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|  | **SRI KRISHNA INSTITUTIONS**  **(AN AUTONOMOUS INSTITUTION)**  **(APPROVED BY AICTE AND AFFILIATED TO ANNA UNIVERSITY CHENNAI)**  **ACCREDITED BY NAAC WITH “A” GRADE** |  |
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E-COMMERCE SYSTEM

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**About Us**

Pitbull internet private limited is a specialized electronic e-commerce company based in Coimbatore. Founded by batch-A-09 in 2019 initially focused on the electronic section of the E-commerce. The services currently provided includes online shopping portal for electrical goods. The company operates now in India only. The company primarily competes with some of the domestic rivals such as flipkart. Pitbull is significantly dominant in the sale of electronic goods includes laptops, smart televisions, washing machines, refrigerators. In august 2019 a US based retail chain Walmart acquired a 50% of the controlling stake in Pitbull for a huge sum. Still one of the biggest E-commerce chain in India.

**Contact Us**

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**ABSTRACT**

E-commerce is the idea of buying and selling of goods and services on the internet. The primary goal of an E-commerce site is to sell goods online.

E-commerce is now seen as a reality for many businesses and a normal part of a start-up business plan. The benefits including cost-saving, efficiency and enhanced profit are more common in recent-days. It is a boom in modern business and is a paradigm shift influencing both marketers and customers. Rather it is another way to boost the existing business practices.

It is leading to a complete change in the traditional way of doing business. This significant change in business model is witnessing a tremendous growth around the globe and India is not an exception. The massive internet usage led to the growth of e-commerce and particularly start-ups have been increasingly using this option as a differentiating business model.

This project deals with developing an e-commerce application for specialized electronic goods. The application provides the user with a catalog of different products available under different categories under electronics. The system is implemented with a 2-tire approach, with a backend of files and file-handling concepts and a frontend with the console.

**OBJECTIVE**

* To develop an application that serves as an specialized e-commerce for electronic goods.
* To develop a user-friendly application.
* To handle functionalities like buy-item, add/edit-item, invoice generation.
* To provide admin with a special and independent environment.
* To provide user with a independent environment.
* To provide more secure and independent login for users.

**Existing Systems**

In conventional way buyer goes to a shop and purchases goods, thus to make the process easier e-commerce has been introduced.

Since e-commerce is recently becoming popular there are many number of existing systems. Many of the market leaders in e-commerce sell huge variety of goods thus the importance in description given to a higher order product is not given to a middle order or lower order product.

The are many duplicate retailers online, thus most of the e-commerce platforms do not verify retailers thus resulting in unsatisfactory customers. Moreover, products get repeated many times under the same category. Thus, resulting in wastage of time and resources.

**Proposed System**

With the proposed system, the user can shop from their location at any point of time. Since the proposed system is specialized to electronic goods most of the products would be covered.

Primarily all the retailers are verified only then they will be able to display their products. Repetition of products are rectified. Thus it would satisfy a customer up to a certain extent and would save a lot of time and resource.

**Specification**

* Safe user login ( Password protected )
* Secure database with binary file
* Always reliable
* User-friendly and elegant
* No leak of user information

**Budget**

Initial Investment:

Software development cost ………. Rs.25000

Website development cost ………. Rs.25000

Products cost ………. Rs.100000000

Regular Investment ( Monthly ):

Staff salary (1250 members ) ……….. Rs.25500000

Server Maintenance Charge ……….. Rs.5000

Management ……….. Rs.100000

Profit Expected ………. Rs.2000000

**High level data documentation**

1. **Business Requirements:**

The following are the business requirements for this project.

|  |  |  |
| --- | --- | --- |
| s.no | requirement | status |
| 1 | Login and sign-up | Implemented |
| 2 | shopping | Implemented |
| 3 | checkout | Implemented |
| 4 | admin | Implemented |

1. **List of files supplied:**

|  |  |  |
| --- | --- | --- |
| S.No. | file | description |
| 1. | sign.h | Header file which contains all the functions for sign-up and sign-in functionalities. |
| 2. | Admin.c | Independent code block which contains functions for the admin functionalities such as editing product details or add a new product. |
| 3. | Shopping.c | The main file of the online purchasing system which contains the main function and contains category and subcategory. |
| 4. | Tv.dat | File that contains all the products available in sub-category televisions. |
| 5. | Laptop.dat | File that contains all the products available in sub-category laptops. |
| 6. | Refrigerator.dat | File that contains all the products available in sub-category refrigerator. |
| 7. | Washingmachine.dat | File that contains all the products available in sub-category washing machine. |
| 8. | Userprofile.dat | File that contains all the details of the  user including the user-id and passwords. |

1. **LOGIN AND SIGN-UP:**

This module has two main functions.

* 1. Sign-up for new user.
  2. Login for existing user.

Sign-up:

The user details such as email-id, name, address, mobile number and user credentials like password are stored in a binary text file with .dat extension.

If the email-id is found to be repeated, then the user is requested to enter another email-id for further process.

Once the sign-up process has been completed then the user is navigated to the shopping page or profile page as per wish.

Login:

The user is required to enter user-id and the password, both of it are compared with existing details in the file. If the values are correct, that is if the user-id matches the password then the user is shown the shopping page.

**4. SHOPPING:**

This is the main module that displays all the categories and then once the category is selected it displays all the available products in the particular category which in turn is present in the binary text file.

**\***The user is required to select one among the available sub-category.

\*The available product in the sub-category are displayed.

\*The user have to select one among the listed products.

\*If the available count of the item is zero then the product is displayed asa out of stock.

\*If the user selects the product and wants to check out, then the count of the product is reduced by one in the text file.

\*Then the bill sheet is displayed for the user reference.

1. **CHECKOUT:**

This module displays the bill and the product description of the ordered item.

The user once has to select the item and have to place the order.

Then the bill details are displayed.

1. **ADMIN:**

This is a separate block of code for admin permissions. Admins are given unique ids and passwords, one signed-up the admin can

1.add item

2.edit item Add item:

The user can add a new item by providing the necessary details.

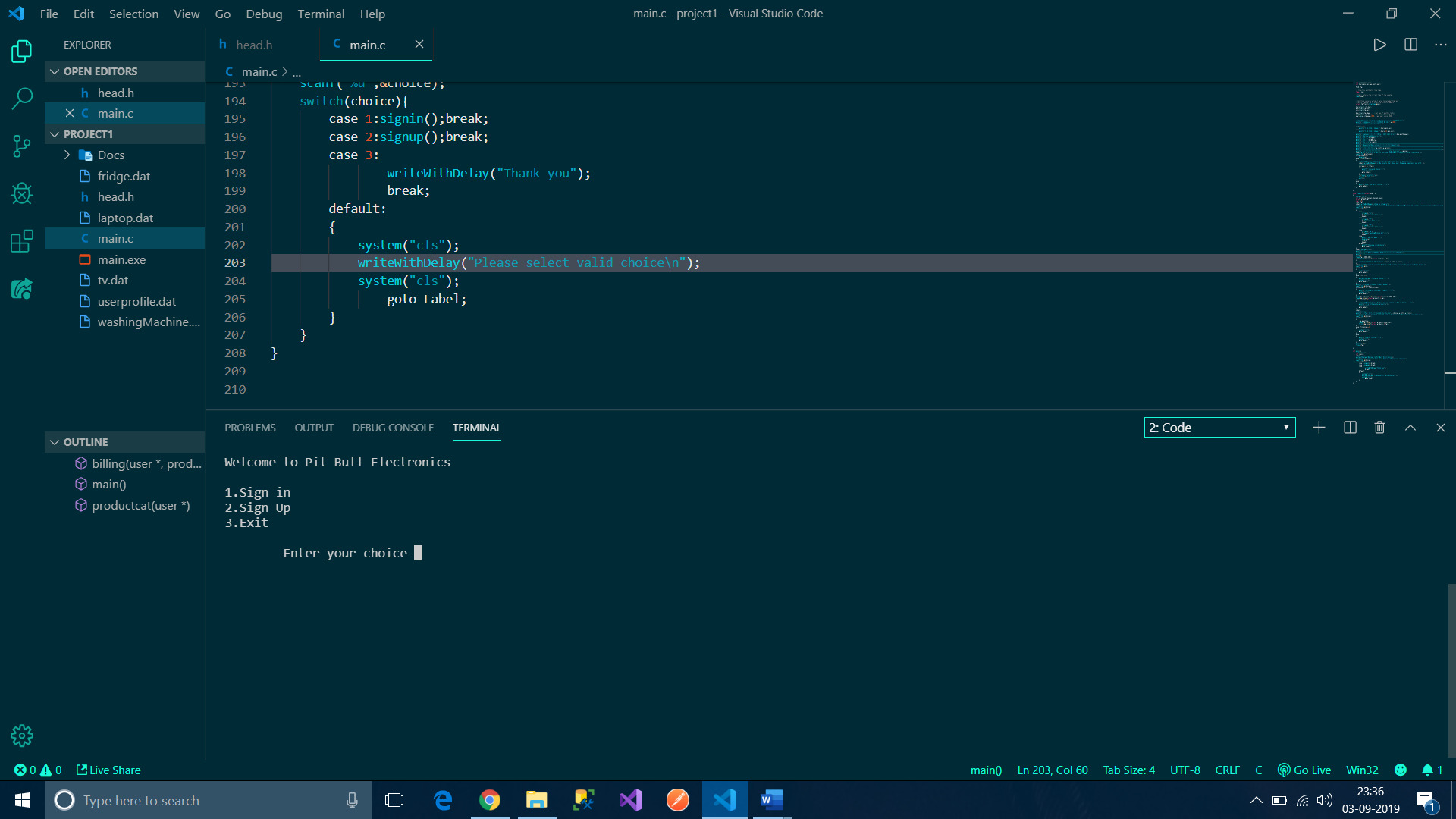
* + - The new product id.
    - The description of the product.
    - The category of the product where it should be placed.  The price of the product  The total stock of the product.

