

Software Requirement Specification for Mess groceries stock maintenance

Name	Kavipriya V
Roll no	7376221CS195
Seat no	57
Project ID	17
Problem Statement	Mess groceries stock maintenance

1. Introduction

1.1. Purpose:

The purpose of this project is to develop a web-based portal for mess grocery stock management. This system will automate, maintain and streamline the entire grocery management process for our college mess, improving efficiency,time saving and reducing costs.

1.2. Scope of Project:

- This software system will serve as a portal for the Mess Manager and Admin. Individual mess managers update the grocery stock, request for the grocery and can return the grocery if the quality is not good.
- Admin or incharge of all messes have the ability to approve. Once it is approved, the admin can put purchase orders for the groceries that sub

messes need. Once the goods are entered, the admin needs to issue the goods to the sub messes separately and the bill details, date also be maintained. Reports are also generated for PR, PO, goods consumed by sub messes, vendor cost, total purchase report.

2. System Overview:

2.1. Users:

1. Mess manager:

Individual mess managers update the grocery stock, request for the groceries, view the groceries received by the main store and return the groceries if the quality is not good.

2. Admin:

Purpose requests given by the sub messes need to approve. Once it is approved, the admin can put purchase orders for the groceries that sub messes need. Once the goods are entered, the admin needs to issue the goods to the sub messes separately and the bill details, date also be maintained.

2.2. Features:

The portal will encompass the following functionalities:

- **Indent Management:**

- Raise indent entries for required groceries.
- Approval for submitted indents.

- **Order Management:**

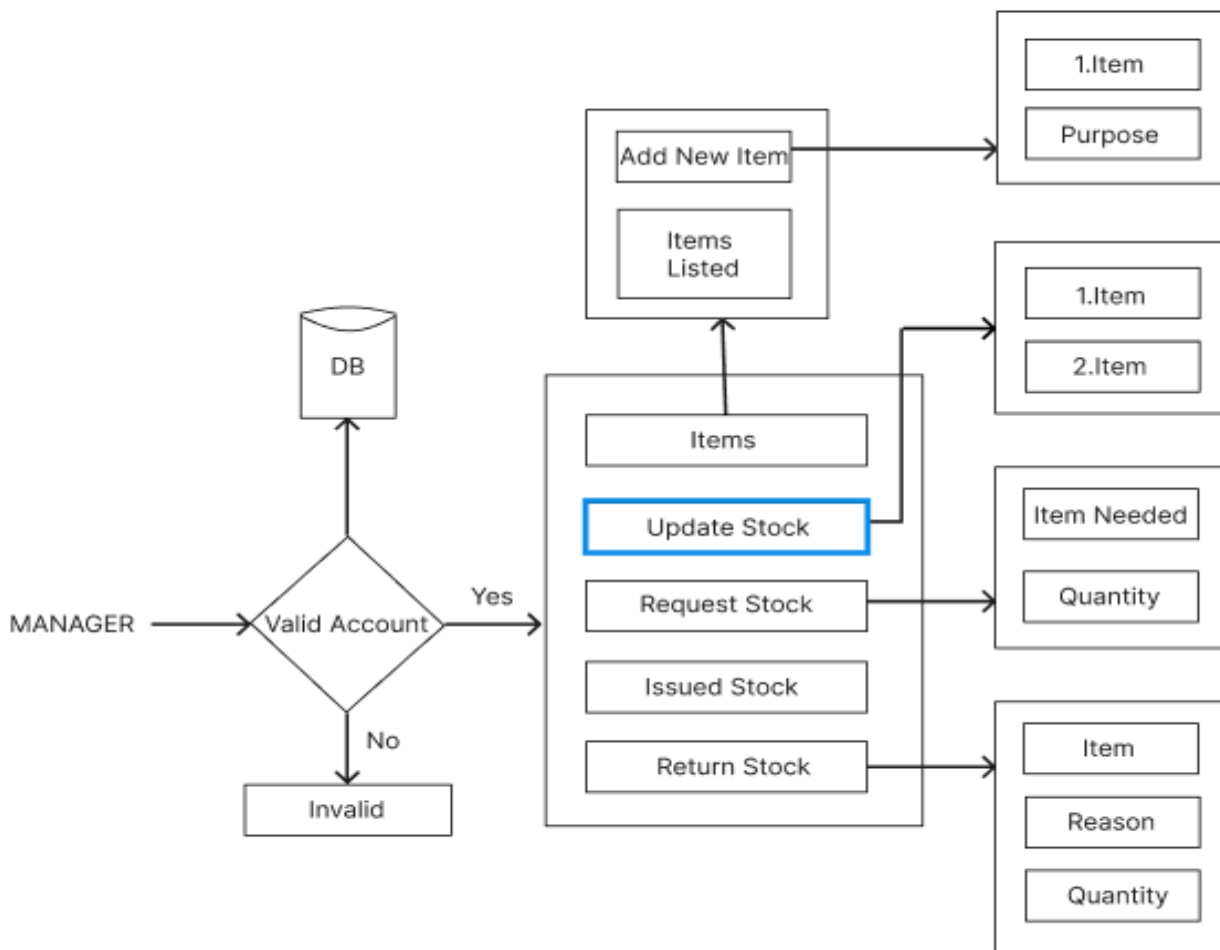
- Raise purchase orders based on approved indents.

