

CS-2001L

Data Structures And Algorithms Lab

SUPERMARKET MANAGEMENT SYSTEM

Project Report By

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Table of Contents

1. Introduction.....	3
2. Scope.....	5
3. Module Description.....	5
4. Hardware/Software Requirements	6
6. Screen Shots	7
7. Flowchart Diagram	21
8. Architecture Diagram	22

Project Drive Link:

https://drive.google.com/drive/folders/1MuQL_bD7ggzndRH3nmFFDSViJYC22wgB?usp=sharing

Introduction:

The Supermarket Management System deals with the automation of supermarket. It includes both sales and purchase of items. The Supermarket Management System is developed with the objective of making the system reliable, easier, fast, and more informative. In the manual System, there are number of inefficiencies that a salesperson face. Large records-books must be maintained where relevant and irrelevant information must be stored which is very untidy and clumsy process. But our System reduces paper works. On the other hand, there are many inherent problems that exist in any manual system. Usually, they lack efficiency. Less efficiency has a great impact on the productivity of any human being keeping the data up to date. The different modules included in our project are administrative module, Supplier module, Customer module.

The first activity is based on adding the items to the system along with the price which are present in the supermarket and the name and item ID of the Products which the supermarket will agree to sell. This authority is given only to Supplier. Any modifications to be done in the item name and the price can be done only by Supplier. He also has the right to delete any item. As the customer buys the products

Purpose:

Supermarket management system is the system where all the aspects related to the proper management of supermarket is done. These aspects involve managing information about the various products, Suppliers, customers, billing etc. This system provides an efficient way of managing the supermarket information. Also allows the customer to purchase and pay for the items purchased.

Application:

The project that we have undertaken aims to develop a Supermarket Management system that is clean, user friendly and multi-functional. The project “Supermarket Management system” includes the following functionalities:

1. When a new customer makes any purchase, his record is saved.
2. If all products have sold, then it displays out of stock in quantity section.
3. It displays the ID, quantity, price, and all other details of product.
4. It provides function to edit the specific product.
5. Admin can:
 - a) delete any customer record
 - b) view products and customers
 - c) add seller
6. Customer can:
 - a) View products
 - b) Purchase any product
 - c) select quantity of the product that he wants to buy

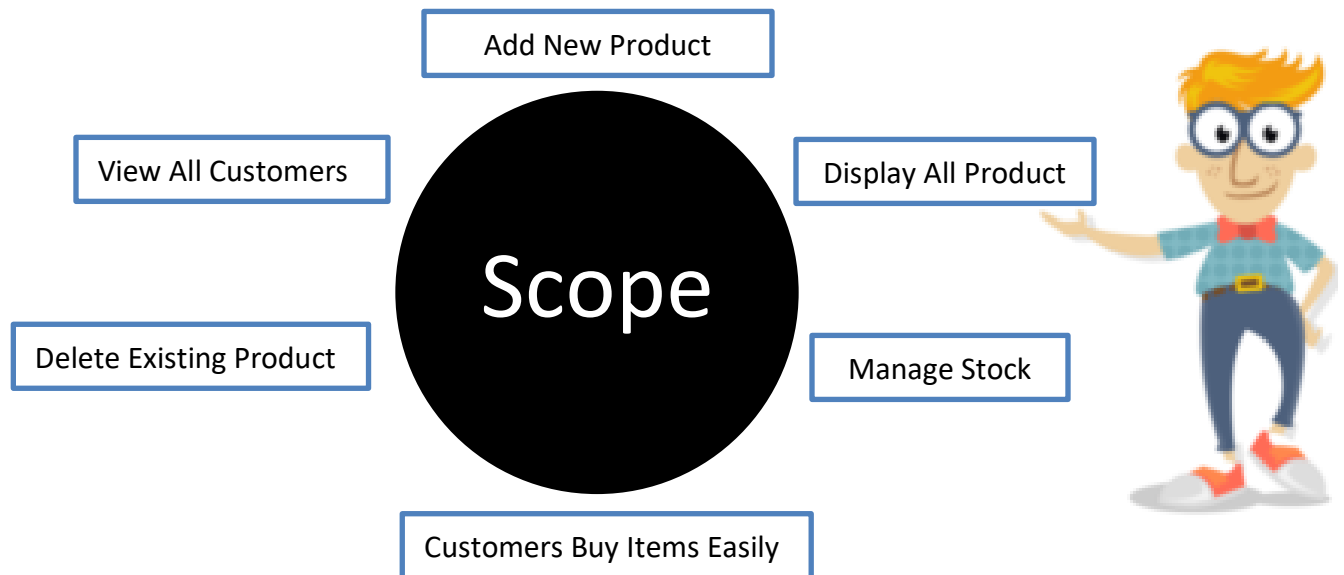
Objective:

To design a Supermarket Management System to ascertain stock level of a supermarket, when to order for more goods, keep status and updates of Customers, thereby helping progress level, stock taking and managerial decisions

- ❖ To explore the challenges being faced by the manual system.
- ❖ To make a software fast in processing, with good user interface.
- ❖ To study the functions of Supermarket management system.
- ❖ To ensure accurate statistics of product item.
- ❖ For Easy record of goods in store and proper identification.

Scope:

Supermarket Management system is a way to maintain product, supplier, and customer records which supermarket holds to keep a track of everything in the Supermarket, so software application is required to make the work easier. The application is built to make it easier for the customers to buy products. The main aim of an application is to somewhere automate records on the system. It gives all sort of functions which are required by the Supermarket to order to run a stable system.



- **Add New Product:** The Supermarket Management System Only allows Suppliers to Add Product using product ID, product name, price, and Quantity. He also has the right to modify existing products.
- **View All Customers:** Admin have rights to view customers list and to remove customers from the list.
- **Display All Products:** Admin and Suppiler have rights to view information regarding products present in the supermarket.
- **Delete Existing Product:** Supplier have rights to delete any product using product ID from Supermarket system.
- **Manage Stock:** Admin and Customer can manage stock if product is out of stock so its show when Admin or Customer view all product.
- **Customer Buy Items Easily:** Friendly user interface helps customer to buy product very easily.

Hardware/Software Requirements:

It does not need any additional hardware or software to operate the program, but the following requirements should be strongly maintained:

Requirements for Hardware:

- Pentium II and hardware.
- 512MB of RAM or higher.
- 800MHz processor or above.
- 20 MB of hard disk

Requirements for Software:

- Operating system windows 98 or higher
- Program Dev C++ needs to be installed

Libraries, IDE:

1- #include <iostream>, 2- #include <conio.h>, 3- #include <string>
4- #include <cmath>, 5- #include <ctime>, 6- #include <sstream>
7- #include <bits/stdc++.h>, 8- #include <windows.h>

Screen Shots:

Welcome Page:

SUPERMARKET MANAGEMENT SYSTEM

Designed and Programmed by:

1- Ayaan Merchant

2- Imadadullah

3- Mohammad Shayan

Press Any key to continue...

Press A to Log in as ADMIN or S to log in as SUPPLIER or C to log in as CUSTOMER

Admin Page:

Supermarket Management System

Current User: Admin

Date: 8/2/2022

ADMINSTATOR PORTAL

1. Display All Products
2. Customers List
3. Dequeue Customer
4. Back To Main Menu

Press a choice between the range [1-4]

Supplier Page:

Supermarket Management System

Current User: Supplier

Date: 8/2/2022

SUPPLIER PORTAL

1. Add A New Product
2. Display All Products
3. Modify Existing Product
4. Delete A Product
5. Back To Main Menu

Press a choice between the range [1-5]

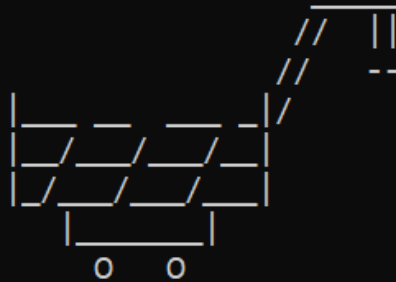
Customer Page:

Supermarket Management System

Current User: Customer

Date: 8/2/2022

Your Trolly No. Is: 50



Press Any Key TO Continue!