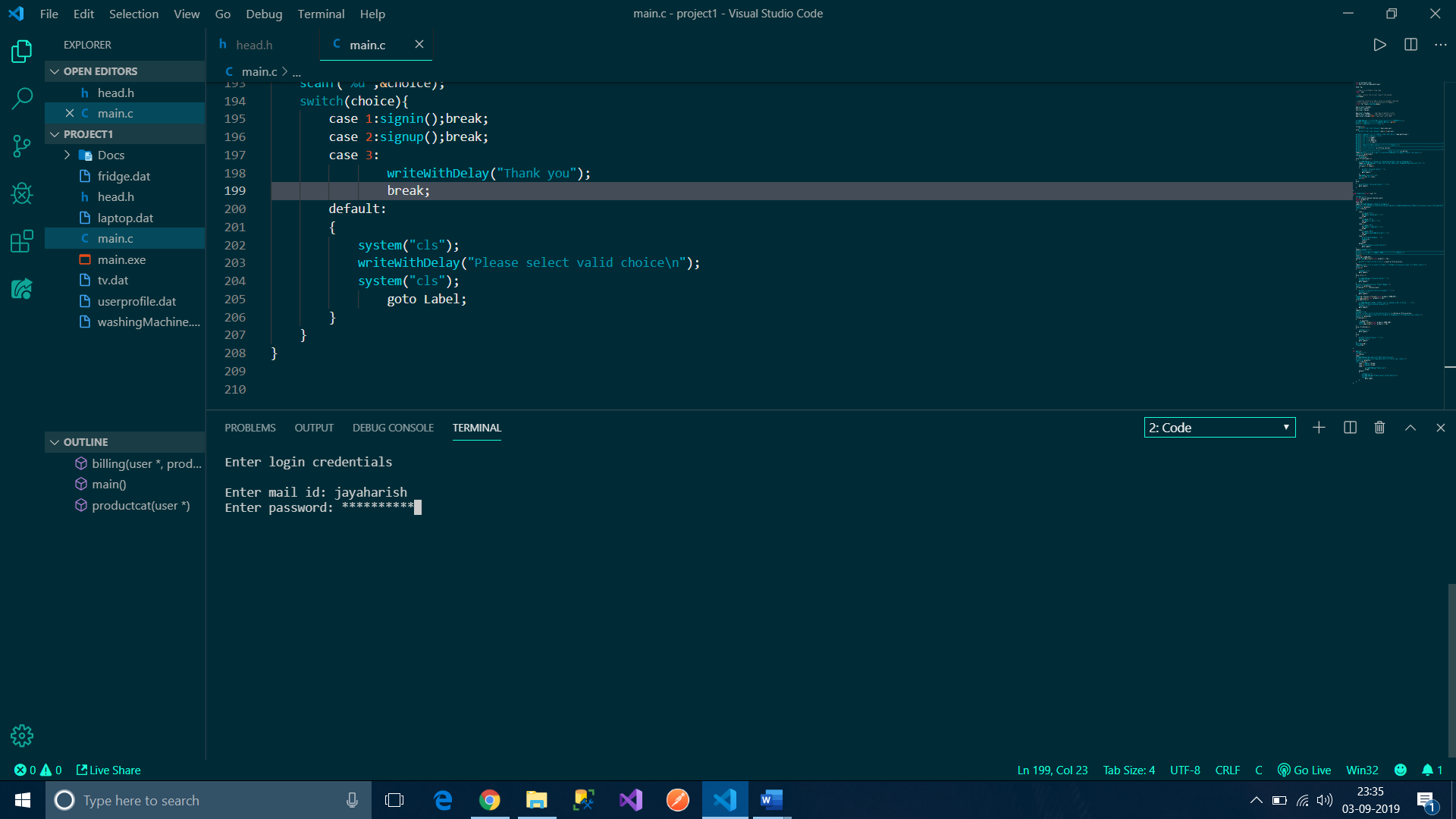
Edit item:

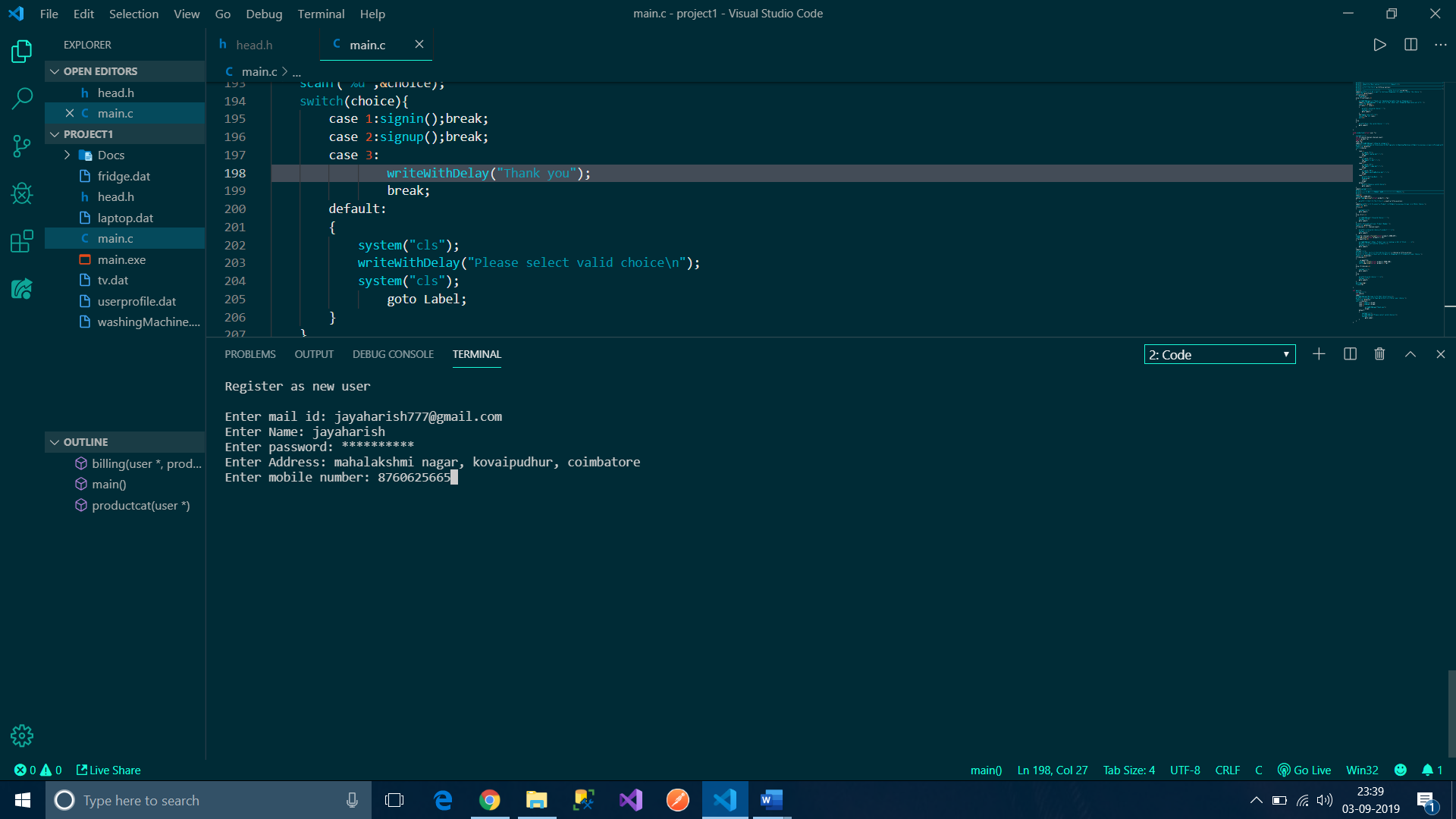
The user can edit the details of the existing item.

