

Virtual Ration Queuing And Distribution System

Jeevitha.T¹, Christy Sheeba.V², Dhilip Kumar.S³, Monika.S⁴, Dayana.C⁵

¹Asst. Professor, Dept of CSE

^{2, 3, 4, 5}Dept of CSE

^{1, 2, 3, 4, 5}Info Institute of Engineering, Coimbatore, India

Abstract- *Waiting in line is an important issue in the context of services owing to its immense impact on operation capabilities and satisfaction of customers of organizations. The mode of ordering queues and how long customers should wait for a service or product has laid the base for determining the most optimal queuing solution that can give a tradeoff towards minimizing operation cost incurred while optimizing queues, and also minimizing the time taken by customers waiting to be served. As the current economies gradually transition from platform dependent to service oriented, it has become trivial to thoroughly grasp how to effectively manage waiting lines and in turn improve on the customer satisfaction in an organization. This project has examined the shortfalls of traditional and current approaches to queue management, studied the types and applications of various queue management systems, and finally formulated a general approach and methodology to design and develop the virtual queue management system.*

I. INTRODUCTION

The objective of the project is to design an application which would provide the following facilities. Get the notifications details of food office using app. Send the request to get the new ration card and get the date details regarding when to go for taking photos by virtually generating token number. Get the status of ration card details as and when required by the web site or by using app. By using this app, people can register to get ration items in each month. Main scope of project is to manage ration queuing and distribution through mobile app. Customer has to visit ration shop to know about the availability of stock. Virtual queuing is not possible, customer has to stand in a queue to get ration items. The queue management system provided by wavetec offers standard and customizable features for queue management. These features are geared towards solving queuing problems faced by organizations by offering, diverse queuing solutions. Businesses have options for basic, enterprise or mobile queuing system with each. Able to manage and disperse crowds effectively. Customers are able to seamlessly journey through the system. through their virtual and linear queuing systems and also access an appointment booking option. Project will be very useful for public distribution systems. Project will create a good impact towards ration queue

checking and ration distribution system. Main result of the project is as follows. Citizen can be able to queue details. Citizen can be able to view the stock availability. Public ration distribution is made as possible through this app.

II. LITERATURE SURVEY

Automated Rationing System Using Raspberry Pi

Public distribution system i.e. rationing distribution is one of the issues that involves corruption and illegal smuggling of goods. In this paper we propose the concept of replacing manual work/job causing these irregularities in public distribution system (rationing distribution system in India) by automated system which can be installed at the ration shop with ease. Automated system described in, author replace the conventional ration card by ATM card. Proposed system also uses AADHAR No (UID) for user's authentication. Using such a system, Government would have all required control/monitoring over the transactions at ration shop. To involve Government in the process we proposed

Smart Ration Card System Using Raspberry-pi

Ration Card is one of the important documents for every Indian family. Every family is given facility by government to receive food grains against a card. But there is lot of corruption involved in TPDS such as black marketing of the subsidized food grains as many families do not claim their quota of food grains and many families claim the quota of other families. As a solution to above problems this paper proposes a system which is highly scalable Ration Distribution System based on embedded system. The main target of project was to bring transparency between government and customer, and this transparency is provided by webpage. Here the conventional paper ration book is replaced with Biometric based smart card. When any transaction is done by customer he/she will receive a message on his mobile through GSM technology. [2]

Automatic Ration Material Distributions Based on GSM and Biometric System

System proposed an Automatic Ration Materials Distribution Based on GSM (Global System for Mobile) and Biometric technology instead of ration cards. To get the materials in ration shops need to match the finger print, then controller check the customer codes and details of amounts in the card. After verification, these systems show the amount details. Then customer need to enter the required materials by using keyboard, after receiving materials controller send the information to government office and customer through GSM technology. In this system provides the materials automatically without help of humans. [3]

Smart Ration Distribution and Controlling

This system proposes the advanced Ration Distribution System, named as “Smart Ration Distribution and Controlling”. Huge amount of Government money get wasted due to corruption in the conventional Ration Distribution System. This paper implements a simple PDA device (personal data assistant) with Finger print scanner used as an e-ration card in place of a conventional ration card. This PDA device scans the finger print to check the authorized person to decrease fraud. Efforts are put together from our side to combat corruption and to have better management of public distribution system. [4]

Key difference between these reference papers and our system is a Smart System and Application for ration card contains Biometric. To prevent the ration forgery as there are chances that the shopkeeper may sell the material to someone else and take the profit and put something false recodes in system. In smart rationing system, Biometric used as authentication. If the user is found authentic then the quantity of ration to be given to the customer according to the total number of family members will be displayed on display device. A smart system is free from thieves. Delivered ration details directly send through web application to the government of India without any manual feeding and also sending message to customer’s register mobile number and ration receipt. In the existing system having two drawbacks, first one is weight of the material may be inaccurate due to human mistakes and secondly, if the materials are not bought at end of the month, they can be sold to others without any intimation to the government and customers.