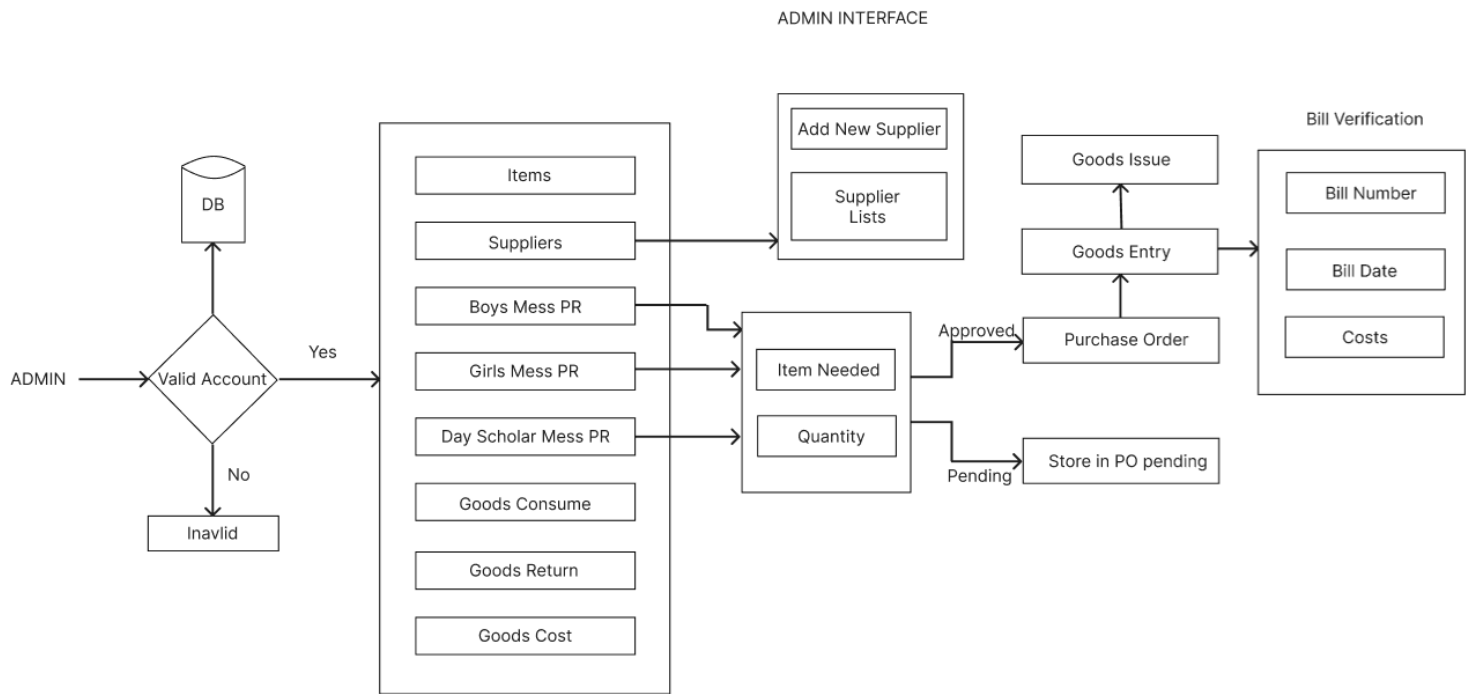
- **Receiving Management:**

- Record receipt of groceries with corresponding bill details.

