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// HEADER FILE USED IN PROJECT

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```
#include<conio.h>
#include<stdio.h>
#include<process.h>
#include<fstream.h>
```

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// CLASS USED IN PROJECT

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```
class product
{
    int pno;
    char name[50];
    float price, qty, tax, dis;
public:
    void create_product()
    {
        cout << "\nPlease Enter The Product No. of The Product ";
        cin >> pno;
        cout << "\n\nPlease Enter The Name of The Product ";
        gets(name);
        cout << "\nPlease Enter The Price of The Product ";
        cin >> price;
        cout << "\nPlease Enter The Discount (%) ";
        cin >> dis;
    }

    void show_product()
    {
        cout << "\nThe Product No. of The Product : " << pno;
        cout << "\nThe Name of The Product : ";
        puts(name);
        cout << "\nThe Price of The Product : " << price;
        cout << "\nDiscount : " << dis;
    }

    int retpno()
    {
        return pno;
    }
}
```

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    }

    float retprice()
    {
        return price;
    }

    char * retname()
    {
        return name;
    }

    int retdis()
    {
        return dis;
    }

}; //class ends here

//*****
// global declaration for stream object, object
//*****

fstream fp;
product pr;
//*****
// function to write in file
//*****

void write_product()
{
    fp.open("Shop.dat", ios::out | ios::app);
    pr.create_product();
    fp.write((char * ) & pr, sizeof(product));
    fp.close();
    cout << "\n\nThe Product Has Been Created ";
    getch();
}
//*****
// function to read all records from file
//*****

void display_all()
{

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    clrscr();
    cout << "\n\n\n\t\tDISPLAY ALL RECORD !!!\n\n";
    fp.open("Shop.dat", ios:: in );
    while (fp.read((char * ) & pr, sizeof(product)))
    {
        pr.show_product();
        cout << "\n\n=====\\n";
        getch();
    }
    fp.close();
    getch();
}
//*****

// function to read specific record from file
//*****

void display_sp(int n)
{
    int flag = 0;
    fp.open("Shop.dat", ios:: in );
    while (fp.read((char * ) & pr, sizeof(product)))
    {
        if (pr.retpno() == n)
        {
            clrscr();
            pr.show_product();
            flag = 1;
        }
    }
    fp.close();
    if (flag == 0)
        cout << "\n\nrecord not exist";
    getch();
}
//*****

// function to modify record of file
//*****

void modify_product()
{
    int no, found = 0;
    clrscr();
    cout << "\n\n\t\tTo Modify ";
    cout << "\n\n\t\tPlease Enter The Product No. of The Product";
    cin >> no;

```

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fp.open("Shop.dat", ios::in | ios::out);
while (fp.read((char * ) & pr, sizeof(product)) && found == 0)
{
    if (pr.retpno() == no)
    {
        pr.show_product();
        cout << "\nPlease Enter The New Details of Product" << endl;
        pr.create_product();
        int pos = -1 * sizeof(pr);
        fp.seekp(pos, ios::cur);
        fp.write((char * ) & pr, sizeof(product));
        cout << "\n\n\t Record Updated";
        found = 1;
    }
}
fp.close();
if (found == 0)
    cout << "\n\n Record Not Found ";
getch();
}
//*****
// function to delete record of file
//*****
void delete_product()
{
    int no;
    clrscr();
    cout << "\n\n\n\tDelete Record";
    cout << "\n\nPlease Enter The product no. of The Product You Want To Delete";
    cin >> no;
    fp.open("Shop.dat", ios::in | ios::out);
    fstream fp2;
    fp2.open("Temp.dat", ios::out);
    fp.seekg(0, ios::beg);
    while (fp.read((char * ) & pr, sizeof(product)))
    {
        if (pr.retpno() != no)
        {
            fp2.write((char * ) & pr, sizeof(product));
        }
    }
    fp2.close();
    fp.close();
}

```

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        remove("Shop.dat");
        rename("Temp.dat", "Shop.dat");
        cout << "\n\n\tRecord Deleted ..";
        getch();
    }
    //*****
    // function to display all products price list
    //*****

void menu()
{
    clrscr();
    fp.open("Shop.dat", ios:: in );
    if (!fp)
    {
        cout << "ERROR!!! FILE COULD NOT BE OPEN\n\n\n Go To Admin Menu to create
        File ";
        cout << "\n\n\n Program is closing ....";
        getch();
        exit(0);
    }

    cout << "\n\n\t\tProduct MENU\n\n";
    cout << "=====\\n";
    cout << "P.NO.\t\tNAME\t\tPRICE\\n";
    cout << "=====\\n";

    while (fp.read((char * ) & pr, sizeof(product)))
    {
        cout << pr.retpno() << "\t\t" << pr.retrname() << "\t\t" << pr.retprice() << endl;
    }
    fp.close();
}

