NITTE EDUCATION TRUST | N.M.A.M. INSTITUTE OF TECHNOLOGY
(An Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)
Nitte – 574 110, Karnataka, India
(ISO 9001:2015 Certified), Accredited with 'A' Grade by NAAC
☎: 08258 - 281039 – 281263, Fax: 08258 – 281265
Department of Computer Science and Engineering
B.E. CSE Program Accredited by NBA, New Delhi from 1-7-2018 to 30-6-2021

Report on Mini Project

Smart Ration Distribution System

Course code: 18CS502

Course Name: Database Management Systems

Semester: V SEM Section: C

Submitted To:

Ms. Ankitha A Nayak

Assistant Professor
Department of Computer Science and Engineering

Submitted By:

Name: Prathvik Shervegar **USN:** 4NM18CS119
Name: Pranav Adiga P **USN:** 4NM18CS114
Name: Rohan Jogihalli **USN:** 4NM18CS136

Date of submission: 26-12-2020

Signature of Course Instructor

ABSTRACT

The main objective of our project is to provide authentication to the ration System to avoid black marketing. Every month fresh stock arrives at these shops and that needs to be disbursed to public. Typically the ration shop owners play foul and the ‘right amount is not disbursed’ or ‘disbursed to unauthorized people’ or ‘sold out at higher rates’. To counter these fouls, we are taking some measures like introducing the smart cards. However this can also be circumvented by the wrong doers and use the same card for issuing to unauthorized people as the card owner need not be present at the time of the ration disbursement. At this point we propose a Smart Ration Distribution 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 shop.

TABLE OF CONTENTS

INTRODUCTION

- The ration card management system is to automate all operations in a ration shop. In existing system all actions in the ration shop was performed by manually.
- Due to the manual entry through paper work in the books duplicate entry or wrong entry may occur in the existing system, resulting in wasting time and resources.
- Here in the proposed system we develop software for ration card management system which provides the automation on working of the ration shop. That means it provides the facility to the customer of the shop to purchase goods from the shop without any complexity.
- The modules included in this project are stock management and account management, family details, distribution based on category.

PROBLEM STATEMENT

The current method of ration distribution is manual entry through paper work in the books which leads to duplicate entry or wrong entry may occur in the existing system, resulting in wasting time and resources.

OBJECTIVES

The objective of the project is to automate the task of distribution of items efficiently. The project is aimed to stop corruption and discrepancies created in distribution shops. Here the system must perform the following.

- Validate the ration smart card of the beneficiaries.
- Validate the right beneficiaries.
- Avoiding irregularities in distribution of grains.
- Stock maintenance in the distribution center.

SOFTWARE REQUIREMENTS

Front end – HTML, CSS, Java Script, Bootstrap

Database – MySQL(phpmyadmin)

Back end – PHP

Source code and Database are managed using Visual Studio Code & XAMPP Control Panel

LITERATURE REVIEW

- **Comprehensiveness**

Complete institutional coverage with respect to organization and functions as provided at the closest possible point of knowledge.

- **Currentness**

Accuracy of static information enhanced by the currentness of changing information.

- **Client-Orientation**

Responsiveness to requests from the viewing audience by providing e-mail connections.

- **Clarity over Coolness**

Simplicity of page design and directness of hyperlink pathways take precedence over visual techniques that clutter or compromise presentation.

- **Courtesy over Coolness**

The length of time required for a page to load useful information is reasonable.

- **Compatibility without Compromise**

Sensitivity to and support of different browser environments.

- **Cross-Linking and Validation**

Multiple access paths to the same information with a method in place to check the validity of site-wide links.

METHODOLOGY

HTML

HTML is a hypertext markup language which is in reality a backbone of any website. Every website can't be structured without the knowledge of html. If we make our web page only with the help of html, than we can't add many of the effective features in a web page, for making a web page more effective we use various platforms such as CSS. So here we are using this language to make our web pages more effective as well as efficient. And to make our web pages dynamic we are using Java script.

CSS

CSS Stands for "Cascading Style Sheet." Cascading style sheets are used to format the layout of Web pages. They can be used to define text styles, table sizes, and other aspects of Web pages that previously could only be defined in a page's HTML. The basic purpose of CSS is to separate the content of a web document (written in any markup language) from its presentation (that is written using Cascading Style Sheets). There are lots of benefits that one can extract through CSS like improved content accessibility, better flexibility and moreover, CSS gives a level of control over various presentation characteristics of the document. It also helps in reducing the complexity and helps in saving overall presentation time.