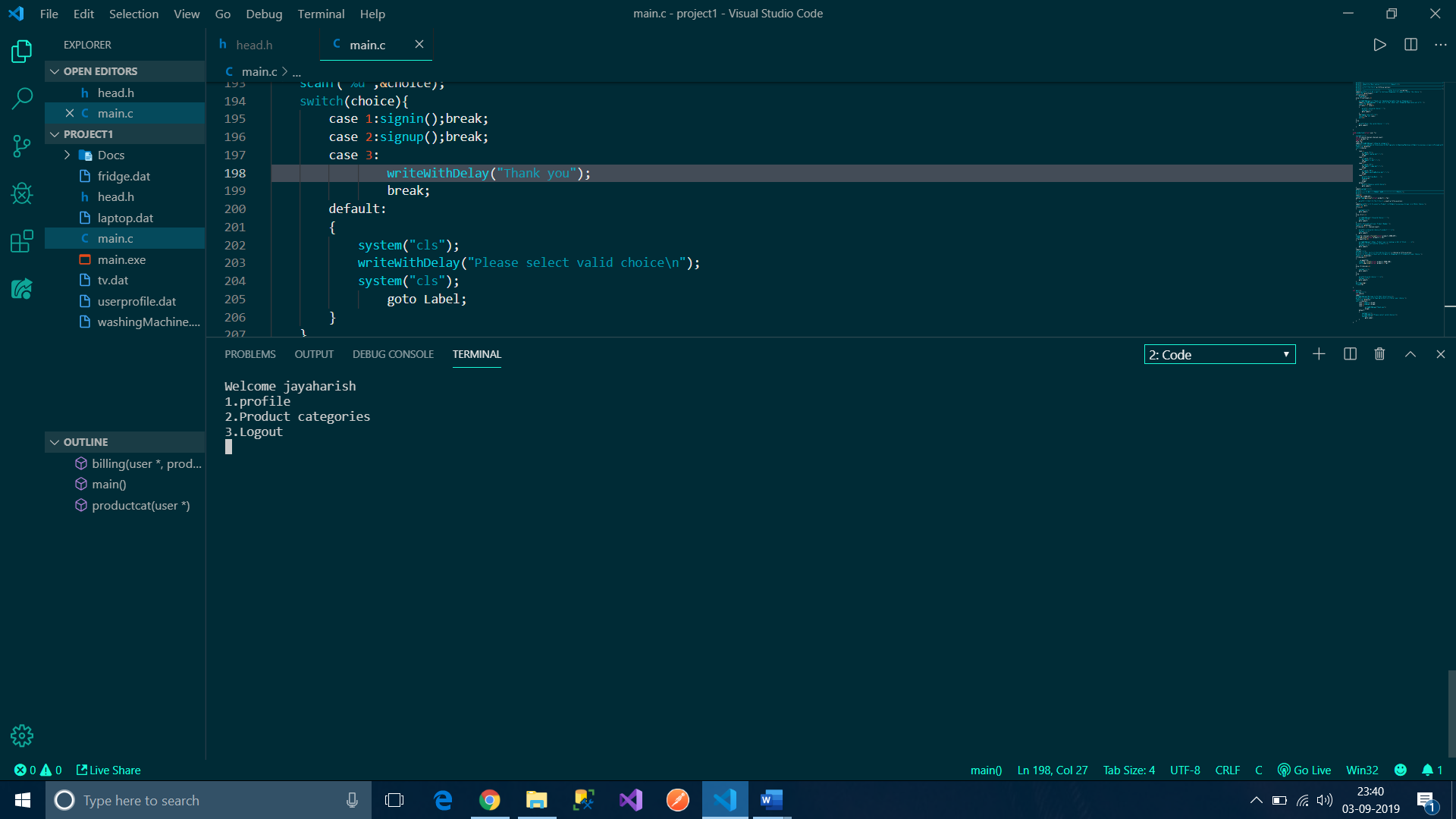
* + - The product id that has to be edited should be selected first.
    - Then the details of the product can be edited.
    - The price and current stock also can be edited.

**Sample screenshots**









**Low level data documentation**

**Control Flow Diagr**

User

Sign In

Homepage

Profile

Choose the Category

DATABASE

Choose the product

Information from database

Confirm to Checkout

Reduce the selected product quantity

**Algorithm**

**Sign up module:**

1. Start
2. Open binary database file
3. Input the User details (mail ID, name, password, mobile number, address)
4. Check if the mail ID is already registered or not

If mail ID is already registered,

then go to the sign in page

else

go to shopping options

1. Stop

**Sign in function:**

1. Start
2. Open user.dat file
3. Input the mail ID and password
4. Check if email ID is present in database or not

If mail ID and password are correct, then go shopping options

else

go to the sign in page

1. Stop

**Homepage function:**

i. Start.

ii. Display the Shopping options

iii. If one is entered

Print the profile details

If two is entered

Go to product categories section

If three is entered

Log out

iv. Stop.

**Shopping Module:**

1. Start.
2. Display the category of the products (Available products are LED TV, Washing Machine, Laptop and Refrigerator).
3. Input the Product from the User.
4. Display the available products accordance to the inputted category. v) Input the user’s choice of product. vi) Display all the specifications and details about the selected product.
5. Ask for user’s confirmation of the product or to continue for another product.
6. If the choice is 1, reduce the quantity from the dat file and call the billing function else get back category function. ix) Stop.

**Billing Module:**

1. Start.
2. Print the date and time using time.h header file.
3. Display the user’s details (User Name and Address). iv) Display the product details (Product Name, Quantity, and Rate). v) Display the Net value of the purchased product. vi) Stop

**Admin module:**

1. Enter Username and Password of admin.
2. If the username and password matches the predefined value, proceed to the next process,else print “incorrect username or password”.
3. If the user enters the input as 1 ,the page will go to adding products mode.
   1. The category in which product to be added is selected by the admin.
      1. The name ,price and quantity of the product is entered and saved.
4. If the user enters the input as 2 ,the page will go to editing products mode.
   1. The category of the product to be edited is entered by the admin.
      1. Sub category of the product to be edited is selected .
      2. The quantity to be edited is entered by the admin.
5. If the user enters the input as 3, the user will be logout and it will return to login page.

**Pseudocode**

**Sign up module**

Begin

Open binary file in “ab” mode

Get the User details

Save the user details in binary file

Close binary file

Redirect to sign in page

End

**Sign in module**

Begin

Open binary file in “ab” mode

Get mail ID, password

If (Input mail ID,password == mail ID,password in database)

Close the binary file

then Go to shopping page else

Close the binary file

go to the sign in page

End

**Homepage function**

Begin

Display Shopping options

If “1”

Print the profile details

If “2”

Go the product categories

If “3”

Log out

End

**Shopping Module**

Begin

Print category of product

If “1”

Display product varieties of LED TV.

If “2”

Display product varieties of Washing Machine.

If “3”

Display product varieties of Laptops.

If “4”

Display product varieties of Refrigerator.

If default

goto homepage

Print 1.Buy Now and 2.Back.

Input choice

If “1”

Quantity-=1

Call Billing function.

If “2”

Call category function.

End.

**Billing Module**

Begin.

Print date and time.

Print user’s details.

Print Product details.

Print Net value.

End.

**Admin Module**

* + - 1. Begin.
      2. If “Username==default username && password == default password”

Continue

Else

Print ” incorrect username or password”

3.Print “Enter the case

1.add,2.edit,3.logout”

4.Input “case”

5.if “case==1”

* 1. print “select category

1.TV,2.Laptops,3.Refrigrator,4.Washing machine”

* 1. Input “category”
  2. if “category ==1”

Print “Name”

Input “ “

Print “Quantity”

Input “ “

Print “Price” Input “ “ if “category ==2” Print “Name”

Input “ “

Print “Quantity”

Input “ “

Print “Price”

Input “ “

if “category ==3” Print “Name”

Input “ “

Print “Quantity”

Input “ “

Print “Price” Input “ “ if “category ==4” Print “Name”

Input “ “

Print “Quantity”

Input “ “

Print “Price”

Input “ “

6.if “case==2”

6.1 print “select category

1.TV,2.Laptops,3.Refrigrator,4.Washing machine”

6.2 Input “category”

6.3 if “category ==1”

Display the available products if “category ==2”

Display the available products if “category ==3”

Display the available products if “category ==4”

Display the available products

6.4 print “enter the product to be edited and quantity to be added”

