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HEADER FILES INCLUDED

* #include<ctype.h>
* #include<string.h>
* #include<conio.h>
* #include<stdio.h>
* #include<fstream.h>
* #include<process.h>

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Data dictionary

Functions used:

Class user:

* **void input( )-** to enter user details.
* **void display( )-** to display user details.
* **char\*retname( )-** accessor to return user name.
* **char \*retcat( )-** accessor to return category.
* **int retid( )-** accessor to return user id.
* **void update 1(char a[ ])-** function to update package selected.
* **void updaten( char j[ ])-**function to update user name.
* **void updatephn( char b[15])-** function to update phone number.
* **void updatea( int a)-** function to update area code.
* **void updatenoc( int l)-**function to update number of connections.
* **void updatet( char b)-**function to update type of connection.
* **void calcbal( )-**function to calculate net balance.

Class package:

* **int retpckgn( char a[])-**function to return compared value after matching with entered string.
* **int retprice()-**function to return the price of particular package.
* **char \*retpckgname()-**function to return package name.
* **void pckin()-** function to input package details.
* **void showpack()-** function to display package details.
* **void channel space()-**to write channels in files of their respective categories.
* **void showmusic()-** to display music channels.
* **void showspotrs()-** to display sports channels.
* **void shownews()-** to display news channels.
* **void showscience()-** to display science channels.
* **void showmov()-** to display movie channels.
* **void showdaily()-** to show daily soap channels.
* **void writepackage()-** function to write package details in file package.txt.
* **void writeuser()-** function to write user details in file user.txt.
* **void showuser()-** function to show user details in file user.txt.
* **void newuser()-**function to append a user in user.txt.
* **void login()-**function to let user login.
* **void welcome()-** function to display a welcome message for the user.
* **void entry()-** to allow the user explore.
* **void run()-**to perform certain menus.
* **void logout()-**to logout of the program.
* **void exit()-** to exit the program.

Global variables declared:

* int g=0; // to store 1 if login has been successful
* char w[30]; // to store the username entered on successful login
* char z[30]; // to store respective category selected by the user

Source code:

#include<ctype.h>

#include<string.h>

#include<conio.h>

#include<stdio.h>

#include<fstream.h>

#include<process.h>

int g=0; char w[30]; char z[30];

void entry();

void exit();

void logout()

{

char j;

cout<<"\nDO YOU WISH TO LOGOUT\n enter y for yes\nor press any key to continue";

cin>>j;

cout<<"\n --\*\*\* THANK YOU \*\*\*--\n"

getch(); }

voidchannelspace()

{

int c;

intchcode;

charchname[30],category[30];

ofstream f1("daily.txt");

ofstream f2("movies.txt");

ofstream f3("sports.txt");

ofstream f4("news.txt");

ofstream f5("music.txt");

ofstream f6("science.txt");

cout<<"enter no of channel to be offered";

cin>>c;

for(int i=0; i<c; i++)

{

cout<<"\n enter chcode,chname and category";

cin>>chcode>>chname>>category;

if(strcmpi(category,"daily")==0)

f1<<chcode<<' '<<chname<<'\n';

else if(strcmpi(category,"movies")==0)

f2<<chcode<<' '<<chname<<'\n';

else if(strcmpi(category,"sports")==0)

f3<<chcode<<' '<<chname<<'\n';

else if(strcmpi(category,"news")==0)

f4<<chcode<<' '<<chname<<'\n';

else if(strcmpi(category,"music")==0)

f5<<chcode<<' '<<chname<<'\n';

else if(strcmpi(category,"science")==0)

f6<<chcode<<' '<<chname<<'\n';

}

f1.close();

f2.close();

f3.close();

f4.close();

f5.close();

f6.close();

}

int chcode;

char chname[30];

voidshowmusic()

{

cout<<"\nMUSIC:" <<endl;

ifstream f10("music.txt");

while(1)

{

f10>>chcode>>chname;

if(f10.eof()) break;

cout<<chcode<<' '<<chname<<endl; }

f10.close(); }

void showsports()

{

cout<<"\nSPORTS :"<<endl;

ifstream f20("sports.txt");

while(1)

{

f20>>chcode>>chname;

if(f20.eof())

break;

cout<<chcode<<' '<<chname<<endl; }

f20.close(); }

voidshownews()

{

cout<< "\nNEWS:"<<endl;

ifstream f30("news.txt");

while(1)

{

f30>>chcode>>chname;

if(f30.eof())

break;

cout<<chcode<<' '<<chname<<endl; }

f30.close(); }

void showscience()

{

cout<<"\nSCIENCE:"<<endl;

ifstream f40("science.txt");

while(1)

{

f40>>chcode>>chname;

if(f40.eof())

break;

cout<<chcode<<' '<<chname<<endl; }

f40.close(); }

void showmov()