JAVA SCRIPT

JavaScript is considered to be one of the most famous scripting languages of all time. JavaScript, by definition, is a Scripting Language of the World Wide Web. JavaScript is one of the most popular scripting languages and that is why it is supported by almost all web browsers available today like Firefox, We used the browser Opera or Internet Explorer. It is often used for the development of client-side web development. JavaScript is used to make web pages more interactive and dynamic. JavaScript is a light weight programming language and it is embedded directly into the HTML code. JavaScript, as the name suggests, was influenced by many languages, especially Java.

BOOTSTRAP

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains CSS- and (optionally) JavaScript based design templates for typography, forms, buttons, navigation, and other interface components. Bootstrap is a HTML, CSS & JS Library that focuses on simplifying the development of informative web pages (as opposed to web apps). The primary purpose of adding it to a web project is to apply Bootstrap's choices of color, size, font and layout to that project. As such, the primary factor is whether the developers in charge find those choices to their liking. Once added to a project, Bootstrap provides basic style definitions for all HTML elements. For example, Bootstrap has provisioned for light- and dark-colored tables, page headings, more prominent pull quotes, and text with a highlight.

PHP

PHP is a very powerful server-side scripting language for developing dynamic web applications. Using PHP, one can build interactive and dynamic websites with ease. PHP script can be embedded straight into the heart of html code. PHP is compatible with various web servers like Apache and the Microsoft’s IIS as well. All the PHP scripts are executed on the server and it supports various databases like MySQL, Oracle, Solid, Generic ODBC etc; however, it is mostly used with MySQL.

MySQL

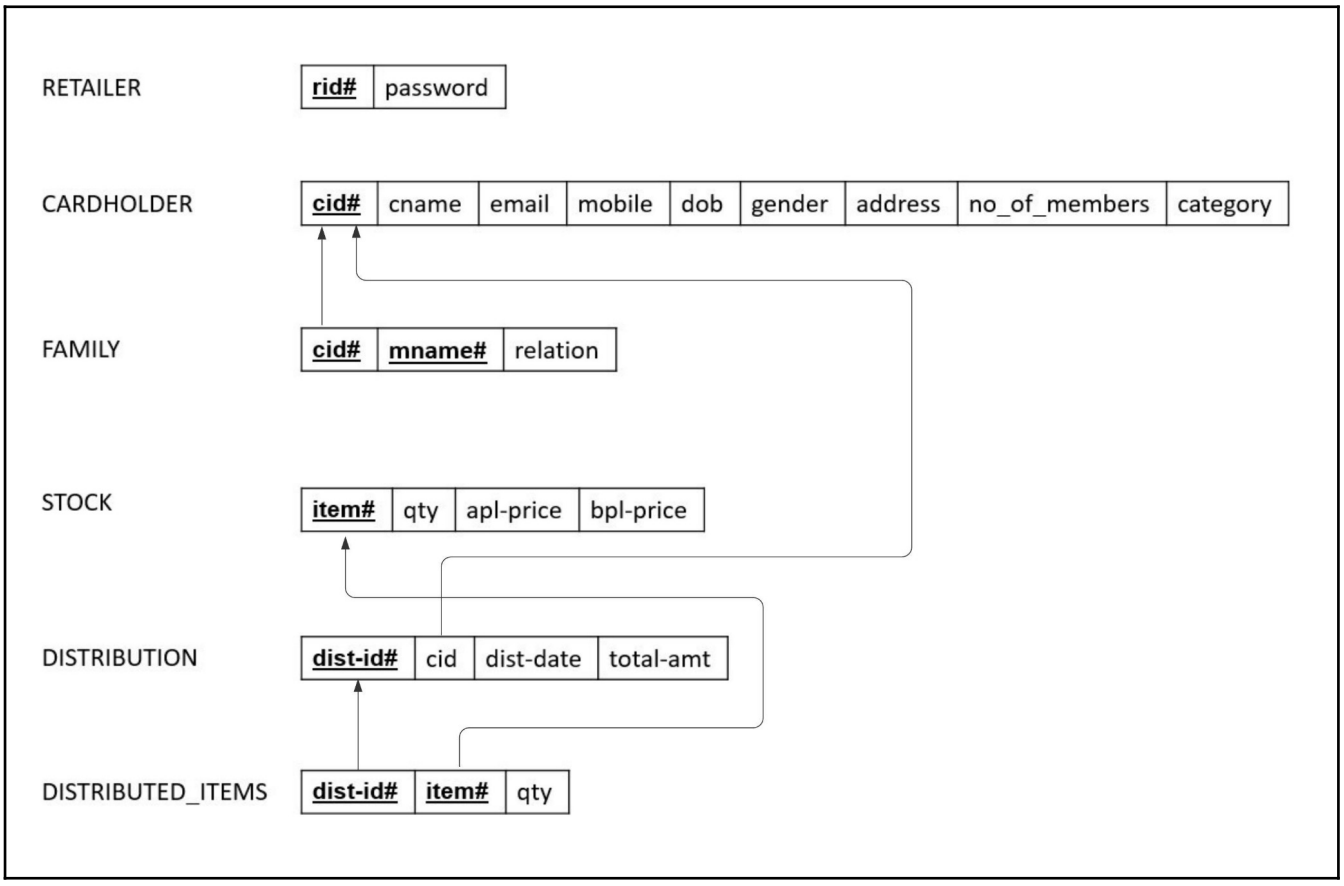
MySQL is the world’s most widely used open source Relational Database Management System (RDBMS) that runs as a server providing multi-user access to a number of databases. The MySQL development project has made it source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. MySQL was owned and sponsored by a single for-profit firm, the Swedish company MySQL AB, now owned by Oracle Corporation. MySQL is a popular choice of database for use in web applications, and is a central development of the widely used LAMP open source web application software stack.

