МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ   
РОССИЙСКОЙ ФЕДЕРАЦИИ

Федеральное государственное автономное  
образовательное учреждение высшего образования  
«Самарский национальный исследовательский университет  
имени академика С.П. Королева»  
(Самарский университет)   
  
  
Факультет информатики  
Кафедра программных систем  
  
Дисциплина  
**Базы данных  
  
  
  
ОТЧЕТ**по лабораторной работе №6  
  
Вариант №12

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Дата: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Самара 2021

**Лабораторная работа № 6**

Тема работы: разработка интерфейса пользователя для работы с данными в БД. Создание форм.

Цель работы: знакомство с возможностями по разработке форм.

Подготовка к работе:

1. Изучите теоретические основы разработки форм, рассмотренные в лекционном курсе, методических указаниях или других источниках.
2. Ответьте на вопросы к лабораторной работе.
3. Подготовьте отчет к оформлению хода выполнения работы.

Порядок выполнения работы:

1. Создайте необходимые формы для ввода информации в базу данных (созданной на предыдущих лабораторных работах), согласно предметной области своего варианта.
2. Проверьте работу форм (введите, измените и удалите около 10 записей в каждой форме).
3. Проверьте правильность работы обеспечения целостности данных.
4. Обдумайте и создайте формы, которые, возможно, будут полезными для будущих пользователей вашей БД.
5. Оформите отчет о выполнении лабораторной работы.

**Примеры работы программы:**

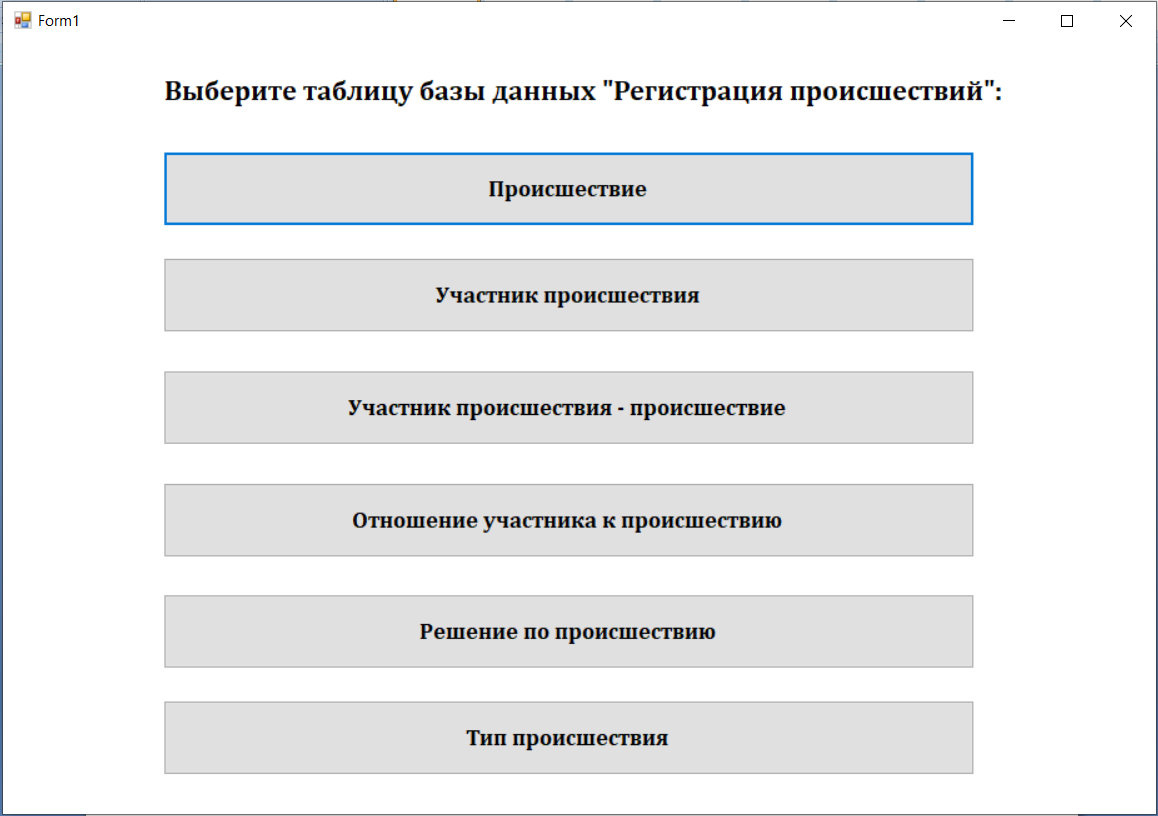


Рисунок 1 – Главная форма программы

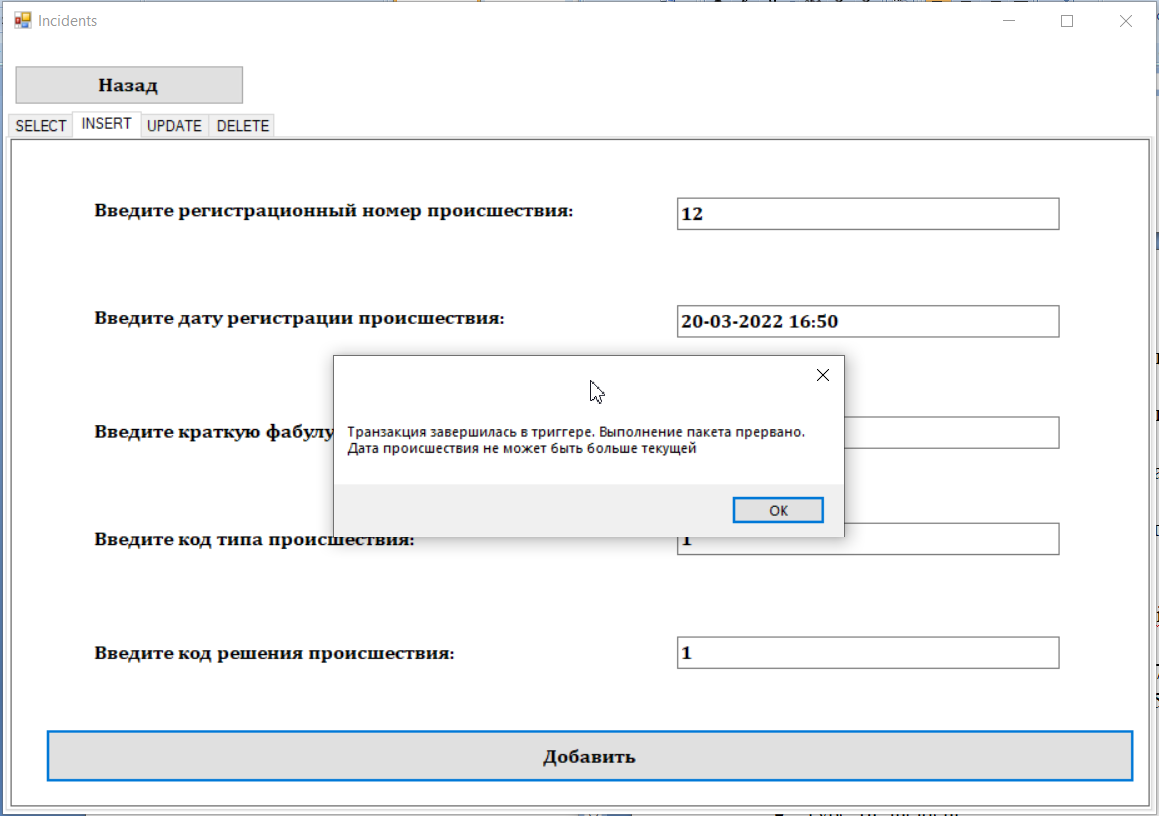
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Рисунок 2 – Завершение транзакции в триггере в таблице “Происшествия”

