SMART CARD BASED DISTRIBUTION SYSTEM USING NFC TECHNOLOGY

Karan Patil[1], Kunal Nalawade[2], Roshan Sawant[3], Prof. K.K.Tripathi[4]

[1,2,3] Students, Dept of Computer Engineering, SSJCOE, Dombivli, India
[4]Prof, Dept of Computer Engineering, SSJCOE, Dombivli, India

---***---

Abstract - *Ration card has a critical part in each home and is utilized for different field, for example, relatives points of interest, to get gas association, it go about as address evidence for different purposes and so forth. Every one of the general population having an apportion card to purchase the different materials (sugar, rice, lamp oil etc.) from the Ration shops. Yet, in this system having two disadvantages, initial one is the incorrectness in the heaviness of the materials because of human errors and besides, if not purchase the materials toward the finish of the month, they will deal to others with no suggestion to the administration and clients. In this paper, proposed a Smart Card Based Public Distribution System utilizing NFC (Near Field Communication) innovation rather than Ration cards. To get the materials in Ration shops we have to demonstrate the NFC tag into the NFC support mobile, at that point check the client details in the card. After check, these systems demonstrate the sum points of interest. The system is set at each Ration shop which is associated with the server through web. The client require not to pay the hard cash as the suitable adjust is deducted from client's financial balance, so there is no immediate contribution of Ration shop proprietor in exchange. The exchange details are sending to clients portable. The administration can have general control and checking at each Ration shop through web. This system can diminish conceivable human mistakes and give precise data of open conveyance system anytime.*

*Key Words***: *SmartRationCard, Smartphone, NFC Card, Login, Unique Identity.*

1. INTRODUCTION

Public Distribution System is government based chain of shops that works for the dissemination of essential items to the destitute areas of the general public at extremely cheap costs. Rice, lamp oil, sugar, and so forth are the real items conveyed by general society circulation system. The customary system has oftentimes been scrutinized for occurrences of corruption and black marketing. In this paper, we proposed an idea on programmed ration materials circulation in light of NFC innovation to stay away from the downsides of present Public Distribution System. The NFC card is going about as Ration card. Smart card is anything but difficult to convey and to utilize and to utilize. The smart card regularly contains details of a family, family head photograph, card number and versatile number of relatives. At the point when the individual comes to ration shop, they can swipe the card and affirm their character. In the proposed system smart card is given to all ration card holders. In this card contain every details of shopper. The client entered the ration shop and

they swipe the card. After approval process was effective they are permitted to buy items. The arrangements of purchased items are sending to their enrolled portable number. In this there is no sort of abuse are finished. At whatever point approval process will be achievement then just the rundown of items will showed. Notwithstanding that the aggregate sum of accessible amount and the aggregate sum of stock offer is likewise shown. After every exchange the check will be diminished. After every exchange the points of interest of the materials permitted is refreshed. At the point when the bookkeeper refreshes the products details specifically shop they are refreshed in neighborhood system. At that point the merchandise is exchanged to that shop. The shopkeeper can't ready to change any details. It is easier to understand to uneducated individuals moreover.

2. Literature Survey

Advancement of open dissemination of essential products in India had its starting point in the rationing system presented by British during the World War II. The system was begin in 1939 in Bombay and slowly reached out to different urban areas and towns. Before the finish of 1943, 13 urban areas had been brought under the scope of apportioning and roughly 771 urban communities or towns were canvassed in 1946. Some provincial regions, experiencing incessant deficiency were likewise secured. Since there Public Distribution System is following a similar example. There are just little change is occurring in the field of Public Distribution System.

One of the proposed ideas of computerization of ration shop depends on unique finger impression module [2]. In the proposed system smart card is given to all ration card holders. In this card contain every one of the points of interest of purchaser including thumb impression. The client entered the proportion shop and they swipe the card and furthermore confirm the thumb impression. After approval process was fruitful they are permitted to buy items.

Another proposed idea is to supplant the manual work in broad daylight dispersion system. The ration dispersion system is robotized by utilizing PLC, which is like ATM machine [3]. This robotized ration system replaces the regular ration system by utilizing smart card. Likewise, the unique mark finder is put in the system in request to check the right client get to. On the off chance that the client is right, at that point the info can be given in the touch screen. At the point when the items are gotten from the robotized ration shop, sum is taken from the financial balance of the specific individual. The implanted controller