{

cout<<"\nMOVIES:"<<endl;

ifstream f50("movies.txt");

while(1)

{

f50>>chcode>>chname;

if(f50.eof())

break;

cout<<chcode<<' '<<chname<<endl;}

f50.close(); }

void showdaily()

{

cout<<"\nDAILY SOAP:"<<endl;

ifstream f60("daily.txt");

while(1)

{

f60>>chcode>>chname;

if(f60.eof()) break;

cout<<chcode<<' '<<chname<<endl; }

f60.close(); }

class package

{

intpckgcode;

charpckgname[30];

int price;

int discount;

int amount;

int noc;

public:

int retpckgn(char a[])

{ return(strcmpi(a,pckgname)); }

int retprice()

{

return price;}

char \* retpckgname()

{ returnpckgname; }

voidpckin()

{

clrscr();

cout<<"enter package code\t";

cin>>pckgcode;

cout<<"enter package name\t";

gets(pckgname);

cout<<"enter price for the package\t";

cin>>price;

cout<<"\n-------\*\*\*-------"<<endl; }

voidshowpack()

{

cout<<"\n package code--\t";

cout<<pckgcode;

cout<<"\npackage name--\t";

puts(pckgname);

cout<<"price for the package--\t";

cout<<price;

cout<<"\n-------\*\*\*-------"<<endl; } };

class user

{

int userid;

char username[40];

char category[20];

char phno[15];

long areacode;

int noc;

char type;

int bal;

package p;

public:

void input( )

{ clrscr();

cout<<"\nenteruserid(in numbers)\t";

cin>>userid;

cout<<"\nenter username\t";

gets(username);

cout<<"\nenter selected pack\n(daily,music,news,sports,science,movies)\t";

gets(category);

cout<<"\nenterphno(in 10 digits)\t";

cin>>phno;

cout<<"\n enter areacode(in 2 digits)\t";

cin>>areacode;

cout<<"\nenter no ofconnections(in digits)\t";

cin>>noc;

cout<<"\n enter type of connection(H for HD/ N for normal)\t";

cin>>type;

cout<<"\n-------\*\*\*-------"<<endl;

}

void display()

{

clrscr();

cout<<"\n---\*USER DETAILS ARE\*---\n"<<endl;

cout<<"\nuserid--\t";

cout<<userid;

cout<<"\nusername--\t";

puts(username);

cout<<"\ncategory--\t";

puts(category);

cout<<"\nphno--\t";

cout<<phno;

cout<<"\nareacode--\t";

cout<<areacode;

cout<<"\nnoofconnections--\t";

cout<<noc;

cout<<"\ntype of connection--\t";

cout<<type;

calcbal();

cout<<"\nbalance--";

cout<<bal;

cout<<"\n-------\*\*\*-------"<<endl;

}

char\* retname()

{ return username; }

char\* retcat()

{ return category; }

int retid()

{ returnuserid; }

void update1( char a[])

{ strcpy(category,a); }

int update2( );

voidupdaten(char j[])

{ strcpy(username,j); }

void updatephn(char b[15])

{ strcpy(phno,b); }

void updatea(int a)

{ areacode=a; }

void updatenoc(int l)

{ noc=l ; }

void updatet(char b)

{ type=b; }

void calcbal( )

{

bal=bal-update2( ) ; }

};

int user::update2( )

{

if(noc==1&&(type=='H'||type=='h'))

{ return 300; }

else

if(noc>1&&(type=='H'||type=='h'))

{ return 250; }

else

if(noc>1&&(type=='N'||type=='n'))

{ return 200; }

else

if(noc==1&&(type=='N'||type=='n'))

{ return 150; }

else

return 0;

}

void writepackage( )

{

package p; int t;

ofstream f("package.txt",ios::binary);

cout<<"\n---\*ENTER PACKAGE DETAILS\*---\n"<<endl;

cout<<"enter no of packages being offered\t";

cin>>t;

for(int i=0; i<t; i++)

{ p.pckin();

f.write((char \*)&p,sizeof(p)); }

f.close();

cout<<"\n-------\*\*\*-------"<<endl;

}

void writeuser()

{

int n; user u1;

ofstream f1("user.txt",ios::binary);

cout<<"\n---\*ENTER USER DETAILS\*---\n";

cout<<"\n enter no of users\t";

cin>>n;

for(int i=0; i<n; i++)

{ u1.input();

f1.write((char \*)&u1,sizeof(u1)); }

f1.close(); }

voidshowuser()

{

clrscr(); user u2;

ifstream f2("user.txt",ios::binary);

while(f2.read((char \*)&u2,sizeof(u2)))

{

u2.display(); }

f2.close(); }

voidnewuser()