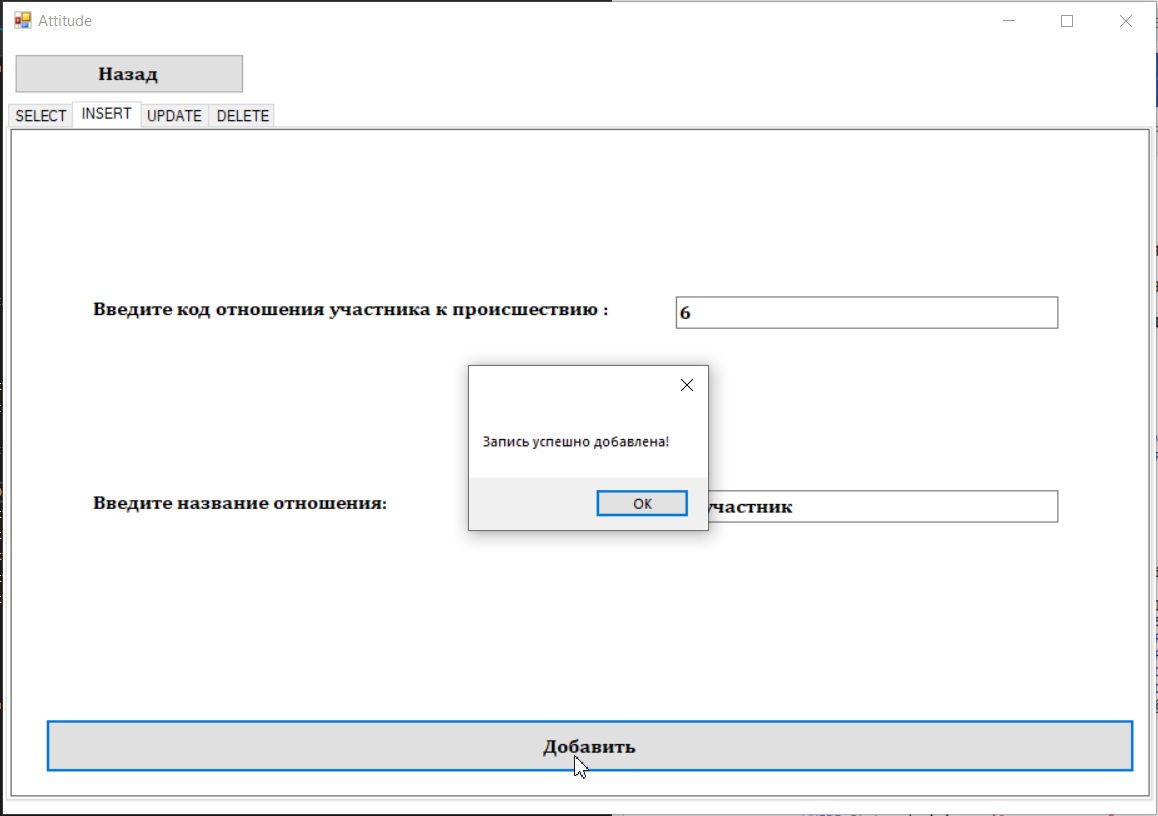


Рисунок 3 – Успешное добавление записи в таблицу “Отношение участника к происшествию”

