ДОДАТОК А. Код програми

#include <string>

#include <iostream>

using namespace std;

struct Node

{

string registrationDate = "RegistrationDate\_No\_Info";

string date = "Date\_No\_Info";

string name = "Name\_No\_Info";

string specialization = "Specialization\_No\_Info";

Node\* next;

};

struct Queue

{

int size;

Node\* first;

Node\* last;

};

void createQueue(Queue\* queue)

{

queue->first = new Node;

queue->first->next = NULL;

queue->last = queue->first;

queue->size = 0;

}

bool checkQueue(Queue\* queue)

{

if (queue->first == queue->last) return true;

else return false;

}

void Add(Queue\* queue, string name, string date, string specialization, string registration)

{

queue->last->next = new Node;

queue->last = queue->last->next;

queue->last->name = name;

queue->last->date = date;

queue->last->specialization = specialization;

queue->last->registrationDate = registration;

queue->last->next = NULL;

queue->size++;

cout << "Element has added\n\n";

}

void showTop(Queue\* queue)

{

cout << "\nName: " << queue->first->next->name << "\nDate: " << queue->first->next->date << "\nSpecialization: " << queue->first->next->specialization << "\nRegistration Date: " << queue->first->next->registrationDate;

}

void Delete(Queue\* queue, int number)

{

queue->first = queue->first->next;

queue->size--;

//name.erase(name.begin() + number);

cout << "Элемент удален\n\n";

}

int getSize(Queue\* queue) //размер очереди

{

return queue->size;

}

void findEl(Queue\* queue, string tempname) {

int position = 0;

/\*int counter = getSize(\*queue);

for (int i = 0; i < getSize(&queue); ++i)\*/

while (queue->last->next != NULL) {

if (queue->last->name == tempname)

{

//position = i;

cout << "Number: " << position << endl;

}

else

queue->last = queue->last->next;

//else cout << "Element not found\n+";

}

}

int main()

{

Queue queue;

createQueue(&queue);

int position = 0;

char number;

do

{

cout << "1. Add element" << endl;

cout << "2. Delete element" << endl;

cout << "3. Show top element" << endl;

cout << "4. Show size" << endl;

cout << "5. Find element" << endl;

cout << "0. Exit\n\n";

cout << "Your choose: ";

cin >> number;

cin.ignore();

if (number == '1')

{

string name, date, specialization, registration;

cout << "Name: ";

cin >> name;

cout << "Date: ";

cin >> date;

cout << "Specialization: ";

cin >> specialization;

cout << "Registration Date: ";

cin >> registration;

Add(&queue, name, date, specialization, registration);

}

else if (number == '2')

{

if (checkQueue(&queue)) cout << endl << "Nothing to delete!\n\n";

else Delete(&queue, position);

}

else if (number == '3')

{

if (checkQueue(&queue)) cout << endl << "Empty!\n\n";

else {

cout << "\nTop Element: ";

showTop(&queue);

cout << "\n";

}

}

else if (number == '4')

{

if (checkQueue(&queue)) cout << endl << "Size is 0!\n\n";

else cout << "\nSize is: " << getSize(&queue) << "\n\n";

}

else if (number == '5')

{

string tempname;

cout << "Enter the name: ";

cin >> tempname;

findEl(&queue, tempname);

}

else if (number == '0') exit(0);

else cout << endl << "Command is not declared\n\n";

} while (number != '0');

system("pause");

return 0;

}