

MOBILE APP FOR SMART RATION CARD SYSTEM

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ABSTRACT

The Ration Shop cannot able to meet the requirement of the user due to over population of our country, so the processing speed is low. As a result, there is always crowd of people in the ration shop. Also there is a chance for the illegal usage of our products in the regular system, i.e. the materials are robbed by making wrong entries in the register without the insight of the ration card holder. Due to that large amount of money given by government gets wasted. Hijacking is the main problem in the user ration card. Hence, we have developed a smart ration card application for all android mobile users. In this system, each user has a separate authentication login. The user profile will contain the information about their family members, the materials which are available and has been received and their price list will also be displayed. The buyer can block the materials needed and they can request to the admin and the user will receive a confirmation message. By using this message they can buy their stuff in their corresponding ration shop. The ration shop admin will upload the details which has been delivered to the respective user.

KEYWORD smart ration card system, Automation of ration shop, web enabled ration shop.

1.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 the 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.

Using this App the card holder can get his/her grocery items from the Fair Price Shop's (FPS).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. Many FPS dealers resort to malpractice since they acquire less salary. Most of the time users do not get their rightful entitlement in terms of quantity. What's meant for them or the farm produce procured by the FPS's is diverted to 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.

2.RELATED WORK

In these, [3] RFID established automatic ration shop is novel approach in space allocation arrangement (PDS) purposeful for additional effectual, precise, and automatic technique of ration distribution. space allocation arrangement in addition yelled parceling allocation arrangement is one in all the extensively difficult subjects that

involve malpractices. this ration allocation arrangement has drawbacks like inaccurate variety of products, low process speed, large staying amount, physical thieving in ration search. The endorsed arrangement replaces the manual add ration search. the most goal of the projected arrangement is that the automation of ration search to furnish transparency. The endorsed automatic ration buy space allocation arrangement is established on Wireless Frequency Identification (RFID) information that replaces normal ration cards. The RFID tags area unit invested rather than normal ration cards.

Customer's information is kept in microcontroller that's invested by Power Authority. Consumer has to scan tag to RFID reader, and next microcontroller checks customer's options aboard keep to assign physical in ration search. Later prosperous verification, consumer has to go into quite physical similarly as variety of physical using input device. Later carrying correct physical to client, the microcontroller sends the information to consumer similarly as PDS powers using Globe Arrangement for Mobile (GSM) technology

Automatic Ration Dispensing System given here is a complicated system helpful for the automated & additional economical approach of ration distribution.[9] 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.

And conjointly there's an opportunity for the illegal usage of our product within the standard system. i.e. the materials area unit robbed by creating wrong entries within the register while not the data of the identity card holder. Attributable to that enormous quantity of cash given by government gets wasted. The Ration retailers cannot ready to meet the wants of the user attributable to the over population of our country. Therefore the process speed is low As a result, there's continually crowd of individuals within the ration search.

E-government is progressively accustomed improve transparency within the government sector and to combat against corruption. [8] E-government is being enforced in additional areas of presidency administration for each the native and national levels worldwide. E-government system developed to scale back corruption. The aim of this paper is to prepare and summarize existing theoretical and empirical work on corruption with read characteristic opportunities for additional analysis. Mechanization will facilitate in modernizing the PDS. The southern states as was common have junction rectifier the method on several reforms meant to handle the problems higher than, and progressively even poorer states have introduced changes in policies and implementation mechanisms to handle the issues of PDS. This paper discusses strategy custom-made in victimization ICT to manage diversion and discharge within the delivery mechanism and its roaring application in mechanization of food product offer chain. As Associate in Nursinging outcome of the project, 0.78 Million farmers have received laptop generated cheques with none delay. Subject involvement within the system has been multiplied in watching PDS.

In this analysis paper, the projected idea is to interchange the manual add public distribution system. [12]The ration distribution system is automatic by victimization PLC, which is analogous to the ATM. This automatic ration system replaces the standard identity card system by open-end credit. Additionally, the finger print detector is placed within the machine so as to envision the right user access. If the user is correct user, future method takes place and therefore the input will be given within the bit screen. As shortly because the input is given, the product square measure obtained from the automatic ration look and therefore the quantity is taken from the checking account of the actual person. The embedded controller is pre-programmed in such some way to perform the similar operations. During this automatic ration look government have management over all dealings that happens in ration look. So as to involve government within the method, the projected ration look system is connected to the govt. information via GSM modules, that any sends the up-to-date info to the govt. and therefore the client. For the economical operation and economic constraints of the system, the facility provides unit is absolutely created alternate to solar energy.

[6]This paper proposes the makeshift technique of implementing good card. The most objectives of good card are providing food grains and different essential things to vulnerable sections of the society at affordable (subsidized) costs and to eradicate unskillfulness within the targeting of beneficiaries and also the ensuing outflow of subsidies that is that the main disadvantage of the current PDS (Public Distribution System). These objectives is achieved by making a singular information of residents in Bharat and can place along the most effective technologies and processes for this purpose. This can cause information while not duplicate entries and ghost cards which is able to facilitate to avoid banned and bastard claims and fraud in distribution of ration.

