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ijircce@gmail.com



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# E – Ration Card Management System

Mayuri Zode , Ishwari Sawwalakhe , Sunpreet Kaur Nanda

UG Student, Dept. of CSE., Sant Gadge Baba Amravati University, P.R.Pote College of Engineering and Management, Amravati , India

Professor, Dept. of CSE., Sant Gadge Baba Amravati University, P.R.Pote College of Engineering and Management , Amravati, India

**ABSTRACT:** Now a day's every one need a government facilities. There are many facilities that government announces for poor people but, that is not actually provided to them. Because in such system there is lots of corruption. Due to corruption, facilities provided by the government are not reaching to poor people who really need this. One of the systems where we can see the corruption is in rationing system or we can say in public distribution system (PDS). By using ration card everyone is buying their monthly ration from licensed ration shop, but the shopkeepers are cheating the poor people for their own profit by not giving correct quantity of ration provided by government to them. To stop this and to help the common people we are atomizing the rationing system. In proposed system we have proposed an application on android which will help to make PDS system corruption free in this system we are developing three roles of application one is customer, ration owner, and government. In this system we are make common interface between all these three. Firstly government will allot some quota of ration to ration owner. After that customer wants to purchase the ration for this we develop a system in which customer will get one code that is generate automatically and varies from customer to customer. For purchasing the ration it given to ration owner which will validate and give the ration to customer. After successful transaction it could possible for the government to maintain the complete transaction on mobile. Which also help to make the system corruption free and making process fast and simple.

**KEYWORDS:** Smart ration card system, Automation of ration shop, Web enabled ration shop , public distribution system.

## I . INTRODUCTION

Public Distribution System (PDS) is an Indian food security system. It is established by the Government of India under Ministry of Consumer Affairs, Food, and Public Distribution and managed jointly with state governments in India. The traditional PDS is used to distribute grocery items to India's poor who are valid ration card holders. The validity and the allocation of t ration cards is monitored by the state governments. A ration card holder should be given 35 kg of food grain as per the norms of PDS. However, there are concerns about the efficiency of the distribution process. In order to make it efficient and improve the current system of PDS we are implementing SMART RATION CARD MOBILE APPLICATION. A Government of India initiative process in which a fixed amount of ration is provided monthly to the people by the PDS stores. The increased corruption in the market sector can be prevented if the system becomes automated, increase adulteration can be prevented as well, the hoarding done by the officials and laborers of Govt. There will be two units. Main control unit from where all the registration process is done. Second unit is placed at the ration shop, which will completely control the activities at shop like customer identification, grain distribution and database updating. Using this App, the card holder can get his/her grocery items from the Ration Shop's. The main reason for using this App is to avoid the problems like duplication of cards, Forgery in Supplying food materials. Issuing products based on ration card. The main drawback in the current system is that the PDS has been criticized for its urban bias gives rise to much corruption in the process of and its failure to serve the poorer sections of the population effectively. The targeted PDS is costly and extricating the poor from those who are less needy. Also, many retail shopkeepers have large number of bogus cards to sell food grains in the open market. So, in order to avoid all these drawbacks, we are going to use the Smart ration card which will help us to avoid the corruption in PDS if not eradicate it.



