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ELECTRONIC RATION 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 individuals because of debasement present in the chain, among every one of the offices given by govt. 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. Each card has a different set of products with respective quantities which are enabled with qr code to get details of the family. However, there are concerns about the efficiency of the distribution process. In order to make it efficient and improve the current system of pds, we are implementing an e-ration shop. Here we are going to make a website for shopping purposes. Using this website, ration card holders can choose their grocery items online. E-ration shopping's a system developed to dispense the correct quantity of ration to the card holders depending on the type of card and the number of members in the family, and also maintain the details of transactions in a database, which saves the time of the public and maintains an integral record in the server. The website asks for login credentials and the users are made to choose their commodities based on the availability of goods. The main reason for using this website is to make this process computerized and to remove the drawbacks of the present way of issuing products based on the ration card.

1. INTRODUCTION*:*

The Indian government offers a range of benefits to those who fall below the poverty line, but because of systemic corruption, these programs frequently do not reach the intended recipients. The Ration Material Distribution System (RMDS) is one of the most important services provided to guarantee food security. The government has implemented many ration card kinds according to family income levels in order to control the distribution of necessities. Every kind of card has a unique set of rights, such as certain goods and amounts, and is frequently furnished with a QR code that keeps track of family information for validation.

Nonetheless, the conventional distribution method has encountered noteworthy obstacles associated with inadequacy, dishonesty, and poor administration. Some fair price shop (FPS) dealers transfer the items to the open market, so that many qualified receivers do not receive their full share of commodities. The issue is further made worse by manual record-keeping and a lack of transparency.

Here, we suggest creating an e-Ration Shop in order to solve these problems and enhance the Public Distribution System's (PDS) effectiveness. A website will be established as part of this scheme so that ration card holders may choose and buy the groceries they are allotted online. The purpose of the e-Ration Shop is to guarantee that ration supplies are distributed correctly according to the kind of card, the size of the family, and the availability of goods. It will also maintain a detailed record of transactions in a centralized database, allowing for better monitoring and reducing the potential for fraud.

Users will need to utilize their login credentials to access the e-Ration Shop before they can choose the necessary commodities. Based on their ration card, the system will automatically determine the kind and quantity of things they are entitled for. This method guarantees a transparent, effective, and well-documented distribution procedure while also saving consumers time. By bringing the system online, we want to eliminate the flaws in the present manual procedure, minimize corruption, and guarantee that the PDS's advantages are immediately received by the appropriate parties.

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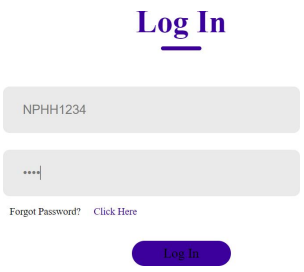
2. LITERATURE SURVEY

Despite a number of improvements, the literature indicates that issues with inefficiency, corruption, and a lack of transparency still plague the PDS in India. Utilizing digital solutions to address these problems, such as online platforms, biometric verification, and QR codes, has showed potential. But there are still gaps, especially when it comes to data security, supply chain management, and user experience.

The next natural step in enhancing the PDS is the planned e-Ration Shop system, which enables recipients to order and receive their rations online. Through an e-Ration Shop, food distribution may be made more transparent, efficient, and accessible to those who need it most by utilizing technology advances like blockchain and real-time monitoring, as well as lessons learned from previous e-governance efforts.

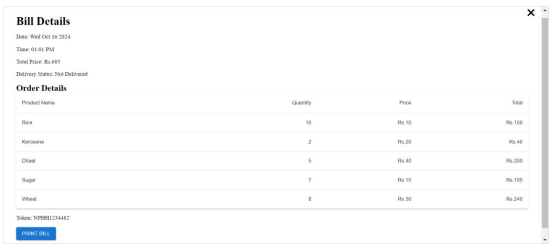
3.PROPOSED SOLUTION:

Individuals can access their accounts by entering their unique card ID and password, thereby ensuring security and providing the option to change the password if it is forgotten.

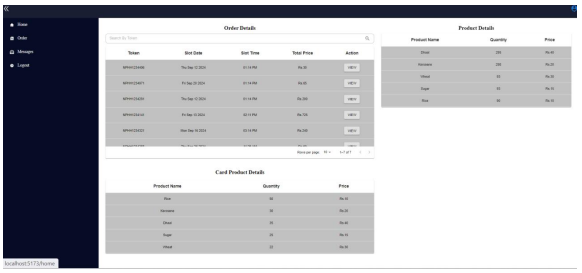


Individuals can arrange for the necessary products and their respective quantities in accordance with their card type. Furthermore, they have the option to select a convenient date and time for collecting the products from the store.