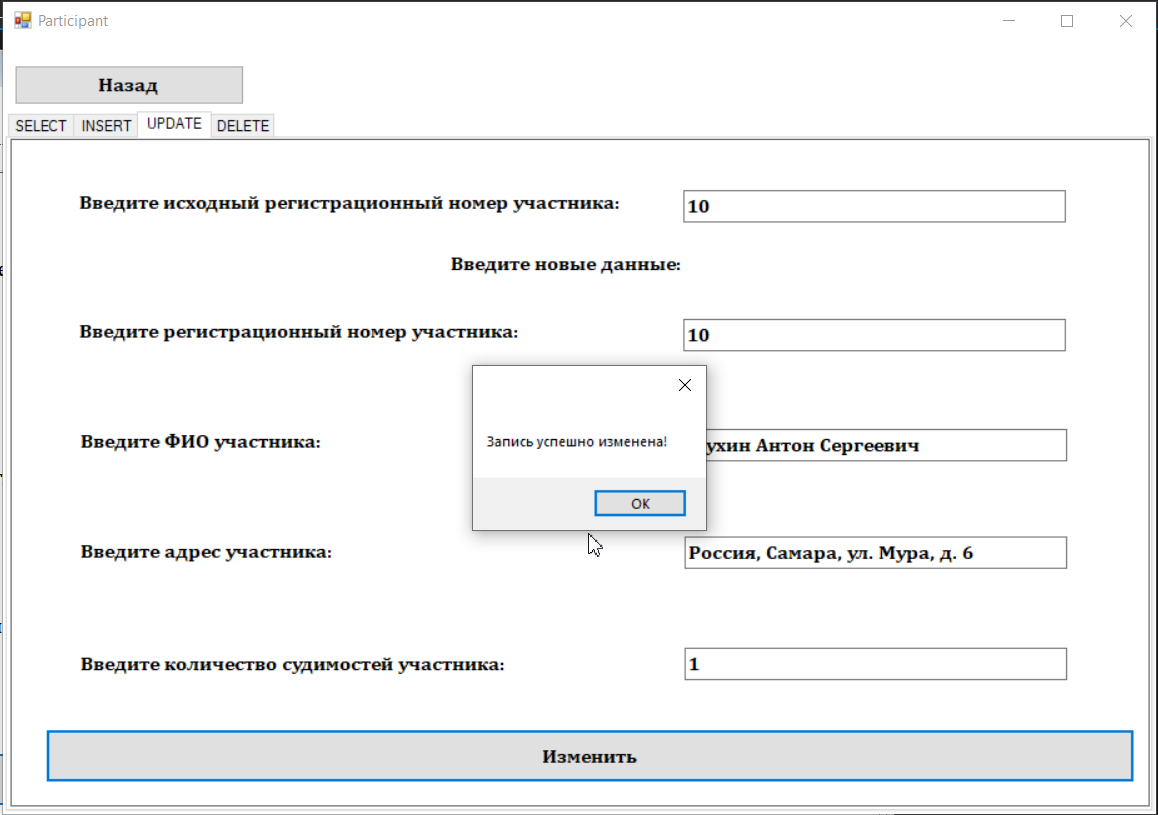


Рисунок 4 – Успешное изменение записи в таблице “Участник происшествия”

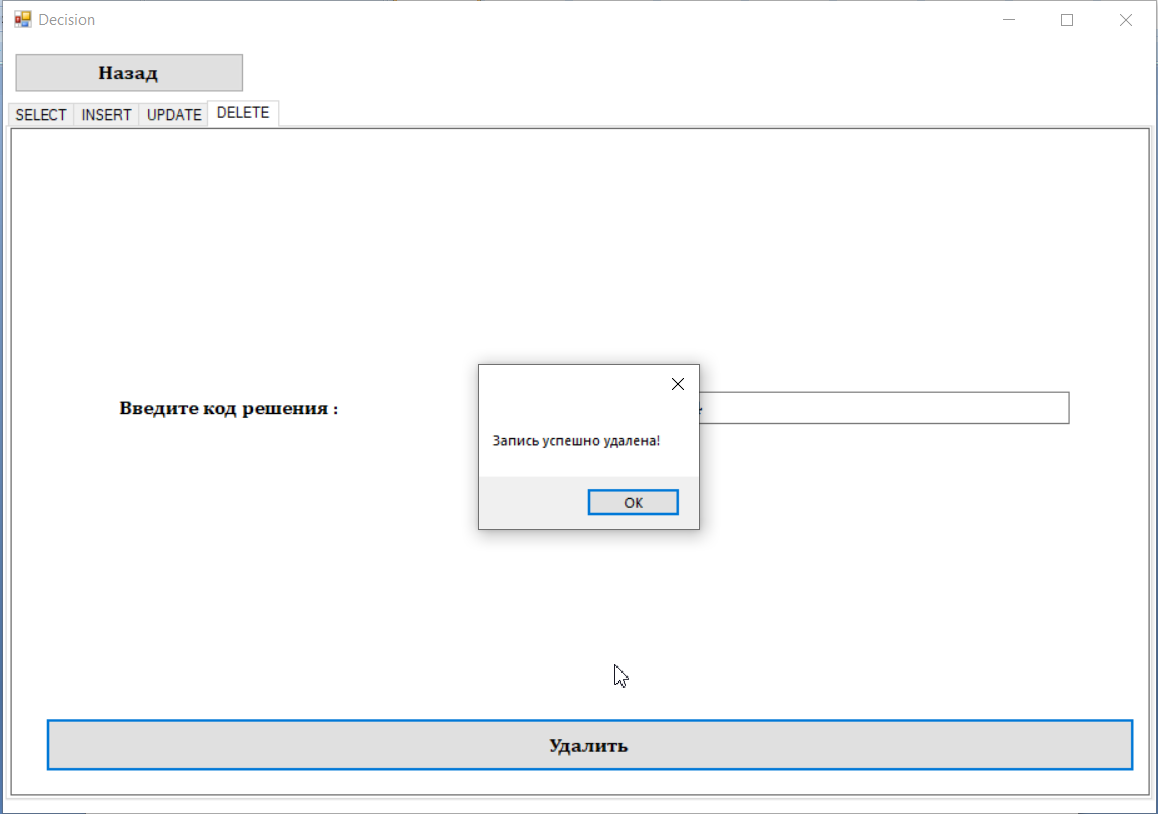
****

Рисунок 5 – Успешное удаление записи в таблице “Решение по происшествию”