6.5 input “ “

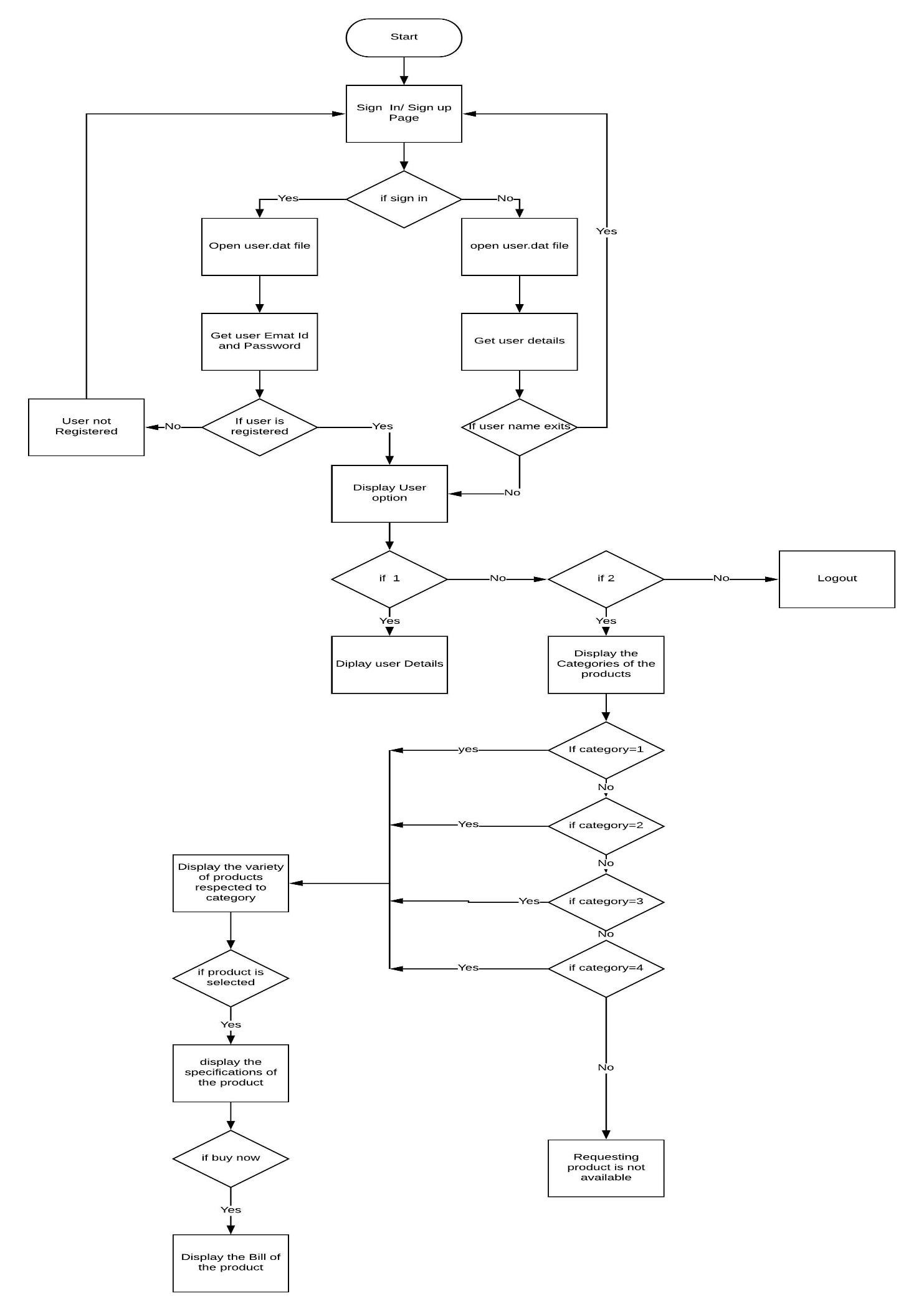
7. if “case==3”

Goto begin.

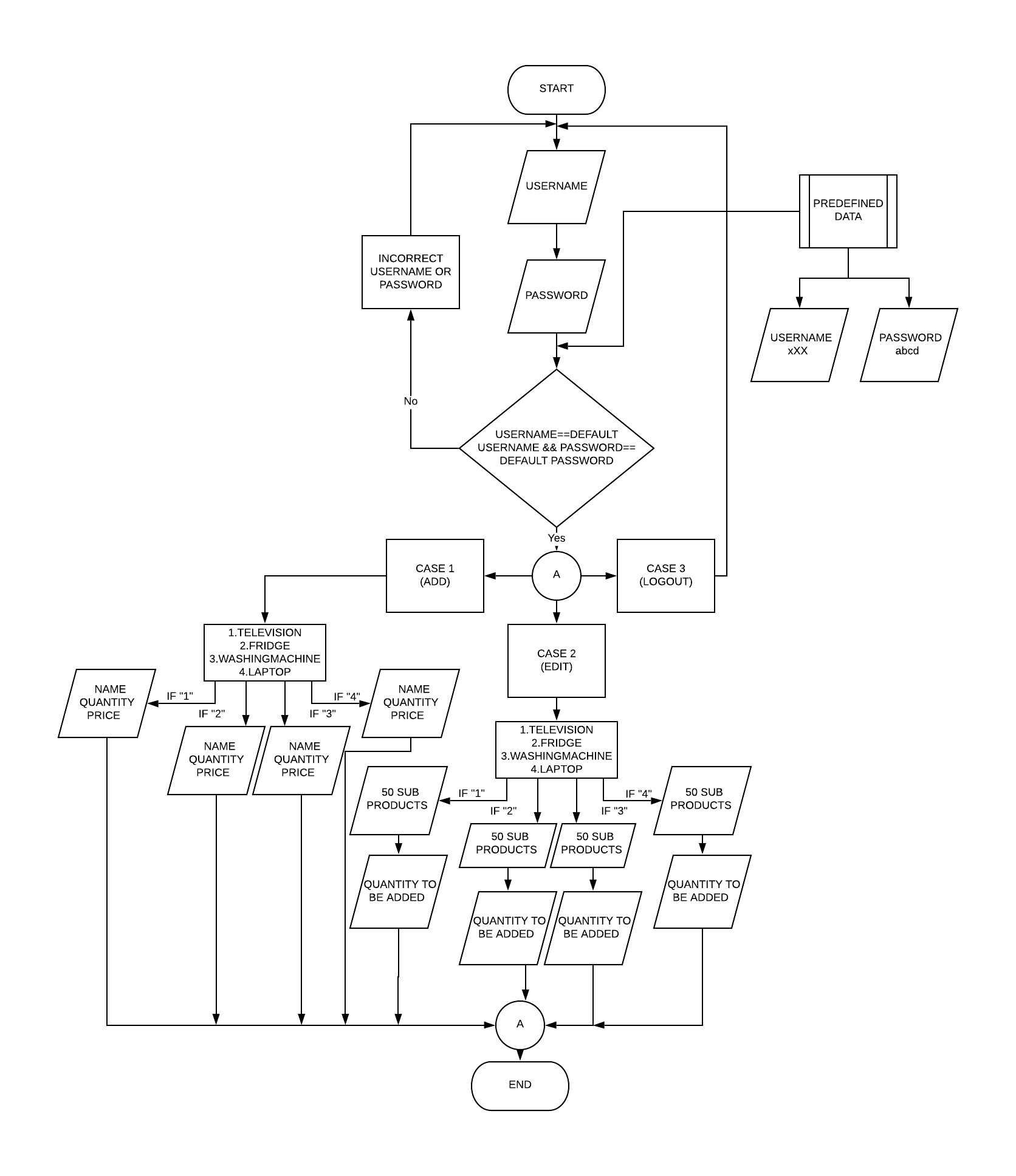
8.END

**FLOW CHARTS**

**User Program**



**Admin program**



**Code**

**User Program code:**

#include"mod1.h" /\* this is a user-defined header file for login module\*/

#include<stdlib.h> /\*link section\*/

#include<time.h> /\*link section\*/

int main(){

system("cls"); /\*clear the console\*/

int choice; /\*integer\*/

printf("1.Sign in\n2.Sign Up\nEnter your choice\t");

scanf("%d",&choice);

switch(choice){

case 1:signin();break; /\* switch for log-in function\*/

case 2:signup();break; /\*switch for sign-up function\*/

default:system("cls");

writeWithDelay("Please select valid choice\n"); /\*print\*/

main();

break;

}

}

void productcat(struct user \*u) /\*function for shopping functionalty\*/

{

system("cls"); /\*clear console\*/

int choice,choice1,choice2,count; /\*integer\*/

struct product p; /\*temporary structure\*/

char i[5]; /\*character array for model no\*/

FILE \*fp; /\*open file pointer\*/

Label1:

system("cls");

count=0; /\*integer for s.no\*/

printf("Shop by category\n1.Laptops\n2.Televisions\n3.Refrigerator\n4.Washing Machines\n\n");

scanf("%d",&choice); /\*get the choice\*/

switch(choice)

