

Министерство науки и высшего образования Российской Федерации
Федеральное государственное бюджетное образовательное учреждение высшего образования
«Российский экономический университет имени Г.В. Плеханова»
Московский приборостроительный техникум

УТВЕРЖДАЮ
Преподаватель

_____ А.А. Шимбирёв

«___» _____ 20__ г.

УТВЕРЖДАЮ
Преподаватель

_____ А.А. Комаров

«___» _____ 20__ г.

Информационная система строительной организации

Текст программы

ЛИСТ УТВЕРЖДЕНИЯ

МПТ УП 02.01 П50-2-18 23-ЛУ

Листов 84

Ине. № подл.	Подпись и дата	Взам. инв. №	Ине. № дубл.	Подпись и дата

Менеджер проекта, студент
группы П50-2-18

_____ А.М. Суслин

«___» _____ 20__ г.

Ответственный исполнитель,
студент группы П50-2-18

_____ Д.М. Балаев

«___» _____ 20__ г.

ПРИЛОЖЕНИЕ И. ТЕКСТ ПРОГРАММЫ

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АННОТАЦИЯ

В данном программном документе приведен C# скрипт информационной системы «Информационная система строительной организации «DP Repair Kit».

В данном программном документе, в разделе «ТЕКСТ ПРОГРАММЫ» указаны: Наименование программы, область применения программы, модули, код программы.

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1. ТЕКСТ ПРОГРАММЫ

1.1. Наименование программы

Наименование – «Информационная система строительной организации «DP Repair Kit».

1.2. Область применения программы

Программа предназначена для организации работы в строительной компании.

1.3. Модули

Таблица 1- Модули

Модуль	Описание	Количество строк кода	Размер в (Кбайтах)
1	2	3	4
SQLManager.cs	Данный модуль отвечает за описание всех функций, используемых для работы с SQL Server.	139	6
WordDocGeneration.cs	Данный модуль отвечает за выполнения работы с Word (формирование отчета).	85	4
Admin.cs	Данный модуль отвечает за перемещение по всем формам, с доступам ко всем функциям.	81	3
Admin.Designer.cs	Данный модуль отвечает за визуальную часть от модуля Admin.cs	144	8
BrigadirAddRabochih.cs	Данный модуль отвечает за возможность добавления рабочих в бригаду, просмотра состава бригады и перехода на форму просмотра информации о работах.	112	5
BrigadirAddRabochih.Designer.cs	Данный модуль отвечает за визуальную часть от модуля BrigadirAddRabochih.cs	140	7
BrigadirInfoORabotah.cs	Данный модуль отвечает за вывод все не выполненных работ и кнопкой завершения работы.	68	3
BrigadirInfoORabotah.Designer.cs	Данный модуль отвечает за визуальную часть от модуля BrigadirInfoORabotah.cs	110	6
BrigadirInfoORashMaterial.cs	Данный модуль отвечает за указания расходуемых материалов с указанием количества, которое затрачено на строительство.	147	7

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Модуль	Описание	Количество строк кода	Размер в (Кбайтах)
1	2	3	4
BrigadirInfoORashMaterial.Designer.cs	Данный модуль отвечает за визуальную часть от модуля BrigadirInfoORashMaterial.cs	216	11
GlavStroiUpr.cs	Данный модуль отвечает за возможность просмотра участков и техники на выбранных участках, а также с кнопками для перехода на формы добавления нового участка и привязки техники к участку.	84	4
GlavStroiUpr.Designer.cs	Данный модуль отвечает за визуальную часть от модуля GlavStroiUpr.cs	155	9
GlavStroiUprAddTechnic.cs	Данный модуль отвечает за добавление техники на объект выбор названия техники из выпадающего списка и указанием вводом количества.	96	4
GlavStroiUprAddTechnic.Designer.cs	Данный модуль отвечает за визуальную часть от модуля GlavStroiUprAddTechnic.cs	149	8
GlavStroiUprAddUchastok.cs	Данный модуль отвечает за добавление участка с выпадающего списка сотрудников, которые могут быть назначены на роль начальника участка и поле для ввода названия участка.	108	4
GlavStroiUprAddUchastok.Designer.cs	Данный модуль отвечает за визуальную часть от модуля GlavStroiUprAddUchastok.cs	148	8
HRmanager.cs	Данный модуль отвечает за наем новых сотрудников с указанием их фамилии, имени, отчества, номера телефона, должности, роли, логина и пароля.	253	11
HRmanager.Designer.cs	Данный модуль отвечает за визуальную часть от модуля HRmanager.cs	306	16
Login.cs	Данный модуль отвечает за авторизацию сотрудников, по завершению авторизации перенаправляет пользователя на форму соответствующую его роли.	103	5
Login.Designer.cs	Данный модуль отвечает за визуальную часть от модуля Login.cs	148	8

Модуль	Описание	Количество строк кода	Размер в (Кбайтах)
1	2	3	4
ManagerAtributsInfo.cs	Данный модуль отвечает за возможность просмотра и добавления дополнительных атрибутов объекту.	122	6
ManagerAtributsInfo.Designer.cs	Данный модуль отвечает за визуальную часть от модуля ManagerAtributsInfo.cs	193	10
ManagerRegObj.cs	Данный модуль отвечает за регистрацию нового объекта: выбор типа объекта, строительного участка, заказчика.	137	6
ManagerRegObj.Designer.cs	Данный модуль отвечает за визуальную часть от модуля ManagerRegObj.cs	211	12
ManagerRegZakaz.cs	Данный модуль отвечает за регистрацию нового заказчика ввод названия организации, номера телефона, номера ИНН.	120	5
ManagerRegZakaz.Designer.cs	Данный модуль отвечает за визуальную часть от модуля ManagerRegZakaz.cs	173	9
NachUchastka.cs	Данный модуль отвечает за просмотр объектов на участке, кнопкой создания отчета, выпадающим списком объектов и кнопкой добавления работ на объекте.	174	8
NachUchastka.Designer.cs	Данный модуль отвечает за визуальную часть от модуля NachUchastka.cs	139	7
NachUchastkaAddRabotiNaObj.cs	Данный модуль отвечает за добавление нового вида работы на объект, назначения бригадира и срока выполнения работы.	119	6
NachUchastkaAddRabotiNaObj.Designer.cs	Данный модуль отвечает за визуальную часть от модуля NachUchastkaAddRabotiNaObj.cs	175	9