{

user o; clrscr();

ofstream f1("user.txt",ios::binary|ios::app);

o.input(); strcpy(o.retname(),w);

f1.write((char \*)&o,sizeof(o));

f1.close(); g=1;

cout<<"\nWELCOME TO THE VIDEOCON FAMILY"<<endl;

cout<<"\n-------\*\*\*-------"<<endl;

}

void welcome()

{

clrscr();

cout<<"\t------------CONGRAUTLATIONS!!-----------------"<<endl;

cout<<" you now have the world of unlimited fun at your disposal."<<endl;

cout<<"We at VIDEOCON D2H are pleased to see you taking the first step with us"<<endl;

cout<<"GET inside and OPEN up FUN, chose from a wide variety of channels and services"<<endl;

cout<<"\t-----------------------------------------------------------\n"<<endl;

char c,b,j,k,l;

cout<<"do you want to continue\n enter y or Y to explore more\n"<<endl;

cin>>c;

if(c=='y'||c=='Y')

{ clrscr(); entry(); } }

void run()

{ clrscr();

char c,m,n,q;

if(g==1)

{ do

{

cout<<"\n1- Want to explore our services?\n2-manage your account?"<<endl;

cout<<"enter your choice";

cin>>c;

switch(c)

{

case '1': char b; clrscr();

cout<<"menu is\n1- view all the channels offered\n2-view all the packages\n"<<endl;

cin>>b;

switch(b)

{

case '1': clrscr();

showmov(); cout<<endl;

showsports(); cout<<endl;

shownews(); cout<<endl;

showmusic(); cout<<endl;

showscience(); cout<<endl;

showdaily(); cout<<endl;

break;

case '2': clrscr(); package p10;

ifstream f0("package.txt",ios::binary);

while(1)

{ f0.read((char \*)&p10,sizeof(p10));

if(f0.eof()) break;

p10.showpack(); getch();

}

f0.close(); break;

default:cout<<"\nSERVICE UNAVAILABLE\n";

} break;

case '2': char a; clrscr();

do {

cout<<"menu is\n1-view your account details\n2-view active package details\n3-change your package\n4-delete account\n5-change user details"<<endl;

cin>>a;

switch(a)

{ case '1': clrscr(); user t;

ifstream f2("user.txt",ios::binary);

while(f2.read((char \*)&t,sizeof(t)))

{ if(strcmpi(t.retname(),w)==0)

t.display(); }

f2.close(); break;

case '2': package p; user u;

ifstream f22("user.txt",ios::binary);

while(f22.read((char \*)&u,sizeof(u)))

{ if(strcmpi(u.retname(),w)==0)

strcpy(z,u.retcat()); }

f22.close();

ifstream f1("package.txt",ios::binary);

while(f1.read((char \*)&p,sizeof(p)))

{ if(strcmpi(p.retpckgname(),z)==0)

p.showpack(); }

f1.close(); break;

case '3': clrscr(); user u1; char l[30];

ofstream f23("abc.txt",ios::binary);

ifstream f33("user.txt",ios::binary);

while(f33.read((char \*)&u1,sizeof(u1)))

{ if(strcmpi(u1.retname(),w)==0)

{ cout<<"\n Enter your desired package name\n";

gets(l);

u1.update1(l); }

f23.write((char \*)&u1,sizeof(u1));

}

f23.close();

f33.close();

remove("user.txt");

rename("abc.txt","user.txt"); break;

case '4': clrscr(); user u5;

ofstream f7("rty.txt",ios::binary);

ifstream f8("user.txt",ios::binary);

while(f8.read((char \*)&u5,sizeof(u5)))

{ if(strcmpi(u5.retname(),w)!=0)

{ cout<<"\nARE YOU SURE TO DELETE THIS ACCOUNT(y/n)"<<endl;

cin>>q;

if(q=='y'||q=='Y')

{ cout<<"\n DELETION SUCCESSFUL\n";

getch(); exit(0); }

f7.write((char \*)&u5,sizeof(u5)); } }

f7.close();

f8.close();

remove("user.txt");

rename("rty.txt","user.txt"); break;

case '5': clrscr(); user u6; char v,x; char d[30];

char h[10]; int a;

cout<<"\n1-Modify name\n2-modify phno\n3-modify area code\n4-modify type\n5-mofify no of connections"<<endl;

cin>>v;

switch(v)

{

case '1': clrscr();

ofstream f91("asd.txt",ios::binary);

ifstream f01("user.txt",ios::binary);

while(f01.read((char \*)&u6,sizeof(u6)))

{ if(strcmpi(u6.retname(),w)==0)

{ cout<<"your old name was="<<w<<endl;

cout<<"enter the name to be input"<<endl;

gets(d); strcpy(w,d);

u6.updaten(d); }

f91.write((char \*)&u6,sizeof(u6)); }

f91.close();

f01.close();

remove("user.txt");

rename("asd.txt","user.txt"); break;

case '2': clrscr();

ofstream f92("qwer.txt",ios::binary);

ifstream f02("user.txt",ios::binary);

while(f02.read((char \*)&u6,sizeof(u6)))