is pre-customized in such an approach to play out the comparative tasks. In this robotized ration shop the administration control exchanges that happen in ration shop. With a specific end goal to include government, the proposed ration shop system is associated with the administration database through GSM modules, which additionally sends the day to day data to the administration and the buyer. For the proficient task and monetary requirements of the system, the power supply unit is interchange to sunlight based power system.
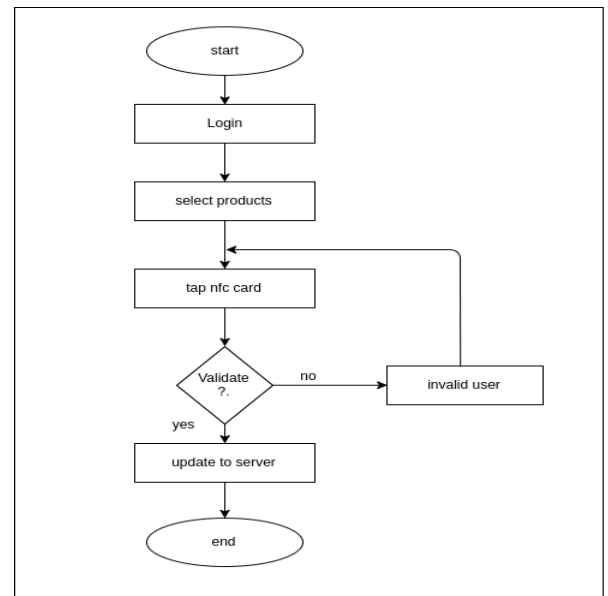
3. PROPOSED SYSTEM

The proposed system comprises of two units. Server and Client unit. In this android application is use for smart card location smart card is considered as ration card of client. In numerous system additional equipment is require for the NFC perusing yet for this situation retailer is utilize Smart telephone for this it will help for drift estimation or cost cutting. The server will totally control the exercises like client ID, cautioning the clients and in addition shop proprietor at the entry of grains and refreshing the database. The Admin have general access to Server unit by signing into the system. Administrator can perform different undertakings which are under his control. The second unit is customer unit which is put at the ration shop. Client will interface to the system by this unit and furthermore the client enlistment process is finished by our system at customer unit which is associated with server through android application.

- Registration of a new Ration Card.
- Cancellation/modification of ration card.
- Identification of Inactive Cards (Bogus Cards)
- Shop wise allocation and per card allocations.
- Change in member data for each ration card.
- Complaint Monitoring System.
- Feedback mechanism.
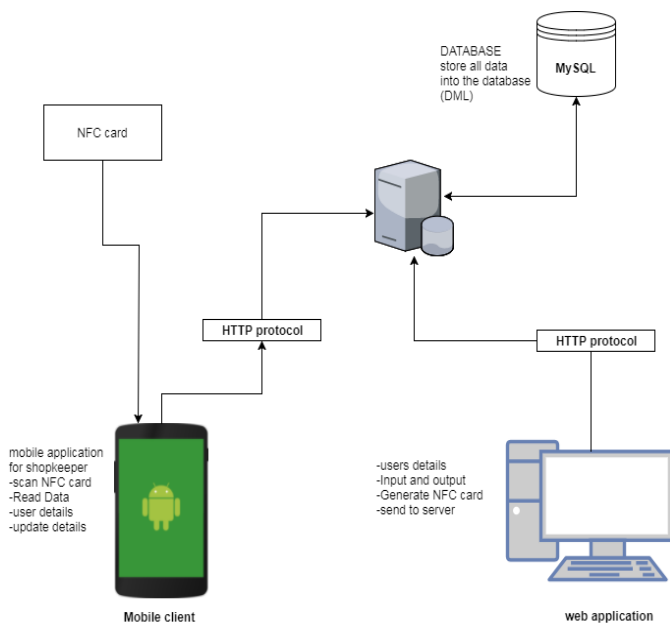
4. FLOWCHART

Algorithm for the proposed system has four steps as follows.

Step 1: Each and Every consumer should be provided with a NFC based ration card which is certified by the government.

Step 2: When ration distribution starts, select quantity and product proceed.

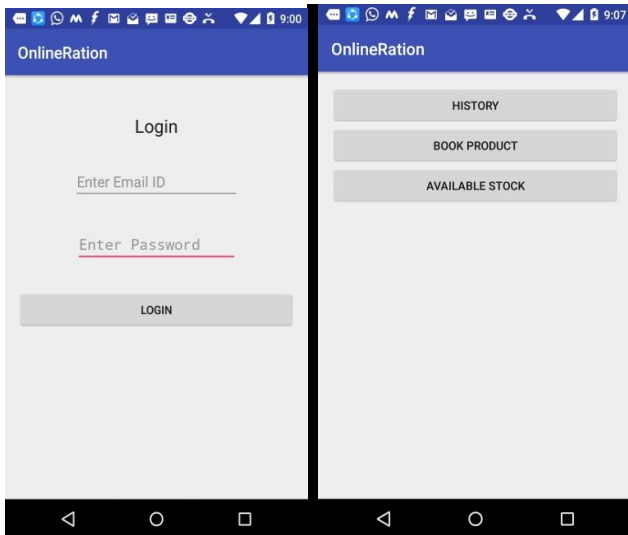Step 2: Then customer needs to tap the NFC card and enter the password.

