**ПРИЛОЖЕНИЕ А**

**Листинг программы**

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Data.SqlClient;

using MySql.Data.MySqlClient;

using System.Security.Cryptography;

namespace HospitalManagementSystemCSharp

{ public partial class login : Form

{Database database = new Database();

public login()

{InitializeComponent();

StartPosition = FormStartPosition.CenterScreen; }

private string GetHashedPassword(string password)

{using (SHA256 sha256Hash = SHA256.Create())

{// Преобразование пароля в байтовый массив

byte[] bytes = sha256Hash.ComputeHash(Encoding.UTF8.GetBytes(password));

// Преобразование байтового массива в строку

StringBuilder builder = new StringBuilder();

for (int i = 0; i < bytes.Length; i++)

{builder.Append(bytes[i].ToString("x2")); // Преобразование в шестнадцатеричное представление}

return builder.ToString();}

}

private void button1\_Click(object sender, EventArgs e)

{

var loginUser = textBox\_login.Text;

var passUser = textBox\_password.Text;

MySqlDataAdapter adapter = new MySqlDataAdapter();

DataTable table = new DataTable();

string hashedPassword = GetHashedPassword(passUser);

string querystring = $"SELECT login, password FROM register WHERE login = '{loginUser}' AND password = '{hashedPassword}'";

MySqlCommand comand = new MySqlCommand(querystring,database.getConnection());

adapter.SelectCommand = comand;

adapter.Fill(table);

if (table.Rows.Count == 1)

{

MessageBox.Show("Вы успешно вошли!", "Успешно!", MessageBoxButtons.OK, MessageBoxIcon.Information);

this.Hide();

Home obj1 = new Home();

obj1.ShowDialog();

}else

{MessageBox.Show("Неверное Имя пользователя или Пароль.");

}}

private void linkLabel1\_LinkClicked(object sender, LinkLabelLinkClickedEventArgs e)

{Register register = new Register();

register.Show();

this.Hide();}

private void button2\_Click(object sender, EventArgs e)

{textBox\_login.Text = "";

textBox\_password.Text = "";}

private void pictureBox2\_Click(object sender, EventArgs e)

{ textBox\_password.UseSystemPasswordChar = true;

pictureBox2.Visible = false;

pictureBox3 .Visible = true; }

private void pictureBox3\_Click(object sender, EventArgs e)

{textBox\_password.UseSystemPasswordChar = false;

pictureBox2.Visible = true;

pictureBox3.Visible = false }

private void Form1\_Load\_1(object sender, EventArgs e)

{ pictureBox2.Visible = false;

textBox\_login.MaxLength = 50;

textBox\_password.MaxLength = 50;

}

}

}