

cinema

“Fundamentals of Programming *Course Project*
Second Semester 2022/2023”

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1. The main idea of our program:

The main purpose of this program is to enable customers to purchase movie tickets, better manage movie tickets, which suits customers' needs, saves customers' time, and makes customers benefit from all cinema services. This program can also help the theatre well to improve the work efficiency and the level of modernization of the theatre.

2. C++ Code:

[illegible]

```
string pass_M;
string pass;
pass = "Cen155e.@";
cout << "Enter a password: ";
cin >> pass_M;
for (int i = 0; i < 3; i++)
{
    if (pass_M == pass)
    {
        cout << "you can enter now " << endl;
        break;
    }
    else
    {
        cout << "the pass is wrong please enter the right pass to
        let you in ";
    }
}
}

void change_password(string newpass)
{
    cout << "enter the new pass: ";
    int len = newpass.length();
    bool hasLower = false, hasUpper = false, hasDigit = false;
    for (int i = 0; i < len; i++)
    {
        if (islower(newpass[i]))
            hasLower = true;
        if (isupper(newpass[i]))
            hasUpper = true;
        if (isdigit(newpass[i]))
            hasDigit = true;
    }
    if (hasLower && hasUpper && hasDigit && (len >= 8))
        cout << "the pass accepted " << endl;
    else
        cout << "the pass not accepted";
}
```

```

}
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////
void add_movie(movie m[])
{ // add new movie
int index = -1;
index++;
cout << "Enter movie name: ";
cin >> m[index].mname;
cout << "Enter movie number: ";
cin >> m[index].mnumber;
cout << "Enter movie Type: ";
cin >> m[index].movietype;
cout << "Enter the date of show (d/m/y): ";
cin >> m[index].dob.day >> m[index].dob.month >>
m[index].dob.year;
cout << "Enter the time of show (h/m): ";
cin >> m[index].t.hour >> m[index].t.minute;
cout << "***movie2 added**\n";
}
////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////
void delete_movie(movie m[], string mnumber)
{ // delete movie
int index = -1;
found = false;
for (int i = 0; i <= index; i++)
{
if (mnumber == m[i].mnumber)
{
for (int i = 0; i < index; i++)
m[i] = m[i + 1];
index--;
cout << "***movie deleted**\n";
found = true;
break;
}
}
}

```

```

}
if (!found)
cout << "movie not found\n";
}
/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
void menu()
{ // main menu
cout << " Please choose from the menu:" << endl
<< "1 : Customer " << endl
<< "2 : Manger " << endl
<< "Your choice is : ";
}
/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
void choice1()
{ // Customer menu
cout << "Welcome Customer!" << endl
<< " Please choose from the menu:" << endl
<< "1 : Ticket Booking . " << endl
<< "2 : Show Ticket Details . " << endl
<< "3 : Back To Main Menu . " << endl
<< "Your choice is : ";
}
/////////////////////////////////////////////////////////////////
/////////////////////////////////////////////////////////////////
void choice2()
{ // manger menu
cout << "Welcome Manger!" << endl;
cout << " Please choose from the menu:" << endl
<< "1 : Add New Movie ." << endl
<< "2 : Delete a Movie . " << endl
<< "3 : Back To Main Menu" << endl
<< "4 : Change password" << endl
<< "Your choice is : ";
}

```

```

////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
////////////////////////////////////////////////////////////////
void TypeMenu()
{ // movie menu
cout << "
~~~~~" <<
endl;
cout << " The Movies Type " << endl;
cout << "
~~~~~" <<
endl;
cout << " which type of movies do you want ? (1/2/3)" << endl;
cout << "1- Drama" << endl;
cout << "2- Comedy" << endl;
cout << "3- Animation" << endl;
cout << " your choice is: " << endl;
}
////////////////////////////////////////////////////////////////
int listMovies(int Type, movie movieArr[])
{ // for the list movies
cout << "
~~~~~" <<
endl;
cout << " The Movies Menu " << endl;
cout << "
~~~~~" <<
endl;
int movieArrSize = sizeof(movieArr);
movie typem[movieArrSize];
for (int i = 0; i < movieArrSize; i++)
{
if(movieArr[i].movietype == Type){
for (int j = 0; j < movieArrSize ; i++)
{
typem[j] = movieArr[i];
}
}
}
}

```

```

}
cout << "number: movie number: movie name:" << endl;
for (int i = 0; i < sizeof(typem); i++)
{
cout <<(i+1) << " " << movieArr[i].mnumber << " " <<
movieArr[i].mname << endl;
}
cout << "Your choice is: (pick the movie number) " << endl;
int pickedNum;
cin>> pickedNum;
if (typeid(pickedNum).name() != "int")
{
cout << "Wrong input";
}
return pickedNum;
}
////////////////////////////////////
void movie1()
{
cout << "
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~" <<
endl;
cout << " The Movies Menu " << endl;
cout << "
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~" <<
endl
<< endl;
cout << "These are the Dramas movies for today which movie do
you want to watch? (1/2): " << endl;
cout << "1- Titanic" << endl;
cout << "2- The Shawshank Redemption" << endl;
cout << " your choice is: ";
}
void movie2()
{
cout << "
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~" <<

