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MANAGEMENT SYSTEM FOR SHOPPING WEBSITE USING C

AIM : To prepare a database management system for the paint factory where a customer can view the products, place the order, view the order, update their order and delete the previous order.

CONCEPTS USED :

1. STRUCTURE :

Structure is the user defined data-type in C in which we can store data of multiple datatypes. We can store complex data in an easy way. It is similar to array but array can store data of only similar datatypes while here multiple datatypes can be used to store the data.

2. FUNCTIONS :

Function is a block of code which is used to perform a specific task. If we need to perform a specific task multiple times in a given program, we can use function for making it easier. Function can be called each time when we want to perform that block of code. It reduces the size of code.

3. CONTROL STRUCTURES :

Here we have used multiple control structures like do...while, switch case, if...else which are used to control the flow of the program.

4. FILE HANDLING:

In some programs we require to take input from the user and it needs to be stored into the file for the future use. For this C provides the facility of file input-output operations. We can perform multiple tasks on file like writing in the file, reading from the file, appending the file, etc.

THEORETICAL PRINCIPLES USED:

Here for creating the management system where the customer can order, view their order, update the order, delete the order we have used different concepts. In the main function, we have first used do...while loop. Loop will be executed without checking the condition for the first time. Then it will take the choice from the user like :

1. View the products
2. Place the order
3. View the order
4. Update the order
5. Delete the order
6. Exit

According to the choice entered by the user we have used switch case which will call the required function. For the first viewing the products, we have called menu() function and their price according to the quantity of 20 and 10 litres we have displayed it using simple printf statements. Here the return type of the menu() function is void which will not return anything to the main function. After the execution of the code in menu function, the control will again come into main function and again ask the user to enter the choice.

If the user enters number 2, the control of the program will go to order() function where we have declared file pointer and then opened the file using fopen("file_name","mode"); then we have asked the user to enter the number of products they want to order. And accordingly we have called insert function.

In the insert function we have first stored the price of different products in different arrays to calculate the total amount. Here also we have opened the file and then we have taken inputs from the user for structure data type variable order i.e. struct ord p. We have also calculated total amount respectively. We have written this data into the file using fwrite function and closed the file. The control will now again go to the function order() and check the condition and again call the function insert() if the condition is true, otherwise it will call the function view().

In the function view() we have first opened the file in read mode and we have used while condition(fread(&p,sizeof(p),1,fp) if it is true then it will print the data. Which means that until there is some data it will read the data and we have used printf function to print the data. When this condition is not true, it will return to the main function and again ask the user to enter the choice.

Now if the user enters 5, i.e if the user wants to delete the order then we have asked him product number that he wants to delete. We have created two file pointers, first for the already existing file where we have stored the data and second is the temporary file. Now according to the product number which user have entered we will compare it with the already existing data of the file. And we will do these using fread function of the file. We will open already existing file in read mode and we will open new file in write mode. Now by reading data from existing file, if the product number is the number entered by the user we will not write it into the new file otherwise we will write the data in the new file. And we will do this using if....else condition. Now we have the data in the new file except the product number the user entered. Now we will remove the

previous file and rename the new file by the name of previous file and display it using view() function.

If the user enters the choice 0, he will get the message as shown in the program and he will exit the program.

METHODOLOGY USED :

```
#include<stdio.h>
```

```
#include<string.h>
```

```
#include<string.h>
```

```
#include<stdlib.h>
```

```
void diplay_menu();
```

```
void order();
```

```
void view();
```

```
void insert();
```

```
void update();
```

```
void delete_order();
```

```
struct ord
```

```
{
```

```
    int prod_no;
```

```
    char prod_name[20];
```

```
    int prod_ltr[2];
```

```
    int quantity;
```

```
    int total;
```

```
};
```

```
struct ord p;
```

```
//FUNCTION TO DISPLAY THE PRODUCTS
```

```
void display_menu()
```

```

{
    printf("NO.PRODUCT NAME    \t\t20LTR \t10LTR \n");
    printf("1.Wood Primer    \t\t1800 \t1000 \n");
    printf("2.Metal Primer    \t\t1800 \t1000 \n");
    printf("3.Black Japan    \t\t1500 \t800 \n");
    printf("4.Black Oxide    \t\t1500 \t800 \n");
    printf("5.Synthetic Enamel\t\t\t2800 \t1500 \n");
    printf("6.Cement Primer    \t\t800 \t500 \n");
    printf(" (Interior)\n");
    printf("7.Cement Primer    \t\t1200 \t800 \n");
    printf(" (Exterior)\n");
    printf("8.Distemper    \t\t1200 \t800 \n");
    printf(" (Washable)\n");
    printf("\t\t*****\n");
}

