E-Ration Card Management System

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Abstract- *Ration Card is one of the most important documents .The Indian ration card provides food for the poor people which is distributed by the government along with the fuel. It provides a distinct identity of person which is useful to update with the government record. The network of the ration shops is spread all over in India to provide food security to the people. This distribution of food and fuel is fully controlled by the government. But it has so many limitations. Most of the ration shopkeepers keep fake ration cards with them. The dealer then does not provide ration items to the customers. Many times people are not aware that the items have arrived in the shop. The dealer then sells these items in increased rates in the market. In this way, in the current situation we are facing problem due to lack in transparency. There is no such good system yet developed through which government gets message of usage of grains by the people. So government meets money loss, time and cost. This reason we develop a web application for the E-ration card management system. It is one of the most important documents which acts as identity proof for any individual. In this application if people are not having their own Ration card they can also apply for the ration card also they can apply for cancel ration card, separate ration card, adding name in ration card, remove name from ration card, change in ration card, view ration card detail etc. The process to apply for ration card has been facilitated to great extent but in this application this process is online which comes as blessing for the applicants who hate standing for long time in queues for filling the application form and then go to the office again to know the status. For the transparency we have added finger print sensor to add customer purchased product details in the database.*

Keywords- Corruption, Public Distribution System (PDS), E-Government, Android app, Ration Card System, RFID, Biometric.

I. INTRODUCTION

The ration distribution system is one of the largest government's economic policies in India. Its main motto is to provide food grains (sugar, wheat, rice, kerosene etc.) to the people at affordable rates. The network of the ration shops is spread all over in India to provide food security to the people. This distribution of ration is controlled and monitored by the

central government, along with the state government. But it has so many limitations. Most of theration shopkeepers keep fake ration cards with them. Due to fake ration cards, the dealer receives the extra ration from higher authority and he sales it into the open market. The dealer may not provide a sufficient amount of food grains to consumers. Most of the time people are not aware of the availability of ration in ration shop. The dealer may sale ration at higher rates than recommended by the government or he may do wrong entries in register. In this way, in the current situation we are facing problem of corruption in public distribution system. There is no such effective system through which government gets acknowledgement of consumption of food grains by people.

"Fig."1 Image of a Ration Shop

Purpose: - The current Ration Allocation System is an offline/ manual one. Due to this, corruption is seen alot. Dealers give false records to benefit themselves. They also provide the ration items of the poor people at maximum rates which is not justified. There is a no common ground between the dealer and consumer. Due to this issue the poor people do not get the items as stated on their ration card and they don't receive their portion well. And there is no such complaint system developed yet throughwhich the consumer's interests can be protected and using the E- Ration Card Management System, we wish to do away with all these problems and create a system which would be fair and just for all.
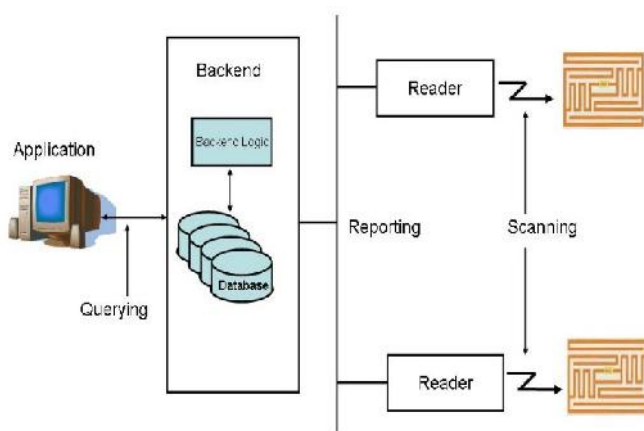
II. LITERATURE REVIEW

[1]Vishal Aher has proposed "Smart Ration Card System".

In order to overcome inefficient traditional way of ration distribution and its management, we developed an efficient smart system to maintain Ration card and make it digital way. To maintain manual database of ration card of every individual in traditional way is very difficult and time consuming process. Biometric authentication is being used nowadays but also has its own drawbacks. All those having their advantages and disadvantages, Smart ration card system is the best replacement to bulky, time consuming manually or digitally management of Distribution of ration. This system is for monitoring ration distribution in smart way and performs various activities for security purposes along with gathering important data for the government to take action on.