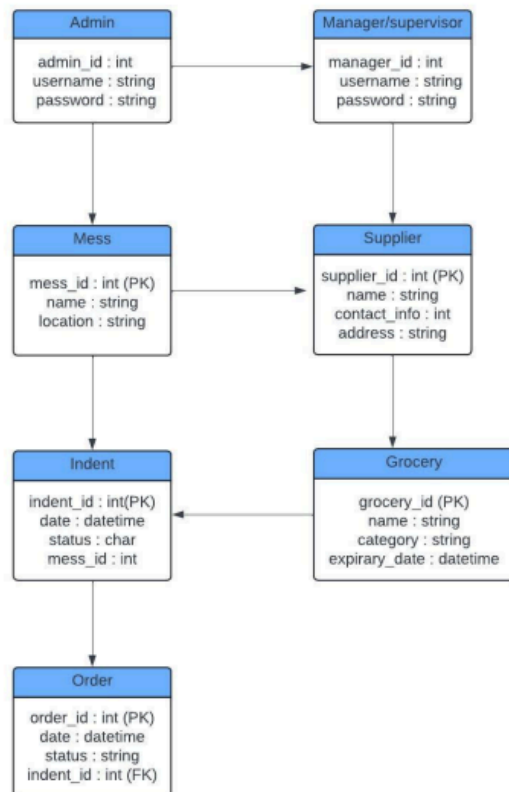
- Track received groceries by sub-store.
- **Issuance Management:**
 - Issue groceries to individual messes based on session and requirements.
- **Consumption Tracking:**
 - Track grocery consumption for each mess across sessions.
- **Reporting:**
 - Generate reports for stock maintenance, monthly summaries, cost analysis, and comparison charts for grocery prices.

MESS MANAGER INTERFACE





ER Diagram:



3. System Requirements Specification:

3.1 Functional Requirements:

- **User Management:**

- Mess manager can login
- Admins can login and see the goods that sub messes hold.

- **Item and Supplier Updation:**

- Both Manager and Admin can add new items to the list.
- Only Admin can add a new supplier to that item.

- **Purchase Request:**

- Manager can add the item to the item list and put the purchase request to the admin.
- If the goods are issued then it shows in the issued list page.

- **Return Goods:**

- If the issued goods are not good, the manager can return the item and the request will be shown to the admin.

- **Admin Dashboard:**

- Admins can view purchase requests of the individual mess.
- Applications can view the goods consumed by the individual sub messes.
- Admins can view returned items of all messes.
- Once the PR is approved, the admin can put the purchase order for the items requested.

- **Goods Entry:**

- After the goods entry admin wants to issue the goods to the messes.
- Bill number, costs, date and all other details are reported.