```

//FUNCTION TO KNOW NUMBER OF PRODUCTS THEY WANT TO ORDER

```
void order()
```

```
{ FILE *fp;
```

```
fp=fopen("cpd.txt","a");
```

```
int i=1,n;
```

```
printf("enter number of products you want to order : ");
```

```
scanf("%d",&n);
```

```
while(i<=n)
```

```
{
```

```
    insert();
```

```
    i++;
```

```
}
```

```
view();
```

```

        fclose(fp);

        printf("*****\n");
    }

//FUNCTION TO INSERT THE ORDER
void insert()
{
    int m,j,i;

    int a[2]={1800,1000},b[2]={1800,1000},c[2]={1500,800},d[2]={1500,800};
    int e[2]={2800,1500},f[2]={800,500},g[2]={1200,800},h[2]={1200,800};

    FILE *fp;
    fp=fopen("cpd.txt","a");

    { m=20;

        printf("Enter product number : ");
        scanf("%d",&p.prod_no);
        printf("Enter product name : ");
        scanf("%s",&p.prod_name);
        for(j=0;j<2;j++)
        {
            printf("Enter quantity for %d ltr : ",m);
            scanf("%d",&p.prod_ltr[j]);
            switch(p.prod_no)
            {
                case 1:
                    p.total=p.total+(a[j]*p.prod_ltr[j]);
                    break;
                case 2:

```

```

        p.total=p.total+(b[j]*p.prod_ltr[j]);
        break;
    case 3:
        p.total=p.total+(c[j]*p.prod_ltr[j]);
        break;
    case 4:
        p.total=p.total+(d[j]*p.prod_ltr[j]);
        break;
    case 5:
        p.total=p.total+(e[j]*p.prod_ltr[j]);
        break;
    case 6:
        p.total=p.total+(f[j]*p.prod_ltr[j]);
        break;
    case 7:
        p.total=p.total+(g[j]*p.prod_ltr[j]);
        break;
    case 8:
        p.total=p.total+(h[j]*p.prod_ltr[j]);
        break;
    default:
        printf("enter valid product number \n");
    }
    m=m-10;
}
fwrite(&p,sizeof(p),1,fp);
}
fclose(fp);
printf("*****\n");

```

```
}
```

```
//FUNCTION TO VIEW THE ORDER
```

```
void view()
```

```
{
```

```
    int k=0,l;
```

```
    FILE *fp;
```

```
    fp=fopen("cpd.txt","r");
```

```
    printf("NO. PRODUCT NAME\t20LTR\t10LTR\tTotal \n");
```

```
    while(fread(&p,sizeof(p),1,fp)==1)
```

```
    {
```

```
        printf("%d ",p.prod_no);
```

```
        printf("%s\t\t",p.prod_name);
```

```
        for(l=0;l<2;l++)
```

```
        {
```

```
            printf("%d\t",p.prod_ltr[l]);
```

```
        }
```

```
        printf("%d\n",p.total);
```

```
    }
```

```
    fclose(fp);
```

```
    printf("*****\n");
```

```
}
```

```
//FUNCTION TO DELETE THE ORDER
```

```
void delete_order()
```

```
{ int no;
```

```
    FILE *fp,*ft;
```

```
    fp=fopen("cpd.txt","r");
```



```

view();

printf("Enter the product number you want to delete : ");

scanf("%d",&no);

ft=fopen("cpd1.txt","a");

while(fread(&p,sizeof(p),1,fp)==1)
{
    if(no==p.prod_no)
    {
        continue;
    }
    else
    {
        fwrite(&p,sizeof(p),1,ft);
    }
}

fclose(fp);

fclose(ft);

remove("cpd.txt");

rename("cpd1.txt","cpd.txt");

printf("*****\n");
}

```

//FUNCTION TO UPDATE THE ORDER

```

void update()
{

    view();

    int n;

    printf("enter the number of products you want to add : ");

    scanf("%d",&n);

```

```

while(n!=0)
{
insert();

n--;
}

view();

printf("*****\n");

}

//main function

int main()
{

int choice,sum=0;

printf("\t*****\n");

printf("\t\t!!!!WELCOME TO THE PAINT FACTORY!!!!\n");

printf("\t*****\n");


//OPTIONS

do
{

printf("\t1. To view the products enter 1 : \n");

printf("\t2. To order enter 2 : \n");

printf("\t3. To view your order enter 3 : \n");

printf("\t4. To update your order enter 4 : \n");

printf("\t5. To delete the order enter 5 : \n");

printf("\t6. To exit enter 0 : \n");

printf("\t*****\n");

printf("Enter your choice : ");

```

```
scanf("%d",&choice);
switch(choice)
{
    case 1:
        system("cls");
        display_menu();
        break;
    case 2:
        system("cls");
        order();
        break;
    case 3:
        system("cls");
        view();
        break;
    case 4:
        system("cls");
        update();
        break;
    case 5:
        system("cls");
        delete_order();
        view();
        break;
    case 0:
        system("cls");
        break;
    default:
        printf("enter the valid choice\n");
```

```

    }

    }while(choice!=0&&(choice>=1&&choice<=5));

    printf("\t\t*****");


    printf("\nYOU CAN PROCEED FOR PAYMENT");

    printf("\nTHANK YOU FOR SHOPPING ");

    return 0;

}

