Supermarket

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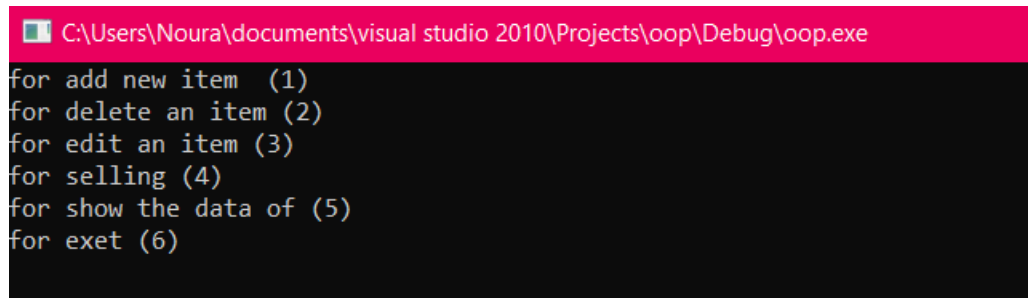
1. Introduction

Programs like this is usually needed to help managing shops properly to limit the waste of time and the loss of data, in this program I solved the problems that shops suffers from like stealing and managing data , to help shopkeepers to reach the highest level of efficiency. I used file organization to accomplish my aim, now you will see how this was accomplished .

2. Content

This program contains 6 functions ; (add,edit,delete,show data,sell,exit),
Each method control a specific operation to manage the shop data. There is only one file that contains   the   data   organized   into   records.


```
C:\Users\Noura\documents\visual studio 2010\Projects\oop\Debug\oop.exe
for add new item  (1)
for delete an item (2)
for edit an item (3)
for selling (4)
for show the data of (5)
for exet (6)
```

When you open the program it will give you the options you can use and how to select any of them. After you finish the operation it will ask you again what you want to do until you chose to exit the program.

2.1 Input

There are a lot of inputs, each input for a specific operation. At the first you have to enter the number of the operation you want to use

(1)is for adding new item to the store

(2)is for deleting an item that exist in the store

(3)is to edit the data of an item the store

(4)is for showing the full data of an item in the store.

1- |

If you chose to add a new item you will enter the data of the item, this data includes; name & price of the item then the number of the sales will be set atomically to 0.

```
fstream obj;
obj.open("names.txt",ios::out|ios::binary|ios::app);
        if(!obj)
        {cout<<"error";return;}
obj<<name;
obj<<"|";
obj<<price;
obj<<"|";
obj<<sales;
obj<<"|";
        obj.close();
```

this is the code of adding a new item , using the delimiter to separate the fields, each record contain three fields name,price,sales.
I used a binary file to save the data more efficiently and used the app operator to allow editing the file.

2- ||

If you chose to delete an item you will enter the name of the item and all the data of the item will be deleted from the file .

```
fstream obj;
fstream obj1;
obj1 .open("new.txt",ios::in|ios::binary|ios::app);
obj .open("names.txt",ios::in|ios::binary|ios::app);
if(!obj||!obj1)
{cout<<"error";return;}
while(!obj.eof())
{char u[50],v[100];
int i=0;
char q;
obj>>q;
```

```
    if(obj.eof())
    {break;}
    while(q!='|')
    {u[i]=q;
    obj>>q;i++;}
    u[i]='\0';
    i=0;
    int o;
for(o=0;o<sizeof(f);o++)
{if(f[o]==u[o]){
name1[o]=u[o];y=o+1;}
    else
    {y=0;break;}}
if(y==sizeof(f)){
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    k=atoi(v);
    i=0;
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    g=atoi(v);i=0;}
    else {obj1<<u;obj1<<q;}}
    obj.close();
    obj1.close();
    remove("names.txt");
    rename("new.txt","names.txt");}
```

This is the code of deleting an item from the file. For deleting, I open the file and create another file, i read the data in the first file and write it in the new file except for the data I want delete, I ignore it then I close the file then I delete the old file then I change the name of the new file into the name of the old file , now all I have is a new file that has the old file name and all the data except the ones I want to delete.

3- |||

If you want to edit an item you will enter the name of the item you want to edit then you will re enter the data of the item ,then the sales well be set to 0 as it will be considered as a new item.

There is no specific code to edit, it uses the code of adding and deleting to do this, as it takes the name you want to edit then it deletes its date using the delete function then reenter the new data with the add function.

