VIRTUAL QUEUING SYSTEM FOR RATION AND RATION CARD DISTRIBUTION USING AN ANDROID APP.

PROJECT REFERENCE NO: 39S_BE_0841

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KEYWORDS:
Ration card, Ration, Virtual queue.

INTRODUCTION:
Distribution of Ration card and ration items to public is the duty of government, which need to be done in proper way mainly for below poverty level (BPL) people it is must essential to properly distribute ration cards and after that issue ration items . Ration card is also used for recognizing the people of the city or state like a voter card it is also very essential for those who are not had voter card they at least had ration card for their identification.

Basically ration card is distributed by the food authorization office which is related to area wise.

OBJECTIVES:
The objective of the project is to design a both website and android app which would provide the following facilities.
1. Get the notifications details of food office using android app.
2. Send the request to get the new ration card and get the date details regarding when to go for taking photos by virtually generating token number.
3. Get the status of ration card details as and when required by the web site or by using android app.
4. By using this app, people can register to get ration items in each month.
5. This system generates the virtual queue for the ration item distribution according to the requests.
6. Transition of manual to automated system.
7. By using this system we can save the public time by reducing waiting time for ration card and ration item distributions.
METHODOLOGY:
During Requirement Collection and Analysis Phase of the Project/Software Development until we finalize the requirements we cannot start the actual development of the project. This is done by the model Prototyping Process Module.

1. **Incremental Process Module**
   i. After requirements are finalized, then we can choose incremental way of software model to develop the Project /Software since we are not able to build all modules of software at once. Therefore, we choose incremental process module for software development.

2. **Iterative Process Module**
   i. This Process Is Implemented in All Individual Module, The Design and Develop is started initially and it go on repeat until Module Design and Develop Completed of one module. After that only we are choosing next Module for Design and Develop.

3. **Block Diagram:**
Use Case Diagram
Use Case Diagram for Food Office Administrator

Use Case Diagram for Public

Login to the Server
Enter To the Server
Add new Ration Card
View all Ration Card
View Requested Ration
View Ration Distribution
View all ration card

View all Ration card Holder details
Request for new ration card.
Check out the status as data & time of queue
Request for ration distribution
View the queue details
4. **SMS Manager Module**
   Text messaging, or texting, refers to the exchange of brief written messages between fixed-line phone or mobile phone and fixed or portable devices over a network.

**RESULTS:**
An android application and web application should be developed for receiving the ration card and ration from organized societies.

1. By using this android app, customers can create a queuing system for ration in the ration centre, instead of making manual queue in the ration centre.
2. Customers can register queues for particular month's ration, and this creates an automatic queue in first-in-first-out process in the app.
3. It automatically creates a distribution queue, meaning per day how much ration centre can issue ration depends on how much possible customers can get the service is identified by the app itself and also it gives alert SMS regarding the day on which customers should come for ration to the ration centre.
4. Customers can also get the details about the availability of rations in the ration centre.
5. Customers can also get the number of people already in queue and when they need to go to bring ration to the ration centre.
6. By using this app, we also inform about the next ration issuing dates through SMS.

**CONCLUSION:**
Virtual queuing system for 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.

Finally, we hope and trust that the work done by us for “Virtual queuing system for ration card and ration distributions using android app” is best and also this project is easy and safe to use.

**SCOPE FOR FUTURE WORK:**
Virtual queuing system for ration distributions using android app is application software to overcome the uncertainties which had occurred in the ration center i.e. in FPS. The drawbacks i.e. manual process, time consumption, stock corruption etc. will be overcome by the app. Perhaps, in future we will try our best to develop an option of money payment for ration instead of paying at FPS to control corruption and loss to the government.