1.4. Код программы

1. SQLManager.cs

```
using System;
using System.Collections.Generic;
using System.Data;
using System.Data.SqlClient;
using System.Linq;
using System.Text;
```

```

using System.Threading.Tasks;
using System.Windows.Forms;

namespace DPRK.Class.SQL
{
    class SQLManager
    {
        public SqlConnection conection = new SqlConnection(@"Data localhost;Initial Catalog=DP_Repair_Kit;Integrated
Security=True");
        SqlDataAdapter dataAdapter;
        SqlCommand command;
        DataSet dataSet;

        /// <summary>
        /// Возвращает количество строк в таблице
        /// </summary>
        /// <param name="tables">Таблица</param>
        /// <returns>Количество строк</returns>
        public int Number_Records(string tables) => Convert.ToInt32(ReturnTable($"select count(*) as count from {tables}
").Rows[0][0]);

        /// <summary>
        /// Получение таблицы по запросу
        /// </summary>
        /// <param name="sqlRequest">Запрос серверу</param>
        /// <returns>Таблица выданная после выполнения запоса</returns>
        public DataTable ReturnTable(string sqlRequest)
        {
            try
            {
                dataAdapter = new SqlDataAdapter($"@"{sqlRequest}", conection);
                DataTable table = new DataTable();
                dataAdapter.Fill(table);
                return table;
            }
            catch {
                return new DataTable();
            }
        }

        /// <summary>
        /// Выполняет запрос по вперданному запросу
        /// </summary>
        /// <param name="sqlRequest">Передаваемый запрос</param>
        /// <returns>Если что то не так то передается текст ошибки если все хорошо возвращается пустая строка</returns>
        public string RequestSql(string sqlRequest)
        {
            try
            {
                command = new SqlCommand();
                conection.Open();
                command.Connection = conection;
                command.CommandText = String.Format(sqlRequest);
                command.ExecuteNonQuery();
                conection.Close();
                return "";
            }
            catch (Exception e)
            {
                conection.Close();
                return e.Message.ToString();
            }
        }
    }
}

```



```

    }
}

/// <summary>
/// Добавление значений в ComboBox
/// </summary>
/// <param name="comboBox">В какой выпадающий список заносить</param>
/// <param name="table">Таблица</param>
/// <param name="columnNumber">Колонка которую надо заносить в выпадающий список</param>
public void AddComboBox(ComboBox comboBox, string table, int columnNumber)
{
    DataTable dataTable = ReturnTable($"select count(*) as count from {table}");
    if (dataTable.Rows.Count > 0)
    {
        int numberOfRecords = Number_Records(table);
        dataAdapter = new SqlDataAdapter($"select * from {table}", connection);
        dataTable = new DataTable();
        dataAdapter.Fill(dataTable);

        for (int i = 0; i < numberOfRecords; i++)
        {
            comboBox.Items.Add(dataTable.Rows[i][columnNumber]);
        }
    }
}

/// <summary>
/// Вывод полученных данных после запроса в DataGridView
/// </summary>
/// <param name="dataGridView">В какой DataGridView заносить</param>
/// <param name="table">Таблица</param>
/// <param name="performance">Текст запроса</param>
public void GetList(DataGridView dataGridView, string table, string performance)
{
    try
    {
        dataAdapter = new SqlDataAdapter(performance, connection);
        dataSet = new DataSet();
        connection.Open();
        dataAdapter.Fill(dataSet, table);
        dataGridView.DataSource = dataSet.Tables[table];
        connection.Close();
    }
    catch {
        connection.Close();
    }
}

/// <summary>
/// Обновление значений
/// </summary>
/// <param name="table">Таблица в которой нужно изменять данные</param>
/// <param name="field">Какое поле изменить</param>
/// <param name="value">Новое значение для поля</param>
/// <param name="nameID">Название уникального индикатора</param>
/// <param name="valueID">Значение индикатора у которого производится обновление данных</param>
public void Update_Value(string table, string field, string value, string nameID, int valueID)
{
    command = new SqlCommand();
    connection.Open();

```

```
command.Connection = conection;
try
{
    command.CommandText = String.Format($"update {table} set {field}='{value}' where {nameID}='{valueID}'");
    command.ExecuteNonQuery();
    conection.Close();
}
catch
{
    conection.Close();
}
}
```