The above drawbacks can be rectified by the proposed method. In this system, ration materials (sugar, rice, oil, kerosene, etc.) are distributed through an automatic mechanism without any help of humans. After receiving the materials, information is sent to government and customer through GSM technology. This system is very accurate, which is used for the real time applications. Thus, on the basis of

literature survey and by analyzing the existing system, we have come to a conclusion that the proposed system will not only aid the government agencies but will also help to digitize the system and in turn help to deploy resources efficiently to the citizens. The apportion card framework confronts two disadvantages: - first the business person who weighted the material can be erroneous as a result of his misstep. Second is, if the material is not purchased till the end of the month they will send to others without authorization of the administration. After effective check client expected to enter the required material with the assistance of keypad. After conveying legitimate material to client microcontroller and in addition PDS authorities utilizing GSM (Global System for Mobile Technology). Smart Automatic Rationing system is based on GSM & Biometric instead of ration card through which the controller will send the information to the customer & this same information will be updated on web page. By using this system we can avoid corruption in ration or public distribution system to some extent.

Multi-Modality Biometric Assisted Smart Card Based Ration Distribution System Authors: Yogesh Kumar Sharma, K B Shiva Kumar

It utilizes the method of unique mark filtering and also confronts discovery. The database stores the records of clients buy history. They utilize a concentrated cloud framework with the goal that straightforwardness is kept up and clients can get to their subtle elements of record at some other reasonable cost shop.[5].

Automization of Rationing System Authors: Shivabhakt Hanamant, Suraj V. S, Moresh Mukhedkar

It proposes atomization of conveyance framework at the proportion shop and in addition keeping up the database at one principle control station and refreshing the database with the goal that the retailer can't cheat the general population[6]. The labels are utilized for validation of substantial clients. For refreshing, GSM is utilized.

Biometric Device using Smart Card in Public Distributed System Authors: S.Kanagasubaraaja, K. Arul Ganesh, Mohesh Viswan

It proposes framework utilizing smartcards for every one of the residents. The smartcard contains the points of interest of the national. Resident can see the aggregate amount of the stock accessible. After every single exchange the stock gets decreased in load up and the resident gets the SMS and email from the government with the obtained time and number of items purchased with the item id and furthermore

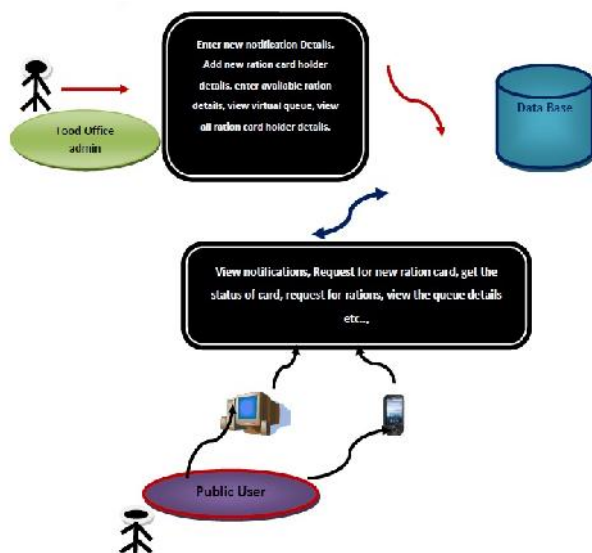
transferred in the principle database without even a second's pause. [7] The cards are checked in view of the native's unique finger impression. To check whether he is smartcard holder, every last individual's unique finger impression in a family are gathered amid card asking for and in like manner, things are designated.

Smart Ration Distribution and Controlling

Authors: Kashinath Wakade, Pankaj Chidrawar, Dinesh Aitwade

This paper uses the technique of biometric devices and the smart card instead of a current booklet of ration card. The device that is provided by the government, in this case, is used as authentication card, and the smart cards are used as ration booklet to swipe and fetch the details[8]

III. BLOCKDIAGRAM



IV. CONCLUSION

The system is completely menu driven and extremely user friendly since it is developed in an efficient front end tool Android. Appropriate error messages are provided to guide the user in a proper and user friendly manner. The website is developed using Android as front end and MySQL as back end. Time consumptions will be reduced to a great extent and user as less complexity in handling it database. The project is fully fledged and user friendly. End users will be lightened in using the software because it will be easy to have reports and will be very user friendly. Project has been completed and tested successfully. It reduces the calculating efforts to be carried out by the staff. Further enhancements can also be

done for improving proposed system. Enhancements can be done based on the upcoming needs in future.

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