PSP COURSE PROJECT REPORT

ON

"ONLINE SHOPPING"

DEVELOPED BY:

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Department of Computer Science and Artificial Intelligence

<u>CERTIFICATE</u>

This is to certify that PSP course project report entitled **"ONLINE SHOPPING"** is a record of Bonafide work carried out by the students T. Siri Chandana, M. Harshitha, Y. Ashritha and S. Swarthik bearing roll numbers 2203A51451,2203A51430,2203A51458 and 2203A51445 of computer science department during the Acedemic year 2022-23.

Supervisor

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PROBLEM STATEMENT:

Develop a c application program for online shopping and store the product details of the products in a file.

Provide the functionality for below mentioned:

1. To add a product to existing cart.

2. To remove a product from the existing cart.

3. Show the billing as following:

   ➢ Product
   ➢ Colour
   ➢ Price
   ➢ Quantity

4. To order with the address with details like:

   ➢ Mobile number
   ➢ Country
   ➢ State
   ➢ District
   ➢ House number
   ➢ Payment method

MODULES:

In this application all variables and structures are declared globally so that these variables and structure members can be accessed throughout the program at any function call. We can choose any function by using function calls which are declared in switch-case. To repeat the loop control statement (do-while) is used with condition. The memory allocation will be done in this program dynamically.

The application asks the user to provide the details like E-mail to login to the application.

In this application four modules are used.

1. Selecting

 In this module the application asks the user who runs the program to select their   desired product.

2. Editing

In this module the application asks if the user wants   to delete or add any product to the existing cart.

3. Billing

In this module the bill will be generated under the categories: -

Product, colour , price, quantity and shows the total amount to be paid.

The application asks if the user wants to place the order or continue shopping.

4.Address

In this module, the application asks to enter details of the user like: -

Mobile number, Country, State, District, House number, Payment method and places the order.

KNOWLEDGE REQUIRED TO DEVELOP THIS APPLICATION

- ➢ Control statements(if,if-else,switch)

- ➢ Loop statements (while/do while, for)

- ➢ Arrays(1D/2D-arrays)

- ➢ Strings (strings and table of strings) and its functions(strcpy,strcmp)

- ➢ Functions (any type of user defined functions)

- ➢ Structure (structures and nested structures)

- ➢ Pointers (pointer to strings and pointers to structures)

- ➢ Dynamic memory allocation(malloc/calloc/realloc)