Supplier - Add Product Page:

Supermarket Management System

Current User: Supplier

Date: 8/2/2022

Enter product ID: 1001

Enter product Name: Surf

Enter product price: 100

Enter product quantity: 20

THIS PRODUCT IS INSERTED!

Supplier - Display Page:

Supermarket Management System

Current User: Supplier

Date: 8/2/2022

Existing products are:

ID	Product Name	Price	Quantity

1001	Surf	100	20
1002	soap	70	150
1003	brush	150	50

Total products in our store is : 3

Supplier - Modify Page:

Supermarket Management System			
Current User: Supplier		Date: 8/2/2022	
Existing Products Are:			
ID	Product Name	Price	Quantity

1001	Surf	100	20
1002	soap	70	150
1003	brush	150	50
Enter ID to modify product Name and its price: 1002			
Old ID: 1002		Enter New ID:	
Old Name: soap			
Old Price: 70			
Old Quantity: 150			

Supermarket Management System			
Current User: Supplier		Date: 8/2/2022	
Existing Products Are:			
ID	Product Name	Price	Quantity

1001	Surf	100	20
1002	soap	70	150
1003	brush	150	50
Enter ID to modify product Name and its price: 1002			
Old ID: 1002		Enter New ID: 1002	
Old Name: soap		Enter New Name: soap	
Old Price: 70		Enter New Price: 100	
Old Quantity: 150		Enter New Quantity: 25	
Click Any Key To Confirm!			

Supplier - Delete Page:

Supermarket Management System			
Current User: Supplier		Date: 8/2/2022	
Existing products are:			
ID	Product Name	Price	Quantity

1001	Surf	100	20
1002	soap	100	25
1003	brush	150	50
Enter ID To Delete That Product:			

Supermarket Management System			
Current User: Supplier		Date: 8/2/2022	
Existing products are:			
ID	Product Name	Price	Quantity

1001	Surf	100	20
1002	soap	100	25
1003	brush	150	50
Enter ID To Delete That Product: 1001			
<<Item Is Deleted>>			

Customer - Purchase Page:

Supermarket Management System

Current User: Customer

Date: 8/2/2022

Existing products are:

ID	Product Name	Price	Quantity

1001	Surf	200	60
1002	Brush	100	60
1003	Mask	200	9
1004	Cream	500	80
1005	shampoo	250	14

How Many Items You Want To Buy:

Supermarket Management System

Current User: Customer

Date: 8/2/2022

Existing products are:

ID	Product Name	Price	Quantity
1001	Surf	200	60
1002	Brush	100	60
1003	Mask	200	9
1004	Cream	500	80
1005	shampoo	250	14

How Many Items You Want To Buy: 2

Enter Your Name: Ayaan

You Have Bought: Mask, Brush,

Enter Id Of Item You Want To Buy: 1003

How Many Quantity You want: 2

Total Price: 1200 Rupees Only

Thank You! For The Shopping

Enter Id Of Item You Want To Buy: 10004

This Item Is Not Available In Our Supermarket At This Time!

Enter Id Of Item You Want To Buy: 1002

The Quantity You Entered Is Not Available!

Enter Id Of Item You Want To Buy: 1002

How Many Quantity You want: 8

Press Enter To Continue!

Supermarket Management System

Current User: Customer

Date: 8/2/2022

Existing products are:

ID	Product Name	Price	Quantity

There Is No Items To Buy
Press Any Key To Continue!

Admin - Display Page

Supermarket Management System

Current User: Admin

Date: 8/2/2022

Existing products are:

ID	Product Name	Price	Quantity

1001	Surf	200	out of stock!
1002	Brush	100	42
1003	Mask	200	2
1004	Cream	500	52
1005	shampoo	250	4

Total products in our store is : 5

Admin – Customer List Page

Supermarket Management System

Current User: Admin

Date: 8/2/2022

CUSTOMERS NAMES LIST

- 1- Ayaan
- 2- Shayan
- 3- Imdadullah
- 4- Haziq
- 5- Aliyan
- 6- Hamza
- 7- Iqbal
- 8- Hussain

Press Any Key To Continue!