## II . RELATED WORK

Automatic Ration Dispensing System given here is a complicated system helpful for the automated & additional economical approach of ration distribution. This project is intended to attenuate the manual intervention within the method of ration distribution, in order that additional transparency & potency will be maintained our project focuses on style and implementation of Automation of Ration search. In recent situation, all the general public and personal sectors choose automation in their method. Civil provides Corporation is that the major public sector that manages and distributes the essential commodities to all or any the voters. In this system varied product like Rice, sugar and coal oil area unit distributed victimization standard ration search system. A number of the constraints of standard ration search system area unit attributable to the manual measurements within the standard system, the user can't ready to get the correct amount of fabric. PDS is administered under the Public Distribution System (Control) Order 2001, 1 notified under the Essential Commodities Act, 1955 (ECA).<sup>2</sup> The ECA regulates the production, supply, and distribution of essential commodities including edible oils, food crops such as wheat, rice, and sugar, among others. It regulates prices, cultivation and distribution of essential commodities. The PDS (Control) Order, 2001 specifies the framework for the implementation of TPDS. It highlights key aspects of the scheme including the method of identification of beneficiaries, the issue of food grains, and the mechanism for distribution of food grains from the centre to states. In 2001, the People's Union for Civil Liberties (PUCL) filed a writ petition in the Supreme Court contending that the "right to food" is essential to the right to life as provided in Article 21 of the Constitution. During the ongoing litigation, the Court has issued several interim orders, including the implementation of eight central schemes as legal entitlements.<sup>3</sup> These include PDS, Antyodaya Anna Yojana (AAY), the Mid-Day Meal Scheme, and Integrated Child Development Services (ICDS). In 2008, the Court ordered that Below Poverty Line (BPL) families be entitled to 35 kg of food grains per month at subsidised prices.<sup>4</sup> National Food Security Act, 2013 The National Food Security Act gives statutory backing to the TPDS. This legislation marks a shift in the right to food as a legal right rather than a general entitlement. The Act classifies the population into three categories: excluded (i.e., no entitlement), priority (entitlement), and Antyodaya Anna Yojana (AAY; higher entitlement). It establishes responsibilities for the centre and states and creates a grievance redressal mechanism to address non-delivery of entitlements. It is yet to be implemented

## III. PROPOSED METHODOLOGY

In online ration system admin plays role of government who will add ration shop, customer, ration. Government registered ration shop and customers information, then customer can allow to get online ration. Ration shop can allot ration to customer which are given by government. Ration shop owner decide their ration product by their poverty line. Ration shop owner first see the code which is generated by customer then also owner provide ration. Only one ration shop registered from same ward. Customer add by admin, they can registered their name, family member, address, ward, APL/BPL . We can view customer which are added by govt. and we can transfer their account when they change their address. After login they generate code and show to ration shop owner .customer will have to generate their code per month as they get ration online. In proposed system we are proposed an application on android which will help to make PDS system corruption free in this system we are developing three roles of application one is customer, ration owner, and government. In this system we are make common interface between all these three.

The classical system of Public Distribution System (PDS) established by the Indian government for provides food security to the people. There are various ration shops in the entire nation where there are employees who give the people various commodities like food grains, oil, kerosene etc. The customer has to go the ration shop and ask the employee to give the commodity and the amount he needs. The employee then manually measures it and gives it to the customer. This transaction also needs to be added in to the ration card. This is the total interaction which takes place. This system faces with various problems. As there are many ration shops and the customers coming to buy from ration shops are normally believed to be below poverty line and illiterate, the customers are fooled to a large extent. There are complaints related to the quality of the product they receive, the quantity they receive is many a times less than the quantity demanded by them as the employees steal from it. Moreover, they end up paying more for the quantity they receive. Also the quantity which is added in the ration card is wrong. So they cannot buy more the next time they need. So there is a lot of cheating and fooling of the customers that takes place.

- The main reason for using this App is to avoid the problems like duplication of cards, Forgery in Supplying fomaterials.

- Using this app user can aware about his ration details.
- Government has details about every ration shop and its available stocks.