SOURCE CODE (with files):

```
#include<stdio.h>

#include<strings.h>

void cart(char [],char [],float,int);

void address();

void add_item();

void bill();

char option='z';

struct online

{

char email[100];

struct address

{

int number[10];

char country[100];

char state[100];

char district[100];

char house[10];

int password[10];


}q;

}s;

struct cart

{

char item[100];

char color[100];

float cost;
```

```c
int q;
}z[5];
int display();
FILE *b,*e,*y,*x,*t,*d;
int choice,things=0,quantity;
char colour[20],item[20];
float totalprice=0,price;
void select();
main()
{
char c;
printf("\n\n***--------------------WELCOME TO THRIFT SHOPPING--------------------*****\n");
printf("logon to 'THRIFT SHOPPING' by providing following details \n\n");
printf("Enter your e-mail ID :");
//scanf("%s",s.email);
gets(s.email);
printf("\n\n");
select();
}
void select()
{
int i;
char c;
char option[20];
choice=display();
switch(choice)
```

```c
{
case 1 :
printf("\t1.WOMEN\n");
printf("\t2.MEN\n");
printf("\t3.CHILDREN");
printf("\nSelect a type of clothing you'd like to shop :");
scanf("%d",&choice);
switch(choice)
{
case 1:
b=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/women.txt.txt","r");
printf("\n=================================================\n");
printf(" type           colour          price\n");
while(fscanf(b,"%s %s %f",&item,&colour,&price)!=EOF)
{
printf("-------------------------------------------------------\n");
fprintf(stdout,"%s          %s           %.2f",item,colour,price);
printf("\n");
}
fclose(b);
 do
{
printf("\nEnter the product that you want to add to cart :");
scanf("%s",&option);
printf("enter quantity=");
scanf("%d",&quantity);
b=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/women.txt.txt","r");
```

```c
while(fscanf(b,"%s %s %f",&item,&colour,&price)!=EOF)
{
if(strcmp(option,item)==0)
{
cart(item,colour,price,quantity);
}
}
fclose(b);
printf("\ndo you want to continue shopping for women[y/n/bill(b)] :");
scanf(" %c",&c);
}
while(c=='y');
if(c=='n')
select();
if(c=='b')
bill();
break;
case 2:
e=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/mens.txt","r");
printf("\n================================================\n");
printf(" type          colour          price\n");
while(fscanf(e,"%s %s %f",&item,&colour,&price)!=EOF)
{
printf("-------------------------------------------------------\n");
fprintf(stdout,"%s          %s          %.2f",item,colour,price);
printf("\n");
}
```

```c
fclose(e);
 do
{
printf("\nEnter the product that you want to add to cart :");
scanf("%s",&option);
printf("enter quantity=");
scanf("%d",&quantity);
e=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/mens.txt","r");
while(fscanf(e,"%s %s %f",&item,&colour,&price)!=EOF)
{
if(strcmp(option,item)==0)
{
cart(item,colour,price,quantity);
}

}
fclose(e);
printf("\ndo you want to continue shopping for men[y/n/bill(b)] :");
scanf(" %c",&c);
}
while(c=='y');
if(c=='n')
select();
if(c=='b')
bill();
break;
case 3:
```

```c
y=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/children.txt","r");
printf("\n==================================================\n");
printf(" type          colour         price\n");
while(fscanf(y,"%s %s %f",&item,&colour,&price)!=EOF)
{
printf("----------------------------------------------------\n");
fprintf(stdout,"%s          %s           %.2f",item,colour,price);
printf("\n");
}
fclose(y);
 do
{
printf("\nEnter the product that you want to add to cart :");
scanf("%s",&option);
printf("enter quantity=");
scanf("%d",&quantity);
y=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/children.txt","r");
while(fscanf(y,"%s %s %f",&item,&colour,&price)!=EOF)
{
if(strcmp(option,item)==0)
{
cart(item,colour,price,quantity);
}
}
fclose(y);
printf("\ndo you want to continue shopping for children[y/n/bill(b)] :");
scanf(" %c",&c);
```

```c
}
while(c=='y');
if(c=='n')
select();
if(c=='b')
bill();
break;
}
break;
case 2:
x=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/accessories.txt","r");
printf("\n================================================\n");
printf(" type          colour          price\n");
while(fscanf(x,"%s %s %f",&item,&colour,&price)!=EOF)
{
printf("------------------------------------------------------\n");
fprintf(stdout,"%s          %s          %.2f",item,colour,price);
printf("\n");
}
fclose(x);
 do
{
printf("\nEnter the product that you want to add to cart :");
scanf("%s",&option);
printf("enter quantity=");
scanf("%d",&quantity);
x=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/accessories.txt","r");
```

```c
while(fscanf(x,"%s %s %f",&item,&colour,&price)!=EOF)
{
if(strcmp(option,item)==0)
{
cart(item,colour,price,quantity);
}
}
fclose(x);
printf("\ndo you want to continue shopping for accessories[y/n/bill(b)] :");
scanf(" %c",&c);
}
while(c=='y');
if(c=='n')
select();
if(c=='b')
bill();
break;
case 3:
t=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/groceries.txt","r");
printf("\n================================================\n");
printf(" type        quantity        price per 1 kg/ltr/dozen\n");
while(fscanf(t,"%s %s %f",&item,&colour,&price)!=EOF)
{
printf("--------------------------------------------------\n");
fprintf(stdout,"%s        %s            %.2f",item,colour,price);
printf("\n");
}
```

```c
fclose(t);
  do
{
printf("\nEnter the product that you want to add to cart :");
scanf("%s",&option);
printf("enter quantity=");
scanf("%d",&quantity);
t=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/groceries.txt","r");
while(fscanf(t,"%s %s %f",&item,&colour,&price)!=EOF)
{
if(strcmp(option,item)==0)
{
cart(item,colour,price,quantity);
}
}
fclose(t);
printf("\ndo you want to continue shopping for groceries[y/n/bill(b)] :");
scanf(" %c",&c);
}
while(c=='y');
if(c=='n')
select();
if(c=='b')
bill();
break;
case 4:
d=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/electronics.txt","r");
```

```c
printf("\n=================================================\n");
printf(" type        colour        price\n");
while(fscanf(d,"%s %s %f",&item,&colour,&price)!=EOF)
{
printf("-----------------------------------------------\n");
fprintf(stdout,"%s        %s        %.2f",item,colour,price);
printf("\n");
}
fclose(d);
 do
{
printf("\nEnter the product that you want to add to cart :");
scanf("%s",&option);
printf("enter quantity=");
scanf("%d",&quantity);
d=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/electronics.txt","r");
while(fscanf(d,"%s %s %f",&item,&colour,&price)!=EOF)
{
if(strcmp(option,item)==0)
{
cart(item,colour,price,quantity);
}
}
fclose(d);
printf("\ndo you want to continue shopping for groceries[y/n/bill(b)] :");
scanf(" %c",&c);
}
```

```c
while(c=='y');
if(c=='n')
select();
if(c=='b')
bill();
break;
    }
}
int display()
{
int choice;
printf("The following are the categories we have that you might like to shop\n");
printf("\t1.Clothes\n");
printf("\t2.Accessories\n");
printf("\t3.Grocery\n");
printf("\t4.Electronics\n");
printf("Select a category you want to shop :");
scanf("%d",&choice);
return choice;

}
void cart(char item[100],char colour[100],float price,int q)
{
strcpy(z[things].item,item);
strcpy(z[things].color,colour);
z[things].cost=price;
z[things].q=q;
```

```
totalprice=totalprice+(z[things].cost*z[things].q);

things++;


}

void bill()

{

int i;

char c;

printf("\n==================================================================================================\n");

printf("s.no  product               colour               price       quantity\n");

for(i=0;i<things;i++)

{

printf("----------------------------------------------------------------------------------------\n");

printf("%d %s               %s               %.2f
%d\n",i+1,z[i].item,z[i].color,z[i].cost*z[i].q,z[i].q);

printf("----------------------------------------------------------------------------------------\n");

}

printf("\ntotal amount=%f\n",totalprice);

   for(i=0;i<1;i++)

{

if(option=='a')

continue;

printf("\nPress 'o' to place order:");

scanf(" %c",&c);

if(c=='o')

address();

}
```

```c
}
int delete_item()
{
int i,r;
char c;
printf("\n The items in cart are =\n");
for(i=0;i<things;i++)
{
printf("\t%d %s  %s   %f  %d\n",i+1,z[i].item,z[i].color,z[i].q*z[i].cost,z[i].q);
}
printf("\nenter the item you want to remove :");
scanf("%d",&r);
if(z[r-1].q>1)
{
z[r-1].q=z[r-1].q-1;
}
else
{
for(i=r;i<things;i++)
{
strcpy(z[i-1].item,z[i].item);
strcpy(z[i-1].color,z[i].color);
z[i-1].cost=z[i].cost;
}
things=things-1;
}
printf("\n------------selected item is succesfully removed----------\n");
```

```c
for(i=0;i<things;i++)

{

printf("\t%d %s  %s  %f  %d\n",i+1,z[i].item,z[i].color,z[i].q*z[i].cost,z[i].q);

}

return things;

}

void edit()

{

int i;

printf("\ndo you want to remove/add any item from/to the cart\n To remove press'r'\n To add press 'a'\n To go to billing press 'b'=");

scanf(" %c",&option);

if(option=='r')

things=delete_item();

if(option=='a')

select();

}

void address()

{

edit();

char c,ch;

printf("\n===================ENTER YOUR DETAILs=========================\n");

printf("Enter your mobile number :");scanf("%d",&s.q.number);

printf("Enter addresss :\n");

printf("\tCountry :");

scanf("%s",s.q.country);

printf("\n\tState :");
```

```c
scanf("%s",s.q.state);
printf("\n\tDistrict :");
scanf("%s",s.q.district);
printf("\n\tHouse number :");
scanf("%d",&s.q.house);
printf("\nPAYMENT METHOD :");
printf("\n\t1.cash on delivery(d)\n\t2.pay with card(p) :");
scanf(" %c",&c);
if(c=='d')
printf("\n ORDER PLACED SUCCESSFULLY :)");
else
{
printf("\n choose your card\n \tcredit(c)\n\tdebit(d)");
scanf(" %c",&ch);
printf("\nenter your password :");
scanf("%d",&s.q.password);
printf("\n=========ORDER PLACED SUCCESSFULLY :)============");
}
printf("\n=============THANK YOU FOR CHOOSING 'THRIFTSHOP' :) :) :)================");
}
```

