

SSN COLLEGE OF ENGINEERING

(Autonomous)

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DEPARTMENT OF CSE

Mini-Project Department Store

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```
#include<stdio.h>
#include<math.h>
#include<stdlib.h>
#include<string.h>

struct storage
{
    char product[20];
    int price;
    int units;
};

struct trans
{
    char name[20];
    char product[20];
    int units;
    int totalprice;
};

struct aby
{
    char product[20];
    int price;
```

```

};

void transaction();
void abuy();
void searchdisp();
void asearchdisp();
void wholeuserbuy();
void display();
void adisplay();
void userbuy();
void delete();
void restock();


void admin()
{
    printf("\nAdmin login\nOptions\n1. Buy from wholesaler\n2. Display
wares \n3. Search for Items\n4. Delete\n5. View all transactions\n6.
Restock\n7.Exit"); //FILL ADMIN FUNCTIONS
    int opt;
    scanf("%d",&opt);
    switch(opt)
    {
        case 1: abuy();
            break;
        case 2: adisplay();
            break;
        case 3: asearchdisp();
            break;
        case 4: delete();
            break;
        case 5: transaction();
            break;
        case 6: restock();
            break;
        case 7: break;
    }
}


void customer()
{
    printf("\nCustomer Login\nOptions\n1. Buy\n2. Buy Wholesale\n3. Display
Products\n4. Search for Items\n5. Exit"); //FILL CUSTOMER
FUNCTIONS
    int opt;
    scanf("%d",&opt);
    switch(opt)
    {
        case 1: userbuy();

```

```

        break;
    case 2: wholeuserbuy();
        break;
    case 3: display();
        break;
    case 4: searchdisp();
        break;
    case 5: break;
}
}

void delete()
{
    FILE * f;
    FILE * f2;
    int fl;
    int k,l;
    struct storage a,b;
    printf("\n enter the item to be deleted");
    char name[20];
    scanf("%s",name);
    f=fopen("storage.bin","rb");
    f2=fopen("temp.bin","wb");
    while(fread(&a,sizeof(struct storage),1,f))
    {
        if(strcmp(name,a.product)==0)
        {
            fl=1;

        }
        else
            fwrite(&a,sizeof(struct storage),1,f2);
    }
    if(fl==1)
        printf("\n Item was Deleted!");
    else
        printf("\n Item doesn't exist");
    fclose(f);

    fclose(f2);
    l=remove("storage.bin");
    k=rename("temp.bin","storage.bin");
    admin();
}

```

```

void restock()
{
    FILE *f;
    int l,k;
    FILE * f1;
    f=fopen("storage.bin","rb");
    f1=fopen("tp.bin","wb");
    struct storage a,b;
    while(fread(&a,sizeof(struct storage),1,f))
    {
        if(a.units<30)
        {
            b=a;
            b.units+=100;
            fwrite(&b,sizeof(struct storage),1,f1);
        }
        else
            fwrite(&a,sizeof(struct storage),1,f1);
    }
    fclose(f);
    fclose(f1);
    printf("Successfully restocked");
    l=remove("storage.bin");
    k=rename("tp.bin","storage.bin");
    admin();
}

void abuy()
{
    printf("\nEnter Product you wish to buy");
    char product[20];
    int units,total,i,unitprice,f=0;
    struct aby price;
    struct storage bought;
    scanf("%s",product);
    printf("Enter number of units you want to buy");
    scanf("%d",&units);
    FILE *fp;
    fp=fopen("abuylist.bin","rb");
    while(fread(&price,sizeof(struct aby),1,fp))
    {
        if(strcmp(price.product,product)==0);
        {
            strcpy(bought.product,product);
            bought.price=price.price;
            bought.units=units;
            fclose(fp);
            printf("Successfully bought");
            fp=fopen("storage.bin","ab");
            fwrite(&bought,sizeof(struct storage),1,fp);
            f=1;
            break;
        }
    }
}

```