3.2. Non-Functional Requirements:

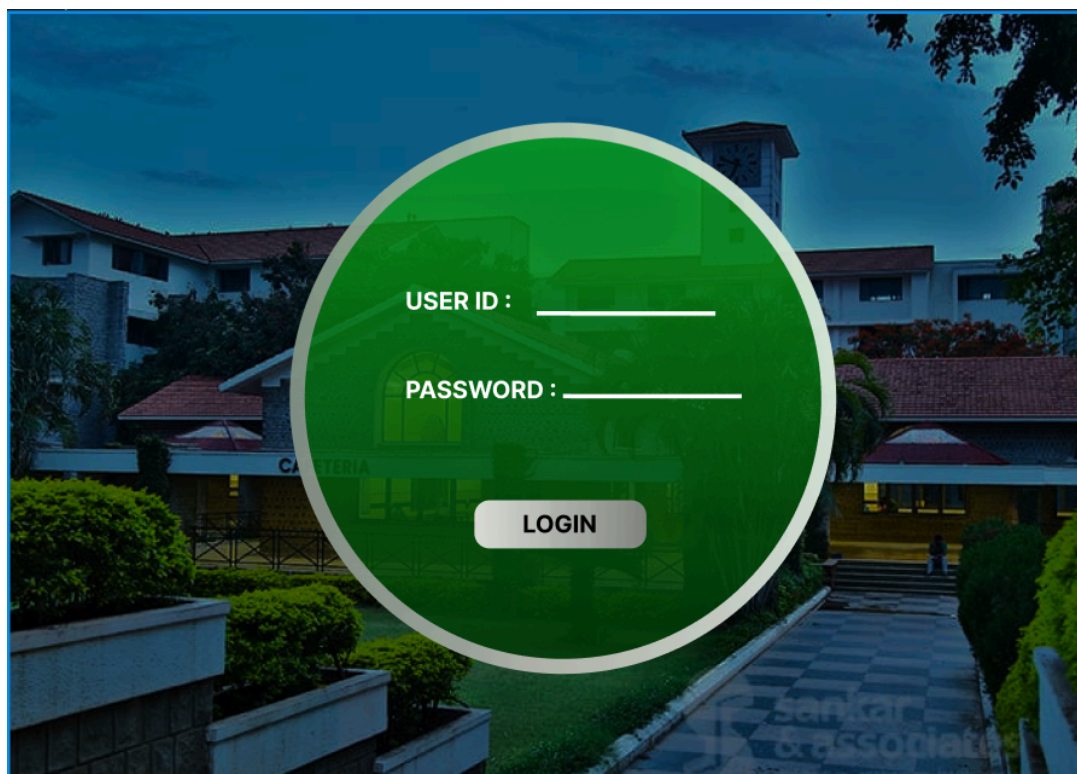
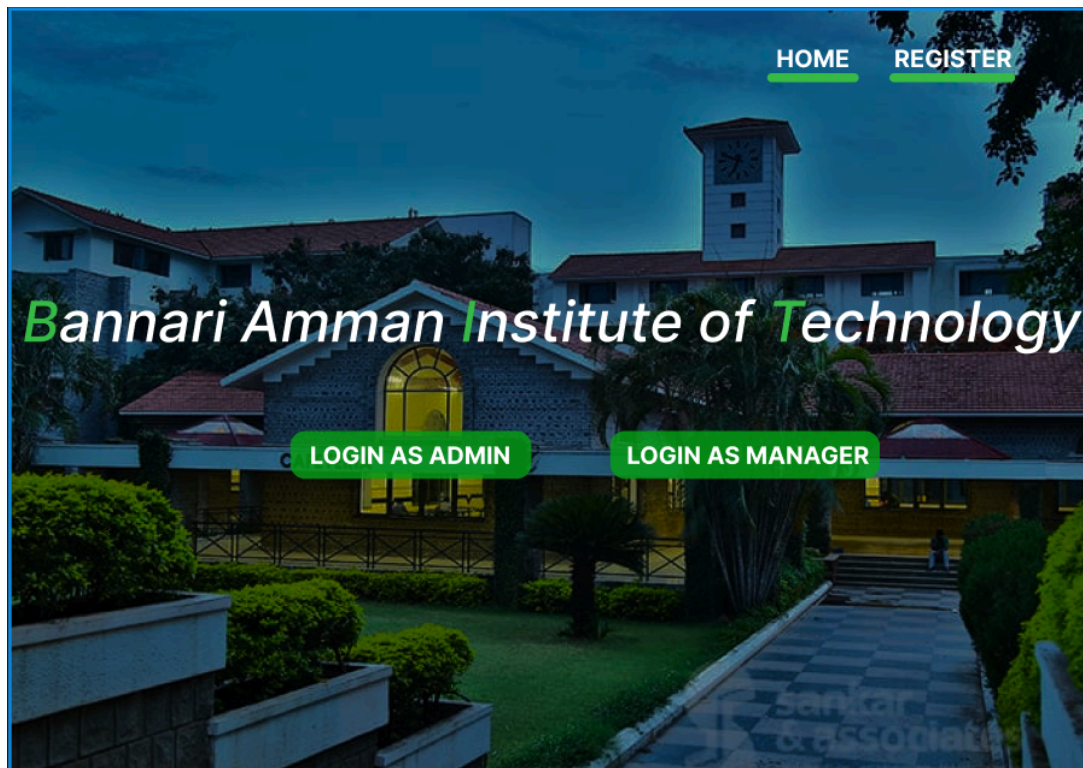
- **Security:** Implement role-based access control to ensure data confidentiality and integrity.
- **Scalability:** Design the system to accommodate future growth in terms of users and data volume.
- **Performance:** Optimize system performance to ensure smooth operation even during peak usage.
- **Usability:** Develop a user-friendly interface with intuitive navigation and clear instructions.
- **Reliability:**
 - Ensure high availability and reliability of the system to minimize downtime.