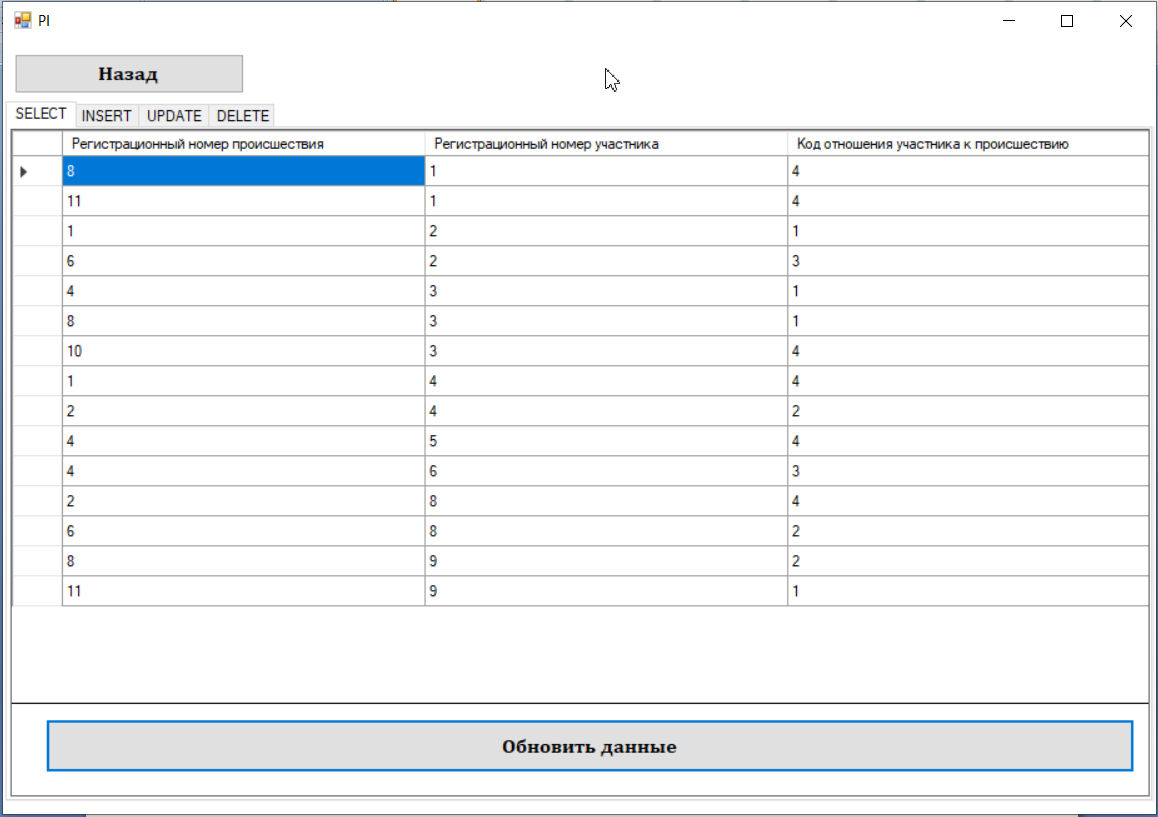
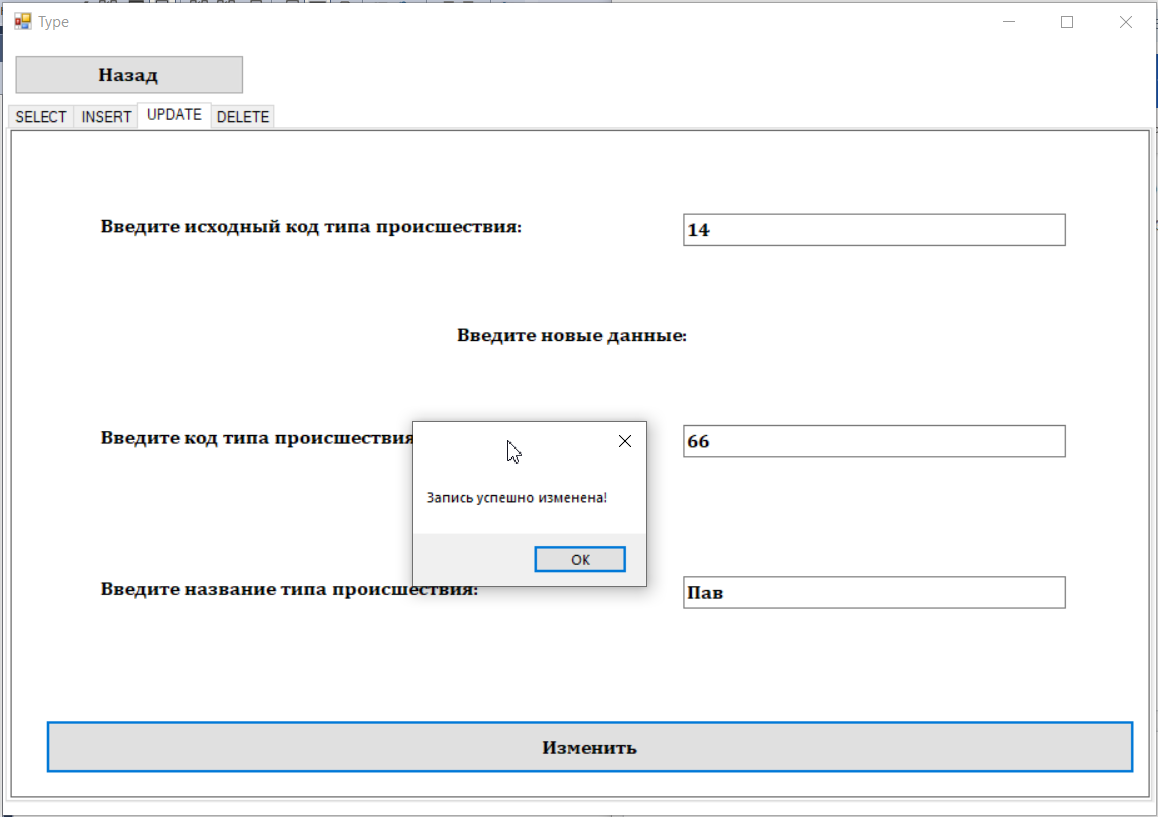


Рисунок 6 – Успешный вывод всех записей из таблицы “Участник происшествия – происшествие”