```

    }
    fclose(fp);
    if(f==0)
        printf("Item doesnt exist");
    admin();
}

void transaction()
{
    printf("\n Displaying the log records");
    FILE *f;
    f=fopen("trans.bin","rb");
        //enter file name
    struct trans p;
    fread(&p,sizeof(struct trans),1,f);
    printf("\n Name of the user: %s",p.name);
    printf("\n name of product: %s",p.product);
    printf("\n Numeber of units: %d",p.units);
    printf("\n totalprice: %d",p.totalprice);
    while(fread(&p,sizeof(struct trans),1,f))
    {
        printf("\n Name of the user: %s",p.name);
        printf("\n name of product: %s",p.product);
        printf("\n Numeber of units: %d",p.units);
        printf("\n totalprice: %d",p.totalprice);
    }
    fclose(f);
    admin();
}

void searchdisp()
{
    FILE * f;
    int fl=0;
    struct storage a,b;
    printf("\n enter the item name to be searched");
    char name[20];
    scanf("%s",name);
    f=fopen("storage.bin","rb");
    while(fread(&a,sizeof(struct storage),1,f))
    {
        if(strcmp(name,a.product)==0)
        {

            printf("\n name: %s",a.product);

            printf("\n price: %d",a.price);
            printf("\n quantity: %d",a.units);
            fl=1;

```

```

                break;
            }

        }
        if(fl==0)
            printf("\n Item not present !");

        fclose(f);
        customer();
    }

void asearchdisp()
{
    FILE * f;
    int fl=0;
    struct storage a,b;
    printf("\n enter the item name to be searched");
    char name[20];
    scanf("%s",name);
    f=fopen("storage.bin","rb");
    while(fread(&a,sizeof(struct storage),1,f))
    {
        if(strcmp(name,a.product)==0)
        {

            printf("\n name: %s",a.product);

            printf("\n price: %d",a.price);
            printf("\n quantity: %d",a.units);
            fl=1;
            break;
        }

    }

    if(fl==0)
        printf("\nItem not present!");

    fclose(f);
    admin();
}

```

```

void userbuy()
{
    FILE * f;
    FILE * f2;
    FILE * f3;
    int fl,n;

```

```

char name[20];
char nm[20];
fl=0;
int p,l,k;
struct storage a,b;
printf("\nenter the item to be bought");

scanf("%s",name);
f=fopen("storage.bin","rb");
f2=fopen("temp.bin","wb");

while(fread(&a,sizeof(struct storage),1,f))
{
    if(strcmp(name,a.product)==0)
    {
        f3=fopen("trans.bin","ab");
        printf("\n name: %s",a.product);

        printf("\n price: %d",a.price);
        printf("\n quantity: %d",a.units);

        fl=1;
        printf("\n Enter the username:");
        scanf("%s",nm);
        struct trans t;
        strcpy(t.name,nm);
        printf("\n Enter the number of units to be bought");
        scanf("%d",&n);
        if(n<a.units)
        {
            p=a.price*n;
            strcpy(t.product,a.product);
            t.units=n;
            t.totalprice=p;
            fwrite(&t,sizeof(struct trans),1,f3);
            printf("\n Price to be paid: %d ",p);
            a.units=a.units-n;
        }
        else
            printf("\nNot enough units");
        fclose(f3);
    }

    fwrite(&a,sizeof(struct storage),1,f2);
}
if(fl==0)
    printf("\n Item not present!");

```