The current system has only manual data entry in the ration card book and the database management is very difficult, authentication is done using biometric but it has its flaws too. The ration is given using faulty measures. Fake ration cards are used by the distributors to gain profits of the system and sell the grains in black market. Corruption is done at the distributor end and thus it's a huge loss for the nation's economy. According to all the research of the current system the above are the problems faced by the nation and the common man.

[2]PranjalPedwalet. al. has proposed "Real Time Automatic Ration Material Distribution System".

In this paper, proposed an automatic ration material distribution based on GSM (global system for mobile) and RFID (Radio Frequency Identification) technology instead of a ration card. To get the materials in ration shops need to show the RFID tag into the RFID reader, then controller check the customer codes and details of amounts in the card. After verification, these systems show the amount details.

"Fig."2 RFID

Then customer need to enter their 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. In this system various sensors are used to measure and dispense the commodities.

[3]Mrs.B.Buvaneswari et.al. has proposed "Mobile App for Smart Ration Card System".
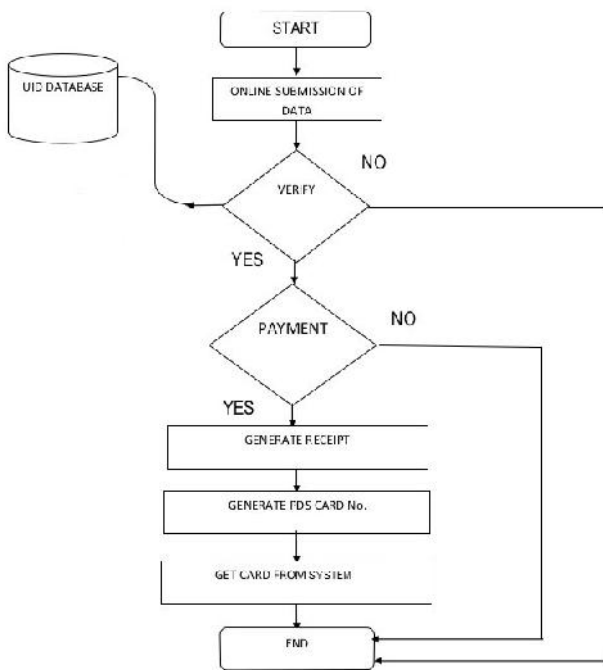
In this system, each user has a separate authentication login. The user profile will contain the information about their family members, the materials which are available and has been received and their price list will also be displayed. The ration shop admin will upload the details which has been delivered to the respective user. Though it reduces corruption.

III. STUDY FINDINGS

Some of the limitations of conventional ration shop system:

- Ration shop do not open every day, nor do they keep regular hours. Even on the days that the shop is open, ration card holders stand in long queues.
- Shopkeeper may declare "No Stock "even when sufficient stock is available.
- The Ration shops are not able to meet the requirements of the user due to the over population of our country.
- Illegal Usage
- Cannot able to get the accurate quantity
- Over crowd
- Processing speed is slow
- Selection of households – Targeting
- Hijacking of ration cards
- More than the prescribed rates are charged.

"Fig."3 Software Development Flowchart

The proposed system provides the customer an easy way of information. The customer can able know the availabilities of products and their quantity also the price of the products.

Due to this ration shop shopkeeper cannot make duplicate ration card so the corruption in ration card system can be reduce. Also the supporting document is added to the ration card so customer cannot need any identity proof.

There are several advantages in this proposed system. They are,

1. It saves time for the people.
2. People need not stand in a queue for a long time.
3. People can also check the availability status of the products.

IV. CONCLUSTION

In old ration distribution system the ration is not provided to the needy people, the drawback is overcome by our system.

In our Approach, we proposed a new method to digitize the ration Distribution System.

It will avoid the corruption in rationing system to a large extent by providing transparency at each level. As there will be no offline/ manual database entry and everything will be central database, it becomes easy for higher authority to cross check the data at any point. Various factors will be solved in account of the Government and healthy relationship with the public will be gained. Authorities can make use of it to see details about various illegal activities going on in the Country and also keep a track on the Products which are in high demand in a particular State.

Also, the customer need not stand in a queue for changing some details in ration card they can directly apply through this web application. This saves the valuable time of the customers. This also avoid the crowds in the changing office. As the customers can able to see the availability status of the products, they need not go to the ration shops when there is no stock. This application helps to modernize traditional rationing system.

V. ACKNOWLEDGMENT

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