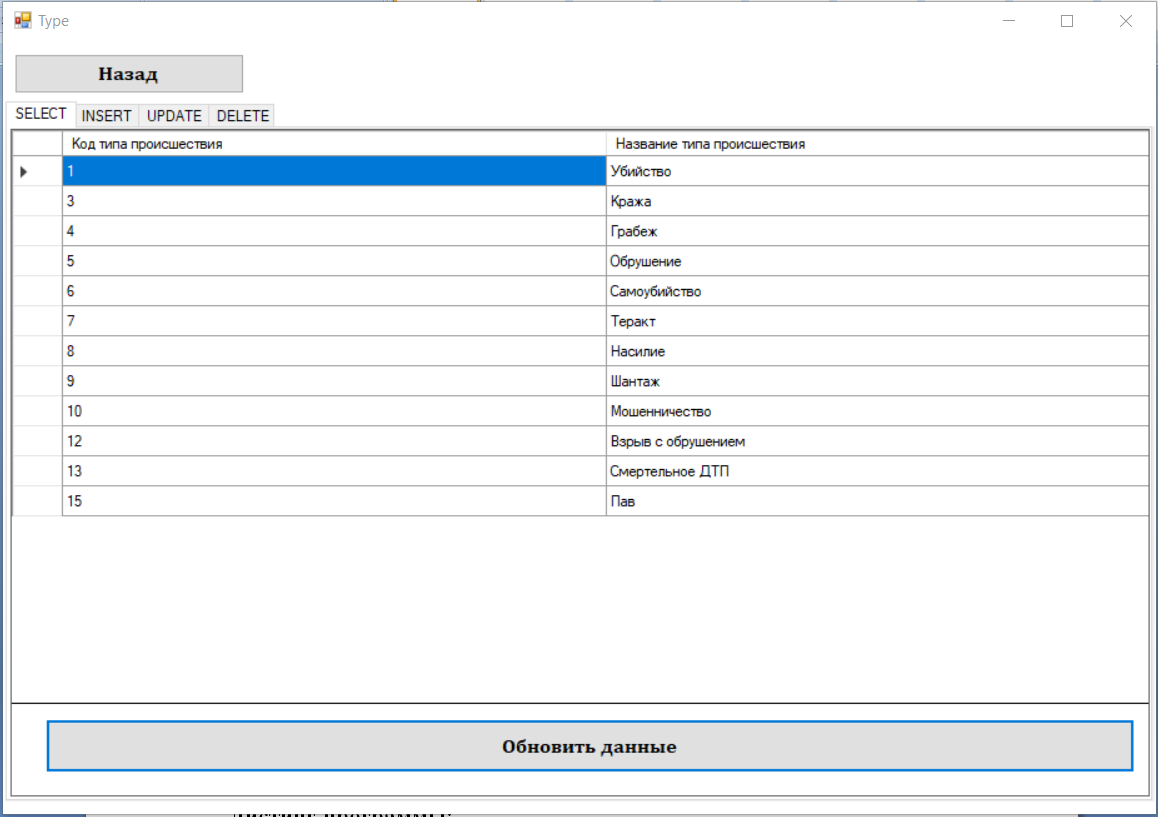


Рисунок 7 – Изменение записи в таблице “Тип происшествия”, триггер в которой определяет значение суррогатного первичного ключа по умолчанию

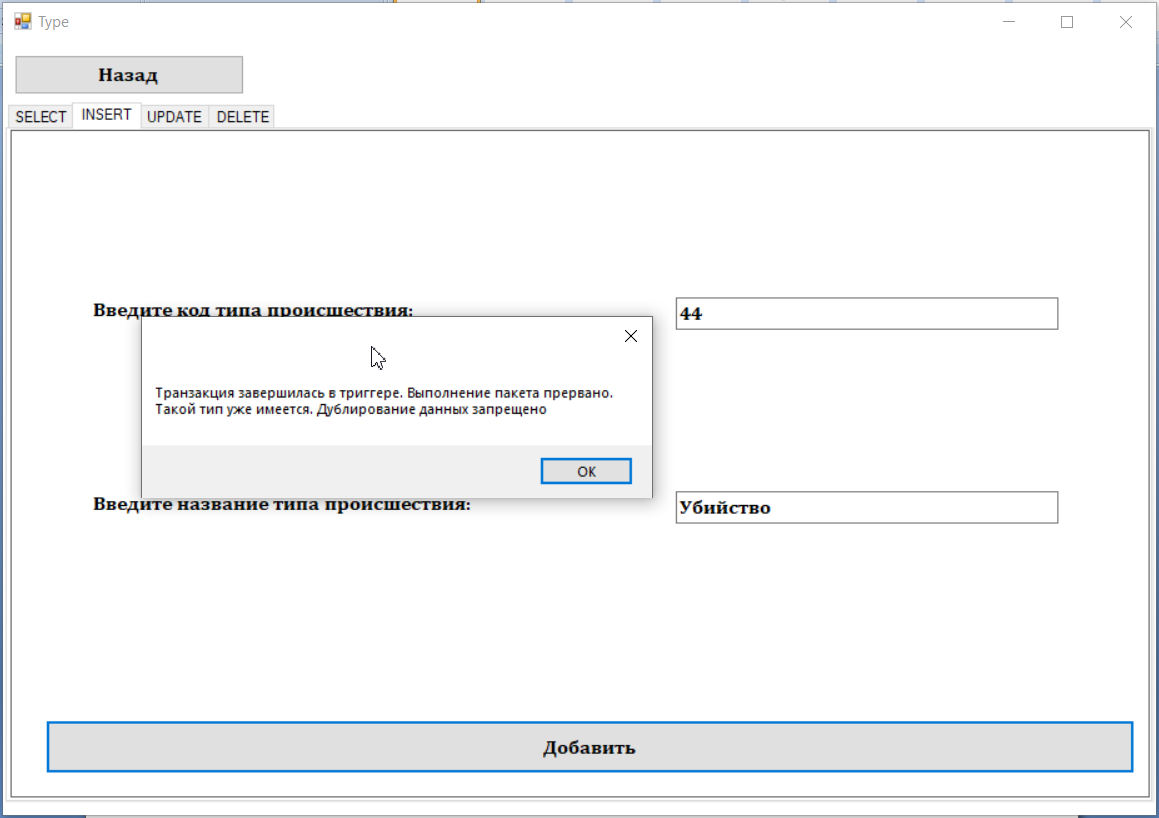


Рисунок 8 – Завершение транзакции в триггере в таблице “Тип происшествия”

**Листинг программы:**

using System;

using System.Windows.Forms;

namespace Lab\_6

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

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

{

Incidents incidents = new Incidents();

incidents.Show();

SetVisibleCore(false);

}

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

{

Participant participant = new Participant();

participant.Show();

SetVisibleCore(false);

}

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

{

PI pI = new PI();

pI.Show();

SetVisibleCore(false);

}

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

{

Attitude attitude = new Attitude();

attitude.Show();

SetVisibleCore(false);

}

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

{

Decision decision = new Decision();

decision.Show();

SetVisibleCore(false);

}

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

{

Type type = new Type();

type.Show();

SetVisibleCore(false);

}

}

}

using System;

using System.Collections.Generic;

using System.Windows.Forms;

using System.Data.SqlClient;

namespace Lab\_6

{

public partial class Attitude : Form

{

public Attitude()

{

InitializeComponent();

}

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

{

Form1 form1 = new Form1();

form1.Show();

SetVisibleCore(false);

}

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

{

try

{

dataGridViewOutput.Rows.Clear();

SqlConnection connection = new SqlConnection("Server = LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("SELECT \* FROM Attitude", connection);

SqlDataReader reader = command.ExecuteReader();

List<string[]> data = new List<string[]>();

while (reader.Read())