#### IV. IMPLEMENTATION

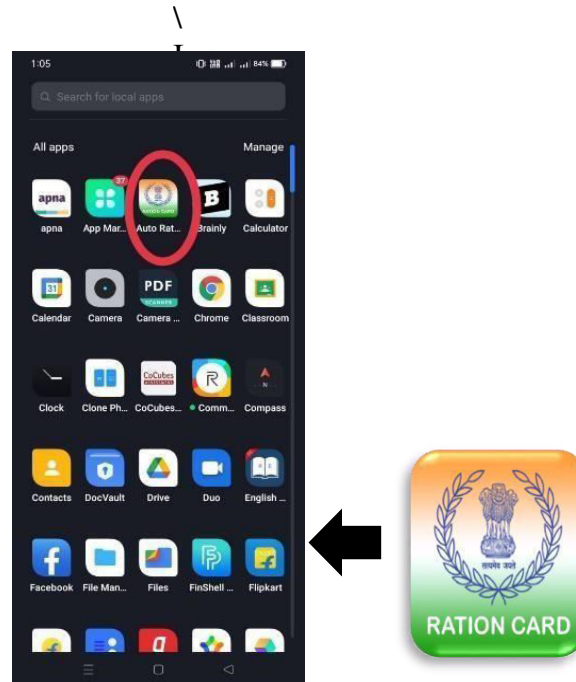


Figure 1: App Logo

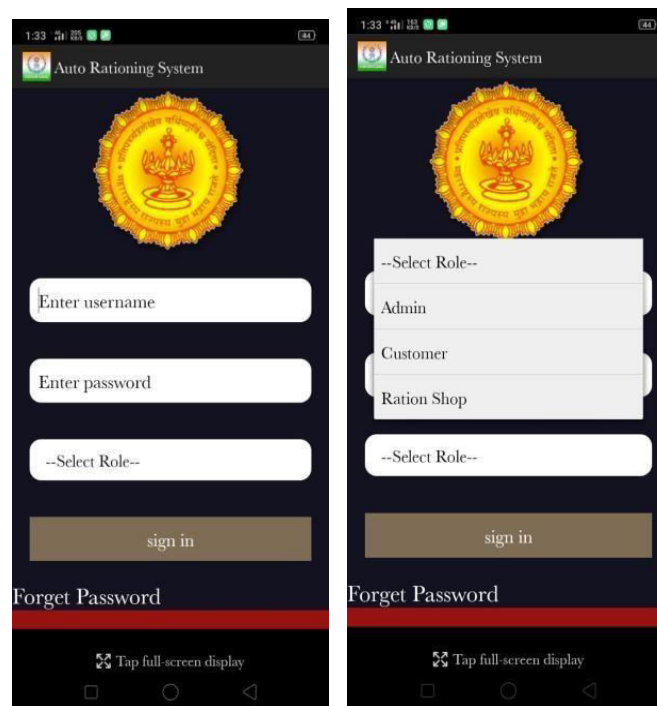


Figure 2 : App Home Page

Home Page : There are blocks of view customer ,allot ration ,add ration ship , view customer shop. How much amount of ration is distributed wheat, kerosene, sugar. enter the address of the customer, email address, adhar card number,username.figure-2 shows the screenshot for the home page.

