WEB BASED RATION PROVISIONING SYSTEM IN PUBLIC DISTRIBUTION SHOP

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Abstract— The Government gives different offices to the general population that are underneath the destitution line, yet such offices don't reach to needy individuals because of debasement present in the chain. Among every one of the offices given by Government Of India, The proportion conveyance is most well known in the public arena. For the Ration Material Distribution System (RMDS), the legislature has given diverse sorts of cards to clients as indicated by their destitution lines. In such frameworks clients can purchase proportion materials, for example, Sugar, Rice, Oil, Kerosene, and so on from the apportion shop according to the rate chosen by the administration of India at one time physically. Whenever dispensed apportion isn't bought by the card holders at that point there is a plausibility of abuse of Ration Material by the businessperson. The business person can move the apportion material illicitly in the market with surprising expense and acquire benefit which leads towards defilement.

Keywords— Ration Material Distribution System, poverty, corruption, government, cards, stock availability, modernization, alignment, measuring instruments, automated system, distribution process, beneficiaries, computerization, web application.

1. INTRODUCTION

Administration of India is using Ration Cards to each Indian family to satisfy their day by day dinner needs. The Government of India gives diverse offices to proportionate dissemination for the destitute individuals [1]; however such offices don't reach up to penniless and needy individuals because of the debase present in the dispersion procedure. While doing the writing study, field visit and buyer survey some serious issues are distinguished in the administration apportion appropriation process, for example,

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● Inappropriate alignment of estimating instruments.
● No Modernizing (up-dation) of rate graph.
● Deficiency of data in regards to stock accessibility.

As per government tenets and control, it is obligatory to the customer to create a legitimate apportion card to buy any materials from the administration proportion dissemination organization [2][6]. Directly the apportion circulation process depends on the month-to-month conveyance design. Thus, the stock check is just done toward the month's end. It demonstrates the lacuna for day by day checking of unused or parity apportion material at the conveyance focus. Ordinarily it has been seen that purchasers won't get the best possible amount of material even in the wake of paying full installment. It is because of ill-advised alignment of estimating instruments [3][7]. The third issue in which it has been seen that Gov. of India dependably endeavors to give and appropriate the material with least expense. The expense of material is relying on different elements. This is to be refreshed and pursued by the merchant for dispersion of apportion material, however it doesn't occur really. In this paper the arrangement on all the above expressed issues of the manual dispersion framework are concentrated and relative investigation of various proportion circulation frameworks is introduced. The answers for all above expressed issues can be given if the dispersion framework is a robotized framework in which it ought to be connected with government workplaces, distributors, the proportion card holders for refreshing the stock at wholesaler [4][9]. This programmed methodology of conveyance through atomization in the dispersion framework will be another methodology in modernization. In our past paper we have given the detailed thought of the proportion material dissemination framework yet it was only a fundamental starting module. Our past module has some constraint between times of confirmation, weighting adjustment and databases of the executives. All such constraints can be defeated in a recently created development framework which is point by point in this commitment.

2. LITERATURE SURVEY

Supply of adequate ration or food grains has been a major concern in our country for many decades. Improper measurement techniques, hoarding, black marketing, etc. have been the main reason for supplying food grains in an improper manner. The poor and tribal people have to be benefited with the offers of the Government. But the government of Uttar Pradesh has admitted recently that food grain was diverted to the open market in the last three months through fraud transactions through the PDS scam. The people below the poverty line are affected the most because of corruption and poor monitoring of grocery supply[1][8]. Our project tries to overcome all the limitations caused due to the previous solutions.

A novel application for automating the Public Distribution System was proposed. The Government of India supplies essential commodities for everyday use like food grains (rice, wheat), kerosene (fuel for cooking) etc. to a large number of people by an elaborate machinery called Public Distribution System (PDS). This system currently works on manual processes. In this work, it is proposed that Smart Automated Ration Disbursal System (SARDS) using IoT replace the manual processes in PDS. This system consists of Embedded Controllers for online biometric authentication of the consumer, smart measuring for accurate disbursal of the commodities and real-time updating of data on the server [2][10]. A prototype system to demonstrate its working is built using Arduino and Raspberry Pi controllers. An automatic dispensing system for solid as well as liquid commodities is fabricated and interfaced with the controllers using solenoid valves and sensors. Robust feedback is built into the system using sensors for accurate disbursal of material and detection of theft.
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The E-RATION SHOP idea includes the planning and execution of ration shop computerization. Everyone in the public and private sectors utilizes computers to communicate in today's environment. RATION SHOP is a well-known government entity in charge of overseeing and distributing needed goods to the general populace. To appropriate various items such as rice, sugar, and lamp oil, a common apportion shop structure is employed [4]. One of the problems with the previous ration store system is the user's inability to acquire the right quantity and quality of commodities owing to human measurements. There is also the possibility of lawfully using our items through the traditional procedure. Due to the significant efforts made by government employees at all levels, there are a few bottlenecks and difficulties for the targeted population in getting services. As a result, we suggested that the RationShop website be computerized.

