at that point disentangles and sends it to the server for verification. Especially, we center around limiting the quantity of information pieces of information expected to recover data with little vulnerability and present great developments some of which are ideal. The client advances the chosen item rundown to the server that empowers the purchaser to choose in view of the item's authenticity. The application said it would read the Barcode(s) of the product(s) and add it to the shopping basket in the application. It gives techniques to change the amount of item/s acquired and alter the rundown. Alongside this the client would be educated about the on-going offers in the store. Installment can be as indicated by client comfort. the user, indicating that the payment has been processed. The app may also generate and provide digital receipts for the purchase, which users can view or download for their records.The app may allow users to view the status of their payments, including pending or completed transactions, and maintain a history of their payment activities.This could provide users with a convenient way to track their purchase transactions and refer to past payment information if neededThe payment gateway would likely have a user-friendly interface with clear instructions and intuitive design to guide users through the payment process. This could include prompts for entering payment details,error handling messages, and other visual cues to ensure a smooth and hassle-free payment experience If the app supports mobile wallets, the payment gateway may integrate with popular mobile wallet apps, allowing users to 46.



METHODOLOGY

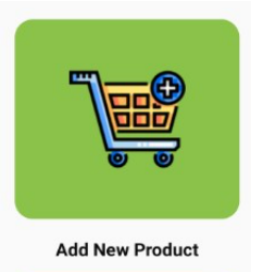
In recent years smartphones are becoming the most important gadget for maintaining daily activities and it is also used by a maximum of the population worldwide. Now a day's maximum operation is based on automation but then for billing, we have to stand in the long queue where automation is not there in the billing system. Based on an automatic barcode scanning method we can reduce the waiting time for billing the products and reduce the manpower. Day by day we try to reduce the man work but for scanning and billing process still, us depending on the manpower. Now, this barcode based billing system application. We are proposing to help in reducing all these chaos related to a long queue at the billing counter and can also save a good amount of time. In this application, the sensors will sense the product barcodes and send the product details to the computer system where the billing will be done. For the implementation of this application, it is required to create an android app for the Android user and fetch the data through the .net code. For all this purpose it requires to create the database and the database must be global because the database is used by the android app user and the system user

1. LOGIN FORM

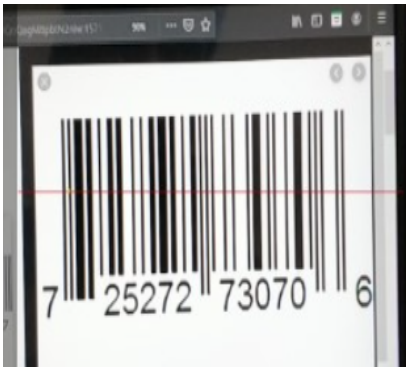
An enlist is a legitimate rundown of one sort of data. Enroll shape is utilized for confirmation of clients. Enter all the details to enlist your ID like Name, address, Mobile No. what's more, watchword.

2 .PRODUCT DETAIL ADD

Thing experts are valuable for entering all items which we will deal with. All offering things enter in as experts. Thing traits are thing related data that you have to enter in the framework for following and exchange purposes. We utilize the Item Master shape to include, refresh, look, and keep up thing information.This application is utilized to deal with the client, utilizing PDA by which the client can catch the item standardized identification and consequently the item id, item name, amount and different points of interest are put away in the database which will be gotten and shown on the android application.



3.SCANNER SCREEN BARCODE



CONCLUSION

As shown by this paper an ongoing catching framework for client supplies utilizing standardized tags in Android PDA. Standardized tag checks items by catching it through the advanced mobile phone, at that point translates and sends it to the server for confirmation. The client advances the chose item rundown to the server and the reaction got from the server empowers the shopper to choose in view of the items credibility. The extent of this paper is to propose an ongoing catching framework for purchaser supplies utilizing scanner tag in an android Smartphone. In future, checking the items after the installment should be possible naturally with the assistance of an inserted framework.

REFERENCE

[1] Dr.Gagandeep Nagra, Dr.R.Gopal, "An study of Factors Affecting on Online Shopping Behavior of Consumer", International Journal of scientific and research publications, Volume3, issue 6, June 2013, ISSN:2250-3153

[2] Constantinides, E., (2004), "Influencing the online consumer's behavior: The web experiences", Internet Research, vol. 14, no. 2, pp.111-126.

[3] Ya-Lin Lee and Wen-Hsiang Tsai, Senior Member, IEEE,"A New Data Transfer Method via Signal–rich-art

Code Images Captured by Mobile Devices", VOL. 25, NO. X, 2015.

[4] Max E. Vizcarra Melgar, Luz A, Melgar Santander,"An Alternative Proposal of Tracking Products Using Digital Signatures and QR Codes", Aug. 2015

.

[5] B. Davis, "Signal rich art: enabling the vision of ubiquitous computing," International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume 4 Issue 3, March 2015

[1] Bhagyashree Bhumkar1, Tejasvini Changal2,Bhagyashri Dahifaler, "Automatic Billing Trolley using RFID and ZigBee with Android Application Rewarding System", International Journal of Research In Science & Engineering, Volume 1 Issue 6 e-ISSN: 2394-8299, p-ISSN: 2394-8280.

[2] S. Sainath, K. Surender, V. VikramArvind Final Year, Department of Computer Science and Engineering Hindustan University Chennai, India J. Thangakumar, Ph.D. Assistant Professor, Department of Computer Science Hindustan University, Chennai, India."Automated Shopping Trolley for Super Market Billing System", International Journal of Computer Applications (0975 – 8887) International Conference on Communication, Computing and Information Technology (ICCCMIT-2014).

[3] Manisha Sable, 2Payoj Gaikwad, 3Shital Halle, 4Suraj Bobade. "Intelligent Trolley for Automatic Billing in Mall Using Internet Server", ISSN 2348-1196 (print) International Journal of Computer Science and Mhaske et al., International Journal of Advanced Research in Computer Science and Software Engineering 6(11), November- 2016, pp. 124-127 © 2016, IJARCSSE All Rights Reserved Page | 127 Information Technology Research ISSN 2348-120X (online) Vol. 4, Issue 2, pp: (272-275), Month: April - June 2016.

[4] LokhandePriyanka V2 bhale Priyanka M. KumkarMonali M. 4Mundhe SandhyaB.MCOERC,Nashik "Smart Shopping: Location Based An Android Application",ISSN : 2454-1362,Vol.2,Issue-1,2016.

[5] "Smart Trolly Using QR CODE"1Arbaaz Khan, 2Aadil Siddiqui, 3 Zeeshan khan, 4 Jasmine khan, 5 Prof. Amit S Zore 1, 2,3,4,5 Department of Computer Engineering, DPCOE College of engineering, Pune, Maharashtra, India

[6] "Intelligent Shopping Cart"ISSN: 2319-5967 ISO 9001:2008 Certified International Journal of Engineering Science and Innovative Technology (IJESIT) Volume 2, Issue 4, July 2013 499 Raju Kumar1, K. Gopalakrishna2, K