**By FURQAN AHMED.**

**PROJECT REPORT OF POS SYSTEM(POINT OF SALE)**

**TABLE OF CONTENTS:**

**INTRODUCTION-----------------------------------------------------------------3**

**PROBLEM STATEMENT---------------------------------------------------------3**

**OBJECTIVES----------------------------------------------------------------------4**

**SALIENT FEATURES-------------------------------------------------------------4**

**CONTROL FLOW DIAGRAM----------------------------------------------------5**

**MODULES------------------------------------------------------------------------5**

**USE CASE-----------------------------------------------------------------------11**

**PROGRAM METHODOLOGY---------------------------------------------------11**

**CONCLUSION--------------------------------------------------------------------12**

# **INTRODUCTION:**

The POS stands for point of sale which is a process where a transaction is made when customers select some product and finalize it after checking out from the main window. It is very useful for keeping the track record of inventory and the number of sales made per day. There are many benefits of using this method including better user experience, retention of customers, price customization of every product, and keeping the track record of the previous purchase history of the customers. This process refrains you from using old traditional methods of carrying out sale process in which cash registers were used.

## **PROBLEM STATEMENT:**

* Design and develop an application to automate a Pos System.
* Application should have a proper login.
* Functionality to Add, Delete, Search and Modify records of the products.
* A detailed text file that includes the product name, quantity, and price.
* A function for the inventory of products.

### OBJECTIVES:

* To check the quantity of products in the supermarket.
* A consumer-friendly interface for the customer to purchase anything easily.
* A secure admin module which can change the details about the product.
* It eliminates the chances of human error while processing any order i.e. human entering wrong price by mistake.
* The system can check the price of the product and can charge the customer automatically.

#### **SILENT FEATURES:**

* Supermarket Icon.
* Welcome screen & Main menu.
* Admin Login screen.
* Admin module menu.
* Add a product in a text file.
* Delete a product form text file.
* Modify a product in the text file.
* Search a product from the list.
* Display all products.
* A function for customer orders and bills.

**CONTROL FLOW DIAGRAM:**

**Graphical user interface, diagram, application, Teams

Description automatically generated**

**MODULES:**

* **SUPERMARKET ICON:**

This screen presents the supermarket name with its trademark.

Qr code

Description automatically generated

Figure shop logo

* **MAIN MENU:**

This page first welcomes the user and ask for a selection of identity whether the user is admin or customer so it proceeds to next according to the identity.

Text

Description automatically generated

Figure Main Menu

* **ADMIN LOGIN:**

This part makes it secure that only the admin can use the admin module.

Graphical user interface, application

Description automatically generated

Figure Login Page

* **ADMIN MODULE:**

This module asks the admin to select an option from different options related to the product and the next module opens on the base of choice of admin.

Shape, rectangle

Description automatically generated

Figure Admin Menu

* **ADD A PRODUCT:**

Text

Description automatically generatedIn this module, the admin can add products to the product list present in a text file form in the system.

Figure Adding Products in inventory

**DELETE A PRODUCT:**

This module gives the admin an option to delete any product from the product list.

Text

Description automatically generated

Figure Deleting a product from inventory

* **MODIFY A PRODUCT:**

This module gives the option to the admin to modify any information about the product in the product list.

Text

Description automatically generated

Figure Modifying a prodct's data

* **SEARCH A PRODUCT:**

In this module, the admin can search for any product to check the information of the specific product.

Shape

Description automatically generated

Figure Searching a product

* **DISPLAY ALL PRODUCTS:**

The display module presents all products with their information in rows and column form.

Graphical user interface, application

Description automatically generated

Figure Displaying all products

* **CUSTOMER ORDER:**

The order module shows a menu having a complete list of products with price and ask the customer for product id and quantity.

Graphical user interface, application

Description automatically generated

Figure Customer order module

* **BILL:**

Bill gives details to purchase product and price and total amount.

Graphical user interface, application, PowerPoint

Description automatically generated

Figure Bill generating

**USE CASE:**

This is use in places where there are many products and the products needs to be sold, it will not only organize the products but also will keep the track of the remaining stocks and also tells about the products sold this will enable the business owners to keep their business much more efficient and avoid much inconvenience caused by manual handling.

**PROGRAM METHODOLOGY:**

So, our program is made up of array, structures, functions and file management. The main functions are:

1. Admin
2. Menu
3. Order
4. Login

* **Admin:**

In admin function the admin will have full authority over the data of POS. In admin function the admin can add new data or he can delete previous data. He can also search for the specific product in order to modify it or he can display all the products that are saved in the database.

* **Menu:**

Menu function is a main function which will display all the products which are available at the moment.

* **Order:**

Order function is the function which will allow the customer add the product which he/she wants to purchase.

* **Login:**

Login function is use to login into the admin portal so that customer will not be able to add or modify the product without authority.

**CONCLUSION:**

This program is designed to modernize the point of sale by adding new features which will not only make it easier for the admin to control the data, but it will also automate the process of a customer buying a product. This can be done by creating a separate login ID for the admin and a separate buy menu for the customer. This will allow the customer to add and select the product without the help of store employee, and in the admin panel the admin can add, delete and edit the product without any difficulties. This system is a base for a much more complex system which aims to revolutionize the POS system to make things easier for the consumer as well as the business entity.