Nowadays buying products from ration shops has become a tedious process due to the long queue, which is time consuming. Smart ration system is the potential solution to overcome the existing challenges. With the help of this application the customers can order their products online and pay for the products online before reaching the shop. Hence, it saves a lot of time standing in queue. Also, the ration workers should update the amount of goods received from the government and available goods frequently [5]. Thus, many fraudulent activities can be avoided by frequently monitoring the goods available in the ration shops. Due to their work some people don’t have time to buy their products regularly so using this application all the people can buy their products regularly. Many people can benefit from this application. This application would be user friendly to all the users. Also, the application comes with an additional feature which is the complaint registration in case of any issues or query to be raised.

The government promotes the structure that includes a chain of stores known as the public distribution scheme. This program aims to provide people with affordable food grains and commodities. Many problems, including availability, overcharging, timeliness, undersupply, illicit smuggling of goods, and corruption, hurt public distribution networks [6]. In our proposed system we aim to implement an e-commerce page for this ration system which makes it easy to shop and reduces the queues in front of shops which is very helpful in the current pandemic situation and also helps to avoid the rush in front of shops. Automated processes are used for client identification, the distribution of goods, billing, data updating, etc.
3. SYSTEM ANALYSIS

3.1 EXISTING SYSTEM
Public distribution system also called ration distribution system is one of the widely controversial issues that involve malpractices. In the existing system, works which include product distribution, ration card entry, product weighing, and product delivery are done manually by FPS (Fair Price Shop) commission agent. The present ration distribution system has drawbacks like inaccurate quantity of goods, low processing speed, large waiting time, material theft in ration shops.

3.2 PROPOSED SYSTEM
The aim of the project is to develop a better, more efficient ration card system using Slots booking system. Automation of the distribution system at the ration shop as well as maintaining the database at one main control station and updating the database so that the shopkeeper does not cheat the poor people are what this project aims at achieving.

3.3 HARDWARE USED
Processor : Intel Core i3 Processor
Speed : 2.5 GHz
RAM : 2GB(min)
Hard Disk : 500MB
Key Board : Standard Windows Keyboard
Mouse : Two or Three Button Mouse
Monitor : LCD

3.4 SOFTWARE USED
Operating System : Windows 7/8/10
Application Server : Tomcat 6.0/7/8.X
Front End : Java, HTML, CSS
Scripts : JavaScript.
Server side Script : Java Server Pages
IDE : Netbeans
Back End : MYSQL 5.0/HeidiSQL 8.1
Database Connectivity : JDBC

3.5 LIST OF MODULES

I. USER:
● Login
● View card details
● Purchase required products

II. RETAILER:
● Login
● View Users
● View available products
III. ADMIN:
- Login
- Add user and employee
- View user
- Add products

MODULE DESCRIPTION: USER:
login: Add Products:
Admin can add the new products and update the quantity of the products.

4. DATA FLOW DIAGRAM

In this module, users need to login themselves in order to access the application. This module gets some details of the user and stores it into a database for future access.

View card details:
View card details module enables our customers to view their profile details—name, city, email ID, mobile number, Card Number.

Purchase required products:
The Products module is a catalog of the products and services offered by the Government. Users can buy their required products.

RETAILER:
login:
In this module, employees need to login themselves in order to access the application. This module gets some details of the user and stores it into a database for future access.

View Users:
In this module, The Retailer can view the list of user details are name, city, email ID, mobile number, Card Number. View available products:
In this module, The Retailer can view the list of available product details and of available product quantity.

ADMIN:
login:
5. **SYSTEM ARCHITECTURE:**

In this module, users need to login themselves in order to access the application. This module gets some details of the user and stores it into a database for future access.

**Add Users and Employees:**
Admin Module can Add the users and Retailers with username, password and Card Number.

**View Users:**
In this module, The Retailer can View the list of user details are name, City, email ID, mobile number, Card Number.

6. **RESULTS AND OUTPUT**
SYSTEM ARCHITECTURE:
In this module, users need to login themselves in order to access the application. This module gets some details of the user and stores it into a database for future access.

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RESULTS AND OUTPUT
USER PURCHASED ITEMS

EMPLOYEE VIEWING USERS PROFILE

ORDER CONFIRMATION
7. CONCLUSION AND FUTURE ENHANCEMENT

CONCLUSION
In this paper, the advance ration material distribution system is discussed. The survey has been carried out in which it has been found that no state government in India is presently distributing the ration with a complete automated distribution system. During analysis of the existing ration distribution systems, some of the problems were identified such as improper calibration of measuring instruments, No update of rate chart and inadequacy regarding stock availability at distributor to Customer and DSO. All such problems can be overcome with some modification in the system. All such modifications were discussed in the presented work. The presented system will be a new approach to modernization of villages and will be helpful for controlling the unethical practices in the public ration distribution system. Due to continuous monitoring and data collection the system will play an important role in Disaster management.

FUTURE ENHANCEMENT
- Deploying the project in the cloud.
Making it available in a mobile browser.

Providing more security.

REFERENCES