The system is more and more getting used to boost transparency within the government sector and to combat corruption. [8] A well-planned e-government strategy will build a lot of economical, responsible and clear government. We tend to 1st analyze the theoretical background of anti-corruption strategy that illustrates the benefits of e-government services. Here efforts from our facet area unit done to beat one among the corruption downside involve in ration distribution system through a sort of electro-dynamics internet template wherever distribution of fuel, rice, wheat etc. at rural and concrete areas, are checked, monitored and controlled with filtering the matter of corruption and adulteration .In addition, let us discuss the e-government as an anti-corruption strategy in India and point out the urgent tasks for good e-government in India. Finally, let us analyze some challenges to the development of the e-government system and its existing problems

3.PROCEDURE

This system can be implemented at the bottom level of PDS network that is at one Fair Price Shop (FPS). We need to collect the data from all the valid ration card holders by registration process. After the complete data has been collected a database is created. It contains separate record for each family which includes details like number of members in the family, name of the members, head of the family, permanent address, present living address, phone number, CREDITS, etc. These credits are like units or points that are issued to each family every month by the respective state governments. Here we will be having two databases for two different categories i.e. one for the card holder information and the other one to store the details of the items (products) that are being distributed.

There will be a database which already contains all the card holders' information. After installing the App cardholder has to register in it. The details will be cross checked with the database information. If the details matched with the database details, then a login id and password will be generated to the mobile number of the cardholder. For the next entry the cardholder have to use this login id and password provided to them. The page contains the ration card details of the customer and three options will be available. Stock availability, stock price, stock blocking.

Stock availability contains the details about the stocks which are available to the cardholder. Stock price shows the price of the products and the amount cardholder has to pay for the blocked products .By stock blocking we can block the commodities (rice, sugar, wheat, etc).After blocking, a message will be generated to the cardholder mobile number as a confirmation message. By showing the message to ration shopper the cardholder can able to buy the products

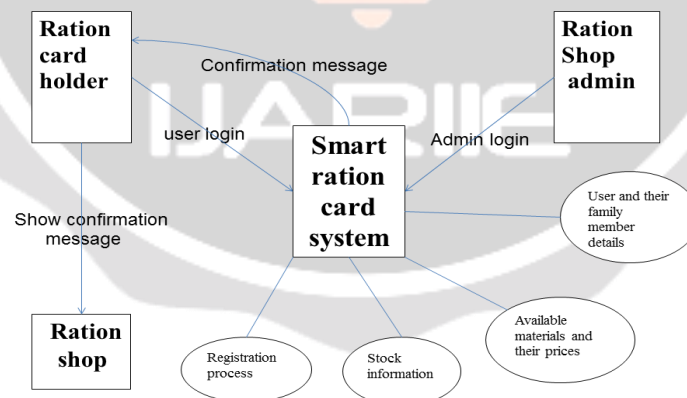


Fig.1 Architecture diagram

4.DATABASE MAINTENANCE

As we have already stated that we will have two databases for two different categories i.e. one for the card holder information and the other one to store the details of the items (products) that are being distributed to the people below poverty line. So every time the distribution has been made there is a necessity of updating and maintaining the database to avoid the miscalculations.

4.1 CUSTOMER'S DATABASE

For maintaining this database we have to collect all the related information and have to store it in the database. Every time if there is any change in the details provided by the customer it should be immediately updated in the respective database. When the distribution of the products (items) is made then the credits will be deducted from the customer's account so the dealer should make sure that it is updated in the following database and the credits are deducted from his/her account.

Fig.2 Registration form

4.2 PRODUCT DATABASE

This database is used to contain the details of the products available at the FPS. When the stock of products arrives at the FPS then that particular amount of data is updated in the database. When the distribution is made to the people below the poverty line then the quantity of the products reduces in that particular FPS and hence it should be updated in the database. For example if 3kg of rice has been distributed to particular customer then that 3kg should be deducted from the total amount(quantity) of rice in the database. Maintaining the database and generating the bill becomes important because these are the two factors that will help the government to avoid the corruption in PDS.

5.STEPS TO BE FOLLOWED

These are the following steps that provide the information on how the processing of customer's transaction takes place:

1. Registration process has to be done.
 - i. Enter valid details.
 - ii. It will be cross checked with the database information and login id and password is generated.
 - iii. After registration the card holder have to enter the App using their login id and password.
2. The card holders can view their stock details.
3. The card holders can block the needed food grains.
4. A message will be received via mobile (message: 3kg sugar is blocked. Its price is Rs.20)
5. The cardholder can buy the products by showing the confirmation message to the ration shopper.
6. After buying the stock details will be updated.
7. The message is valid for a month, because the next month stock details have to be updated.

Our project focuses on design and implementation of Automation of Ration Shop. In recent scenario, all the public and private sectors go for automation in their process. Civil Supplies Corporation is the major public sector which manages and distributes the essential commodities to all the citizens. In that system various products like Rice, sugar and kerosene are distributed using conventional ration shop system. Some of the limitations of conventional ration shop system are Due to the manual measurements in the conventional system, the user can not able to get the accurate quantity of material.

6.CONCLUSION

This paper depicts the computerized version of the Public Distribution System (PDS) and its advantages over the present ration cards. Using this technique or method we can reduce the corruption level and can mostly eradicate it from the above mentioned system which will help the country's economy to reach new heights. The computerized

PDS is simple to implement and requires much less hard work when compared to the other system. So implementing this will be really helpful to the people below poverty line.

7. REFERENCES

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