```

 C:\Users\ASUS\Desktop\cp project\tri.exe

```

*****
!!!!WELCOME TO THE PAINT FACTORY!!!!
*****
1. To view the products enter 1 :
2. To order enter 2 :
3. To view your order enter 3 :
4. To update your order enter 4 :
5. To delete the order enter 5 :
6. To exit enter 0 :
*****
Enter your choice : 1_

```

C:\Users\ASUS\Desktop\cp project\tri.exe

```
NO.PRODUCT NAME          20LTR   10LTR
1.Wood Primer            1800    1000
2.Metal Primer           1800    1000
3.Black Japan            1500     800
4.Black Oxide            1500     800
5.Synthetic Enamel       2800    1500
6.Cement Primer          800     500
  (Interior)
7.Cement Primer          1200     800
  (Exterior)
8.Distemper              1200     800
  (Washable)


*****
1. To view the products enter 1 :
2. To order enter 2 :
3. To view your order enter 3 :
4. To update your order enter 4 :
5. To delete the order enter 5 :
6. To exit enter 0 :
*****

Enter your choice : _
```

C:\Users\ASUS\Desktop\cp project\tri.exe

```
NO. PRODUCT NAME          20LTR   10LTR   Total
*****
1. To view the products enter 1 :
2. To order enter 2 :
3. To view your order enter 3 :
4. To update your order enter 4 :
5. To delete the order enter 5 :
6. To exit enter 0 :
*****

Enter your choice : _
```

 C:\Users\ASUS\Desktop\cp project\tri.exe

enter number of products you want to order : 4

Enter product number : 3

Enter product name : blackjapan

Enter quantity for 20 ltr : 2

Enter quantity for 10 ltr : 2

Enter product number : 4

Enter product name : blackoxide

Enter quantity for 20 ltr : 5

Enter quantity for 10 ltr : 2

Enter product number : 7

Enter product name : cement

Enter quantity for 20 ltr : 3

Enter quantity for 10 ltr : 3

Enter product number : 8

Enter product name : distemper

Enter quantity for 20 ltr : 2

Enter quantity for 10 ltr : 2_

C:\Users\ASUS\Desktop\cp project\tri.exe

NO.	PRODUCT NAME	20LTR	10LTR	Total
3	blackjapan	2	2	4600
4	blackoxide	5	2	13700
7	cement	3	3	19700
8	distemper	2	2	23700

1. To view the products enter 1 :

2. To order enter 2 :

3. To view your order enter 3 :

4. To update your order enter 4 :

5. To delete the order enter 5 :

6. To exit enter 0 :

Enter your choice :

C:\Users\ASUS\Desktop\cp project\tri.exe

NO.	PRODUCT NAME	20LTR	10LTR	Total
3	blackjapan	2	2	4600
4	blackoxide	5	2	13700
7	cement	3	3	19700
8	distemper	2	2	23700

enter the number of products you want to add : 2

Enter product number : 1

Enter product name : woodpimer

Enter quantity for 20 ltr : 2

Enter quantity for 10 ltr : 3

Enter product number : 2

Enter product name : metalprimer

Enter quantity for 20 ltr : 5

Enter quantity for 10 ltr : 5

NO.	PRODUCT NAME	20LTR	10LTR	Total
3	blackjapan	2	2	4600
4	blackoxide	5	2	13700
7	cement	3	3	19700
8	distemper	2	2	23700
1	woodpimer	2	3	30300
2	metalprimer	5	5	44300

1. To view the products enter 1 :
2. To order enter 2 :
3. To view your order enter 3 :
4. To update your order enter 4 :
5. To delete the order enter 5 :
6. To exit enter 0 :

Enter your choice : _

C:\Users\ASUS\Desktop\cp project\tri.exe

NO.	PRODUCT NAME	20LTR	10LTR	Total
3	blackjapan	2	2	4600
4	blackoxide	5	2	13700
7	cement	3	3	19700
8	distemper	2	2	23700
1	woodpimer	2	3	30300
2	metalprimer	5	5	44300

Enter the product number you want to delete : 8

NO.	PRODUCT NAME	20LTR	10LTR	Total
3	blackjapan	2	2	4600
4	blackoxide	5	2	13700
7	cement	3	3	19700
1	woodpimer	2	3	30300
2	metalprimer	5	5	44300

1. To view the products enter 1 :
2. To order enter 2 :
3. To view your order enter 3 :
4. To update your order enter 4 :
5. To delete the order enter 5 :
6. To exit enter 0 :

Enter your choice :

YOU CAN PROCEED FOR PAYMENT
THANK YOU FOR SHOPPING

Process exited after 94.39 seconds with return value 0
Press any key to continue . . .

Conclusion :

We can use this system for different industries for there customers who wants to order there products. Here function makes it easier to run the code multiple times and structure makes it easier to store data of multiple datatypes. File handling helps to store our data for the further use.