{

data.Add(new string[2]);

data[data.Count - 1][0] = reader[0].ToString();

data[data.Count - 1][1] = reader[1].ToString();

}

reader.Close();

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

foreach (string[] s in data)

dataGridViewOutput.Rows.Add(s);

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Insert.Text) && !string.IsNullOrEmpty(textBox2Insert.Text) &&

!string.IsNullOrWhiteSpace(textBox1Insert.Text) && !string.IsNullOrWhiteSpace(textBox2Insert.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("INSERT INTO Attitude(ID\_attitude,Name\_attitude) VALUES(@1, @2)", connection);

command.Parameters.AddWithValue("1", textBox1Insert.Text);

command.Parameters.AddWithValue("2", textBox2Insert.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно добавлена!");

textBox1Insert.Clear();

textBox2Insert.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Insert.Clear();

textBox2Insert.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Update.Text) && !string.IsNullOrEmpty(textBox2Update.Text) && !string.IsNullOrEmpty(textBox3Update.Text) &&

!string.IsNullOrWhiteSpace(textBox1Update.Text) && !string.IsNullOrWhiteSpace(textBox2Update.Text) && !string.IsNullOrWhiteSpace(textBox3Update.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("UPDATE [Attitude] SET ID\_attitude = @2,Name\_attitude = @3 WHERE ID\_attitude = @1", connection);

command.Parameters.AddWithValue("1", textBox1Update.Text);

command.Parameters.AddWithValue("2", textBox2Update.Text);

command.Parameters.AddWithValue("3", textBox3Update.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно изменена!");

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Delete.Text) && !string.IsNullOrWhiteSpace(textBox1Delete.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("DELETE FROM Attitude WHERE ID\_attitude = @id", connection);

command.Parameters.AddWithValue("id", textBox1Delete.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно удалена!");

textBox1Delete.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Delete.Clear();

}

}

}

}

using System;

using System.Collections.Generic;

using System.Windows.Forms;

using System.Data.SqlClient;

namespace Lab\_6

{

public partial class Decision : Form

{

public Decision()

{

InitializeComponent();

}

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

{

try

{

dataGridViewOutput.Rows.Clear();

SqlConnection connection = new SqlConnection("Server = LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("SELECT \* FROM Incident\_decision", connection);

SqlDataReader reader = command.ExecuteReader();

List<string[]> data = new List<string[]>();

while (reader.Read())

{

data.Add(new string[2]);

data[data.Count - 1][0] = reader[0].ToString();

data[data.Count - 1][1] = reader[1].ToString();

}

reader.Close();

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

foreach (string[] s in data)

dataGridViewOutput.Rows.Add(s);

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

}

}

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

{

Form1 form1 = new Form1();

form1.Show();

SetVisibleCore(false);

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Insert.Text) && !string.IsNullOrEmpty(textBox2Insert.Text) &&

!string.IsNullOrWhiteSpace(textBox1Insert.Text) && !string.IsNullOrWhiteSpace(textBox2Insert.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("INSERT INTO Incident\_decision(ID\_decision,Status\_decision) VALUES(@1, @2)", connection);

command.Parameters.AddWithValue("1", textBox1Insert.Text);

command.Parameters.AddWithValue("2", textBox2Insert.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно добавлена!");

textBox1Insert.Clear();

textBox2Insert.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Insert.Clear();

textBox2Insert.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Update.Text) && !string.IsNullOrEmpty(textBox2Update.Text) && !string.IsNullOrEmpty(textBox3Update.Text) &&

!string.IsNullOrWhiteSpace(textBox1Update.Text) && !string.IsNullOrWhiteSpace(textBox2Update.Text) && !string.IsNullOrWhiteSpace(textBox3Update.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("UPDATE [Incident\_decision] SET ID\_decision = @2,Status\_decision = @3 WHERE ID\_decision = @1", connection);

command.Parameters.AddWithValue("1", textBox1Update.Text);

command.Parameters.AddWithValue("2", textBox2Update.Text);

command.Parameters.AddWithValue("3", textBox3Update.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно изменена!");

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Delete.Text) && !string.IsNullOrWhiteSpace(textBox1Delete.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("DELETE FROM Incident\_decision WHERE ID\_decision = @id", connection);

command.Parameters.AddWithValue("id", textBox1Delete.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно удалена!");

textBox1Delete.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Delete.Clear();

}

}

}

}

using System;

using System.Collections.Generic;

using System.Windows.Forms;

using System.Data.SqlClient;

namespace Lab\_6

{

public partial class Incidents : Form

{

public Incidents()

{

InitializeComponent();

}

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

{

Form1 form1 = new Form1();

form1.Show();

SetVisibleCore(false);

}

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

{

try

{

dataGridViewOutput.Rows.Clear();

SqlConnection connection = new SqlConnection("Server = LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("SELECT \* FROM Incident", connection);

SqlDataReader reader = command.ExecuteReader();

List<string[]> data = new List<string[]>();

while (reader.Read())

{

data.Add(new string[5]);

data[data.Count - 1][0] = reader[0].ToString();

data[data.Count - 1][1] = reader[1].ToString();

data[data.Count - 1][2] = reader[2].ToString();

data[data.Count - 1][3] = reader[3].ToString();

data[data.Count - 1][4] = reader[4].ToString();

}

reader.Close();

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

foreach (string[] s in data)

dataGridViewOutput.Rows.Add(s);

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Insert.Text) && !string.IsNullOrEmpty(textBox2Insert.Text) && !string.IsNullOrEmpty(textBox3Insert.Text) && !string.IsNullOrEmpty(textBox4Insert.Text) && !string.IsNullOrEmpty(textBox5Insert.Text) &&

