

CECS2222 Computer Programming II

C.Talavera

Programa que pide una fecha al usuario y emplea el operador de asignar el valor de una instancia, hace otras dos. Realiza una asignación múltiple de instancias. La función miembro retorna el apuntador `this`.

```
#ifndef CONTACTINFO_H
#define CONTACTINFO_H
#include <cstring> // Needed for strlen and strcpy
// ContactInfo class declaration.
class ContactInfo
{
private:
    char *name; // The contact's name
    char *phone; // The contact's phone number
public:
    // Constructor
    ContactInfo(char *n, char *p);
    ContactInfo();
    // Destructor
    ~ContactInfo();
    // This function initializes the name attribute.
    void setName(char *n);
    // This function initializes the phone attribute.
    void setPhone(char *p);
    const char *getName() const;
    const char *getPhoneNumber() const;
    void display() const;
    const ContactInfo &operator=(const ContactInfo &obj);
#endif

+++++
#include<iostream>
using namespace::std;
#include "ContactInfo.h"
    ContactInfo::ContactInfo(){
        char tempName[20] = "Jose Rivera";
        char tempPhone[20] = "000-000-0000";
        setName(tempName);
        setPhone(tempPhone);
    }
    //Constructor
    ContactInfo::ContactInfo(char *n, char *p)
    { // Initialize the name attribute.
        setName(n);
        // Initialize the phone attribute.
        setPhone(p);
    }
    // Destructor
    ContactInfo::~~ContactInfo()
    {
        delete[] name;
        delete[] phone;
    }
    void ContactInfo::setName(char *n)
    {
        name = new char[strlen(n) + 1];
        strcpy_s(name, strlen(n) + 1, n);
    }
}
```

```

// Private member function: initPhone
// This function initializes the phone attribute.
void ContactInfo::setPhone(char *p)
{
    phone = new char[strlen(p) + 1];
    strcpy_s(phone, strlen(p) + 1, p);
}
const char *ContactInfo::getName() const
{
    return name;
}
const char *ContactInfo::getPhoneNumber() const
{
    return phone;
}
void ContactInfo::display() const{
    cout << "Nombre:" << getName() << endl;
    cout << "Telephono:" << getPhoneNumber() << endl;
};
const ContactInfo &ContactInfo::operator=(const ContactInfo &obj){
    delete[] name;
    name = new char[strlen(obj.getName()) + 1];
    strcpy_s(name, strlen(obj.getName()) + 1, obj.getName());
    delete[] phone;
    phone = new char[strlen(obj.getPhoneNumber()) + 1];
    strcpy_s(phone, strlen(obj.getPhoneNumber()) + 1, obj.getPhoneNumber());
    return *this;
}
+++++ +
#include<iostream>
#include<string>
    using namespace::std;
#include "ContactInfo.h"
int main(){
    ContactInfo std1, std2, std3;
    char *name = nullptr;
    char *phoneNumber = nullptr;
    const int SIZE = 15;
    name = new char[SIZE];
    phoneNumber = new char[SIZE];
    cout << "Entre su nombre:";
    cin.getline(name, SIZE);
    cout << "Entre su numero de telefono:";
    cin.getline(phoneNumber, SIZE);
    std1.setName(name);
    std1.setPhone(phoneNumber);
    std3 = std2 = std1;
    std1.display();
    std2.display();
    std3.display();
    delete[] name;
    name = nullptr;
    delete[] phoneNumber;
    phoneNumber = nullptr;
    system("pause");
    return 0;
} //end main

```