{

case 1:

strcpy(i,"PL"); /\*copy the string to i\*/

fp=fopen("laptop.dat","rb+"); /\*open file pointer\*/

break;

case 2:

strcpy(i,"PT"); /\*copy the string to i\*/

fp=fopen("tv.dat","rb+"); /\*open file pointer\*/

break;

case 3:

strcpy(i,"PF"); /\*copy the string to i\*/

fp=fopen("fridge.dat","rb+"); /\*open file pointer\*/

break;

case 4:

strcpy(i,"PW"); /\*copy the string to i\*/

fp=fopen("washingMachine.dat","rb+"); /\*open file pointer\*/

break;

case -1:

printf("Getting back.."); /\*print\*/

display(u);return; /\*functioncall to a fun in the mod1 header\*/

break;

default:

printf("Choose a valid choice"); /\*print\*/

goto Label1;

}

fseek(fp,0,SEEK\_SET); /\*move file pointer to beggining\*/

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

printf("S.NO\t\t\tPRODUCT NAME\t\t\t\t\t\t\tPRICE\n\n");

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

while(fread(&p,sizeof(struct product),1,fp)) /\*read the file until EOF is encountered\*/

{

printf("%d\t%-75s\t\t%s",++count,p.title,p.price); /\*print the available items\*/

if(p.quantity<=0){

printf("\t Out of Stock");

}

printf("\n");

}

printf("Select a Product "); /\*print\*/

scanf("%d",&choice1);

if(choice1>=count){

printf("You entered a invalid product number\n");

productcat(u); /\*calling the function again\*/

return;

}

if(choice1<=0){

printf("Moving back....");

productcat(u); /\*calling the function again\*/

return;

}

fseek(fp,(choice1-1)\*sizeof(struct product),SEEK\_SET); /\*move file pointer to the required position\*/

fread(&p,sizeof(struct product),1,fp);

if(p.quantity<=0){ /\*statement for out of stock\*/

printf("The product is currently out of stock\nPlease enter another product number\n");

productcat(u); /\*calling the function again\*/

return;

}

Label2:printf("Your Cart\n\t%s%d\t%s\t%s\n\n",i,choice1,p.title,p.price);

printf("1.Proceed to Check out\n2.Back to Shopping\n");

scanf("%d",&choice2);

if(choice2==1)

{

--p.quantity; /\*reduce the quantity of the stock\*/

fseek(fp,-sizeof(struct product),SEEK\_CUR); /\*move pointer\*/

fwrite(&p,sizeof(struct product),1,fp); /\*write the changed value to the file\*/

fclose(fp);

}

else if(choice2==2)

goto Label1;

else

{

printf("Invalid choice\n");

goto Label2;

}

billing(u,&p);

}

void billing(struct user \*u,struct product \*p) /\*billing module\*/

{

int a; /\*integer\*/

int hours,min,sec,day,month,year;

// time\_t is arithmetic time type

time\_t now;

//time() returns the current time of the sysetm

time(&now);

//localtime converts a time\_t value to calander time and

//return a ponter to tm structure with its members

struct tm \*local=localtime(&now);

hours=local->tm\_hour;

min=local->tm\_min;

sec=local->tm\_sec;

day=local->tm\_mday; //get day of month(1 to 31)

month=local->tm\_mon+1; //get month of year(0 to 11)

year=local->tm\_year+1900; //get year since 1990

printf("\n\n\tPit Bull Electronics\t\t\t\tINVOICE\n\n");

printf("\t[Address]\t\t\tINVOICE NO:%d\n",a%1000);

printf("\t[Address]\t\t\tTime:");

if(hours<12)

printf("%.2d:%.2d:%.2d am\n",hours,min,sec);

else

printf("%.2d:%.2d:%.2d pm\n",hours-12,min,sec);

printf("\t[phone]\t\t\t\tDate:%.2d/%.2d/%.2d\n\n",day,month,year);

printf("\tDelivery Address:\n\n");

printf("\t[%s]\n",u->name);

printf("\t[%s]\n",u->addr);

printf("\t[%lld]\n\n\n",u->mobile);

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

printf("\tQuantity\t\t\tDescription\t\t\t\t\t\t\t\t\t\tAmount\n\n");

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

printf("\t1\t\t\t\t%s\t\t\t\t%s\n",p->title,p->price);

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

printf("\n\n\t\t\t\t\t\t\t Total:\t\t%s\n\n\n",p->price);

getch();

productcat(u);

}

**Mod1 header file code:**

#include<stdio.h>

#include<string.h>

#ifdef \_WIN32

#include<windows.h>

void sleep(unsigned milliseconds){Sleep(milliseconds);}

#else

#include<unistd.h>

void sleep(unsigned milliseconds){usleep(milliseconds);}

#endif

void writeWithDelay(char \*s){

int i=0;

while(s[i]!='\0'){

printf("%c",s[i++]);

sleep(70);

}

}

int signup();

int signin();

struct user

{

char mail[30];

char name[20],pass[20];

char mobile[10];

char addr[100];

}profile;

struct product{

char title[150];

char price[13];

int quantity;

int id;

};

int display(struct user \*p)

{

int n,i;

char temp[150];

l1:

system("cls");

strcpy(temp,"");

strcat(temp,"Welcome ");

strcat(temp,p->name);

strcat(temp,"\n");

writeWithDelay(temp);

printf("1.profile\n");

printf("2.Product categories\n");

printf("3.Logout\n");

scanf("%d",&n);

switch(n){

case 1:

system("cls");

writeWithDelay(strcat(p->name,",Your Details\n"));

printf("%-15s : %s\n","Email",p->mail);

printf("%-15s : %s\n","Mobile Number",p->mobile);

printf("%-15s : %s\n","Address",p->addr);

getch();

display(p);

return;

case 2:

productcat(p);

return;

case 3:

main();

break;

case -1:

goto l1;

break;

default:

writeWithDelay("Invalid user option");

goto l1;

return;

}

}

int signup()

{

FILE \*data;

int a,i;

fflush(stdin);

system("cls");

data=fopen("userprofile.dat","ab+");

printf("Enter mail id:\n");

gets(profile.mail);

printf("Enter Name:\n");

gets(profile.name);

printf("Enter password:\n");

gets(profile.pass);

printf("Enter Address:\n");

gets(profile.addr);

printf("Enter mobile number\n");

gets(profile.mobile);

fwrite(&profile,sizeof(struct user),1,data);

system("cls");

writeWithDelay("User created successfully");

fclose(data);

main();

}

int signin(){

system("cls");

writeWithDelay("Enter login credentials\n");

FILE \*data;

int i,j=0,count=0;

char c;

fflush(stdin);

char s1[100];

char s2[100];

puts("Enter mail id:\n");

gets(s1);

puts("Enter password:\n");

do{

c=getch();

if(c=='\b'){

printf("\b \b");

j--;

continue;

}

else if(c!='\r' && c!='\n')

s2[j++]=c;

else break;

printf("\*");

}while(1);

s2[j]='\0';

data=fopen("userprofile.dat","rb+");

while(fread(&profile,sizeof(profile),1,data))

if(strcmp(s1,profile.mail)==0 && strcmp(s2,profile.pass)==0 )

{

system("cls");

fclose(data);

writeWithDelay("Successfully Logged in\n");

display(&profile);

count=1;

return;

}

if(count==0){

system("cls");

writeWithDelay("Invalid credentials");

main();

}else{

}

}

**ADMIN PROGRAM:**

#include<stdio.h>

#include<conio.h>

#include<string.h>

#include<stdlib.h>

#ifdef \_WIN32

#include<windows.h>

void sleep(unsigned milliseconds){Sleep(milliseconds);}

#else

#include<unistd.h>

void sleep(unsigned milliseconds){usleep(milliseconds);}

#endif

struct product{

char title[150];

char price[13];

int quantity;

int id;

};

void writeWithDelay(char \*s){

int i=0;

while(s[i]!='\0'){

printf("%c",s[i++]);

sleep(100);

}

}

void adminPanel();

int main();

void addProduct(){

system("cls");

FILE \*fp;

struct product x;

int choice;

printf("ADD PRODUCT\n");

printf("{\n\t11 for Television\n\t12 for Washing Machine\n\t13 for Laptop\n\t14 for Refrigerator\n}\nEnter the category\t");

scanf("%d",&choice);

switch(choice){

case 11:fp = fopen("tv.dat","ab");break;

case 12:fp = fopen("washingMachine.dat","ab");break;

case 13:fp = fopen("laptop.dat","ab");break;

case 14:fp = fopen("fridge.dat","ab");break;

case -1:system("cls");

writeWithDelay("Moving back");

system("cls");

adminPanel();

return;

default: system("cls");

writeWithDelay("Not a valid category");

system("cls");

addProduct();

return;