```

fclose(f);

fclose(f2);
l=remove("storage.bin");
k=rename("temp.bin","storage.bin");
customer();
}

void wholeuserbuy()
{
    FILE * f;
    FILE * f2;
    FILE * f3;
    int fl,n;
    fl=0;
    int p,l,k;
    struct storage a,b;
    printf("\n enter the item to be bought");
    char name[20];
    char nm[20];
    scanf("%s",name);
    f=fopen("storage.bin","rb");
    f2=fopen("temp.bin","wb");

    while(fread(&a,sizeof(struct storage),1,f))
    {
        if(strcmp(name,a.product)==0)
        {
            f3=fopen("trans.bin","ab");
            printf("\n name: %s",a.product);

            printf("\n price: %d",a.price);
            printf("\n quantity: %d",a.units);

            fl=1;
            printf("\n Enter the username:");
            scanf("%s",nm);
            struct trans t;
            strcpy(t.name,nm);
            printf("\n Enter the number of units to be bought(>15)");
            scanf("%d",&n);
            if(n<a.units)
            {
                p=a.price*n;
                if(n>15)
                    p=p-p*10/100;
                else
                    {printf("Too few units, go to normal buy");

```



```

        customer();
        exit(0);
    }
    strcpy(t.product,a.product);
    t.units=n;
    t.totalprice=p;
    fwrite(&t,sizeof(struct trans),1,f3);
    printf("\n Price to be paid(Discout included): %d ",p);
    a.units=a.units-n;
    }
    else
        printf("\nNot enough units");
    fclose(f3);

}

    fwrite(&a,sizeof(struct storage),1,f2);
}
if(fl==0)
    printf("\n Item not present !");
fclose(f);

fclose(f2);
l=remove("storage.bin");
k=rename("temp.bin","storage.bin");
customer();
}

void display()
{
    printf("\n Displaying the products");
    FILE *f;
    f=fopen("storage.bin","rb");
        //enter file name
    struct storage p;
    fread(&p,sizeof(struct storage),1,f);

    printf("\n name: %s",p.product);
    printf("\n price: %d",p.price);
    printf("\n quantity: %d",p.units);
    while(fread(&p,sizeof(struct storage),1,f))
    {
        printf("\n name: %s",p.product);
        printf("\n price: %d",p.price);
        printf("\n quantity: %d",p.units);
    }
    fclose(f);
}

```

```

        customer();
    }

void adisplay()
{
    printf("\n Displaying the products");
    FILE *f;
    f=fopen("storage.bin","rb");
        //enter file name
    struct storage p;
    fread(&p,sizeof(struct storage),1,f);

    printf("\n name: %s",p.product);
    printf("\n price: %d",p.price);
    printf("\n quantity: %d",p.units);
    while(fread(&p,sizeof(struct storage),1,f))
    {
        printf("\n name: %s",p.product);
        printf("\n price: %d",p.price);
        printf("\n quantity: %d",p.units);
    }
    fclose(f);
    admin();
}

int main()
{
    int op,i;
    char pass[10],cust[10],custp[10];
    printf("1. Admin Login\n2. Customer Login\n");           //which login
    scanf("%d",&op);
    if(op==1)
    {
        printf("\nUsername : admin\nEnter Password\n");
        scanf("%s",pass);
        if(strcmp(pass,"admin")!=0)
        {
            printf("\nWrong Password! Use customer login if you are a
customer\nPress any key to go to customer login\n");           //failed
attempt to login
            getchar();
            op=2;
        }
        else
            //successful login
        {
            admin();
            exit(0);
        }
    }
}

```

```

if(op==2)
{
    printf("\n1. Existing User\n2. Create New account\n");

    scanf("%d",&op);
    if(op==1)
    {
        printf("\nEnter Username and Password\n");
        //login options
        scanf("%s",cust);
        scanf("%s",custp);
        int f=0; //login check
        FILE *c;
        c=fopen("customerlogin.txt","r");
        char ct[20],cp[20];
        for(int z=0;z<20;z++)
        {
            fscanf(c,"%s",ct);
            if(strcmp(ct,cust)==0)
            {
                fscanf(c,"%s",cp);
                if(strcmp(cp,custp)==0)
                {
                    printf("Login successful");
                    customer();
                    exit(0);
                }
            }
            else
            {
                printf("Invalid login");
                exit(0);
            }
        }
        f=1;
    }
    else
    {
        fscanf(c,"%s",cp);
    }
}
if(f==0)
{
    printf("no such username");
    exit(0);
}
}
else if(op==2)
{
    printf("Enter Username and Password to create account");
    scanf("%s",cust);
    scanf("%s",custp);
    FILE *c;
    c=fopen("customerlogin.txt","a");
    fprintf(c,"%s\n",cust);