IMPLEMENTATION

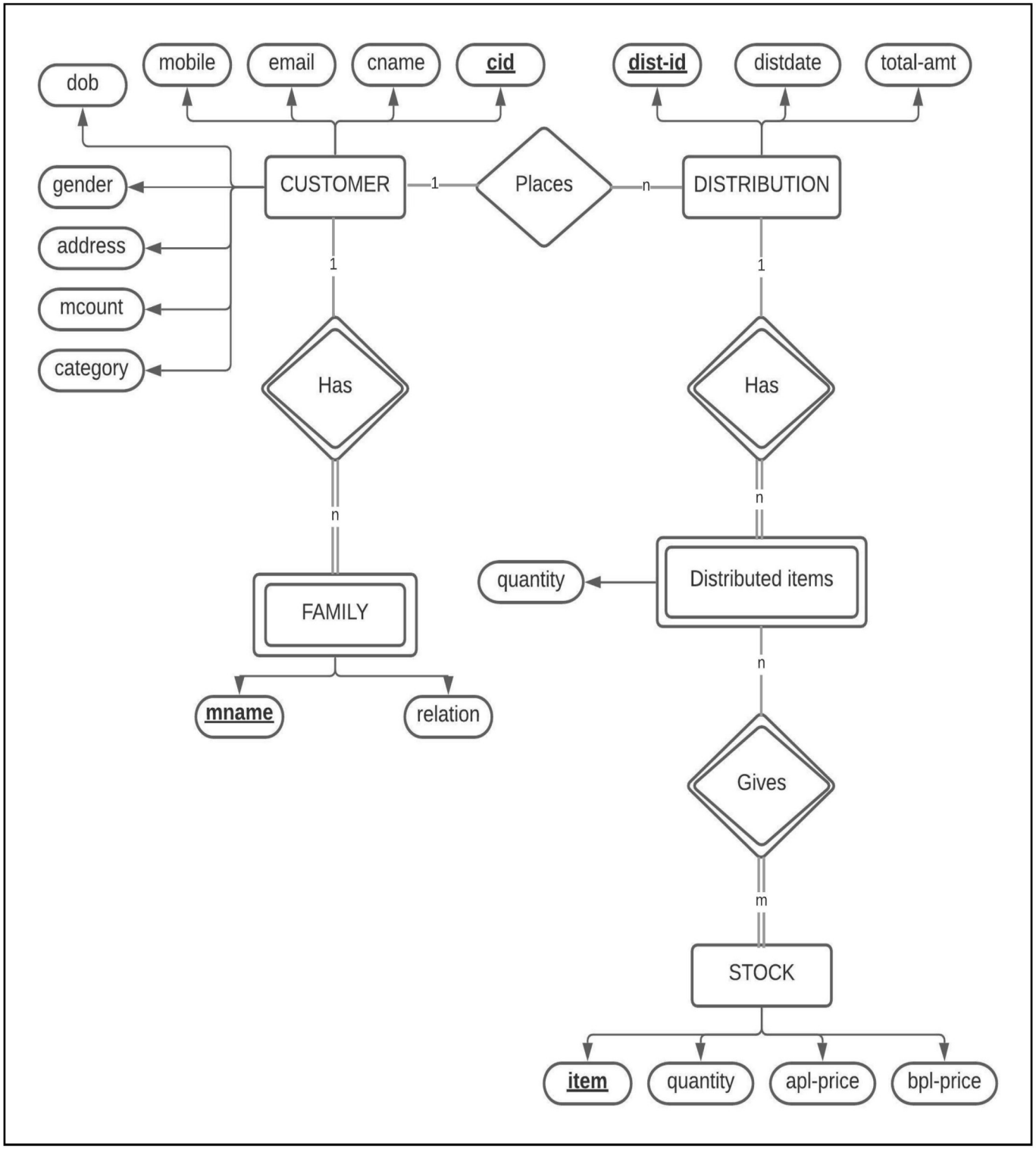
Following relations represents ration distribution