Step 3: If the password matches then the system starts.

Step 4: Once the verification is successful, user history generated and it save to server.

5. RESULTS

User Login

In the proposed system smart card is given to all ration card holders. The client entered the ration shop and they swipe the card. After approval process was effective they are permitted to buy items. The arrangements of purchased items are sending to their enlisted portable number.

Admin Login

In these proposed system admin login with their username and password.

Admin add the new ration card holder to database.

Admin add new distributor (Shopkeeper) to database.

6. CONCLUSION

Programmed ration system is a propelled ration system that in light of NFC innovation. In this proposed system, NFC tag is utilized rather than ration cards. This system has more prominent scope in future. This system has no manual information put away and all data is put away in database, the higher expert can check the details and when it's vital through the utilization of servers. The disadvantages of the current system are corrected by this technique.

REFERENCES

[1] Jhani Bhasha Shaikl, Mazhar Hussain Shaik, "Voter Identification and Detection System using RFID and GSM", International Journal of Innovative Research in electrical, Electronics, Instrumentation and Control EngineeringVol. 2, Issue 6, June 2014.
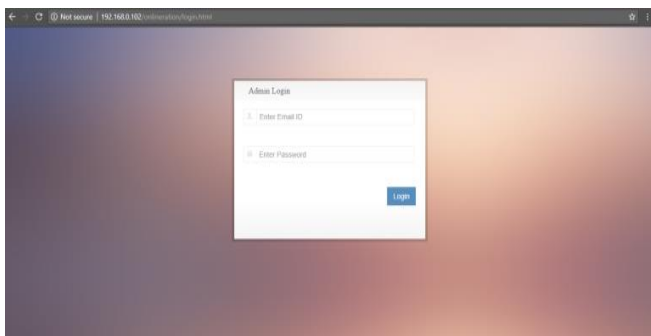
[2] S. Nandhini1, P. Premkuma, "Automatic Toll Gate System Using Advanced RFID and GSM Technology", International Journal of Innovative Research In Electrical, Electronics, Instrumentation and Control EngineeringVol. 1, Issue 8, November 2013.

[3] S. Valarmathy, R. Ramani, "Automatic Ration Material distributions Based on GSM and RFID Technology", International Journal of Intelligent Systems and Applications, vol 5,pp. 47-54, Oct 2013.
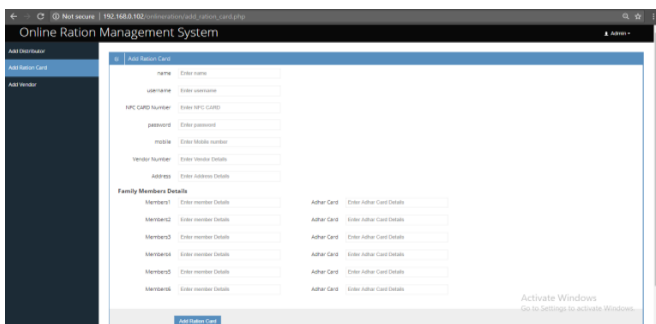
[4] Rajesh Pingle, P.B.Borole and Sagar Patkar, "Simulation and Results of Automatic Rationing for Public Distribution System (PDS)", International Journal of Emerging Trends in Electrical and Electronics, Vol. 5, Issue. 3, July-2013.

[5] Mahammad Shafi, K. Munidhanalakshmi, "e–Ration Shop: An Automation Tool for Fair Price Shop under the Public Distribution System in the State of Andhra Pradesh", International Journal of Computer Applications (0975 – 8887) National Conference on Computational Intelligence for Engin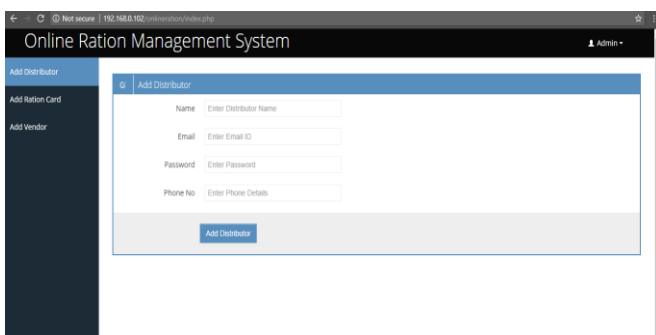eering Quality Software (CiQS- 2014)