2. WordDocGeneration.cs

```
using System;
using System.Collections.Generic;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using Xceed.Document.NET;
using Xceed.Words.NET;

namespace DPRK.Class.WordManager
{
    class WordDocGeneration
    {

        SQL.SQLManager sqlManager = new SQL.SQLManager();

        public string addFile(string valueObject, int[] idSubmissionWork, string [] titleObj,string region)
        {
            try
            {
                string pathDocument = AppDomain.CurrentDomain.BaseDirectory + $"Отчет от {DateTime.Now.ToShortDateString()} {valueObject} Участок-{region}.docx";
                DocX document = DocX.Create(pathDocument);
                int i = 0;
                foreach (int idSubm in idSubmissionWork)
                {
                    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Working_Material_Inform] ({idSubm})");
                    int countRow = dataTable.Rows.Count;
                    if (countRow > 0)
                    {
                        title(document, titleObj[i]);
                        title(document, "Используемые материалы: ");
                        Paragraph paragraph = document.InsertParagraph();
                        for (int j = 0; j < countRow; j++)
                        {
                            stringValue($" {dataTable.Rows[j][4]} {dataTable.Rows[j][5]} штук", paragraph);
                        }

                        paragraph.AppendLine();
                    }
                    i++;
                }
            }
        }
    }
}
```

```
document.Save();
return pathDocument;
}
catch
{
    return "Закройте файл.";
}
}
```

```
/// <summary>
/// Создание заголовка в word документе
/// </summary>
/// <param name="document">Документ с котрым работаем</param>
/// <param name="value">Значение для заголовка</param>
/// <returns></returns>
Alignment title(DocX document,string value)
{
    return document.InsertParagraph(value).
        Font("Times New Roman").
        FontSize(10).
        Color(Color.Black).
        Bold().
        Alignment = Alignment.center;
}
```

```
/// <summary>
/// Создание строки в документе word
/// </summary>
/// <param name="value">Значение для занесения</param>
/// <param name="paragraph">Параграф документа</param>
/// <returns>
/// Параграф с текстом
/// </returns>
Paragraph stringValue(string value,Paragraph paragraph)
{
    paragraph.Alignment = Alignment.left;
    return paragraph.AppendLine(value).
        FontSize(12).
        Font("Times New Roman").
        Color(Color.Black);
}
}
```

3. Admin.Designer.cs

```
namespace DPRK
{
    partial class Admin
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
        {

```

```
if (disposing && (components != null))
{
    components.Dispose();
}
base.Dispose(disposing);
}
```

#region Windows Form Designer generated code

```
/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.headStation = new System.Windows.Forms.Button();
    this.manager = new System.Windows.Forms.Button();
    this.headConstructionDepartment = new System.Windows.Forms.Button();
    this.brigadir = new System.Windows.Forms.Button();
    this.hrManager = new System.Windows.Forms.Button();
    this.exit = new System.Windows.Forms.Button();
    this.SuspendLayout();
    //
    // headStation
    //
    this.headStation.BackColor = System.Drawing.Color.MediumTurquoise;
    this.headStation.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
    this.headStation.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.headStation.Location = new System.Drawing.Point(213, 25);
    this.headStation.Name = "headStation";
    this.headStation.Size = new System.Drawing.Size(329, 38);
    this.headStation.TabIndex = 0;
    this.headStation.Text = "Начальник участка";
    this.headStation.UseVisualStyleBackColor = false;
    this.headStation.Click += new System.EventHandler(this.headStation_Click);
    //
    // manager
    //
    this.manager.BackColor = System.Drawing.Color.MediumTurquoise;
    this.manager.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
    this.manager.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.8F);
    this.manager.Location = new System.Drawing.Point(213, 69);
    this.manager.Name = "manager";
    this.manager.Size = new System.Drawing.Size(155, 87);
    this.manager.TabIndex = 1;
    this.manager.Text = "Менеджер";
    this.manager.UseVisualStyleBackColor = false;
    this.manager.Click += new System.EventHandler(this.manager_Click);
    //
    // headConstructionDepartment
    //
    this.headConstructionDepartment.BackColor = System.Drawing.Color.MediumTurquoise;
    this.headConstructionDepartment.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
    this.headConstructionDepartment.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.8F);
    this.headConstructionDepartment.Location = new System.Drawing.Point(387, 69);
    this.headConstructionDepartment.Name = "headConstructionDepartment";
    this.headConstructionDepartment.Size = new System.Drawing.Size(155, 87);
    this.headConstructionDepartment.TabIndex = 2;
    this.headConstructionDepartment.Text = "Глава строительного управления";
}
```

```
this.headConstructionDepartment.UseVisualStyleBackColor = false;
this.headConstructionDepartment.Click += new System.EventHandler(this.headConstructionDepartment_Click);
//
// brigadir
//
this.brigadir.BackColor = System.Drawing.Color.MediumTurquoise;
this.brigadir.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.brigadir.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.8F);
this.brigadir.Location = new System.Drawing.Point(213, 174);
this.brigadir.Name = "brigadir";
this.brigadir.Size = new System.Drawing.Size(155, 87);
this.brigadir.TabIndex = 3;
this.brigadir.Text = "Бригадир";
this.brigadir.UseVisualStyleBackColor = false;
this.brigadir.Click += new System.EventHandler(this.brigadir_Click);
//
// hrManager
//
this.hrManager.BackColor = System.Drawing.Color.MediumTurquoise;
this.hrManager.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.hrManager.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.8F);
this.hrManager.Location = new System.Drawing.Point(387, 174);
this.hrManager.Name = "hrManager";
this.hrManager.Size = new System.Drawing.Size(155, 87);
this.hrManager.TabIndex = 4;
this.hrManager.Text = "HR Менеджер";
this.hrManager.UseVisualStyleBackColor = false;
this.hrManager.Click += new System.EventHandler(this.hrManager_Click);
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(213, 281);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(329, 38);
this.exit.TabIndex = 5;
this.exit.Text = "Выйти";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// Admin
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(800, 450);
this.Controls.Add(this.exit);
this.Controls.Add(this.hrManager);
this.Controls.Add(this.brigadir);
this.Controls.Add(this.headConstructionDepartment);
this.Controls.Add(this.manager);
this.Controls.Add(this.headStation);
this.Name = "Admin";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "Admin";
this.ResumeLayout(false);
}
```

```
#endregion
```

```
private System.Windows.Forms.Button headStation;  
private System.Windows.Forms.Button manager;  
private System.Windows.Forms.Button headConstructionDepartment;  
private System.Windows.Forms.Button brigadir;  
private System.Windows.Forms.Button hrManager;  
private System.Windows.Forms.Button exit;
```

```
}
```

```
}
```

