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"Smart Ration Card System"

Prof. S.M. Rampur, Geeta M. Hublimath[2], Tanuja R[2]. Bandichode[2], Trupti V. Bhosale[2], Pallavi R. Jadhav[2]

[1]Assistant Professor at BMIT, Solapur.
[2]Students at BMIT, Solapur.

Abstract - *In the present days many immoral activities are taking place in ration shop, which are meant to distribute the commodities to the people who are in below the poverty line, as the distribution process is manually operated and due to which it consumes a lots of time. To overcome this problem we one can use RFID technology. In this report RFID tags are introduced, the RFID card are used instead of ration cards, which consists of all the details about the card holder like family details, type of card and its validity etc. In this report we are going to discuss different types of automatic ration distribution system implemented for the automatic ration distribution*

Key Words: Public Distribution System, Ration Distribution, Unique Identity, GUI screen, Web server, Android Application

1. INTRODUCTION

India's Public Distribution System (PDS) is the largest retail system in the world. System of Public Distribution System provides a ration card issued under an order or authority of the state government for the buy of essential consumer materials like Rice, Wheat, Kerosene and Oil .State Government issues distinctive ration identity cards like Yellow ration card, Saffron (Orange) ration card and White ration card depending on family annual income. The consumer material is feeding to ration card holders in the first week of every month by ration shop keeper. System of Public Distribution is one of the widely disputable issues that involve malpractice. The manuscript intervention in weighing of the materials to incorrect measurements and/or it may leads happen, the ration shop owner illegally uses consumer materials (Rice, Wheat, Kerosene).

1.1 Purpose

In this system, firstly we briefly studied the existing works about Public Distribution System, and to overcome problems related with existing system we are designing proposed system. In this automated system conventional ration card is replaced by RFID (smart ration card) in which all the details about users are provided including their Adhaar details which is used for user authentication. This proposed to use smart card instead of manual ration card with User id for unique authentication. Main purpose of this system is to avoid frauds in Ration shops and to provide some technology based environment to government sector.

1.2 Scope

The main objective of the project is to create transparency in operations so that every citizen can very easily know what is happening and what is supposed to happen. Providing food grains and other essential items to vulnerable sections of the society at reasonable prices, to put an indirect check on the open market prices of various items. To attempt socialization in the matter of distribution of essential commodities.

2. Design

The primary design constraint is the Desktop platform. Since the application is designated for Desktop Systems, effective GUI and well user friendliness will be the major design considerations. Creating a user interface which is both effective and easily navigable is important. We are utilizing the database to store the various information of the users so storage space needs to be considered for smooth functioning of system. Other constraints such as memory and processing power are also worth considering. Efficiency needs to be considered since it is one of the major reasons of having an automated system for ration. The input and output generated and their individual working efficiency and its contribution to the overall software application must also be considered. The software will give the desired results only if the specified software requirements are satisfied.

The System works in four steps

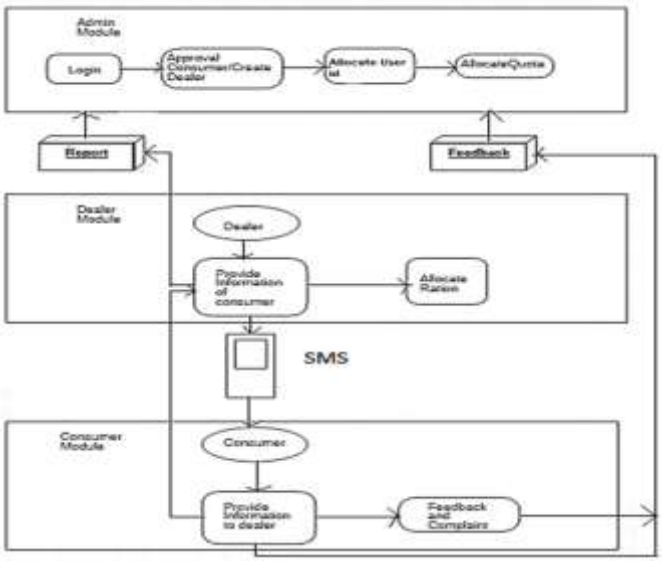


Fig: System Architecture

1. **Input Part:**
   In this system each customer has User Id for each customers Smart Ration Card.

2. **Processing Part:**
   User Id provide data to the System, processes the data and match with the database which is authenticated by Government.

3. **Display Part:**
   The system process for display the name of the card holder and the monthly allocated ration.

4. **Messaging Part:**
   Messaging system is proposed here to avoid Forgery helps the customer to take an action towards ration forgery.

System Evaluation

- **Advantages**
  - User Friendly.
  - Access to authorized person only.
  - Reduce Corruption
  - Active contribution towards step towards digital India.

- **Applications**
  - Similar digitized web applications.
  - On successful authentication sms is sent to user.
  - Useful in providing transparency to both government and consumers.

Figure -1: Types of Ration Card

- **Ration Card Types:**
  - Yellow Card
    1. Below Poverty Line (BPL)
    2. Antyodya Anna Yojna (AAY).
  - White Card
  - Orange Card

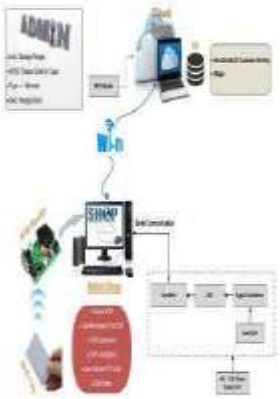
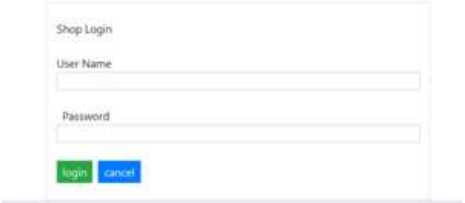


Fig -2: Block Diagram

In this system, the user profile will contain the information n about their family members, the materials which are available and has been received and their price list will also be displayed. By using this 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 as shown in the Fig.2 Block diagram

- **Snapshots:**
  1. Admin Login:

  2. Shop Login:



3. CONCLUSIONS

Using this proposed system we can avoid the corruption in rationing system to a large extent by providing transparency at each level. As there is no manual data stored in books or register, all the data is stored in database hence it is easy for higher authority to cross check the data at any point. So implementing this will be really helpful to targeted people.

Ration card and ration distributions using android app is application software developed to overcome the uncertainties in ration centers. Through this program we are aiming at designing user friendly, multipurpose, efficient and attractive application software.

REFERENCES

[1] Kostecki M., "Waiting Lines as a Marketing Issue", European Management Journal, Vol. 14, No.3, pp. 295-303, 1996\

[2] K.Balakarthik,"Closed-Based Ration Card System using RFID and GSM Technology," vol.2, Issue 4, Apr2013

[3] Ministry of Consumer Affairs, Food and Public Distribution Department of Food and Public Distribution, Annual Plan 2011-12.