FILE CODE :

```c
#include<stdio.h>
main()
{
    FILE *b,*e,*y,*x,*t,*d;
    char item[20];
    char colour[20];
    float price;
    printf("womens\n");
    b=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/women.txt.txt","w");
    while(fscanf(stdin,"%s %s %f",item,&colour,&price)!=EOF)
    fprintf(b,"%s %s %.2f",item,colour,price);
    fclose(b);
    printf("\nmens");
    e=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/mens.txt","w");
    while(fscanf(stdin,"%s %s %f",item,&colour,&price)!=EOF)
    fprintf(e,"%s %s %.2f",item,colour,price);
    fclose(e);
    printf("\nchildren");
    y=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/children.txt","w");
    while(fscanf(stdin,"%s %s %f",item,&colour,&price)!=EOF)
    fprintf(y,"%s %s %.2f",item,colour,price);
    fclose(y);
    printf("accesories\n");
    x=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/accessories.txt","w");
    while(fscanf(stdin,"%s %s %f",item,&colour,&price)!=EOF)
    fprintf(x,"%s %s %.2f",item,colour,price);
```

```c
    fclose(x);
    printf("groceries\n");
    t=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/groceries.txt","w");
    while(fscanf(stdin,"%s %s %f",item,&colour,&price)!=EOF)
    fprintf(t,"%s %s %.2f",item,colour,price);
    fclose(t);
    printf("Electronics\n");
    d=fopen("C:/Users/sirichandana/OneDrive/Desktop/products/electronics.txt","w");
    while(fscanf(stdin,"%s %s %f",item,&colour,&price)!=EOF)
    fprintf(d,"%s %s %.2f",item,colour,price);
    fclose(d);



}
```