Stack:

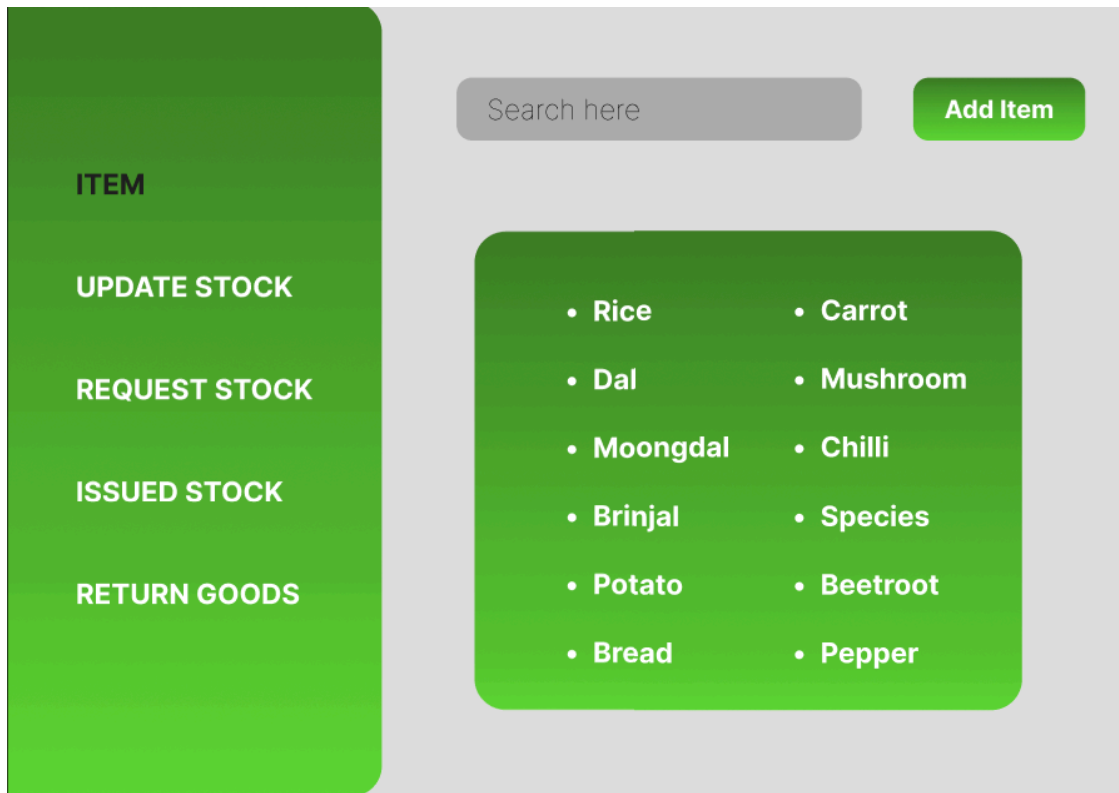
Front End	React JS
Backend	SpringBoot(JAVA)
Data Base	MySQL

Prototype of the Project:

Login Page:



Manager Interface:



ITEM	Search here	
UPDATE STOCK		
REQUEST STOCK		
ISSUED STOCK		
RETURN GOODS		

ITEMS	QUANTITY
Rice	70 Kg
Dal	30 Kg
Moongdal	10 Kg
Carrot	5 Kg
Potato	7 Kg
Brinjal	5 Kg

ITEM

UPDATE STOCK

REQUEST STOCK

ISSUED STOCK

RETURN GOODS

Item :

Rice

Total Quantity :

70 Kg

Quantity Used :

50 Kg

Session :

Lunch

Date :

29-04-24

UPDATE

ITEM

UPDATE STOCK

REQUEST STOCK

ISSUED STOCK

RETURN GOODS

ITEM NEEDED :

Rice

QUANTITY :

60 Kg

REQUEST

ITEM	Search here	
UPDATE STOCK		
REQUEST STOCK		
ISSUED STOCK		
RETURN GOODS		

ITEMS	QUANTITY	DATE
Rice	70 Kg	20-04-23
Dal	30 Kg	23-04-23
Moongdal	10 Kg	28-04-23
Carrot	5 Kg	04-05-24
Potato	7 Kg	01-08-23
Brinjal	5 Kg	12-05-24