4. Admin.cs

```
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;
```

```
namespace DPRK
```

```
{
```

```
    public partial class Admin : Form
```

```
    {
```

```
        static string role = "Администратор информационной системы";
```

```
        public Admin()
```

```
        {
```

```
            InitializeComponent();
```

```
        }
```

```
        /// <summary>
```

```
        /// Нажатие на кнопку "Начальник участка"
```

```
        /// </summary>
```

```
        private void headStation_Click(object sender, EventArgs e)
```

```
        {
```

```
            NachUchastka nachUchastka = new NachUchastka(role, 0);
```

```
            nachUchastka.Show();
```

```
            this.Hide();
```

```
        }
```

```
        /// <summary>
```

```
        /// Нажатие на кнопку "Менеджер"
```

```
        /// </summary>
```

```
        private void manager_Click(object sender, EventArgs e)
```

```
        {
```

```
            ManagerRegObj managerRegObj = new ManagerRegObj("Администратор Менеджер информационной системы");
```

```
            managerRegObj.Show();
```

```
            this.Hide();
```

```
        }
```

```
        /// <summary>
```

```
        /// Нажатие на кнопку "Глава строительного управления"
```

```
        /// </summary>
```

```
        private void headConstructionDepartment_Click(object sender, EventArgs e)
```

```
        {
```

```
            GlavStroiUpr glavStroiUpr = new GlavStroiUpr(role);
```

```
            glavStroiUpr.Show();
```

```
        this.Hide();
    }

    /// <summary>
    /// Нажатие на кнопку "Бригадир"
    /// </summary>
    private void brigadir_Click(object sender, EventArgs e)
    {
        BrigadirAddRabochih brigadirAddRabochih = new BrigadirAddRabochih(role, 0);
        brigadirAddRabochih.Show();
        this.Hide();
    }

    /// <summary>
    /// Нажатие на кнопку "HR менеджер"
    /// </summary>
    private void hrManager_Click(object sender, EventArgs e)
    {
        HRmanager HRmanager = new HRmanager(role);
        HRmanager.Show();
        this.Hide();
    }

    /// <summary>
    /// Нажатие на кнопку "Выйти" на форме Admin
    /// </summary>
    private void exit_Click(object sender, EventArgs e)
    {
        Login loginForm = new Login();
        loginForm.Show();
        this.Hide();
    }
}
}
```

5. BrigadirAddRabochih.Designer.cs

```
namespace DPRK
{
    partial class BrigadirAddRabochih
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }

        #region Windows Form Designer generated code
```

```
/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.employee = new System.Windows.Forms.ComboBox();
    this.lable = new System.Windows.Forms.Label();
    this.add = new System.Windows.Forms.Button();
    this.listEmployee = new System.Windows.Forms.DataGridView();
    this.exit = new System.Windows.Forms.Button();
    this.listWorks = new System.Windows.Forms.Button();
    ((System.ComponentModel.ISupportInitialize)(this.listEmployee)).BeginInit();
    this.SuspendLayout();
    //
    // employee
    //
    this.employee.BackColor = System.Drawing.Color.White;
    this.employee.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
    this.employee.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.employee.FormattingEnabled = true;
    this.employee.Location = new System.Drawing.Point(48, 46);
    this.employee.Name = "employee";
    this.employee.Size = new System.Drawing.Size(407, 26);
    this.employee.TabIndex = 0;
    //
    // lable
    //
    this.lable.AutoSize = true;
    this.lable.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.lable.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.lable.Location = new System.Drawing.Point(44, 23);
    this.lable.Name = "lable";
    this.lable.Size = new System.Drawing.Size(146, 20);
    this.lable.TabIndex = 1;
    this.lable.Text = "Выбор рабочего";
    //
    // add
    //
    this.add.BackColor = System.Drawing.Color.MediumTurquoise;
    this.add.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
    this.add.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.add.Location = new System.Drawing.Point(477, 36);
    this.add.Name = "add";
    this.add.Size = new System.Drawing.Size(209, 36);
    this.add.TabIndex = 2;
    this.add.Text = "Добавить";
    this.add.UseVisualStyleBackColor = false;
    this.add.Click += new System.EventHandler(this.add_Click);
    //
    // listEmployee
    //
    this.listEmployee.ColumnHeadersHeightSizeMode =
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;
    this.listEmployee.Location = new System.Drawing.Point(48, 95);
    this.listEmployee.Name = "listEmployee";
    this.listEmployee.RowHeadersWidth = 51;
```



```

this.listEmployee.RowTemplate.Height = 24;
this.listEmployee.Size = new System.Drawing.Size(799, 274);
this.listEmployee.TabIndex = 3;
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(730, 36);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(117, 36);
this.exit.TabIndex = 4;
this.exit.Text = "Выход";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// listWorks
//
this.listWorks.BackColor = System.Drawing.Color.MediumTurquoise;
this.listWorks.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.listWorks.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.listWorks.Location = new System.Drawing.Point(316, 395);
this.listWorks.Name = "listWorks";
this.listWorks.Size = new System.Drawing.Size(237, 43);
this.listWorks.TabIndex = 5;
this.listWorks.Text = "Список работ";
this.listWorks.UseVisualStyleBackColor = false;
this.listWorks.Click += new System.EventHandler(this.listWorks_Click);
//
// BrigadirAddRabochih
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(871, 450);
this.Controls.Add(this.listWorks);
this.Controls.Add(this.exit);
this.Controls.Add(this.listEmployee);
this.Controls.Add(this.add);
this.Controls.Add(this.lable);
this.Controls.Add(this.employee);
this.Name = "BrigadirAddRabochih";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "BrigadirAddRabochih";
((System.ComponentModel.ISupportInitialize)(this.listEmployee)).EndInit();
this.ResumeLayout(false);
this.PerformLayout();

}

#endregion

private System.Windows.Forms.ComboBox employee;
private System.Windows.Forms.Label lable;
private System.Windows.Forms.Button add;
private System.Windows.Forms.DataGridView listEmployee;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button listWorks;

