FINAL PROJECT

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Album Reservation System

Introduction to Programming – L1AC

1. Description

This program will take people’s album order. The one who will use this program is the store staff and not the customer. When a customer place an order, the staff will input the reservation on the program.

1. Design / Plan

This program will be consisting of 5 options. The first option is input album information. This option allows the staff to input the album’s information such as the title, the artist, the year of release and the genre. The second option is reservation. This option allows the staff to reserve a slot for the customer. The staff will input the album title, the slot number, and the name of the customer. There will be 50 slots only so the slot number must be less than 51. The third option is show reservation. This option allows the staff to see the reservation status. Status means which slot is reserved and the customer’s name who have reserved the slot. The fourth option is show album information. This option allows the staff to see all the album information. The fifth option is exit. This option is to exit the program.

1. Explanation
2. Class Album consists of private and public members.
3. Private: string mtitle;

string martist;

string mgenre;

string morder[50];

int myear;

int mbatch;

1. Public:

void setAlbum: To set album information

void getAlbumInfo: To get album information

void addReservation: To add reservation

void getReservationInfo: To get reservation information

1. int main: For the function to send an integer value back to the operating system when it is finished executing.
2. do-while (loop): For the program to go back to the main menu after it finishes one of the options
3. if and else-if: To make choices. If the person chooses A, ‘this’ will happen and if the person chooses B ‘that’ will happen.
4. Things I have learned during the process
5. It’s frustrating when the code doesn’t work
6. Must work diligently to make the program.
7. Read the code carefully to find mistakes
8. Must manage time very well
9. Must read thoroughly to understand
10. Some new functions
11. Understand how to use some functions
12. Problems that I have overcome
13. The code doesn’t work
14. When I run the program, it stopped working
15. The program won’t finish. It kept looping
16. Syntax errors
17. Simple errors (Typos)
18. Code

// Final Project (Album Reservation System)

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// This program is for an album store worker to reserve an album that a customer has reserved. Cancelation is not allowed.

#include <iostream>

#include <string>

using namespace std;

class Album

{

private:

string mtitle;

string martist;

string mgenre;

string morder[50];

int myear;

int mbatch;

public :

//constructor

album()

{

mtitle = "";

martist = "";

mgenre = "";

myear = 0;

mbatch = 0;

}

// To set album info

void setAlbum(string stitle, string sartist, string sgenre, int syear)

{

mtitle = stitle;

martist = sartist;

mgenre = sgenre;

myear = syear;

}

// To get album info

void getAlbumInfo()

{

cout << "Title : " << mtitle << endl;

cout << "Artist : " << martist << endl;

cout << "Genre : " << mgenre << endl;

cout << "Year : " << myear << endl;

}

// To add reservation

void addReservation(string name)

{

if(mbatch < 50)

{

morder[mbatch] = name;

mbatch++;

}

else

{

cout << "Sorry, this batch is full. Please wait for another batch" << endl;

}

}

// To get reservation info

void getReservationInfo()

{

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

{

cout << " Slot number " << (i+1) << " is reserved for " <<morder [i] << endl;

}

}

int getReservationTotal()

{

return mbatch;

}

};

int main()

{

Album salbum[50];

int option;

int totalAlbum;

do // Go back to the main menu after finishing one of the option (loop)

{

cout << "\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* ALBUM RESERVATION \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

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

cout << "\n1. Input Album Information" << endl;

cout << "\n2. Reservation" << endl;

cout << "\n3. Reservation Status" << endl;

cout << "\n4. Show Album Information" << endl;

cout << "\n5. Exit" << endl;

cout << "\n\nPlease enter your choice ==> ";

cin >> option;

if(option == 1)

{

string stitle, sartist, sgenre;

int syear;

cout << "\nInput Title : ";

fflush(stdin);

getline(cin, stitle);

cout << "Input Artist : ";

getline(cin, sartist);

cout << "Input Genre : ";

getline(cin, sgenre);

cout << "Input Year : ";

cin >> syear;

//salbum[totalalbum]();

salbum[totalAlbum].setAlbum(stitle, sartist, sgenre, syear);

cout << "Album Created" << endl;

totalAlbum++;

}

else if(option == 2)

{

int chooseAlbum;

cout << "\nInput Album Number : ";

cin >> chooseAlbum;

int totalReservation;

cout << "Input total reservation: ";

cin >> totalReservation;

if((totalReservation + salbum[chooseAlbum - 1].getReservationTotal()) > 50)

{

cout<<"We only have 50 slot."<<endl;

}

else

{

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

{

string name;

cout << "Input customer's name for slot number " << (i+1) << ": ";

cin >> name;

salbum[chooseAlbum].addReservation(name);

cout << "Reservation success" << endl;

}

}

cout << "Reservation Done" << endl;

}

else if(option == 3)

{

int chooseAlbum;

cout << "Input Album number: ";

cin >> chooseAlbum;

salbum[chooseAlbum].getReservationInfo();

}

else if(option == 4)

{

int chooseAlbum;

cout << "Input No Album : ";

cin >> chooseAlbum;

salbum[chooseAlbum - 1].getAlbumInfo();

}

cout<<endl;

}

while (option > 0 && option < 5);

cout << "System finished" << endl;

}