Admin Interface:

ITEM	Search here		Add Supplier
SUPPLIER			
BOYS PR			
GIRLS PR			
DAY SCHOLAR PR			
REMAINING GOODS			
PURCHASE ORDER			
CONSUMED GOODS			
RETURNED GOODS			
COSTS			

• Karuppusamy	• Vadivel
• Thandapani	• Sivakumar
• Rangasamy	• Ramesh
• Ponnusamy	• Suresh
• Thangavel	• Sukumar
• Seladurai	• Manoj

ITEM
SUPPLIER
BOYS PR
GIRLS PR
DAY SCHOLAR PR
REMAINING GOODS
PURCHASE ORDER
CONSUMED GOODS
RETURNED GOODS
COSTS

ITEM NEEDED :
Rice

QUANTITY :
60 Kg

APPROVE
ISSUE

ITEM
SUPPLIER
BOYS PR
GIRLS PR
DAY SCHOLAR PR
REMAINING GOODS
PURCHASE ORDER
CONSUMED GOODS
RETURNED GOODS
COSTS

Search here

ITEMS	BOYS	GIRLS	DS
Rice	70 Kg	60 Kg	70 Kg
Dal	30 Kg	40 Kg	35 Kg
Moongdal	10 Kg	8 Kg	10 Kg
Carrot	5 Kg	7 Kg	6 Kg
Potato	7 Kg	10 Kg	7 Kg
Brinjal	5 Kg	6 Kg	7 Kg

ITEM

SUPPLIER

BOYS PR

GIRLS PR

DAY SCHOLAR PR

REMAINING GOODS

PURCHASE ORDER

CONSUMED GOODS

RETURNED GOODS

COSTS

ITEM NEEDED :

Rice

QUANTITY :

60 Kg

SUPPLIER :

Vadivel

ORDER

ITEM

SUPPLIER

BOYS PR

GIRLS PR

DAY SCHOLAR PR

REMAINING GOODS

PURCHASE ORDER

CONSUMED GOODS

RETURNED GOODS

COSTS

Search here

ITEMS	BOYS			GIRLS			DS		
	BF	Lun	Din	BF	Lun	Din	BF	Lun	Din
Rice		70 Kg	30 Kg	60 Kg	30 Kg	30 Kg	70 Kg	7 Kg	7 Kg
Dal	30 Kg	30 Kg	30 Kg	40 Kg	30 Kg	30 Kg	35 Kg	7 Kg	7 Kg
Moongdal	10 Kg	30 Kg	30 Kg	8 Kg	30 Kg	30 Kg	10 Kg	7 Kg	7 Kg
Carrot	5 Kg	3 Kg	3 Kg	7 Kg	30 Kg	30 Kg	6 Kg	7 Kg	7 Kg
Potato	7 Kg	4 Kg	3 Kg	10 Kg	30 Kg	30 Kg	7 Kg	7 Kg	7 Kg
Brinjal	5 Kg			6 Kg	30 Kg	30 Kg	7 Kg	7 Kg	7 Kg

ITEM	Search here		
SUPPLIER			
BOYS PR			
GIRLS PR			
DAY SCHOLAR PR			
REMAINING GOODS			
PURCHASE ORDER			
CONSUMED GOODS			
RETURNED GOODS			
COSTS			

ITEMS	BOYS	GIRLS	DS
Rice	70 Kg	60 Kg	70 Kg
Dal	30 Kg	40 Kg	35 Kg
Moongdal	10 Kg	8 Kg	10 Kg
Carrot	5 Kg	7 Kg	6 Kg
Potato	7 Kg	10 Kg	7 Kg
Brinjal	5 Kg	6 Kg	7 Kg

ITEM	Search here	
SUPPLIER		
BOYS PR		
GIRLS PR		
DAY SCHOLAR PR		
REMAINING GOODS		
PURCHASE ORDER		
CONSUMED GOODS		
RETURNED GOODS		
COSTS		

ITEMS	QUANTITY	COST
Rice	70 Kg	Rs. 23000
Dal	30 Kg	Rs.20000
Moongdal	10 Kg	Rs.10000
Carrot	5 Kg	Rs.15000
Potato	7 Kg	Rs.5000
Brinjal	5 Kg	Rs.5000