```

```
}  
}
```

6. BrigadirAddRabochih.cs

```
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;  
  
namespace DPRK  
{  
    public partial class BrigadirAddRabochih : Form  
    {  
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();  
        string roles;  
        int idForeman = 0;  
        public BrigadirAddRabochih()  
        {  
            InitializeComponent();  
        }  
        /// <summary>  
        /// Инициализация компонентов, вывод рабочих под этим бригаиром  
        /// </summary>  
        /// <param name="roleReturn"> Переданная роль входящего</param>  
        /// <param name="idForemanReturn"> Переданный номер бригадира</param>  
        public BrigadirAddRabochih(string roleReturn,int idForemanReturn)  
        {  
            InitializeComponent();  
            roles = roleReturn;  
            idForeman = idForemanReturn;  
  
            if (roles == "Администратор информационной системы")  
            {  
                sqlManager.AddComboBox(employee, "[dbo].[Chief_Brigades]", 0);  
                lable.Text = "Выбор бригадира";  
                add.Text = "Выбрать бригадира";  
                if (employee.Items.Count > 0)  
                {  
                    employee.SelectedIndex = 0;  
                }  
            }  
            else  
            {  
                sqlManager.AddComboBox(employee, "[dbo].[Employee_Raboch_Inform]", 0);  
                sqlManager.GetList(listEmployee, "[dbo].[Sostav_Brigadi]", $"select * from [dbo].[Output_Workers]  
({idForeman})");  
            }  
        }  
  
        /// <summary>  
        /// Нажатие на кнопку "Выход" на форме BrigadirAddRabochih для перехода на форму авторизации или  
        администратора  
        /// </summary>  
        private void exit_Click(object sender, EventArgs e)  
        {  

```

```
if (roles == "Администратор информационной системы")
{
    Admin admin = new Admin();
    admin.Show();
}
else
{
    Login loginForm = new Login();
    loginForm.Show();
}
this.Hide();
}

/// <summary>
/// Нажатие на кнопку "Список работ" на BrigadirAddRabochih переход на форму BrigadirInfoORabotah
/// </summary>
private void listWorks_Click(object sender, EventArgs e)
{
    BrigadirInfoORabotah brigadirInfoORabotah = new BrigadirInfoORabotah(idForeman,roles);
    brigadirInfoORabotah.Show();
    this.Hide();
}

/// <summary>
/// Нажатие на кнопку для добавления сотрудника в (БД) бригаду или выбора бригадира при заходе под
администратором.
/// Вывод рабочих из под выбранном бригаиром
/// </summary>
private void add_Click(object sender, EventArgs e)
{
    if (employee.Text != "")
    {
        if (idForeman == 0)
        {
            idForeman = Convert.ToInt32(sqlManager.ReturnTable($"select * from [dbo].[Brigadir_Search]
('{employee.Text}')").Rows[0][0]);
            lable.Text = "Выбор рабочего";
            add.Text = "Добавить рабочего";
            employee.Items.Clear();
            sqlManager.AddComboBox(employee, "[dbo].[Employee_Raboch_Inform]", 0);
            sqlManager.GetList(listEmployee, "[dbo].[Sostav_Brigadi]", $"select * from [dbo].[Output_Workers]
({idForeman})");
            if (employee.Items.Count > 0)
            {
                employee.SelectedIndex = 0;
            }
        }
        else
        {
            int idEmployee = Convert.ToInt32(sqlManager.ReturnTable($"select * from [dbo].[Employee_Search]
('{employee.Text}')").Rows[0][0]);
            sqlManager.RequestSql($"insert into [dbo].[Sostav_Brigadi] values ({idForeman},{idEmployee})");
            sqlManager.GetList(listEmployee, "[dbo].[Sostav_Brigadi]", $"select * from [dbo].[Output_Workers]
({idForeman})");
        }
    }
    else
    {
        MessageBox.Show("Надо выбрать сотрудника из выпадающего списка.");
    }
}
```

```
}  
}  
}
```