!string.IsNullOrWhiteSpace(textBox1Insert.Text) && !string.IsNullOrWhiteSpace(textBox2Insert.Text) && !string.IsNullOrWhiteSpace(textBox3Insert.Text) && !string.IsNullOrWhiteSpace(textBox4Insert.Text) && !string.IsNullOrWhiteSpace(textBox5Insert.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("INSERT INTO Incident(ID\_incident, Date, Short\_plot, ID\_type, ID\_decision) VALUES(@1, @2, @3, @4, @5)", connection);

command.Parameters.AddWithValue("1", textBox1Insert.Text);

command.Parameters.AddWithValue("2", textBox2Insert.Text);

command.Parameters.AddWithValue("3", textBox3Insert.Text);

command.Parameters.AddWithValue("4", textBox4Insert.Text);

command.Parameters.AddWithValue("5", textBox5Insert.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно добавлена!");

textBox1Insert.Clear();

textBox2Insert.Clear();

textBox3Insert.Clear();

textBox4Insert.Clear();

textBox5Insert.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Insert.Clear();

textBox2Insert.Clear();

textBox3Insert.Clear();

textBox4Insert.Clear();

textBox5Insert.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Update.Text) && !string.IsNullOrEmpty(textBox2Update.Text) && !string.IsNullOrEmpty(textBox3Update.Text) && !string.IsNullOrEmpty(textBox4Update.Text) && !string.IsNullOrEmpty(textBox5Update.Text) && !string.IsNullOrEmpty(textBox6Update.Text) &&

!string.IsNullOrWhiteSpace(textBox1Update.Text) && !string.IsNullOrWhiteSpace(textBox2Update.Text) && !string.IsNullOrWhiteSpace(textBox3Update.Text) && !string.IsNullOrWhiteSpace(textBox4Update.Text) && !string.IsNullOrWhiteSpace(textBox5Update.Text) && !string.IsNullOrWhiteSpace(textBox6Update.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("UPDATE [Incident] SET ID\_incident = @2, Date = @3, Short\_plot = @4, ID\_type = @5, ID\_decision = @6 WHERE ID\_incident = @1", connection);

command.Parameters.AddWithValue("1", textBox1Update.Text);

command.Parameters.AddWithValue("2", textBox2Update.Text);

command.Parameters.AddWithValue("3", textBox3Update.Text);

command.Parameters.AddWithValue("4", textBox4Update.Text);

command.Parameters.AddWithValue("5", textBox5Update.Text);

command.Parameters.AddWithValue("6", textBox6Update.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно изменена!");

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

textBox4Update.Clear();

textBox5Update.Clear();

textBox6Update.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

textBox4Update.Clear();

textBox5Update.Clear();

textBox6Update.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Delete.Text) && !string.IsNullOrWhiteSpace(textBox1Delete.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("DELETE FROM Incident WHERE ID\_incident = @id", connection);

command.Parameters.AddWithValue("id", textBox1Delete.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно удалена!");

textBox1Delete.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Delete.Clear();

}

}

}

}

using System;

using System.Collections.Generic;

using System.Windows.Forms;

using System.Data.SqlClient;

namespace Lab\_6

{

public partial class Participant : Form

{

public Participant()

{

InitializeComponent();

}

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

{

Form1 form1 = new Form1();

form1.Show();

SetVisibleCore(false);

}

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

{

try

{

dataGridViewOutput.Rows.Clear();

SqlConnection connection = new SqlConnection("Server = LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("SELECT \* FROM Participant\_in\_incident", connection);

SqlDataReader reader = command.ExecuteReader();

List<string[]> data = new List<string[]>();

while (reader.Read())

{

data.Add(new string[4]);

data[data.Count - 1][0] = reader[0].ToString();

data[data.Count - 1][1] = reader[1].ToString();

data[data.Count - 1][2] = reader[2].ToString();

data[data.Count - 1][3] = reader[3].ToString();

}

reader.Close();

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

foreach (string[] s in data)

dataGridViewOutput.Rows.Add(s);

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Insert.Text) && !string.IsNullOrEmpty(textBox2Insert.Text) && !string.IsNullOrEmpty(textBox3Insert.Text) && !string.IsNullOrEmpty(textBox4Insert.Text) &&

!string.IsNullOrWhiteSpace(textBox1Insert.Text) && !string.IsNullOrWhiteSpace(textBox2Insert.Text) && !string.IsNullOrWhiteSpace(textBox3Insert.Text) && !string.IsNullOrWhiteSpace(textBox4Insert.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("INSERT INTO Participant\_in\_incident(ID\_participant, Address, Number\_of\_convictions, Name) VALUES(@1, @3, @4, @2)", connection);

command.Parameters.AddWithValue("1", textBox1Insert.Text);

command.Parameters.AddWithValue("2", textBox2Insert.Text);

command.Parameters.AddWithValue("3", textBox3Insert.Text);

command.Parameters.AddWithValue("4", textBox4Insert.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно добавлена!");

textBox1Insert.Clear();

textBox2Insert.Clear();

textBox3Insert.Clear();

textBox4Insert.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Insert.Clear();

textBox2Insert.Clear();

textBox3Insert.Clear();

textBox4Insert.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Update.Text) && !string.IsNullOrEmpty(textBox2Update.Text) && !string.IsNullOrEmpty(textBox3Update.Text) && !string.IsNullOrEmpty(textBox4Update.Text) && !string.IsNullOrEmpty(textBox5Update.Text) &&

!string.IsNullOrWhiteSpace(textBox1Update.Text) && !string.IsNullOrWhiteSpace(textBox2Update.Text) && !string.IsNullOrWhiteSpace(textBox3Update.Text) && !string.IsNullOrWhiteSpace(textBox4Update.Text) && !string.IsNullOrWhiteSpace(textBox5Update.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("UPDATE [Participant\_in\_incident] SET ID\_participant = @2, Address = @4, Number\_of\_convictions = @5, Name = @3 WHERE ID\_participant = @1", connection);

command.Parameters.AddWithValue("1", textBox1Update.Text);

command.Parameters.AddWithValue("2", textBox2Update.Text);

command.Parameters.AddWithValue("3", textBox3Update.Text);

command.Parameters.AddWithValue("4", textBox4Update.Text);

command.Parameters.AddWithValue("5", textBox5Update.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно изменена!");

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

textBox4Update.Clear();

textBox5Update.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

textBox4Update.Clear();

textBox5Update.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Delete.Text) && !string.IsNullOrWhiteSpace(textBox1Delete.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("DELETE FROM Participant\_in\_incident WHERE ID\_participant = @id", connection);

command.Parameters.AddWithValue("id", textBox1Delete.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно удалена!");

textBox1Delete.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Delete.Clear();

}

}

}

}

using System;

using System.Collections.Generic;

using System.Windows.Forms;

using System.Data.SqlClient;

namespace Lab\_6

{

public partial class PI : Form

{

public PI()

{

InitializeComponent();

}

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

{

try

{

dataGridViewOutput.Rows.Clear();

SqlConnection connection = new SqlConnection("Server = LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("SELECT \* FROM Participant\_incident", connection);