}

printf("Enter product title\t");

scanf(" %[^\n]s",x.title);

printf("Enter price\t");scanf(" %s",x.price);

printf("Enter quantity\t");scanf("%d",&x.quantity);

x.id = ftell(fp)/sizeof(struct product);

x.id++;

if(x.quantity<0){

fclose(fp);

system("cls");

writeWithDelay("Invalid count for quantity");

system("cls");

addProduct();

return;

}

fwrite(&x,sizeof(struct product),1,fp);

fclose(fp);

writeWithDelay("Product added successfully");

adminPanel();

}

void editQuantity(){

system("cls");

FILE \*fp;

struct product x;

int choice;

printf("EDIT PRODUCT\n");

printf("{\n\t11 for Television\n\t12 for Washing Machine\n\t13 for Laptop\n\t14 for Refrigerator\n}\nEnter the category\t");

scanf("%d",&choice);

switch(choice){

case 11:fp = fopen("tv.dat","rb+");break;

case 12:fp = fopen("washingMachine.dat","rb+");break;

case 13:fp = fopen("laptop.dat","rb+");break;

case 14:fp = fopen("fridge.dat","rb+");break;

case -1:system("cls") ;

writeWithDelay("Moving back");

system("cls");

adminPanel();

return;

default: system("cls");

writeWithDelay("Not a valid category");

system("cls");

adminPanel();

return;

}

int count=1,quantity=0;

system("cls");

while(fread(&x,sizeof(struct product),1,fp)){

printf("%d. Product title : %s\tQuantity : %d\n",count++,x.title,x.quantity);

}

if(count==1){

system("cls");

writeWithDelay("There are no products available under this category");

system("cls");

adminPanel();

return;

}

printf("Enter the product to be changed\t");

scanf("%d",&choice);

if(choice==-1){

system("cls");

writeWithDelay("Moving back");

system("cls");

adminPanel();

return;

}

if(count<=choice){

system("cls");

writeWithDelay("Enter a valid product serial number");

system("cls");

editQuantity();

return;

}

fseek(fp,(choice-1)\*sizeof(struct product),SEEK\_SET);

printf("Enter quantity to be addedd\t");

scanf("%d",&quantity);

if(quantity<0){

fclose(fp);

system("cls");

writeWithDelay("Invalid count of quantity");

system("cls");

editQuantity();

return;

}

fread(&x,sizeof(struct product),1,fp);

x.quantity+=quantity;

fseek(fp,-sizeof(struct product),SEEK\_CUR);

fwrite(&x,sizeof(struct product),1,fp);

fclose(fp);

system("cls");

writeWithDelay("product quantity changed successfully");

adminPanel();

}

void adminPanel(){

system("cls");

int choice;

printf("ADMIN PANEL\n1.Add product\n2.Edit quantity\n3.Logout\n4.Logout and Exit\nEnter your choice\t");

scanf("%d",&choice);

switch(choice){

case 1:addProduct();break;

case 2:editQuantity();break;

case 3:system("cls");

writeWithDelay("You are being logged out");

main();

break;

case 4:exit(0);

default: system("cls");

writeWithDelay("Invalid choice\n");

adminPanel();

}

}

int main(){

system("cls");

static int try=0;

char username[50],password[50],c;

int i=0;

printf("Enter username\t");

scanf(" %[^\n]s",username);

printf("Enter password\t");

do{

c=getch();

if(c=='\b'){

printf("\b \b");

i--;

continue;

}

else if(c!='\r'&&c!='\n')

password[i++]=c;

else break;

printf("\*");

}while(1);

printf("\n");

password[i]='\0';

if(!strcmp(password,"1234321")&&!strcmp(username,"pitbull")) adminPanel();

else {

try++;

system("cls");

writeWithDelay("Invalid credentials");

if(try>3){

writeWithDelay("You ran out of try");

exit(0);

}

main();

}

return 0;

}

**Quality assurance - Test cases :**

**USER TEST CASE**

Testcase 1:

SIGN IN

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to sign in page | passed |
| Sign in | mail id =  srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password = srikanth | Accepts and moves to the next page | passed |

Testcase 2:

SIGN IN

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to sign in page | passed |
| Sign in | Mail id=jayaharish | Accepts and then asks for the password | Failed |
| Sign in | Password=jayaharish | Accepts and moves to the next page | failed |

Testcase 3:

SIGN UP

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=2 | Accepts and then moves to signup page | Passed |
| Sign up | Mail id=  ashwadha@gmail.com | Accepts and then asks for the name | passed |
| Sign up | Name=ashwadha | Accepts and the asks for the password to enter | Passed |
| Sign up | Password=ashwadha | Accepts and then asks for the address to enter | passed |
| Sign up | Address=skcet | Accepts and asks for the phone number | passed |
| Sign up | Ph no:9944465876 | Accepts and goes to the signin or signup | passed |

Testcase 4:

SIGN UP

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=2 | Accepts and then moves to signup page | Passed |
| Sign up | Mail id= Praveen | Accepts and then asks for the name | Failed |
| Sign up | Name= Praveen | Accepts and the asks for the password to enter | Passed |
| Sign up | Password= Praveen | Accepts and then asks for the address to enter | passed |
| Sign up | Address=skct | Accepts and move to the sign in/sign up page | passed |

Testcase 5:

INCORRECT USERNAME/PASSWORD

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| sign in/sign up | Choice=1 | Accepts and moves to the next page | Passed |
| Sign in | Mail id=  ironman@gmail.com | Accepts and ask for the password | passed |
| Sign in | Password= Jarvis | Accepts and print  “Incorrect username/password” | passed |

Testcase 6:

# PROFILE

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to sign in page | passed |
| Sign in | Mail id =  srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password=srikanth | Accepts and moves to the home page | passed |
| Home | Choice=1 | Accepts and moves to the profile page | passed |

Testcase 7:

# PROFILE

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to sign in page | passed |
| Sign in | Mail id =  srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password=srikanth | Accepts and moves to the home page | passed |
| Home | Choice=-1 | Accepts and moves backs to the login page | passed |

Testcase 8:

# PROFILE

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to signin page | passed |
| Sign in | Mail id =  srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password=srikanth | Accepts and moves to the home page | passed |
| Home | Choice=\* | Accepts and gives invalid input message And goes to home page | passed |

Testcase 9:

PRODUCT CATEGORY-TELEVISION

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to signin page | passed |
| Sign in | Email  id=srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password= srikanth | Accepts and moves to the next page | passed |
| Home | Choice=2 | Accepts and moves to the product category block | passed |
| Product category | Choice=1 | Accepts and moves to the television block | passed |
| Product subcategory | Choice=5 | Accepts and goes to the product entered | passed |
| Product subcategory | Choice=1 | Accepts and proceeds to check out and bill is displayed and moves to product category | passed |
| Product category | Choice = -1 | Accepts and goes to home page | passed |
| Home | Choice =3 | Accepts and loges out | passed |

Testcase 10:

PRODUCT CATEGORY-LAPTOP

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to signin page | passed |
| Sign in | Email  id=srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password= srikanth | Accepts and moves to the next page | passed |
| Home | Choice=2 | Accepts and moves to the product category block | passed |
| Product category | Choice=2 | Accepts and moves to the laptop block | passed |
| Product subcategory | Choice=5 | Accepts and goes to the product entered | passed |
| Product subcategory | Choice=1 | Accepts and proceeds to check out and bill is displayed and moves to product category | passed |
| Product category | Choice = -1 | Accepts and goes to home page | passed |
| Home | Choice =3 | Accepts and loges out | passed |

Testcase 11:

PRODUCT CATEGORY-WASHING MACHINE

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to signin page | passed |
| Sign in | Email  id=srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password= srikanth | Accepts and moves to the next page | passed |
| Home | Choice=2 | Accepts and moves to the product category block | passed |
| Product category | Choice=3 | Accepts and moves to the washing machine block | passed |
| Product subcategory | Choice=9 | Accepts and goes to the product entered | passed |
| Product subcategory | Choice=1 | Accepts and proceeds to check out and bill is displayed and moves to product category | passed |
| Product category | Choice = -1 | Accepts and goes to home page | passed |
| Home | Choice =3 | Accepts and loges out | passed |

Testcase 12: PRODUCT CATEGORY-FRIDGE

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to sign in page | passed |
| Sign in | Email  id=srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password= srikanth | Accepts and moves to the next page | passed |
| Home | Choice=2 | Accepts and moves to the product category block | passed |
| Product category | Choice=3 | Accepts and moves to the television block | passed |
| Product subcategory | Choice=7 | Accepts and goes to the product entered | passed |
| Product subcategory | Choice=1 | Accepts and proceeds to check out and bill is displayed and moves to product category | passed |
| Product category | Choice = -1 | Accepts and goes to home page | passed |
| Home | Choice =3 | Accepts and loges out | passed |