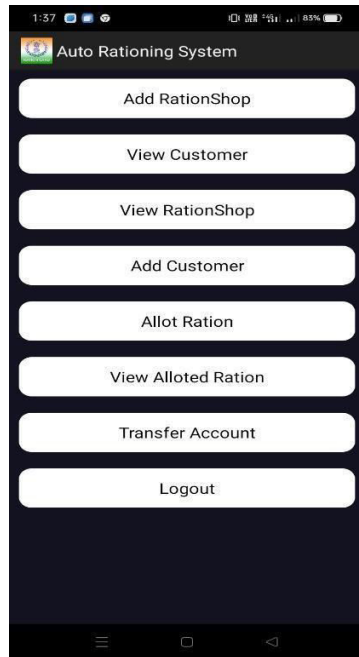


Figure 3 : Admin Page

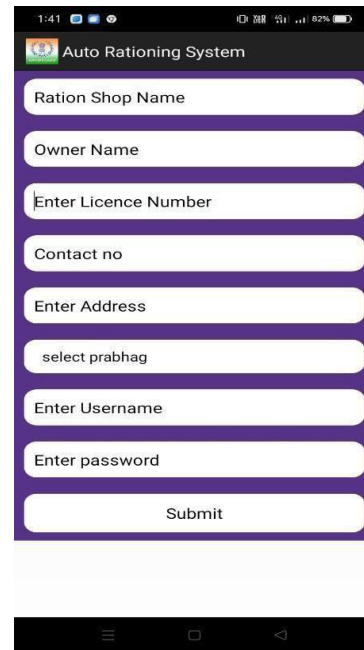
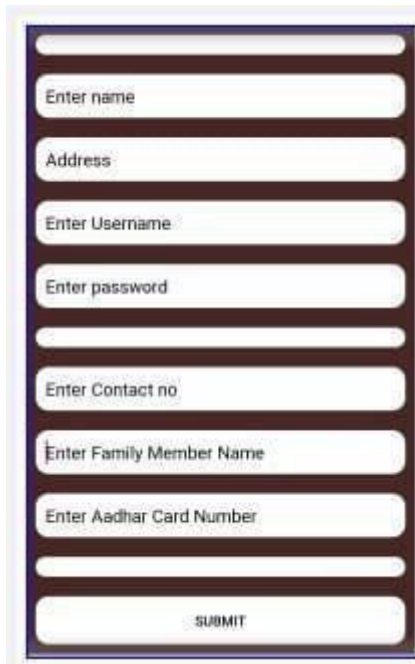


Figure 4: Add Ration Shop Owner

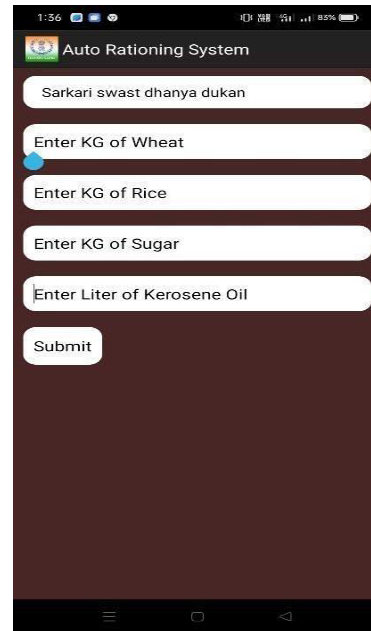
- Add Ration shop : First admin will register to ration card shop. In this it will add details of ration shop owner name,email address, city, username, password.
- View Customer : After this , it will addcustomer details name of customer,username, password, adhar number, address.
- View Ration Shop: In which shops are registered there will be an OTP System.
- Add Customer : Data of user wil add name customer no,username,password.
- Allot Ration Shop : It comes under which card APL,BPL.
- View Alloted Ration : The amount of ration is seen in rice , wheat ,kerosene.

Fig. 4 Add Ration Shop Owner : First add ration shop name next add owner name next add licence number next add contact number next add address next select the prabhag number next add username & password and submit the shop owner details



A vertical registration form with a dark blue header and footer. The form contains several white input fields with labels: 'Enter name', 'Address', 'Enter Username', 'Enter password', 'Enter Contact no', 'Enter Family Member Name', and 'Enter Aadhar Card Number'. A 'SUBMIT' button is located at the bottom.

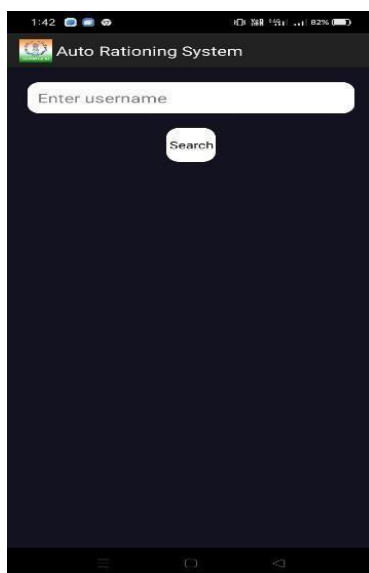
Figure 5 : Customer Page



A mobile app screen titled 'Auto Rationing System'. It features a dark blue background with white input fields for: 'Sarkari swast dhanya dukan', 'Enter KG of Wheat', 'Enter KG of Rice', 'Enter KG of Sugar', and 'Enter Liter of Kerosene Oil'. A 'Submit' button is at the bottom.