7. BrigadirInfoORabotah.Designer.cs

```
namespace DPRK
```

```
{  
    partial class BrigadirInfoORabotah  
    {  
        /// <summary>  
        /// Required designer variable.  
        /// </summary>  
        private System.ComponentModel.IContainer components = null;  
  
        /// <summary>  
        /// Clean up any resources being used.  
        /// </summary>  
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>  
        protected override void Dispose(bool disposing)  
        {  
            if (disposing && (components != null))  
            {  
                components.Dispose();  
            }  
            base.Dispose(disposing);  
        }  
  
        #region Windows Form Designer generated code  
  
        /// <summary>  
        /// Required method for Designer support - do not modify  
        /// the contents of this method with the code editor.  
        /// </summary>  
        private void InitializeComponent()  
        {  
            this.label1 = new System.Windows.Forms.Label();  
            this.information = new System.Windows.Forms.DataGridView();  
            this.exit = new System.Windows.Forms.Button();  
            this.finishWork = new System.Windows.Forms.Button();  
            ((System.ComponentModel.ISupportInitialize)(this.information)).BeginInit();  
            this.SuspendLayout();  
            //  
            // label1  
            //  
            this.label1.AutoSize = true;  
            this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,  
System.Drawing.GraphicsUnit.Point, ((byte)(204)));  
            this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;  
            this.label1.Location = new System.Drawing.Point(244, 27);  
            this.label1.Name = "label1";  
            this.label1.Size = new System.Drawing.Size(284, 29);  
            this.label1.TabIndex = 0;  
            this.label1.Text = "Информация о работах";  
            //  
            // information  
            //  
            this.information.ColumnHeadersHeightSizeMode =  
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;
```

```

this.information.Location = new System.Drawing.Point(27, 77);
this.information.Name = "information";
this.information.RowHeadersWidth = 51;
this.information.RowTemplate.Height = 24;
this.information.Size = new System.Drawing.Size(743, 267);
this.information.TabIndex = 1;
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(27, 375);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(93, 38);
this.exit.TabIndex = 2;
this.exit.Text = "Выход";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// finishWork
//
this.finishWork.BackColor = System.Drawing.Color.MediumTurquoise;
this.finishWork.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.finishWork.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.finishWork.Location = new System.Drawing.Point(496, 375);
this.finishWork.Name = "finishWork";
this.finishWork.Size = new System.Drawing.Size(274, 38);
this.finishWork.TabIndex = 3;
this.finishWork.Text = "Завершить работу";
this.finishWork.UseVisualStyleBackColor = false;
this.finishWork.Click += new System.EventHandler(this.finishWork_Click);
//
// BrigadirInfoORabotah
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(800, 450);
this.Controls.Add(this.finishWork);
this.Controls.Add(this.exit);
this.Controls.Add(this.information);
this.Controls.Add(this.label1);
this.Name = "BrigadirInfoORabotah";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "BrigadirInfoORabotah";
((System.ComponentModel.ISupportInitialize)(this.information)).EndInit();
this.ResumeLayout(false);
this.PerformLayout();

}

#endregion

private System.Windows.Forms.Label label1;
private System.Windows.Forms.DataGridView information;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button finishWork;
}

```

```
}
```

8. BrigadirInfoORabotah.cs

```
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;

namespace DPRK
{
    public partial class BrigadirInfoORabotah : Form
    {
        int idBrigad;
        string role;
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();

        public BrigadirInfoORabotah()
        {
            InitializeComponent();

            /// <summary>
            /// Инициализация компонент и вывод работ на объектах у которых статус не "Работа выполнена"
            /// </summary>
            /// <param name="idBrigada">Номер бригадира</param>
            /// <param name="roles">Роль сотрудника который зашел</param>
            public BrigadirInfoORabotah(int idBrigada, string roles)
            {
                InitializeComponent();
                idBrigad = idBrigada;
                role = roles;
                sqlManager.GetList(information, "[dbo].[Raboti_Na_Objekte]", $"select * from [dbo].[List_Worke] ({idBrigad})");
                information.Columns[0].Visible = false;
            }

            /// <summary>
            /// Нажатие на кнопку "Выйти" на форме BrigadirInfoORabotah,
            /// переход на форму BrigadirAddRabochih
            /// </summary>
            private void exit_Click(object sender, EventArgs e)
            {
                if (role == "Администратор информационной системы")
                {
                    idBrigad = 0;
                }
                BrigadirAddRabochih brigadirAddRabochih = new BrigadirAddRabochih(role, idBrigad);
                brigadirAddRabochih.Show();
                this.Hide();
            }

            /// <summary>
            /// Нажатие на кнопку "Завершить работу", переход на форму BrigadirInfoORashMaterial

```

```

/// </summary>
private void finishWork_Click(object sender, EventArgs e)
{
    if (information.Rows.Count > 1)
    {
        int idrow = information.CurrentRow.Index;
        int idWorkeObject = Convert.ToInt32(information.Rows[idrow].Cells[0].Value);
        BrigadirInfoORashMaterial brigadirInfoORashMaterial = new BrigadirInfoORashMaterial(idWorkeObject,
role,idBrigad);
        brigadirInfoORashMaterial.Show();
        this.Hide();
    }
}
}
}

```

9. BrigadirInfoORashMaterial.Designer.cs

```

namespace DPRK
{
    partial class BrigadirInfoORashMaterial
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }

        #region Windows Form Designer generated code

        /// <summary>
        /// Required method for Designer support - do not modify
        /// the contents of this method with the code editor.
        /// </summary>
        private void InitializeComponent()
        {
            this.label1 = new System.Windows.Forms.Label();
            this.material = new System.Windows.Forms.ComboBox();
            this.label2 = new System.Windows.Forms.Label();
            this.value = new System.Windows.Forms.TextBox();
            this.label3 = new System.Windows.Forms.Label();
            this.informAttribute = new System.Windows.Forms.DataGridView();
            this.Column1 = new System.Windows.Forms.DataGridViewTextBoxColumn();
            this.Column2 = new System.Windows.Forms.DataGridViewTextBoxColumn();
            this.add = new System.Windows.Forms.Button();
            this.delete = new System.Windows.Forms.Button();
            this.confirm = new System.Windows.Forms.Button();
            this.exit = new System.Windows.Forms.Button();
            ((System.ComponentModel.ISupportInitialize)(this.informAttribute)).BeginInit();