Testcase 13 : PRODUCT CATEGORY

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to signin page | passed |
| Sign in | Email  id=srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password= srikanth | Accepts and moves to the next page | passed |
| Home | Choice=2 | Accepts and moves to the product category block | passed |
| Product category | Choice=4 | Accepts and moves to the laptop block | passed |
| Product subcategory | Choice=6 | Accepts and goes to the product entered | passed |
| Product subcategory | Choice=-1 | Accepts and goes to category page | passed |
| Product category | Choice = -1 | Accepts and goes to home page | passed |
| Home | Choice =3 | Accepts and loges out | passed |

Test case :14

SIGN UP

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=2 | Accepts and then moves to signup page | Passed |
| Sign up | Mail id=  ashwadha@gmail.com | Accepts and then asks for the name | passed |
| Sign up | Name=ashwadha | Accepts and the asks for the password to enter | Passed |
| Sign up | Password=ashwadha | Accepts and then asks for the address to enter | passed |
| Sign up | Address=skcet | Accepts and asks for the phone number | passed |
| Sign up | Ph no:4465876 | Accepts and goes to the signin or signup | Failed |

Testcase 15:

SIGN UP

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=2 | Accepts and then moves to signup page | Passed |
| Sign up | Mail id=  ashwadha@gmail.com | Accepts and then asks for the name | passed |
| Sign up | Name=ashwadha | Accepts and the asks for the password to enter | Passed |
| Sign up | Password=ashwadha | Accepts and then asks for the address to enter | passed |
| Sign up | Address=skcet | Accepts and asks for the phone number | passed |
| Sign up | Ph no:15tehx7w | Accepts and goes to the signin or signup page | Failed |

Testcase 16 :

PRODUCT CATEGORY

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | STATUS | REMARKS |
| Sign in/sign up | Choice=1 | Accepts and then moves to sign in page | passed |
| Sign in | Email id =  srikanth.arivu@gmail.com | Accepts and then asks for the password | passed |
| Sign in | Password= srikanth | Accepts and moves to the next page | passed |
| Home | Choice=2 | Accepts and moves to the product category block | passed |
| Product category | Choice=1 | Accepts and moves to the television block | passed |
| Product subcategory | Choice=5 | Accepts and goes to the product entered | passed |
| Product subcategory | Choice=50 | Accepts and prints enter a valid input | passed |

# **ADMIN TEST CASES**

Test case 1:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 1 | Accepts and moves to add products block | passed |
| Add block | Category = 11 | Accepts and move to television category | Passed |
| Television block | Name : sony 4k  Price: 80,000.00  Quantity : 15 | Accepts and adds the product in the list and moves to admin panel | Passed |
| Admin panel | Choice = 4 | Accepts and logouts and exits the program | passed |

Test case 2:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| Login | Password =12345321 | Incorrect password and moves to login page | passed |

Test case 3:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 4 | Accepts and exits the program | passed |

Test case 4:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 3 | Accepts and goes to the login page | passed |

Testcase 5:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 2 | Accepts and moves to add edit block | passed |
| Edit block | Category = 13 | Accepts and move to laptop category | Passed |
| laptop block | Product=10 | Accepts and selects the product in which quantity should be edited | Passed |
| Product block | quantity = 5 | Accepts and adds the quantity of the product And returns to admin panel | passed |
| Admin panel | Choice = 1 | Accepts and moves to add block | passed |
| Add block | Category=13 | Accepts and moves to laptop block | Passed |
| Laptop block | Name: hp pavilion  Price: 80,000.22  Quantity:23 | Accepts and addes the new product in laptop block and moves to admin panel | passed |
| Admin panel | Choice=3 | Accepts and goes to the sign in page | passed |

Testcase 6:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 1 | Accepts and goes to the add module | passed |
| Add block | Category = -1 | Accepts and goes back to admin panel | passed |
| Admin panel | Choice = 4 | Accepts and exits the program | passed |

Test case 7:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 5 | Invalid input and goes to admin panel | passed |
| Admin panel | Choice = 4 | Accepts and exits the program | passed |

Test case 8:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 2 | Accepts and moves to add edit block | passed |
| Edit block | Category = 12 | Accepts and move to washing machine category | Passed |
| Washing machine block | Product=10 | Accepts and selects the product in which quantity should be edited | Passed |
| Product block | quantity = 5 | Accepts and adds the quantity of the product And returns to admin panel | passed |
| Admin panel | Choice = 1 | Accepts and moves to add block | passed |
| Add block | Category=12 | Accepts and moves to washing machine block | Passed |
| Washing machine block | Name: Whirlpool semi automatic. Price: 80,000.22  Quantity:30 | Accepts and addes the new product in laptop block and moves to admin panel | passed |
| Admin panel | Choice=4 | Accepts and exits the program. | passed |

Test case 9:

|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 2 | Accepts and moves to add edit block | passed |
| Edit block | Category = 14 | Accepts and move to washing machine category | Passed |
| fridge block | Product=7 | Accepts and selects the product in which quantity should be edited | Passed |
| Product block | quantity = 4 | Accepts and adds the quantity of the product And returns to admin panel | passed |
| Admin panel | Choice = 4 | Accepts and exits the program | passed |

Test case 10:

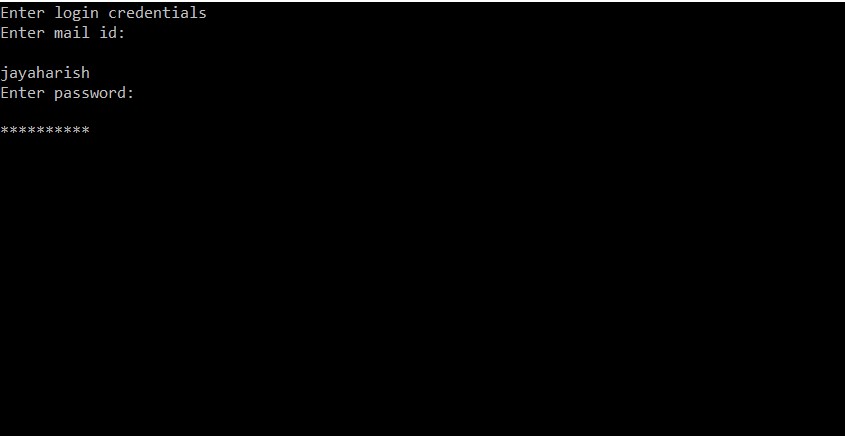
|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 1 | Accepts and moves to add edit block | passed |
| add block | Category = 13 | Accepts and move to laptop category | Passed |
| laptop block | Name :mi laptop  Price:45,000.00  Quantity :25 | Accepts and addes the product in the list and goes to admin block | Passed |
| Admin panel | Choice = 4 | Accepts and exits the program | passed |

Test case 11:

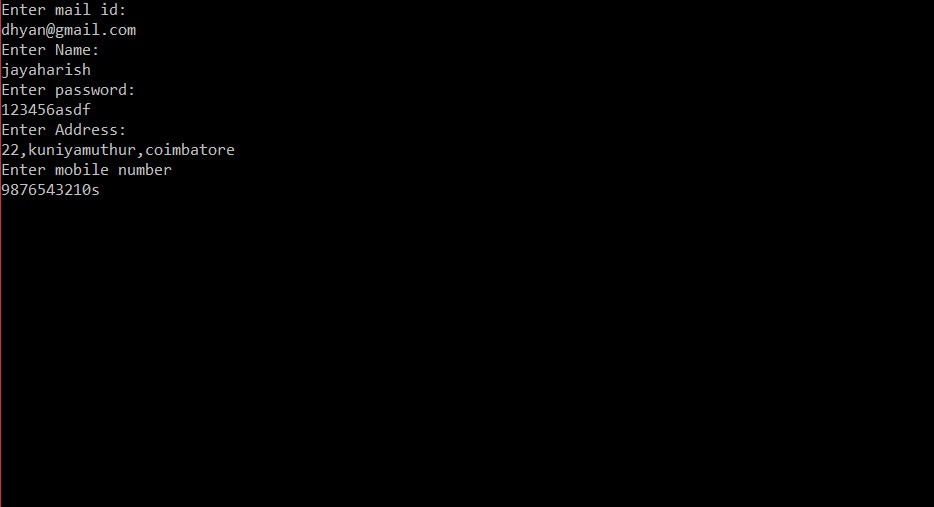
|  |  |  |  |
| --- | --- | --- | --- |
| MODULE | TEST CASE | REMARKS | STATUS |
| Login | Username=pitbull | Accepts and asks for password | Passed |
| login | Password =1234321 | Accepts and move to next page | passed |
| Admin Panel | Choice = 1 | Accepts and moves to add edit block | passed |
| add block | Category = 11 | Accepts and move to fridge category | Passed |
| fridge block | Name : lg android fridge  Price:45,000.00  Quantity :15 | Accepts and addes the product in the list and goes to admin block | Passed |
| Admin panel | Choice = 4 | Accepts and exits the program | passed |