{ if(strcmpi(u6.retname(),w)==0)

{ cout<<"enter your new phno"<<endl;

cin>>h;

u6.updatephn(h); }

f92.write((char \*)&u6,sizeof(u6)); }

f92.close();

f02.close(); remove("user.txt");

rename("qwer.txt","user.txt"); break;

case'3': clrscr();

ofstream f93("ewr.txt",ios::binary);

ifstream f03("user.txt",ios::binary);

while(f03.read((char \*)&u6,sizeof(u6)))

{ if(strcmpi(u6.retname(),w)==0)

{ cout<<"enter your new area code"<<endl;

cin>>a; u6.updatea(a); }

f93.write((char \*)&u6,sizeof(u6)); }

f93.close();

f03.close();

remove("user.txt");

rename("ewr.txt","user.txt"); break;

case '4': clrscr();

ofstream f94("uio.txt",ios::binary);

ifstream f04("user.txt",ios::binary);

while(f04.read((char \*)&u6,sizeof(u6)))

{ if(strcmpi(u6.retname(),w)==0)

{ cout<<"enter your new connection type(H/N)"<<endl;

cin>>x; u6.updatet(x); }

f94.write((char \*)&u6,sizeof(u6)); }

f94.close();

f04.close(); remove("user.txt");

rename("uio.txt","user.txt"); break;

case '5': clrscr();

ofstream f95("plo.txt",ios::binary);

ifstream f05("user.txt",ios::binary);

while(f05.read((char \*)&u6,sizeof(u6)))

{ if(strcmpi(u6.retname(),w)==0)

{ cout<<"enter new no of connections\n"<<endl;

cin>>a; u6.updatenoc(a); }

f95.write((char \*)&u6,sizeof(u6)); }

f95.close();

f05.close();

remove("user.txt");

rename("plo.txt","user.txt"); break;

default: cout<<"SORRY WE CANNOT UPDATE YOUR ENTERED INFO"<<endl;

} break;

default: cout<<"SORRY REQUEST CANNOT BE FULFILLED\n";}

cout<<"\n Do you want to continue\n";

cin>>m;

} while(m=='y'||m=='Y'); break;

default: cout<<"SORRY YOUR REQUEST CANNOT BE FULFILLED\n"; }

cout<<"\n do you want to return to main menu\n";

cin>>n;

} while(n=='y'||n=='Y'); }

exit(); }

void login()

{ clrscr(); char a[30],n;

cout<<"\n enter your name\t";

gets(a); strcpy(w,a); user u; int l=0; char p[30];

ifstream f("user.txt",ios::binary);

while(f.read((char \*)&u,sizeof(u)))

{ if(strcmpi(u.retname(),a)==0)

{ l=1; g=1; clrscr(); } }

if(l==1)

cout<<"\n--\*\*\* LOGIN SUCCESSFUL \*\*\*--"<<endl;

else

cout<<"\n data not found"<<endl;

f.close(); clrscr(); }

void entry()

{ char b,j,k,l;

cout<<"\nGET STARTED:\n1- login \n2-new user ? create account\n3-logout\n4-exit";

cin>>b;

switch(b)

{

case '1': clrscr(); login();

run(); break;

case '2': clrscr(); newuser();

run(); break;

case '3': clrscr(); logout();

exit(); break;

case '4': clrscr(); exit(); break;

default: cout<<"\nWE ARE SORRY, SERVICE UNAVAILABLE"<<endl;

} }

void exit()

{ char k,l ; clrscr();

cout<<"\nDO YOU WISH TO EXIT\n enter y to exit\n or press any key to continue\n";

cin>>k;

if(k=='y')

{ cout<<"\n--\*\*\* THANK YOU \*\*\*--\n"; exit(0); }

else

if(k!='y')

{ cout<<"\nDO YOU WISH TO CONTINUE(y/n)\n";

cin>>l;

if(l=='y'||l=='Y')

{ entry(); run(); }

else

run(); } }

void main()

{

char c,m,n,q; clrscr();

cout<<"\n--\*\*\* WRITING OF CHANNEL DATA \*\*\*--\n"<<endl;

channelspace(); clrscr();

cout<<"\n --\*\*\* WRITING OF USER DATA \*\*\*--\n"<<endl;

writeuser(); clrscr();

cout<<"\n --\*\*\* WRITING OF PACKAGE DATA \*\*\*-\n"<<endl;

writepackage(); clrscr();

welcome(); getch();

}

Bibliography

* Computer Science With C++ Textbook- XII

OUTPUT:







































































































