4- IV

If you want to sell items ,first enter the number of items you want to sell,then enter the names of the items ,it will tell you the total price of the items and will record the selling of each item in the file.

```cpp
fstream obj;
    fstream obj1;
    obj1 .open("new.txt",ios::in|ios::binary|ios::app);
    obj .open("names.txt",ios::in|ios::binary|ios::app);
    if(!obj||!obj1)
    {cout<<"error";return;}
    while(!obj.eof())
    {char u[50],v[100];
    int i=0;
    char q;
    obj>>q;
    if(obj.eof())
    {break;}
    while(q!='|')
    {u[i]=q;
    obj>>q;i++;}
    u[i]='\0';
    i=0;
    int o;
    for(o=0;o<sizeof(f);o++)
    {if(f[o]==u[o]){
    name1[o]=u[o];y=o+1;}
    else
    {y=0;break;}}
    if(y==sizeof(f)){
    obj1<<u;
    obj1<<q;
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    k=atoi(v);
    obj1<<k;
    i=0;
    obj1<<q;
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    g=atoi(v);
    g++;
    obj1<<g;
    i=0;
    obj1<<q;}
    else {obj1<<u;
```

```
            obj1<<q;}}
    obj.close();
    obj1.close();
    remove("names.txt");
    rename("new.txt","names.txt");}
```

This is the code of selling,it is almost like the delete code but instead of deleting it changes the sales as it adds one for each time it is sold. To keep record of the sales, it also uses another code to get the price of the items.
fstream obj;

```
    obj .open("names.txt",ios::in|ios::binary|ios::app);
    if(!obj)
    {cout<<"error";return;}
    while(!obj.eof())
    {char u[50],v[100];
    int i=0;
    char q;
    obj>>q;
    while(q!='|')
    {u[i]=q;
    obj>>q;i++;}
    u[i]='\0';
    i=0;
    int o;
 for(o=0;o<sizeof(f);o++)
 {if(f[o]==u[o]){
 name1[o]=u[o];y=1;}
    else
    {y=0;break;}}
 if(y==1){
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    k=atoi(v);
    i=0;
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    g=atoi(v);
    i=0;}}
    obj.close();}
    int getprice()
    {return k;}
```

It uses this to search (discussed in V) for the price in the file using the name then return the price for each item then it counts the total price in the main ,
cin>>num;

```
        sel.read(num); \\ send the name to the class serch
        int p =sel.getprice(); \\ return the price of the item
        sum=sum+p;
        sel.readd(num);} \\ change the sales
    cout<<"total price is :"<<sum<<endl;
```

5- V

If you want to see the data of an item, enter the name of the item and it will show the data.

It uses the code of searching that is used in the selling ,but returns all the data not just the price.

```cpp
fstream obj;
    obj .open("names.txt",ios::in|ios::binary|ios::app);
    if(!obj)
    {cout<<"error";return;}
    while(!obj.eof())
    {char u[100],v[100],pp[100];
    int i=0;
    char q;
    obj>>q;
    while(q!='|')
    {u[i]=q;
    obj>>q;i++;}
    u[i]='\0';
    i=0;
    int o=0;
            while(f[o]!='\0')
            {if(f[o]==u[o]){
name1[o]=u[o];y++;}
    else
    {y=0;break;}
    o++;}
    if(y==io){
    name1[o]='\0';
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    k=atoi(v);
    i=0;
    obj>>q;
    while(q!='|')
    {v[i]=q;
    obj>>q;i++;}
    v[i]='\0';
    g=atoi(v);
    i=0;}}
    obj.close();
void get()
    {cout<<"name is: "<<name1<<endl;
    cout<<"price is: "<<k<<endl;
    cout<<"number of sails is: "<<g<<endl;}
```

This is the code of search it takes the name of the item you want to search for then it compare it with each field litter by litter until it reaches the similar field then it reads the following two fields as they contain the rest of the wanted data then return them to the main to be shown.

6- VI

If you want to exit the program chose it then priss any key.

2.2 Output

When you open the programe, the out pot that will appear is the options you can use .

```
C:\Users\Noura\documents\visual studio 2010\Projects\oop\Debug\oop.exe
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```

1- I

In **addation**:

```
1
enter the name: noura
enter th price: 1111
\\done\\
```

First enter the name then the price .

2- II

In deleting:

```
2
what do u wann delete?(name) noura
\\done\\
```

Just enter the   of the item .

3- III

In editing:

```
3
what do u wanna edet?(name) noura
enter the new data of: noura
the new name is: noura
the new price is: 1555
\\done\\
```

First enter the name of the item you want to edit then enter the new data of the item .

4- IV

In selling:

```
4
enter the number pf items: 2
enter the name of the items:
noura
111111
total price is :188
\\done\\
```

First enter the number of the items that will be sold,then enter the names of the items ,it will till you the total price.

5- V

In show the data:

```
5
what do u wanna serch for??(name) noura
name is: noura
price is: 100
number of sails is: 2
\\done\\
```

First enter the name you want to see its data,then it will show the data .

6- VI

In exit only chose it then press any key:

```
6
Press any key to continue . . .
```

Press any key and it will close.