

PROJECT DESCRIPTION:

Shopify Plaza

It is a shopping store management software. The software is made to be operated by both the customer and the administrator.

TOOLS USED:

- The code is written using C language.
- Besides using basic input output ,linked list data structure and file handling have been incorporated in the project for memory allocation and management.
- The whole program is built using ADT format having 3 files :
 - 1.header.h
 - 2.projectfile.c
 - 3.functions.c
- .csv files are used to store bill details, customer records and inventory record .
 - 1.Bill_details.csv
 - 2.Customer_details.csv
 - 3.Inventory.csv
 - 4.Bill.csv
- The whole program has been **modulated into a number of functions** and **dynamic memory allocation** has been used to make it efficient and user friendly.
- The **.csv files** are automatically updated to keep the stocks ,customer details and bill records up to date.

STRUCTURES

1. typedef struct node
{
 int id;
 char category[500000];
 char name[500000];
 int qty;
 int price;
 char location[10];
 struct node *next;
}item;

(a)Stores the item.

(b)Contains attributes of an item and a next pointer which points to the next node containing next item.

2. typedef struct date

```
{  
    int dd;  
    int mm;  
    int yy;  
}date;
```

(a)Stores the date.

(b)Each node structure stores the date,month and year.

3. typedef struct customer

```
{  
    int id;  
    char name[500000];  
    date bday;  
    char phoneno[11];  
    date entry;  
    int points;  
    char membership[500000];  
    int rate;  
    struct customer *next;  
}customer;
```

(a)Stores the customer details.

(b)Contains attributes of a customer and a next pointer pointing to the next node.

4. typedef struct bill_det

```
{  
  
    int customerno;  
    int billno;  
    char itemname[500000];  
    int qty;  
    int t_price;  
    date cur_date;  
    struct bill *next;  
}bill_det;
```

(a) Stores the details of the bill of a customer.

(b)Each node contains information of each invoice generated and a next pointer which points to the next node in the linked list.

```
5. typedef struct bill
{
    int customerno;
    int billno;
    int total_price;
    date cur_date;
    struct bill *next;
}bill;
```

Stores the details of the final bill of the current customer.

FUNCTIONS:ACTION PERFORMED

1. void setColor(int);

This function has been used to change the font color on the console.

2. void correctpass();

It displays the main menu to the admin when correct password is entered.

3. void inventory();

It displays the Inventory/list of all items to the admin.

4. void screen1(char);

(a)It takes a character input as argument which tells whether the user is a customer or admin.

(b)This function reads all the files used in the program and also shows the respective opening screens for customer and admin.

5. void customer_entry();

It displays the main menu to the customer and asks whether he wants to check item location or generate the bill.

6. void checkLocation();

It shows the location of a particular item in the store to the customer.

7. void customerDetails();

It displays the details of the customers to the admin.

8. void generateBill();

It facilitates the user to choose the items to buy and then modify according to his needs and finally generate the total amount to be paid.

9. void update_details(int);

This function updates all the values in the appropriate .csv files from the recent updates in the linked lists with the help of the parameter passed which tells which file has to be updated.

10. void offerzone();

It displays the offerzone and all the discounts to the customer who is currently not a member.

11. void invoice(int,int);

(a) It takes two integer arguments as input, it takes the total bill amount and Bill number from the generateBill() function .

(b) This function generates the final invoice, it shows the bill summary the final amount to be paid after application of valid discounts.

12. void billDetails();

This function generates prints the items bought by a customer by matching the records in the files using the phone number.

13. void addItems();

This function allows the admin to insert a new item by creating a new category or inserting them in the already existing ones.

14. void statistics();

This function allows the admin to view the statistics :total sales,inventory stock,ratings and total members of each type of membership.

REFER TO THE STEPS TO BE FOLLOWED FILE ATTACHED FOR SMOOTH EXECUTION OF THE PROGRAM

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The whole project was completed successfully by equal contributions from each member be it discussing the draft of the project to its implementation in code and debugging. Thus ,this project reached its concluding end with the help of the sincere efforts of the team members.

FOR COLLABORATING WE HAVE USED GITHUB AND GMAIL