1. **RETAILER** (**rid#**: int, rpass: string);
2. **CARDHOLDER** (**cid#**: int, cname: string, email: string, mobile: string, dob: date, gender: string, address: string, mcount: int, category: string);
3. **FAMILY** (**cid#**: int, **mname#**: string, relation: string);
4. **STOCK** (**item#**: string, qty: int, apl-price: double, bpl-price: double);
5. **DISTRIBUTION** (**dist-id#**: int, cid: int, dist-date: date, total-amt: double);
6. **DISTRIBUTED_ITEMS** (**dist-id#**: int, **item#**: string, qty: int)

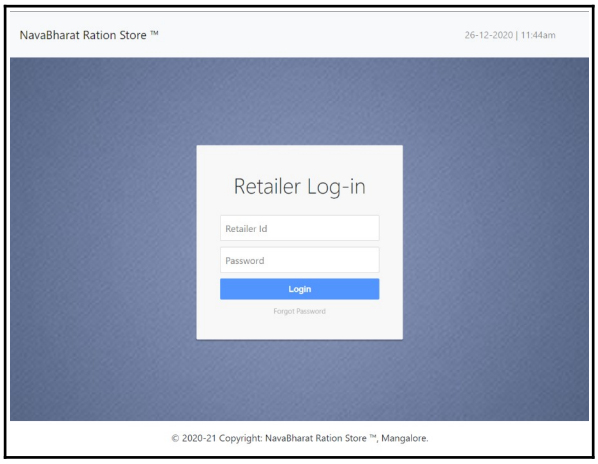
Schema:

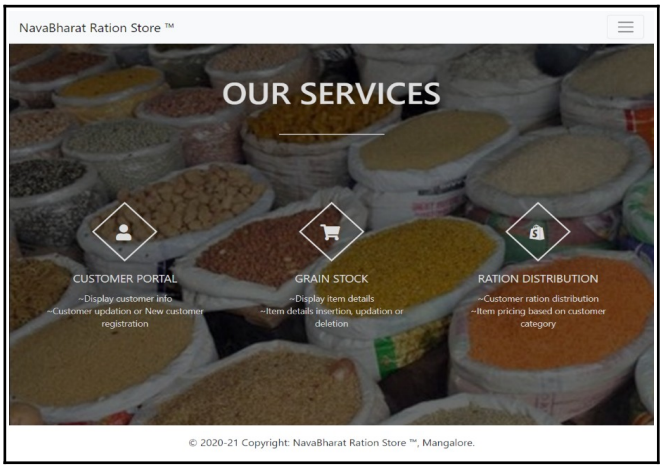


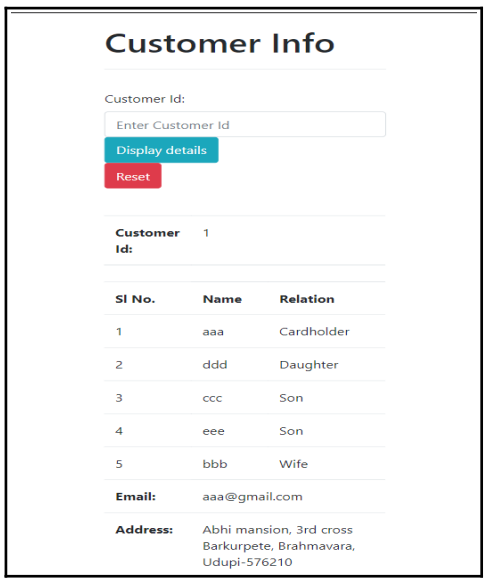
E-R Diagram:

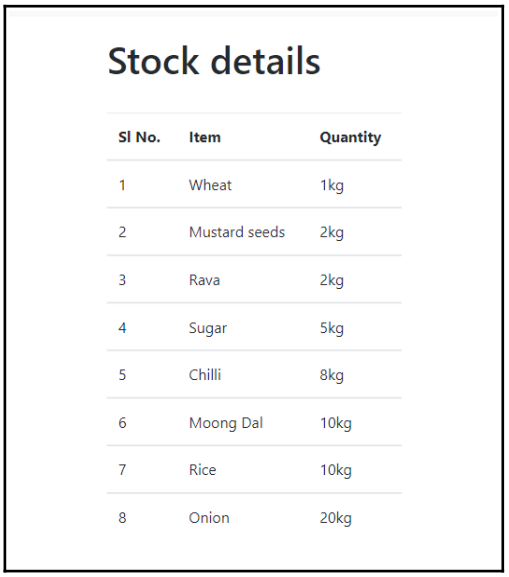

mobile
email
cname
cid
dist-id
distdate
total-amt
dob
gender
address
mcount
category
CUSTOMER
1
Places
n
DISTRIBUTION
1
1
Has
Has
n
n
quantity
Distributed items
FAMILY
n
mname
relation
Gives
m
STOCK
item
quantity
apl-price
bpl-price

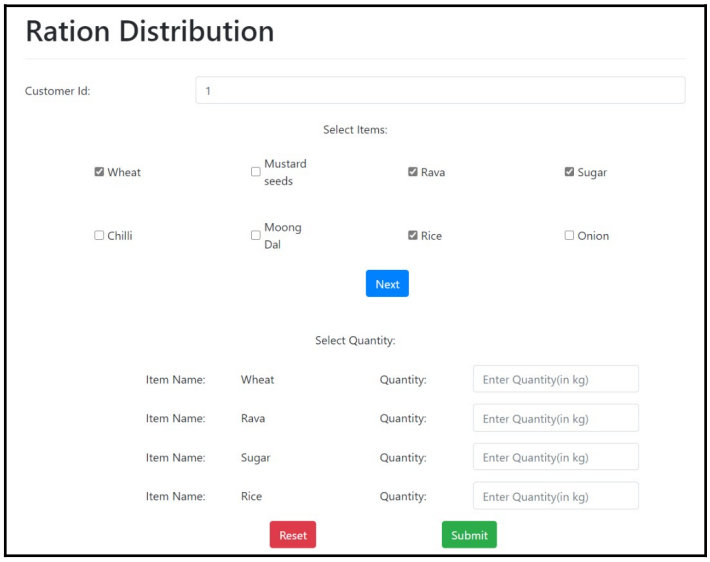
RESULTS


NavaBharat Ration Store ™
26-12-2020 | 11:44am
Retailer Log-in
Retailer Id
Password
Login
Forgot Password
© 2020-21 Copyright: NavaBharat Ration Store ™, Mangalore.


NavaBharat Ration Store ™
OUR SERVICES
CUSTOMER PORTAL
~Display customer info
~Customer updation or New customer registration
GRAIN STOCK
~Display item details
~Item details insertion, updation or deletion
RATION DISTRIBUTION
~Customer ration distribution
~Item pricing based on customer category
© 2020-21 Copyright: NavaBharat Ration Store ™, Mangalore.


Customer Info
Customer Id:
Enter Customer Id
Display details
Reset
Customer Id: 1
Sl No. Name Relation
1 aaa Cardholder
2 ddd Daughter
3 ccc Son
4 eee Son
5 bbb Wife
Email: aaa@gmail.com
Address: Abhi mansion, 3rd cross Barkurpete, Brahmavara, Udupi-576210


Stock details
Sl No. Item Quantity
1 Wheat 1kg
2 Mustard seeds 2kg
3 Rava 2kg
4 Sugar 5kg
5 Chilli 8kg
6 Moong Dal 10kg
7 Rice 10kg
8 Onion 20kg


Ration Distribution
Customer Id: 1
Select Items:
Wheat
Mustard seeds
Rava
Sugar
Chilli
Moong Dal
Rice
Onion
Next
Select Quantity:
Item Name: Wheat Quantity: Enter Quantity(in kg)
Item Name: Rava Quantity: Enter Quantity(in kg)
Item Name: Sugar Quantity: Enter Quantity(in kg)
Item Name: Rice Quantity: Enter Quantity(in kg)
Reset
Submit

CONCLUSION AND FUTURE SCOPE

- For better understanding, an interface and website can be made available in different languages (regional languages).
- For the ease of use, an application can be built for the same.
- The site can be developed for the beneficiaries to check the commodities available.

REFERENCES

[1] W3Schools Web Tutorials - www.w3schools.com

[2] Stack Overflow - www.stackoverflow.com

[3] Bootstrap - www.getbootstrap.com

[4] Visual Studio Code Editing Redefined - code.visualstudio.com

[5] XAMPP installers and tutorials - www.apachefriends.org

[6] Tuts Mate PHP registration validation - www.tutsmake.com/simple-registration-form-in-php- with-validation/