EFFECTIVE PUBLIC DISTRIBUTION SYSTEM USING AN ANDROID APP

Mrs Jitha K, Ms Aparna P.T, Ms Aswathi P, Ms Divya P, Ms Fathima shahana

Asisstant Professor, Student, Student, Student. Student

Department of computer Science and Engineering
MEA Engineering College Perinthalmanna.Malappuram,Kerala,India

Abstract:

Android based PDS is a novel approach in public distribution system.Manual work based ration card system leads to various problems like corruption, black marketing etc.

This drawbacks are overcome by using android based smart ration card system. Main features of this application include online purchasing , exchange button, easy to add/remove members. Android based system we propose in this paper will be more specific, accurate and in whole it increases the security of system.The system of providing basic domestic commodities on subsidy to poor families in developing countries like India is an important aspect to meet fundamental requirement of people. The existing public distribution system in Ration shops requires manual measurement of quantity and maintenance of record of transactions. Many problems are encountered by the existing system such as,

1. Ration distribution to unauthenticated card holders.

2. Card holders wasting time in queues for collecting ration for hours.

3. Lots of malpractices such as hoarding, black marketing and overcharging

.4. Human intervention in updating transactions and maintenance of records in ledger is difficult

INTRODUCTION

Government provides food, oil and fuel to economically challenged people at subsidized

rates which are distributed to the public through ration shops. The stocks for these ration shops will be bought from the farmers and then sold at subsidized rates. Every month fresh stock arrives at these shops and that needs to be distributed to public. The owner of most of the ration shops resort to malpractices and the allotted amount

of ration is not distributed to authorized people. To counter these fraudulent activities this system is developed which incorporates the following features.

1. Exchange button (which can exchange monthly ration to needed ones)

2. Add or Remove button (by using this we can easily add or remove person)

3. Online purchasing(UPI)

Public distribution system in the country has undergone organic changes from the rationing system introduced during World War II to an important social safety program to ensure food security of the country. Under the public distribution System (PDS),the central government procures and supplies special essential commodities to fair price at fixed central issue prices. In the past, a number of items like iodized salt, palm oil, candles,

ghee,cloth etc have been distributed through the PDS, however at present department of food and supplies have concerned the fair price distribution to few cereals,wheat, rice, sugar and kerosene oil. At present India has 4,78,000 ration stores operat-ing across many localities,villages, towns and cities in the country making it the largest

distribution network in the world. Department of food and supplies is providing rationcards to the citizens based on their economic conditions. There are mainly two types of cards:

1. Below poverty line (BPL) cards

2. Above poverty line (APL) cards

Against the essential commodities act there are many fraudulent activities going on unfair price shops. Users are forced to wait in long queues for hours together to pur-chase the essential commodities. Card holders and their family member's details are stored in a notebook. Hence each time transaction is made by the card holder, entry had to be made manually in the book. Maintenance of record in book is difficult. Thus, an efficient and automated system is required to minimize the misappropriations.Quantity of ration to be given for these cards is fixed based on the number of members in the card holders family.

The Department of food and supplies enforces control over these provisions under the orders by the Essential Commodities Act, 1955 regulating trade in specified essential commodities by keeping a close watch on stocks, passage, quality and availability of these commodities. Enforcement consists of collection of information and evidence of contravention of provisions of the relevant control orders and action taken against them under the provisions of Essential Commodities Act. India's Public Distribution System (PDS) with a network of 4.78 Lakh Fair Price Shops(FPS) is perhaps the largest retail system in the world.

Major problems due to this system are the inefficiency in the targeting of beneficiaries and the resulting

leakage of subsidies. The TPDS system today supports over 40 crore Indians below the poverty line with a monthly supply of subsidized food grains. The Government of India is having a UID (Unique Identification) number system called AADHAR number,which contains all general information like age, count of family, the fingerprint of the

family, address, contact numbers, bank account information, etc. for every resident in the country. Using the AADHAR number and the contact details, the Government can send a message (SMS) to the individuals, containing information regarding quality and quantity of products allotted to him/her in a respective ration shop.

SYSTEM DESIGN AND IMPLEMENTATION

It will be simple and effective than the earlier system. We can order the items from our home itself by login to this App. Main features are login the App by entering the ration card number. Select the appropriate options for purchasing the product. presss submit button. Here we introduce an exchange button, by which we can exchange monthly ration. Easy to add/remove members is another highlighting feature of ourapp. Give notification properly. Here we introduce an online payment method.

1. User/Citizen

* They have to login with phone number.

* So that they can view there profile and also view notifications.

* Those who are not availing monthly ration can exchange items through exchange button.

* Finally they can add items to cart and purchase items.

* Application form for add/removal of person is available in the portal.

* And the user/citizen have access to fill and submit form to higher authorities.

2. Admin

* Admin also use phone number to login to the app.

* Different scheme applied by the user are visible to the admin.

* They have the role of ration card listing, add new ration shop, shopkeeper listing, additems, add categories,to change order.

* More over they have the access to add user application and item category listing.

* They have the role in giving updation and giving notification regarding items, cate-gories etc.

3. Government employee/Shopkeeper

* They can also login with phone number.

* After that they can confirm order which have been received.

* Finally they have to produce report to the higher authorities regarding items pur-chased, items available etc.

4. Advantages

1. To avoid black marketing.

Effective PDS using android app reduce black marketing to a greater extend

2. To reduce congestion of people in fair price shop.

Online purchasing reduce congestion of peoples.

3. It contains an exchange button.

Exchange button is the main highlighting feature of this android app. Using this we can exchange the monthly ration to the needed one

4.Add or Remove button

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