

OOP Sections

Lab # 2

Ex 1: Reading manufacturers from a file.

Add a member function to the manufacturer class that reads a manufacturer from an input file stream. Let the function parameter be reference to an ifstream object. Write a test program that reads the following records from a file and displays them on the screen:

(id, name, phone)

5001 shawm_office_products 301-232-4099

5005 ABC_enterprises 204-353-2110

5010 zemco_products 901-200-4021

5020 balbo_manufacturing 907-421-2020

5030 zeikel_milleston 808-721-8033

Solution:

Main.cpp

```
#include <iostream>
#include "Manufacturer.h"
using namespace std;
int main()
{
    ifstream infile( "manuf.txt", ios::in );
    if( !infile )
        return 1;
    Manufacturer M;
    M.ReadFromFile( infile );
    while( !infile.eof() )
    {
        M.Display();
        M.ReadFromFile( infile );
    }
    return 0;
}
```

Manufacturer.h

```
#ifndef MANUFACTURER_H
#define MANUFACTURER_H

#include <iostream>
#include <iomanip>
#include <fstream>

using namespace std;

class Manufacturer
{
public:
    Manufacturer();
    Manufacturer( long idVal, const string nameVal,const string phoneVal);
    long GetId() const;
    string GetName() const;
    string GetPhone() const;
    void Display() const;
    void ReadFromFile( ifstream & infile );

protected:

private:
    long id; // 4-digit number, unique
    string name; // name of manufacturer
    string phone; // phone of the manufacturer
};

#endif // MANUFACTURER_H
```

Manufacturer.cpp

```
#include "Manufacturer.h"

#include <string.h>
using namespace std;

Manufacturer::Manufacturer(){
    id = 0;
    name = "";
    phone = "";
}

Manufacturer::Manufacturer( long idVal, const string nameVal, const string phoneVal){
    id = idVal;
    name = nameVal;
    phone = phoneVal;
}

long Manufacturer::GetId() const{
    return id;
}

string Manufacturer::GetName() const{
    return name;
}

string Manufacturer::GetPhone() const{
    return phone;
}

void Manufacturer::Display() const{
    cout << id << " " << left << setw(30) << name << phone << endl;
}

void Manufacturer::ReadFromFile( ifstream & infile ){
    infile >> id >> name >> phone;
}
```