```

```
this.SuspendLayout();
//
// label1
//
this.label1.AutoSize = true;
this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label1.Location = new System.Drawing.Point(167, 23);
this.label1.Name = "label1";
this.label1.Size = new System.Drawing.Size(490, 29);
this.label1.TabIndex = 0;
this.label1.Text = "Информация о расходующих материалах";
//
// material
//
this.material.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.material.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.material.FormattingEnabled = true;
this.material.Location = new System.Drawing.Point(47, 98);
this.material.Name = "material";
this.material.Size = new System.Drawing.Size(327, 26);
this.material.TabIndex = 1;
//
// label2
//
this.label2.AutoSize = true;
this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label2.Location = new System.Drawing.Point(43, 75);
this.label2.Name = "label2";
this.label2.Size = new System.Drawing.Size(93, 20);
this.label2.TabIndex = 2;
this.label2.Text = "Материал";
//
// value
//
this.value.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.value.Location = new System.Drawing.Point(47, 165);
this.value.Name = "value";
this.value.Size = new System.Drawing.Size(327, 24);
this.value.TabIndex = 3;
this.value.KeyPress += new System.Windows.Forms.KeyPressEventHandler(this.value_KeyPress);
//
// label3
//
this.label3.AutoSize = true;
this.label3.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label3.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label3.Location = new System.Drawing.Point(43, 142);
this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(91, 20);
this.label3.TabIndex = 4;
this.label3.Text = "Значение";
//
// informAttribute
```



```
//
this.informAttribute.ColumnHeadersHeightSizeMode =
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;
this.informAttribute.Columns.AddRange(new System.Windows.Forms.DataGridColumn[] {
this.Column1,
this.Column2});
this.informAttribute.Location = new System.Drawing.Point(430, 75);
this.informAttribute.Name = "informAttribute";
this.informAttribute.RowHeadersWidth = 51;
this.informAttribute.RowTemplate.Height = 24;
this.informAttribute.Size = new System.Drawing.Size(421, 360);
this.informAttribute.TabIndex = 5;
//
// Column1
//
this.Column1.HeaderText = "Материал";
this.Column1.MinimumWidth = 6;
this.Column1.Name = "Column1";
this.Column1.Width = 125;
//
// Column2
//
this.Column2.HeaderText = "Значение";
this.Column2.MinimumWidth = 6;
this.Column2.Name = "Column2";
this.Column2.Width = 125;
//
// add
//
this.add.BackColor = System.Drawing.Color.MediumTurquoise;
this.add.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.add.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.add.Location = new System.Drawing.Point(47, 215);
this.add.Name = "add";
this.add.Size = new System.Drawing.Size(166, 44);
this.add.TabIndex = 6;
this.add.Text = "Добавить";
this.add.UseVisualStyleBackColor = false;
this.add.Click += new System.EventHandler(this.add_Click);
//
// delete
//
this.delete.BackColor = System.Drawing.Color.MediumTurquoise;
this.delete.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.delete.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.delete.Location = new System.Drawing.Point(229, 215);
this.delete.Name = "delete";
this.delete.Size = new System.Drawing.Size(145, 44);
this.delete.TabIndex = 7;
this.delete.Text = "Удалить";
this.delete.UseVisualStyleBackColor = false;
this.delete.Click += new System.EventHandler(this.delete_Click);
//
// confirm
//
this.confirm.BackColor = System.Drawing.Color.MediumTurquoise;
this.confirm.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.confirm.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.confirm.Location = new System.Drawing.Point(47, 276);
```

```

this.confirm.Name = "confirm";
this.confirm.Size = new System.Drawing.Size(166, 46);
this.confirm.TabIndex = 8;
this.confirm.Text = "Подтвердить";
this.confirm.UseVisualStyleBackColor = false;
this.confirm.Click += new System.EventHandler(this.confirm_Click);
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.exit.Location = new System.Drawing.Point(229, 276);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(145, 46);
this.exit.TabIndex = 9;
this.exit.Text = "Выйти";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// BrigadirInfoORashMaterial
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(875, 450);
this.Controls.Add(this.exit);
this.Controls.Add(this.confirm);
this.Controls.Add(this.delete);
this.Controls.Add(this.add);
this.Controls.Add(this.informAttribute);
this.Controls.Add(this.label3);
this.Controls.Add(this.value);
this.Controls.Add(this.label2);
this.Controls.Add(this.material);
this.Controls.Add(this.label1);
this.Name = "BrigadirInfoORashMaterial";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "BrigadirInfoORashMaterial";
((System.ComponentModel.ISupportInitialize)(this.informAttribute)).EndInit();
this.ResumeLayout(false);
this.PerformLayout();
}

```

#endregion

```

private System.Windows.Forms.Label label1;
private System.Windows.Forms.ComboBox material;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.TextBox value;
private System.Windows.Forms.Label label3;
private System.Windows.Forms.DataGridView informAttribute;
private System.Windows.Forms.Button add;
private System.Windows.Forms.Button delete;
private System.Windows.Forms.Button confirm;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.DataGridViewTextBoxColumn Column1;
private System.Windows.Forms.DataGridViewTextBoxColumn Column2;
}