OUTPUT:

FIG 1: SELECTING A CATEGORY TO SHOP

```
********----------------------WELCOME TO THRIFT SHOPPING----------------------***********
logon to 'THRIFT SHOPPING' by providing following details

Enter your e-mail ID :sirichandana


The following are the categories we have that you might like to shop
        1.Clothes
        2.Accessories
        3.Grocery
        4.Electronics
Select a category you want to shop :1
        1.WOMEN
        2.MEN
        3.CHILDREN
Select a type of clothing you'd like to shop :1


================================================
 type              colour             price
------------------------------------------------
kurtha            pink            1200.00
------------------------------------------------
jeans             blue            999.00
------------------------------------------------
t-shirt           blue            600.00
------------------------------------------------
sweat-shirt           pink            799.00
------------------------------------------------
hoodie            blue            799.00
------------------------------------------------
Enter the product that you want to add to cart :kurtha
enter quantity=1

do you want to continue shopping for women[y/n/bill(b)] :n
The following are the categories we have that you might like to shop
        1.Clothes
        2.Accessories
        3.Grocery
```

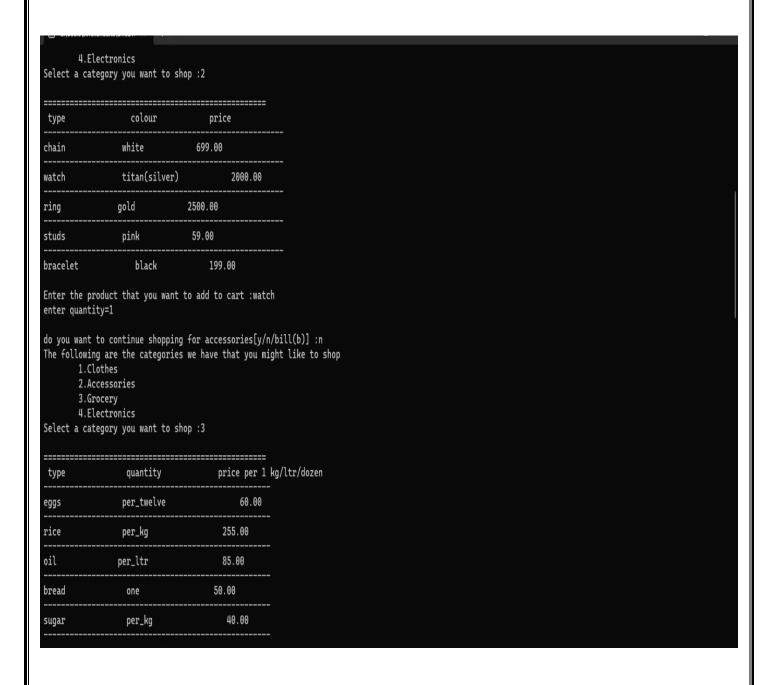# FIG 2: ADDING ITEMS OF ACCESSORIES AND GROCERIES TO CART

```
        4.Electronics
Select a category you want to shop :2


===================================================
  type            colour          price
---------------------------------------------------
chain            white          699.00
---------------------------------------------------
watch            titan(silver)        2000.00
---------------------------------------------------
ring          gold         2500.00
---------------------------------------------------
studs          pink         59.00
---------------------------------------------------
bracelet          black          199.00

Enter the product that you want to add to cart :watch
enter quantity=1

do you want to continue shopping for accessories[y/n/bill(b)] :n
The following are the categories we have that you might like to shop
        1.Clothes
        2.Accessories
        3.Grocery
        4.Electronics
Select a category you want to shop :3


===================================================
  type            quantity        price per 1 kg/ltr/dozen
---------------------------------------------------
eggs          per_twelve          60.00
---------------------------------------------------
rice          per_kg          255.00
---------------------------------------------------
oil          per_ltr          85.00
---------------------------------------------------
bread          one          50.00
---------------------------------------------------
sugar          per_kg          40.00
===================================================
```