SqlDataReader reader = command.ExecuteReader();

List<string[]> data = new List<string[]>();

while (reader.Read())

{

data.Add(new string[3]);

data[data.Count - 1][0] = reader[0].ToString();

data[data.Count - 1][1] = reader[1].ToString();

data[data.Count - 1][2] = reader[2].ToString();

}

reader.Close();

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

foreach (string[] s in data)

dataGridViewOutput.Rows.Add(s);

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

}

}

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

{

Form1 form1 = new Form1();

form1.Show();

SetVisibleCore(false);

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Insert.Text) && !string.IsNullOrEmpty(textBox2Insert.Text) && !string.IsNullOrEmpty(textBox3Insert.Text) &&

!string.IsNullOrWhiteSpace(textBox1Insert.Text) && !string.IsNullOrWhiteSpace(textBox2Insert.Text) && !string.IsNullOrWhiteSpace(textBox3Insert.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("INSERT INTO Participant\_incident(ID\_incident, ID\_participant, ID\_attitude) VALUES(@1, @2, @3)", connection);

command.Parameters.AddWithValue("1", textBox1Insert.Text);

command.Parameters.AddWithValue("2", textBox2Insert.Text);

command.Parameters.AddWithValue("3", textBox3Insert.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно добавлена!");

textBox1Insert.Clear();

textBox2Insert.Clear();

textBox3Insert.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Insert.Clear();

textBox2Insert.Clear();

textBox3Insert.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Update.Text) && !string.IsNullOrEmpty(textBox2Update.Text) && !string.IsNullOrEmpty(textBox3Update.Text) && !string.IsNullOrEmpty(textBox4Update.Text) && !string.IsNullOrEmpty(textBox5Update.Text) &&

!string.IsNullOrWhiteSpace(textBox1Update.Text) && !string.IsNullOrWhiteSpace(textBox2Update.Text) && !string.IsNullOrWhiteSpace(textBox3Update.Text) && !string.IsNullOrWhiteSpace(textBox4Update.Text) && !string.IsNullOrWhiteSpace(textBox5Update.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("UPDATE [Participant\_incident] SET ID\_incident = @3, ID\_participant = @4, ID\_attitude = @5 WHERE ID\_incident = @1 AND ID\_participant = @2", connection);

command.Parameters.AddWithValue("1", textBox1Update.Text);

command.Parameters.AddWithValue("2", textBox2Update.Text);

command.Parameters.AddWithValue("3", textBox3Update.Text);

command.Parameters.AddWithValue("4", textBox4Update.Text);

command.Parameters.AddWithValue("5", textBox5Update.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно изменена!");

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

textBox4Update.Clear();

textBox5Update.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

textBox4Update.Clear();

textBox5Update.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Delete.Text) && !string.IsNullOrWhiteSpace(textBox1Delete.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("DELETE FROM Participant\_incident WHERE ID\_incident = @1 AND ID\_participant = @2", connection);

command.Parameters.AddWithValue("1", textBox1Delete.Text);

command.Parameters.AddWithValue("2", textBox2Delete.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно удалена!");

textBox1Delete.Clear();

textBox2Delete.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Delete.Clear();

textBox2Delete.Clear();

}

}

}

}

using System;

using System.Collections.Generic;

using System.Windows.Forms;

using System.Data.SqlClient;

namespace Lab\_6

{

public partial class Type : Form

{

public Type()

{

InitializeComponent();

}

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

{

try

{

dataGridViewOutput.Rows.Clear();

SqlConnection connection = new SqlConnection("Server = LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("SELECT \* FROM Type\_of\_incident", connection);

SqlDataReader reader = command.ExecuteReader();

List<string[]> data = new List<string[]>();

while (reader.Read())

{

data.Add(new string[2]);

data[data.Count - 1][0] = reader[0].ToString();

data[data.Count - 1][1] = reader[1].ToString();

}

reader.Close();

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

foreach (string[] s in data)

dataGridViewOutput.Rows.Add(s);

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

}

}

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

{

Form1 form1 = new Form1();

form1.Show();

SetVisibleCore(false);

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Insert.Text) && !string.IsNullOrEmpty(textBox2Insert.Text) &&

!string.IsNullOrWhiteSpace(textBox1Insert.Text) && !string.IsNullOrWhiteSpace(textBox2Insert.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("INSERT INTO Type\_of\_incident(ID\_type,Name\_type) VALUES(@1, @2)", connection);

command.Parameters.AddWithValue("1", textBox1Insert.Text);

command.Parameters.AddWithValue("2", textBox2Insert.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно добавлена!");

textBox1Insert.Clear();

textBox2Insert.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Insert.Clear();

textBox2Insert.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Update.Text) && !string.IsNullOrEmpty(textBox2Update.Text) && !string.IsNullOrEmpty(textBox3Update.Text) &&

!string.IsNullOrWhiteSpace(textBox1Update.Text) && !string.IsNullOrWhiteSpace(textBox2Update.Text) && !string.IsNullOrWhiteSpace(textBox3Update.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("UPDATE [Type\_of\_incident] SET ID\_type = @2, Name\_type = @3 WHERE ID\_type = @1", connection);

command.Parameters.AddWithValue("1", textBox1Update.Text);

command.Parameters.AddWithValue("2", textBox2Update.Text);

command.Parameters.AddWithValue("3", textBox3Update.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно изменена!");

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Update.Clear();

textBox2Update.Clear();

textBox3Update.Clear();

}

}

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

{

try

{

if (!string.IsNullOrEmpty(textBox1Delete.Text) && !string.IsNullOrWhiteSpace(textBox1Delete.Text))

{

SqlConnection connection = new SqlConnection("Server= LAPTOP-235LH2MO\\SQLEXPRESS; Database = Registration of incident; User ID=sa; Password=mssslkova");

connection.Open();

SqlCommand command = new SqlCommand("DELETE FROM Type\_of\_incident WHERE ID\_type = @id", connection);

command.Parameters.AddWithValue("id", textBox1Delete.Text);

command.ExecuteNonQuery();

connection.Close();

connection.Dispose();

connection = null;

MessageBox.Show("Запись успешно удалена!");

textBox1Delete.Clear();

}

else

MessageBox.Show("Все поля должны быть заполнены!");

}

catch (Exception exp)

{

MessageBox.Show(exp.Message);

textBox1Delete.Clear();

}

}

}

}