Admin – Customer Remove Page

Supermarket Management System

Current User: Admin

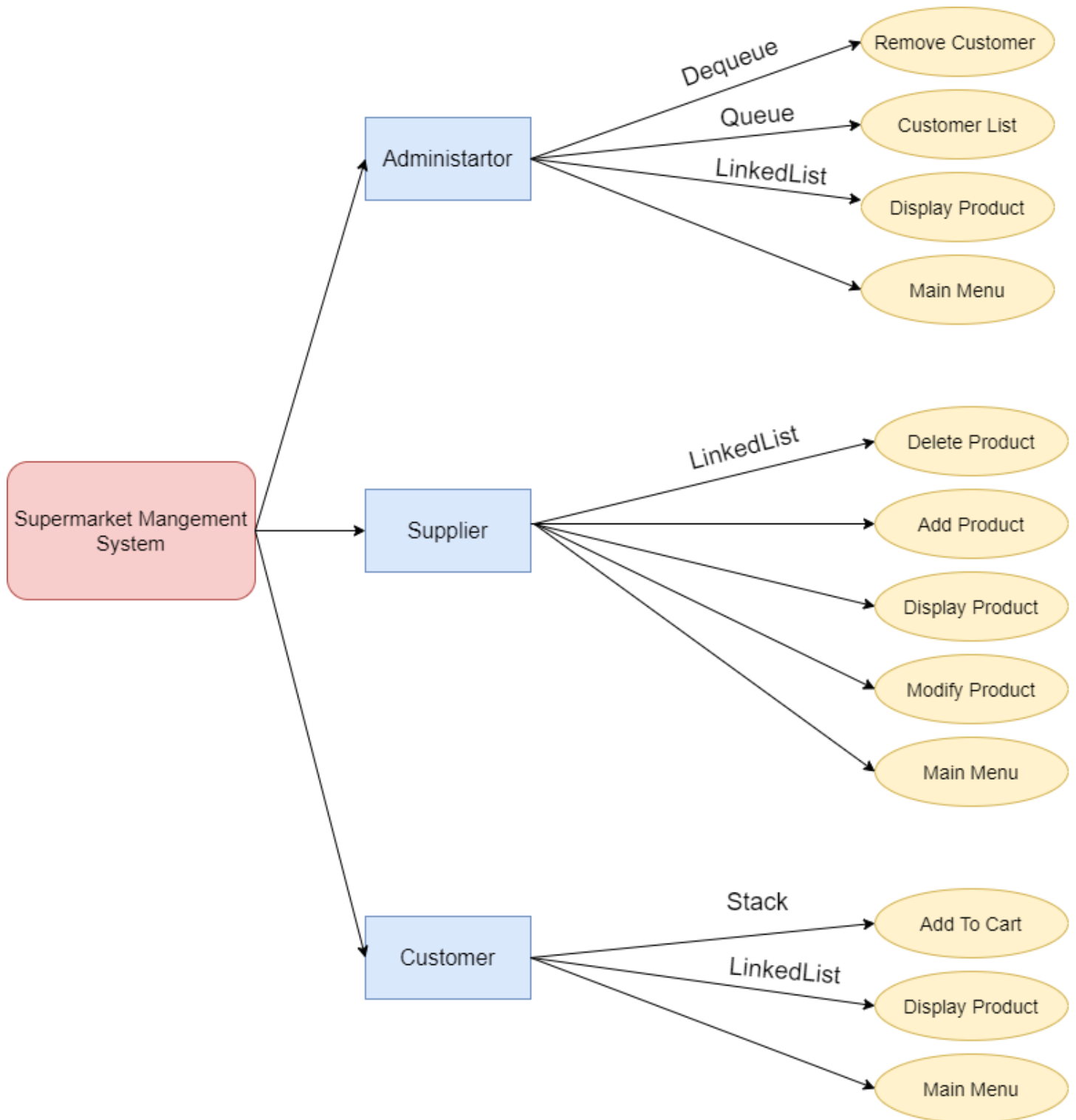
Date: 8/2/2022

CUSTOMERS NAMES LIST

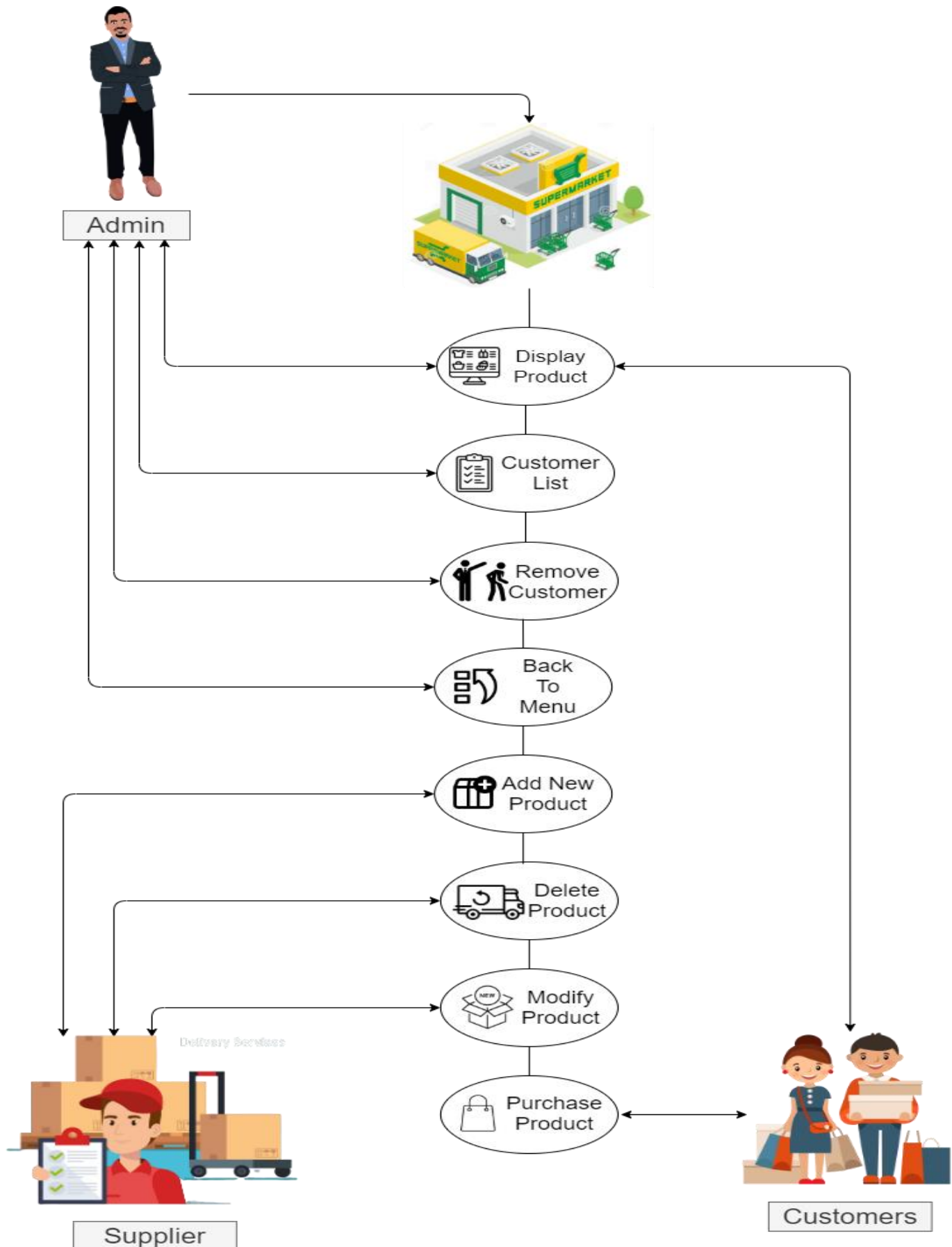
- 1- Haziq
- 2- Aliyan
- 3- Hamza
- 4- Iqbal
- 5- Hussain

Press Any Key To Continue!

FlowChart Diagram:



Architecture Diagram:



Thank You!

Project Drive Link:

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