FIG 3: ADDING PRODUCTS OF ELECTRONICS TO CART AND BILLING

```
Enter the product that you want to add to cart :eggs
enter quantity=1

do you want to continue shopping for groceries[y/n/bill(b)] :n
The following are the categories we have that you might like to shop
        1.Clothes
        2.Accessories
        3.Grocery
        4.Electronics
Select a category you want to shop :4

=============================================
 type          colour        price
---------------------------------------------
hplaptop        silver        50000.00
---------------------------------------------
headphones      black         2000.00
---------------------------------------------
tv        black       85000.00
---------------------------------------------
AC        white       90000.00
---------------------------------------------
smartwatch      black         3000.00

Enter the product that you want to add to cart :AC
enter quantity=1

do you want to continue shopping for groceries[y/n/bill(b)] :b

=================================================================
s.no  product                 colour            price      quantity
-----------------------------------------------------------------
1 kurtha                       pink              1200.00        1

-----------------------------------------------------------------
2 watch                        titan(silver)         2000.00        1

-----------------------------------------------------------------
3 eggs                         per_twelve            60.00          1
```

FIG 4: REMOVING ITEMS FROM THE CART

```
-----------------------------------------------------------------------------------------
2 watch                        titan(silver)                        2000.00            1
-----------------------------------------------------------------------------------------

-----------------------------------------------------------------------------------------
3 eggs                         per_twelve                           60.00          1
-----------------------------------------------------------------------------------------

-----------------------------------------------------------------------------------------
4 AC                           white                                90000.00           1
-----------------------------------------------------------------------------------------


total amount=93260.000000

Press 'o' to place order:o

do you want to remove/add any item from/to the cart
 To remove press'r'
 To add press 'a'
 To go to billing press 'b'=r

 The items in cart are =
      1 kurtha   pink   1200.000000  1
      2 watch  titan(silver)  2000.000000  1
      3 eggs  per_twelve   60.000000  1
      4 AC  white   90000.000000  1

enter the item you want to remove :1

-------------selected item is succesfully removed-----------
      1 watch  titan(silver)   2000.000000   1
      2 eggs  per_twelve   60.000000   1
      3 AC  white   90000.000000   1

===================ENTER YOUR DETAILs===========================
Enter your mobile number :9989795762
Enter addresss :
       Country :india

       State :telangana

       District :warangal
```

FIG 5: PLACING ORDER

```
The items in cart are =
     1 kurtha  pink   1200.000000  1
     2 watch  titan(silver)   2000.000000  1
     3 eggs  per_twelve   60.000000  1
     4 AC  white   90000.000000  1

enter the item you want to remove :1

------------selected item is succesfully removed-----------
     1 watch  titan(silver)   2000.000000   1
     2 eggs  per_twelve   60.000000   1
     3 AC  white   90000.000000   1


==================ENTER YOUR DETAILs========================
Enter your mobile number :9989795762
Enter addresss :
        Country :india

        State :telangana

        District :warangal

        House number :2318011

PAYMENT METHOD :
        1.cash on delivery(d)
        2.pay with card(p) :p

 choose your card
        credit(c)
        debit(d)c

enter your password :123678

=========ORDER PLACED SUCCESSFULLY :)============
=============THANK YOU FOR CHOOSING 'THRIFTSHOP' :) :) :)===============
-------------------------------
Process exited after 112.5 seconds with return value 110
Press any key to continue . . .
```