Figure 6 : Alloted Ration

In fig. 5 Customer Page : First Add customer name next add customer address next add username& password customer contact number next add family member name and next add adhar card number and submit the customer information.  
In fig. 6 Alloted Ration : How many ration has the government provided in one village.



A mobile app screen titled 'Auto Rationing System'. It features a dark blue background with a white input field labeled 'Enter username' and a 'Search' button below it.

Figure 7 : Transfer account



A mobile app screen titled 'OTP Verification'. It features a dark blue background with a white input field labeled 'Enter OTP' and a 'BUTTON' below it.

Figure 8 : OTP Verification



Figure 7 Transfer account: Transfer account suppose for example there is ration card owned by your father but now they want to owner the son they can transfer account from the government. Fig. 8 OTP Verification: Shop owner send the OTP to customer Next submit the task ani shop owner provide the rati on and Complete the ration distribution process.

## V. CONCLUSION AND FUTURE WORK

From the above analysis conclude that This proposed method can provide a safe, secure and efficient way of public distribution system. By using this technic PLC based automated ration shop; it solves the problem of manual process in public distribution system. A Government of India initiative process in which a fixed amount of ration is provided monthly to the people by the PDS. stores. The hypothesis framed for the project Consumer Perception towards Online Grocery Shopping was “Online ration system is beneficial for the consumer. The method now we using for buying ration after showing ration card. Out of the agreed respondent to buy an online ration system, most of the respondents would think that it would be beneficial to shop ration online based on factors like ease to order, and fair price. And also saves time and avoids long queues. Overall the experiences of users with this type of system were positive. Users described the system as ‘quick’ and ‘easy to use ‘and will recommend this to others.

## REFERENCES

- [1].C. K. Chow, On Optimum Recognition Error And Reject Tradeoff, IEEE Transactions On Information Theory, Vol. It-16, No. 1, January 1970.
- [2].Gyanendra K Verma, PawanTripathi, “A Digital Security System with Door Lock System Using RFID Technology”, International Journal of Computer Applications (IJCA) (0975 – 8887), Volume 5– No.11, August 2010
- [3] Kumar Chaturvedula .U.P, “RFID Based Embedded System for Vehicle Tracking and Prevention of Road Accidents”, Vol. 1 Issue 6, August – 2012, ISSN: 2278-0181. [4] R.Ramani ,S. Selvaraju, S.Valarmathy, P.Niranjan, “Bank Locker security System Based on RFID and GSM Technology”, Volume 57– No.18, November 2012
- [5] Security Analysis of India’s Electronic Voting Machines Hari K. Prasad, J. Alex Halderma, RopGonggrijp, Scott Wolchok, Eric Wustrow, ArunKankipati, Netindia, (P) Ltd., Hyderabad
- [6] Vikram Singh et. al. “Smart ration card”, Volume 4, No. 4, April 2013 Journal of Global Research in Computer Science.
- [7] Nehaet. al. “Web-Enabled Ration Distribution and Controlling.” March2012 International Journal of Electronics, Communication and Soft Computing Science and Engineering.
- [8] Mohan et. al. “Automation of ration shop using PLC.” Vol.3, Issue.5, SeptOct 2013. International Journal of Modern Engineering Research.
- [9] Dhanashriet. al. “Web- Enabled Ration Distribution and Corruption Controlling System.” Vol.2, Issue 8, Feb 2013, International Journal of Engineering and innovative technology.
- [10] Sharma et. al. “Multi-Modality Biometric Assisted Smart card Based Ration Distribution System”, volume 3 June 2014
- [11] Sukhumaret. al. “Automatic Rationing System Using Embedded System Technology”, volume 1 Nov2011

## BIOGRAPHY

**Mayuri Bhashkarrao Zode** is a Research Assistant in the Computer Science And Engineering Department, College of P.R.Pote College Of Engineering And Management Amravati, SantGadge Baba Amravati University. She received Bachlour Of Engineering (B.E) degree in 2022 from SGBAU, Amravati, MS, India. Her research interests are Computer Networks (wireless Networks), HCI, Algorithms, web 2.0 etc.



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