    fprintf(c,"%s\n",custp);

    customer();
    exit(0);
}

```

```
        //add login details to customer record
    }
}
return(0);
}
```

Output

C:\Users\Prakash\Desktop\mini-proj\proj>actual

1. Admin Login
 2. Customer Login
- 1

Username : admin
Enter Password
admin

Admin login
Options
1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock
7.Exit1

Enter Product you wish to buywaterbottle
Enter number of units you want to buy900
Successfully bought

Admin login
Options
1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock
7.Exit2

Displaying the products
name: toothbrush

price: 10
quantity: 1000
name: toothpaste
price: 20
quantity: 1000
name: waterbottle
price: 100
quantity: 900

Admin login

Options

1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock
- 7.Exit3

enter the item name to be searchedtoothbrush

name: toothbrush
price: 10
quantity: 1000

Admin login

Options

1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock
- 7.Exit4

enter the item to be deletedtoothpaste

Item was Deleted!

Admin login

Options

1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock

7.Exit5

Displaying the log records

Name of the user: abc

name of product: cup

Numeber of units: 10

totalprice: 700

Name of the user: abc

name of product: tea

Numeber of units: 20

totalprice: 3600

Name of the user: abc

name of product: tea

Numeber of units: 1

totalprice: 200

Name of the user: dsa

name of product: tea

Numeber of units: 188

totalprice: 37600

Admin login

Options

1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock

7.Exit6

Successfully restocked

Admin login

Options

1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock

7.Exit7

C:\Users\Prakash\Desktop\mini-proj\proj>actual

1. Admin Login
2. Customer Login

1

Username : admin
Enter Password
admin

Admin login

Options

1. Buy from wholesaler
2. Display wares
3. Search for Items
4. Delete
5. View all transactions
6. Restock
- 7.Exit7

C:\Users\Prakash\Desktop\mini-proj\proj>actual

1. Admin Login
 2. Customer Login
- 2

1. Existing User
 2. Create New account
- 2

Enter Username and Password to create accountfghj
fghj

Customer Login

Options

1. Buy
2. Buy Wholesale
3. Display Products
4. Search for Items
5. Exit1

enter the item to be boughtwaterbottle

name: waterbottle

price: 100

quantity: 900

Enter the username:fghj

Enter the number of units to be bought10

Price to be paid: 1000

Customer Login

Options

1. Buy
2. Buy Wholesale
3. Display Products
4. Search for Items
5. Exit2

enter the item to be boughtfghj

Item not present !

Customer Login

Options

1. Buy
2. Buy Wholesale
3. Display Products
4. Search for Items
5. Exit2

enter the item to be boughtwaterbottle

name: waterbottle

price: 100

quantity: 890

Enter the username:fghj

Enter the number of units to be bought(>15)50

Price to be paid(Discout included): 4500

Customer Login

Options

1. Buy
2. Buy Wholesale
3. Display Products
4. Search for Items
5. Exit3

Displaying the products

name: toothbrush

price: 10

quantity: 1000

name: waterbottle

price: 100

quantity: 840

Customer Login

Options

1. Buy
2. Buy Wholesale
3. Display Products
4. Search for Items
5. Exit4

enter the item name to be searchedtea

Item not present !

Customer Login

Options

1. Buy
2. Buy Wholesale
3. Display Products
4. Search for Items
5. Exit4

enter the item name to be searchedtoothbrush

name: toothbrush

price: 10

quantity: 1000

Customer Login

Options

1. Buy
2. Buy Wholesale
3. Display Products
4. Search for Items
5. Exit5