```

```

endl;
cout << " The Movies Menu " << endl;
cout << "
~~~~~" <<
endl
<< endl;
cout << "These are the Comedy movies for today which movie do
you want to watch? (1/2): " << endl;
cout << "1- The Mask" << endl;
cout << "2- Mr.Bean" << endl;
cout << " your choice is: ";
}
void movie3()
{
cout << "
~~~~~" <<
endl;
cout << " The Movies Menu " << endl;
cout << "
~~~~~" <<
endl
<< endl;
cout << "These are the Animation movies for today which movie
do you want to watch? (1/2): " << endl;
cout << "1- SHREK" << endl;
cout << "2- The Little Mermaid" << endl;
cout << " your choice is: ";
}

////////////////////////////////////
////////////////////////////////////
void PrintTicket(movie Movie)
{
ofstream OutTicket;
OutTicket.open("Movie.txt");
int random = rand() % 100;
int price = 65;

```



```

string alphabet[5] = {"A", "B", "C", "D", "E"};
string numbers[4] = {"1", "2", "3", "4"};
string seat = alphabet[rand() % 5] + numbers[rand() % 4];
OutTicket << "======" << endl;
OutTicket << " Welcome to our Ticket System " << endl;
OutTicket << "======" << endl;
OutTicket << "Ticket Number: " << random << endl;
OutTicket << "Seat Number: " << seat << endl;
OutTicket << "Movie Name: " << << endl;
OutTicket<<*day<<"/"<<*month<<"/"<<*year;
OutTicket << "Price: " <<price <<"SR"<< endl;
OutTicket << "======" << "THANK YOU" << endl;
OutTicket.close();
}
////////////////////////////////////////main////////////////////////////////////////
int main()
{
cout<<"-----"<<endl
<<"WELCOM TO C++ CINEMA"<<endl
<<"-----";
int num1,num2,num3,num4;
int *day , *month ,*year;
int D=25 , M= 06 ,Y=2022;
day=&D;
month=&M;
year=&Y;

menu(); // show the main menu
cin>>num1;
if(num1 == 1 ){
choice1();// show the Customer menu
cin>>num2;
if(num2== 1){
TypeMenu();
cin>>type1;
/*drama*/
if(Type1 == 1){

```

```

movie1();
cin>>num4;
if (num4== 1){
cout<<" You want to watch Titanic"<<endl;
OutTicket>>num4;
}
else if (num4== 2){
cout<<" You want to watch The Shawshank Redemption"<<endl;
OutTicket>>num4;
}
else
cout<<" You did not choose the right number!! "<<endl;
}
/*comedy*/
else if(Type1==2){
movie2();
cin>>num4;
if(num4== 1){
cout<<" You want to watch The Mask"<<endl;
OutTicket>>num4;
}
} else if (num4 == 2){
cout<< "You want to watch Mr.Bean"<<endl;
OutTicket>>num4;
}
else
cout<<"You did not choose the right number!!"<<endl;

/*Animation*/
else if (Type1==3){
movie3();
cin>>num4;
if(num4== 1){
cout<<" You want to watch SHREK"<<endl;
OutTicket>>num4;
}
else if (num4== 2){

```

```

cout<<"You want to watch The Little Mermaid"<<endl;
OutTicket>>num4;
}
else if (num4==3)
{
OutTicket>>*day>>"/">>*month>>"/">>*year;
PrintTicket(movie Movie);

}

else
cout<<" You did not choose the right number!!"<<endl;

}
}
}

////////////////////////////////manger menu deatelis////////////////////////////////
else if (num1 == 2)
{ // show the Manger menu
do
{
choice2();
cin >> num3;
switch (num3)
{
case 1:
if (index < size - 1)
add_movie(movieArr);
else
cout << "The class is full. You can't add new movies\n";
break;
case 2:
if (index >= 0)
{
cout << "Enter movie number to delete: ";
cin >> mnumber;

```

```
delete_movie(movieArr, mnumber);  
}  
else  
cout << "There are no movie. " << "You can't delete\n";  
break;  
default:  
cout << "Invalid choice!!\n\n"; } }  
while (num3 != 0); }  
return 0;  
}  
}
```

References

1. Movie Ticket Booking System Project in C++ and MySQL with Source Code (Free Download) 2022. (n.d.). Retrieved from [www.youtube.com](https://www.youtube.com/watch?v=3sblery_LeQ) website: https://www.youtube.com/watch?v=3sblery_LeQ
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