#include<iostream>

#include<iomanip>

#include<fstream>

#include<cstring>

#include<stdio.h>

using namespace std;

class Movie

{

public:

char m\_movie\_name[20];

int m\_price;

int m\_total\_ticket\_count;

char m\_format[5];

char m\_release\_date[20];

char m\_show\_time[10];

char m\_auditorium;

char m\_movie\_duration[10];

char m\_genre[10];

char m\_director\_name[20];

Movie()

{

m\_price =0;

m\_total\_ticket\_count=0;

strcpy(m\_movie\_name,"N/A");

strcpy(m\_release\_date,"N/A");

strcpy(m\_show\_time,"N/A");

strcpy(m\_movie\_duration,"N/A");

strcpy(m\_genre,"N/A");

strcpy(m\_director\_name,"N/A");

m\_auditorium='N';

}

void display()

{

cout<<setfill('-')<<setw(41)<<"|"<<endl;

cout<<"DISPALYING MOVIE DETAILS:<"<<endl;

cout<<setfill('-')<<setw(41)<<"|"<<endl;

cout<<"Movie Name :"<<m\_movie\_name<<endl;

cout<<"Price:"<<m\_price<<endl;

cout<<"Total Ticket Count :"<<m\_total\_ticket\_count<<endl;

cout<<"Format :"<<m\_format<<endl;

cout<<"Release Date :"<<m\_release\_date<<endl;

cout<<"Show time :"<<m\_show\_time<<endl;

cout<<"Auditorium :"<<m\_auditorium<<endl;

cout<<"Movie Duration :"<<m\_movie\_duration<<endl;

cout<<"Genre :"<<m\_genre<<endl;

cout<<"Director Name :"<<m\_director\_name<<endl;

}

void accept()

{

cout<<"Enter Movie Name :";

cin>>m\_movie\_name;

cout<<"Enter Price:";

cin>>m\_price;

cout<<"Enter Total Ticket Count :";

cout<<"Enter Format (2D/3D):";

cin>>m\_format;

cout<<"Enter Release Date :";

cin>>m\_release\_date;

cout<<"Enter Show Time : ";

cin>>m\_show\_time;

cout<<"Enter Auditorium :";

cin>>m\_auditorium ;

cout<<"Enter Movie Duration :";

cin>>m\_movie\_duration;

cout<<"Enter Movie Genre :";

cin>>m\_genre;

cout<<"Enter Director Name :";

cin>>m\_director\_name;

}

void writeMovieData()

{

ofstream fout;

fout.open("movie.dat",ios::app|ios::binary);

fout.write((char\*)this , sizeof(\*this));

fout.close();

}

void viewMovieData()

{

ifstream fin;

fin.open("movie.dat",ios::app|ios::binary);

if(!fin)

{

cout<<"NO DATA FOUND !!"<<endl;

}

else

{

fin.read((char\*)this,sizeof(\*this));

while(!fin.eof()) //end of file eof()

{

display();

fin.read((char\*)this,sizeof(\*this));

}

fin.close();

}

}

};

class TicketDetails

{

public:

int seat\_number;

char row\_number;

char ticket\_type[20];

};

class TicketDisplay:public Movie, public TicketDetails //multiple

{

public:

void displayticket()

{

cout<<setfill('-')<<setw(41)<<"|"<<endl;

cout<<"DISPLAY TICKET DETAILS !!!"<<endl;

cout<<setfill('-')<<setw(41)<<"|"<<endl;

cout<<"Movie Name :"<<m\_movie\_name<<endl;

cout<<"Show Time:"<<m\_show\_time<<endl;

cout<<"Movie Duration :"<<m\_movie\_duration<<endl;

cout<<"Ticket Type :"<<ticket\_type<<endl;

cout<<"Row Number :"<<row\_number<<endl;

cout<<"Seat Number :"<<seat\_number<<endl;

}

void getTicketDetails()

{

cout<<"Enter Movie Name :";

cin>>m\_movie\_name;

cout<<"Enter Show Time";

cin>>m\_show\_time;

cout<<"Enter Movie Duration :";

cin>>m\_movie\_duration;

cout<<"Please Enter Ticket Type (gold ,silver , platinum ) :";

cin>>ticket\_type;

cout<<"Enter Row Number :";

cin>>row\_number;

cout<<"Enter Seat Number :";

cin>>seat\_number;

}

void writeTicketData()

{

ofstream fout;

fout.open("ticket.dat",ios::app|ios::binary);

fout.write((char\*)this , sizeof(\*this));

fout.close();

}

void viewTicketData()

{

ifstream fin;

fin.open("ticket.dat",ios::in|ios::binary);

if(!fin)

{

cout<<"NO DATA FOUND !!"<<endl;

}

else

{

fin.read((char\*)this , sizeof(\*this));

while(!fin.eof())

{

displayticket();

fin.read((char\*)this , sizeof(\*this));

}

fin.close();

}

}

};

class Help

{

public:

virtual void show()

{

cout<<"For any Help , Please Contact Administrator "<<endl;

}

};

class TicketHelp :public Help

{

public:

virtual void show()

{

cout<<"For Ticket Related Issue , Go to counter NO.2 "<<endl;

}

};

class MovieHelp :public Help

{

public:

virtual void show()

{

cout<<"For Movie Related Issue , Go to counter NO.1 "<<endl;

}

};

int main()

{

TicketDisplay ticketData;

Movie movieData;

cout<<"|"<<setfill('-')<<setw(41)<<"|"<<endl;

cout<<"|"<<"----------MOVIE BOOKING SYSTEM "<<setfill('-')<<setw(11)<<"|"<<endl;

cout<<"|"<<setfill('-')<<setw(41)<<"|"<<endl;

while(1)

{

cout<<"1.Input Movie Details "<<endl

<<"2.Display Movie Details "<<endl

<<"3.Enter Tickets Details "<<endl

<<"4.Display Ticket "<<endl

<<"5.Help"<<endl

<<"6.Exit"<<endl;

int ch,n=0;

cout<<"Enter Your Choice :";

cin>>ch;

switch(ch)

{

case 1:

{

cout<<setfill('=')<<setw(45)<<"|"<<endl;

cout<<"Enter Movie Details ....."<<endl;

cout<<setfill('=')<<setw(45)<<endl;

movieData.accept();

movieData.writeMovieData();

}

break;

case 2:

{

movieData.viewMovieData();

}

break;

case 3:

{

cout<<setfill('=')<<setw(45)<<"|"<<endl;

cout<<"Enter Ticket Details ...."<<endl;

cout<<setfill('=')<<setw(45)<<"|"<<endl;

ticketData.getTicketDetails();

ticketData.writeTicketData();

}

break;

case 4 :

ticketData.viewTicketData();

break;

case 5 :

{

int x;

cout<<"1.Ticket Issue "<<endl

<<"2.Movie Issue "<<endl

<<"3.General Issue "<<endl

<<"Enter Your Choice :";

cin>>x;

if(x==1)

{

cout<<"For any Help , Please Contact Administrator "<<endl;

}

else if(x==2)

{

cout<<"For Ticket Related Issue , Go to counter NO.2 "<<endl;

}

else if(x==3)

{

cout<<"For Movie Related Issue , Go to counter NO.1 "<<endl;

}

break;

}

case 6:

return 0;

}

}

return 0;

}