# ДОДАТОК Е

(Вихідний код ModulesOzhekhovskyi)

**… / ModulesOzhekhovskyi / main.cpp**

#include "ModulesOzhekhovskyi.h"

string inputTextData(int numBytes, string data, string msg)

{

do {

cout << msg;

cin >> data;

} while (data.length() < 1 || data.length() > numBytes);

return data;

}

string inputNumData(string data, int maxNum, string msg)

{

string num = "";

int intNum = 0;

do {

cout << msg;

cin >> num;

string::size\_type sz;

intNum = stoi(num, &sz);

if (intNum > 0 && intNum < 10) {

data += num;

return data;

} else if (intNum > 9 && intNum <= maxNum){

data = num;

return data;

}

} while(intNum < 1 || intNum > maxNum);

}

string inputYearData(string data, string msg)

{

int intNum = 0;

do {

cout << msg;

cin >> data;

string::size\_type sz;

intNum = stoi(data, &sz);

if (intNum >= 1800 && intNum < 2023) return data;

} while(intNum < 1800 || intNum > 2022);

}

string inputAdditions(string data, string msg)

{

do {

cout << msg;

cin.ignore();

getline(cin, data);

if (data.length() <= 255) return data;

} while(data.length() > 255);

}

void addElement(regEnrollment \*rootNode)

{

regEnrollment \*bufNode = rootNode;

regEnrollment \*newElement = new regEnrollment;

while (bufNode->ptr != nullptr) {

bufNode = bufNode->ptr;

}

bufNode->ptr = newElement;

newElement->ptr = nullptr;

string name = "";

string lastName = "";

string patronymic = "";

string carBrand = "";

string gradYear = "";

string dateDay = "0";

string dateMonth = "0";

string dateYear = "";

string govNum = "";

char additions[255] = "";

strcpy(newElement->firstName, inputTextData(35, name, "Enter your name: ").c\_str());

strcpy(newElement->lastName, inputTextData(35, lastName, "Enter your last name: ").c\_str());

strcpy(newElement->patronymic, inputTextData(35, patronymic, "Enter your patronymic: ").c\_str());

strcpy(newElement->carBrand, inputTextData(35, carBrand, "Enter your car brand: ").c\_str());

strcpy(newElement->gradYear, inputYearData(gradYear, "Enter your graduation year: ").c\_str());

strcpy(newElement->dateDay, inputNumData(dateDay, 31, "Enter the day of registration: ").c\_str());

strcpy(newElement->dateMonth, inputNumData(dateMonth, 12, "Enter the month of registration: ").c\_str());

strcpy(newElement->dateYear, inputYearData(dateYear, "Enter the year of registration: ").c\_str());

strcpy(newElement->govNumber, inputTextData(8, govNum, "Enter your state number: ").c\_str());

strcpy(newElement->additions, inputAdditions(additions, "Enter additions informations: ").c\_str());

}

void deleteElement(regEnrollment \*&root)

{

regEnrollment \*findNode = root;

regEnrollment \*buffer = nullptr;

char searchRequest[9] = "";

cout << endl << "Choose element for deleting by state number: ";

cin >> searchRequest;

do {

if (int(strcmp(searchRequest, findNode->govNumber)) == 0) {

if (findNode == root) {

root = root->ptr;

}

else {

buffer->ptr = findNode->ptr;

}

delete(findNode);

break;

}

buffer = findNode;

findNode = findNode->ptr;

} while (findNode != nullptr);

}**… / ModulesOzhekhovskyi / ModulesOzhekhovskyi.h**

#ifndef MODULESOZHEKHOVSKYI\_H\_INCLUDED

#define MODULESOZHEKHOVSKYI\_H\_INCLUDED

#include "struct\_type\_project\_1.h"

#include <iostream>

#include <string>

#include <cstring>

using namespace std;

string inputTextData(int numBytes, string data, string msg);

string inputNumData(string data, int maxNum, string msg);

string inputYearData(string data, string msg);

string inputAdditions(string data, string msg);

void addElement(regEnrollment \*lst);

void deleteElement(regEnrollment \*&root);

#endif // MODULESOZHEKHOVSKYI\_H\_INCLUDED