//*****
// function to place order and generating bill for Products
//*****

void place_order()
{
    int order_arr[50], quan[50], c = 0;
    float amt, damt, total = 0;
    char ch = 'Y';

```

```

menu();
cout << "\n===== ";
cout << "\n PLACE YOUR ORDER";
cout << "\n===== \n";
do
{
    cout << "\n\nEnter The Product No. Of The Product : ";
    cin >> order_arr[c];
    cout << "\nQuantity in number : ";
    cin >> quan[c];
    c++;
    cout << "\nDo You Want To Order Another Product ? (y/n)";
    cin >> ch;
} while (ch == 'y' || ch == 'Y');
cout << "\n\nThank You For Placing The Order";
getch();
clrscr();
cout << "\n\n***** INVOICE *****\n";
cout << "\nPr No.\tPr Name\tQuantity \tPrice \tAmount \tAmount after\n";
cout << "discount\n ";
for (int x = 0; x <= c; x++)
{
    fp.open("Shop.dat", ios::in);
    fp.read((char * ) & pr, sizeof(product));
    while (!fp.eof())
    {
        if (pr.retpno() == order_arr[x])
        {
            amt = pr.retprice() * quan[x];
            damt = amt - (amt * pr.retprice() / 100);
            cout << "\n" << order_arr[x] << "\t" << pr.retprice() <<
                "\t" << quan[x] << "\t\t" << pr.retprice() << "\t" << amt << "\t\t" << damt;
            total += damt;
        }
        fp.read((char * ) & pr, sizeof(product));
    }

    fp.close();
}
cout << "\n\n\t\t\t\t\tTOTAL = " << total;
getch();
}

```

```

//*****
// INTRODUCTION FUNCTION
//*****

void intro()
{
    clrscr();
    gotoxy(31, 11);
    cout << "SUPER MARKET";
    gotoxy(35, 14);
    cout << "BILLING";
    gotoxy(35, 17);
    cout << "PROJECT";
    cout << "\n\nMADE BY : ANUJ KUMAR";
    cout << "\n\nSCHOOL : RYAN INTERNATIONAL SCHOOL";
    getch();
}

//*****
// ADMINSTRATOR MENU FUNCTION
//*****

void admin_menu()
{
    clrscr();
    char ch2;
    cout << "\n\n\n\tADMIN MENU";
    cout << "\n\n\t1.CREATE PRODUCT";
    cout << "\n\n\t2.DISPLAY ALL PRODUCTS";
    cout << "\n\n\t3.QUERY ";
    cout << "\n\n\t4.MODIFY PRODUCT";
    cout << "\n\n\t5.DELETE PRODUCT";
    cout << "\n\n\t6.VIEW PRODUCT MENU";
    cout << "\n\n\t7.BACK TO MAIN MENU";
    cout << "\n\n\tPlease Enter Your Choice (1-7) ";
    ch2 = getche();
    switch (ch2)
    {
        case '1':
            clrscr();
            write_product();
            break;
        case '2':

```

```

        display_all();
        break;
    case '3':
        int num;
        clrscr();
        cout << "\n\n\tPlease Enter The Product No. ";
        cin >> num;
        display_sp(num);
        break;
    case '4':
        modify_product();
        break;
    case '5':
        delete_product();
        break;
    case '6':
        menu();
        getch();
    case '7':
        break;
    default:
        cout << "\a";
        admin_menu();
    }
}

//*****
// THE MAIN FUNCTION OF PROGRAM
//*****

void main()
{
    char ch;
    intro();
    do
    {
        clrscr();
        cout << "\n\n\n\tMAIN MENU";
        cout << "\n\n\t01. CUSTOMER";
        cout << "\n\n\t02. ADMINISTRATOR";
        cout << "\n\n\t03. EXIT";
        cout << "\n\n\tPlease Select Your Option (1-3) ";
        ch = getche();
        switch (ch)
        {

```



```
    case '1':
        clrscr();
        place_order();
        getch();
        break;
    case '2':
        admin_menu();
        break;
    case '3':
        exit(0);
    default:
        cout << "\a";
    }
} while (ch != '3');
}

//*****
// END OF PROJECT
```