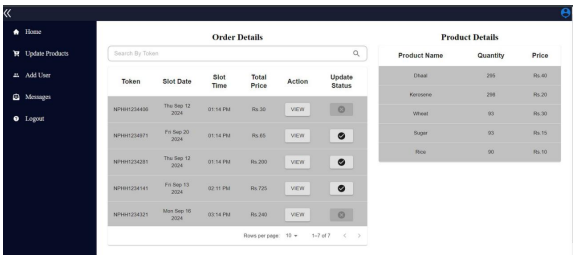
Following the successful placement of an order, a bill is issued that features the unique token ID, the specified date and time for product collection, the overall cost of the order, the delivery status, particulars of the ordered items, and an option to print the bill.



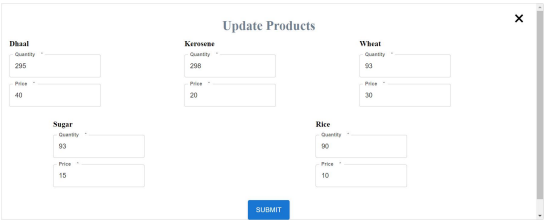
Within the users dashboard, users have the capability to view all relevant order details, such as the token ID, the date and time designated for product collection, and the total amount payable. A button is available for users to access and print the full details of an order. The dashboard is equipped with a search bar that facilitates the search for orders by token ID. Additionally, users can view the products that are available in the respective store as well as those that are in their cart.



The admin dashboard grants administrators the ability to review all essential order details, including the token ID, the designated date and time for product collection, and the total amount payable. Administrators can also update the delivery status to "delivered," a change that is permanent and requires proper validation through the token ID along with the total cost of the order. A button is available for the admin to view and print the complete order details. Additionally, the dashboard is equipped with a search bar that allows for the retrieval of orders by token ID. Furthermore, administrators can access information regarding the products available in the respective store.



The administrator is permitted to adjust the quantity and price of products solely by incrementing these values for the designated store, and this change will be visible to all cardholders linked to that store.



The role of the administrator includes the addition of new cardholders and the revision of details for existing cardholders. To facilitate the creation of a new card, the administrator must provide the card ID, card type, password,

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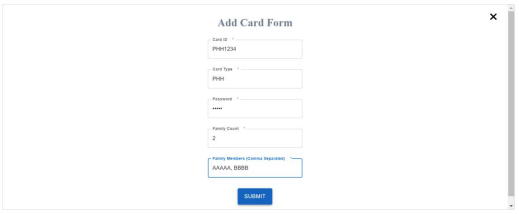
family count, and the names of family members. Existing cards can also be updated by either adding new family members or removing those who are no longer associated.

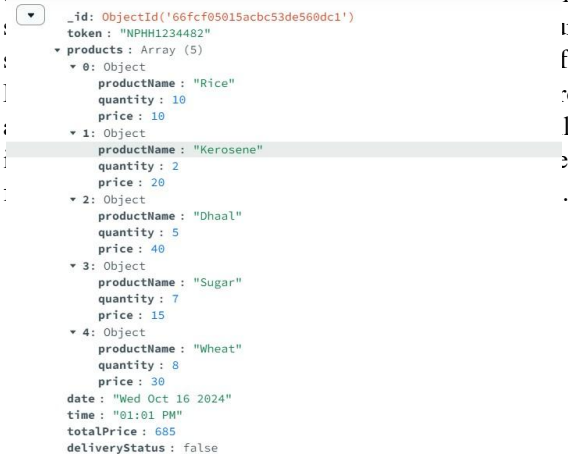
This system is allows user to purchase the products availing to his/her card and allows them to purchase the quantity they need and reorder the product if it is available within the same month.After placing an order , a token is generated with a bill which is used to get the order from the shop.The user can view all orders he/she placed and check status of the order.User can view the products avail in the shop.



The Admin can add a new card to the system and update product details and view all orders and update the order status.

4.DATABASE SCHEMA:

MongoDB architecture is used here for storing the user information and all the necessary details. MongoDB facilitates horizontal scaling, which is advantageous for effectively managing increasing data volumes. Its document-oriented architecture supports dynamic schemas,



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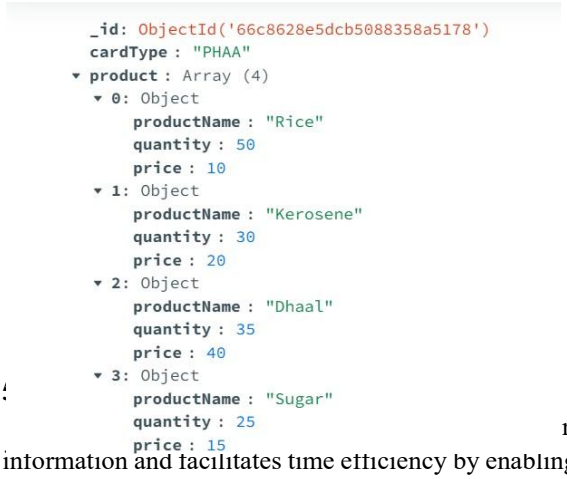

roduct information and facilitates time efficiency by enabling orders to be placed from any location while allowing users to select the desired quantity of products. It mitigates corruption and unethical practices within the store by promoting transparency. Additionally, it simplifies the ordering process for individuals and effectively manages the Public Distribution System.

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