**Output Screens**

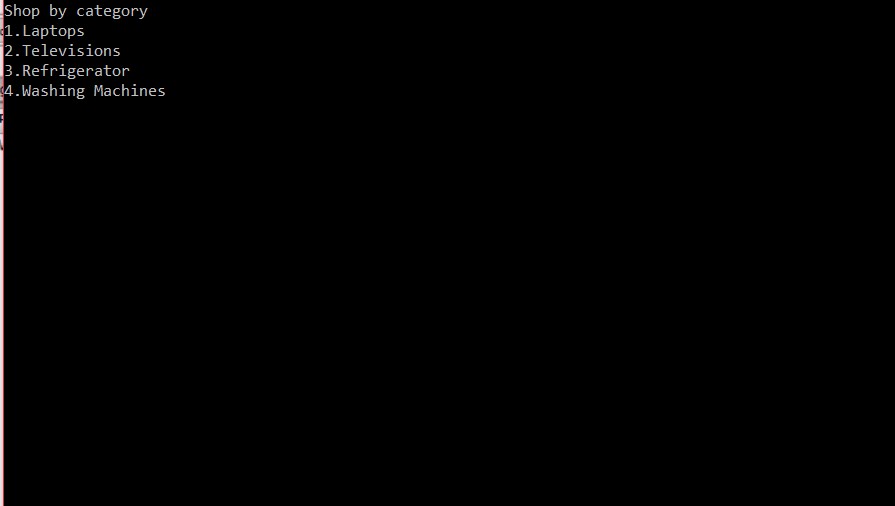
**Login screen**



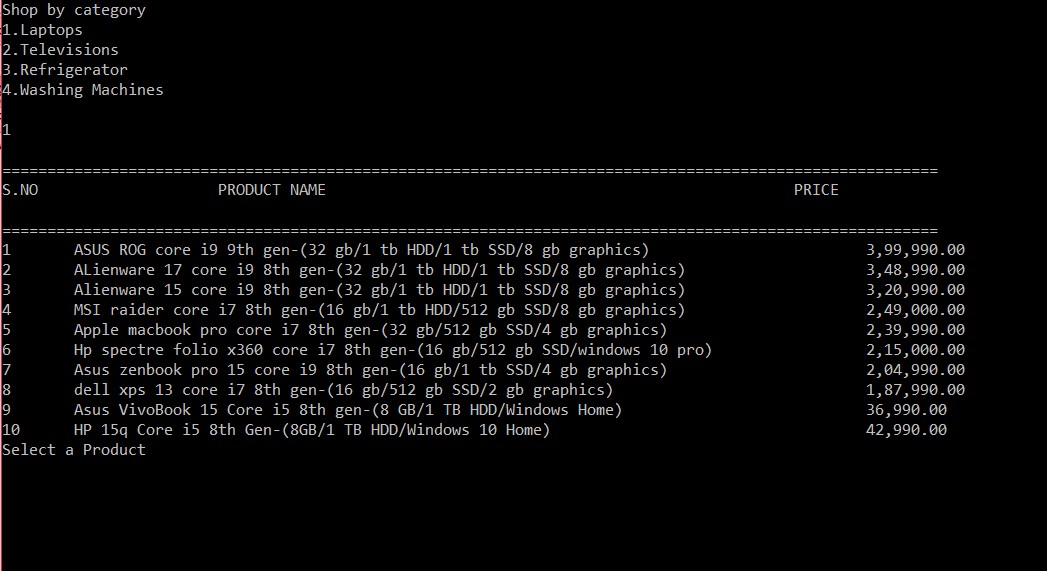
**Register screen**



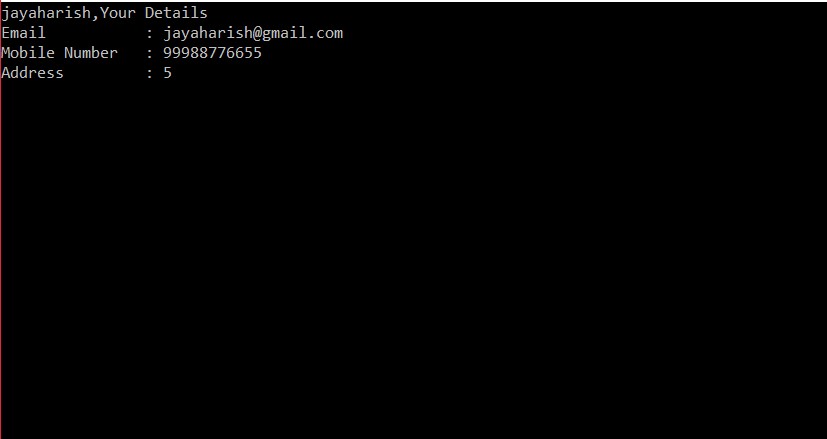
**Category screen**



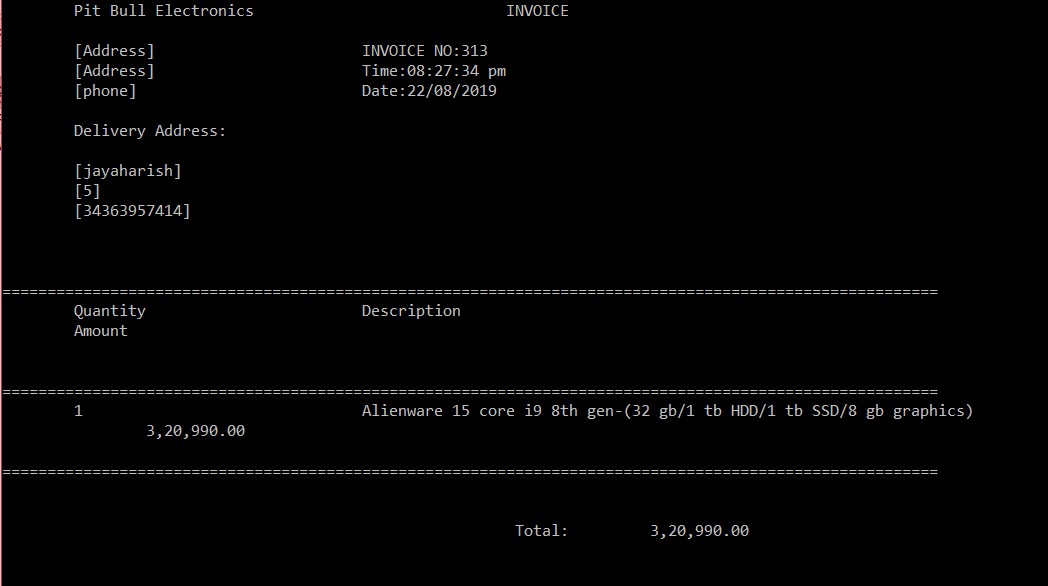
**Shopping screen**



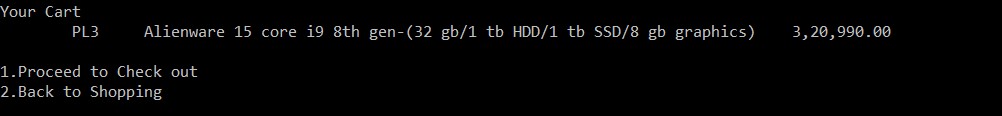
**Profile screen**



**Billing screen**



**Checkout screen**



**Complexity**

The project is kept very simple with less goto statements used for simplifying the flow of execution.

**Time complexity**

Sign in -------------------- O(n)

Sign up -------------------- O(n)

Product Display -------------------- O(m)

*‘n’ denotes number of users registered previously*

*‘m’ denotes number of products in the particular category*

**Conclusion**

The project is out now with major of our requirements and tests passed. The designed program is so fast and consumes memory within the optimum level as we expected. The project is ready to be deployed and now customers can feel free to order our products from home with a click. We expect that this move would boost our profit percentage by 7% since there are no middlemen between us. We expect this product to be huge success.

**Future Enhancement**

We have planned to add following features:

* + Sign in with OTP
  + Display complete product specifications
  + Credit card/ Debit card payment options
  + Introduce pitbull wallet
  + Introduce pitcoin for more safer online transaction
  + Add more visually appealing designs
  + Password Change option
  + Product preview
  + EMI based payments

**References**

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Flipkart.com (for product information)

Geeksforgeeks.com (for file handling in c)

Tutorialpoint.com (for file handling in c)

Quora.com (for making time delays in c)