```

}

10. BrigadirInfoORashMaterial.cs

```
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;

namespace DPRK
{
    public partial class BrigadirInfoORashMaterial : Form
    {
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
        int idWorking;
        string roles;
        int idBrig;
        public BrigadirInfoORashMaterial()
        {
            InitializeComponent();

            /// <summary>
            /// Инициализация компонентов, занесение в выпадающий список материалов
            /// </summary>
            /// <param name="idweek">Номер работы на объекте</param>
            /// <param name="role">Роль сотрудника котрый зашел</param>
            /// <param name="idBrigad"> Номер бригадира</param>
            public BrigadirInfoORashMaterial(int idweek, string role, int idBrigad)
            {
                InitializeComponent();
                idWorking = idweek;
                idBrig = idBrigad;
                roles = role;
                sqlManager.AddComboBox(material, "[dbo].[Material]", 1);
            }

            /// <summary>
            /// Нажатие на кнопку "Выйти" на форме BrigadirInfoORashMaterial котрый переходит на BrigadirAddRabochih
            /// </summary>
            private void exit_Click(object sender, EventArgs e)
            {
                if (roles == "Администратор информационной системы")
                {
                    idBrig = 0;
                }
                BrigadirAddRabochih brigadirAddRabochih = new BrigadirAddRabochih(roles, idBrig);
                brigadirAddRabochih.Show();
                this.Hide();
            }

            /// <summary>
            /// Нажатие на кнопку "Подтвердить" чтобы изменить статус работы на объекте и занчение расходуемых
            материалов в БД
        }
    }
}
```

```

/// </summary>
private void confirm_Click(object sender, EventArgs e)
{
    if (informAttribute.Rows.Count > 1)
    {
        sqlManager.Update_Value("[dbo].[Raboti_Na_Obiecte]", "[dbo].[Raboti_Na_Obiecte].[Status]", "Работа
выполнена", "[dbo].[Raboti_Na_Obiecte].[ID_Raboti_Na_Obiecte]", idWorking);
        string message = sqlManager.RequestSql($"insert into [dbo].[Sdacha_Rabot] values
('{DateTime.Now.ToShortDateString()}',{idWorking})");
        if (message == "")
        {
            int idSdachRabot = Convert.ToInt32(sqlManager.ReturnTable($"select
max([dbo].[Sdacha_Rabot].[ID_Sdachi_Rabot]) from [dbo].[Sdacha_Rabot]").Rows[0][0]);
            for (int i = 0; i < informAttribute.Rows.Count - 1; i++)
            {
                DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Material] where
[dbo].[Material].[Name] = '{informAttribute.Rows[i].Cells[0].Value}'");
                int attributeNumber = Convert.ToInt32(dataTable.Rows[0][0]);
                string valueDataGrid = informAttribute.Rows[i].Cells[1].Value.ToString();
                sqlManager.RequestSql($"insert into [dbo].[Rashod_Materialov] values
({valueDataGrid},{attributeNumber},{idSdachRabot})");
            }
            BrigadirAddRabochih brigadirAddRabochih = new BrigadirAddRabochih(roles, idBrig);
            brigadirAddRabochih.Show();
            this.Hide();
        }
        else
        {
            BrigadirAddRabochih brigadirAddRabochih = new BrigadirAddRabochih(roles, idBrig);
            brigadirAddRabochih.Show();
            this.Hide();
            MessageBox.Show("Такие работы уже завершены.");
        }
    }
    else
    {
        MessageBox.Show("Введите значения атрибутов.");
    }
}

/// <summary>
/// Удаление записи из списка
/// </summary>
private void delete_Click(object sender, EventArgs e)
{
    informAttribute.Rows.RemoveAt(informAttribute.SelectedCells[0].RowIndex);
}

/// <summary>
/// Добавление записи в список
/// </summary>
private void add_Click(object sender, EventArgs e)
{
    if (material.Text != "")
    {
        if (value.Text.Replace(" ", string.Empty).Length < 1)
        {
            MessageBox.Show("Вы не ввели значение для атрибута ");
        }
        else
    }
}

```

```

    {
        if (Convert.ToInt32(value.Text) < 1)
        {
            MessageBox.Show("Значение должно быть больше нуля.");
        }
        else
        {
            if (value.Text.Length > 50)
            {
                MessageBox.Show("Значение не более 50 символов.");
            }
            else
            {
                int rowNumber = informAttribute.Rows.Add();
                informAttribute.Rows[rowNumber].Cells[0].Value = material.Text;
                informAttribute.Rows[rowNumber].Cells[1].Value = Convert.ToInt32(value.Text);
            }
        }
    }
}
else
{
    MessageBox.Show("Вы не выбрали материал.");
}
}

```

```

/// <summary>
/// Ограничения ввода символов в поле value
/// </summary>
private void value_KeyPress(object sender, KeyPressEventArgs e)
{
    if (!Char.IsDigit(e.KeyChar) && e.KeyChar != Convert.ToInt32(Keys.Back) )
    {
        e.Handled = true;
    }
}
}

```

11. GlavStroiUpr.Designer.cs

```

namespace DPRK
{
    partial class GlavStroiUpr
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }
    }
}

```

}

#region Windows Form Designer generated code

/// <summary>

/// Required method for Designer support - do not modify

/// the contents of this method with the code editor.

/// </summary>

private void InitializeComponent()

{

 this.label1 = new System.Windows.Forms.Label();

 this.label2 = new System.Windows.Forms.Label();

 this.informationRegion = new System.Windows.Forms.DataGridView();

 this.informationConstructionEquipment = new System.Windows.Forms.DataGridView();

 this.exit = new System.Windows.Forms.Button();

 this.addRegion = new System.Windows.Forms.Button();

 this.addConstructionEquipment = new System.Windows.Forms.Button();

 ((System.ComponentModel.ISupportInitialize)(this.informationRegion)).BeginInit();

 ((System.ComponentModel.ISupportInitialize)(this.informationConstructionEquipment)).BeginInit();

 this.SuspendLayout();

 //

 // label1

 //

 this.label1.AutoSize = true;

 this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 12F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

 this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;

 this.label1.Location = new System.Drawing.Point(93, 78);

 this.label1.Name = "label1";

 this.label1.Size = new System.Drawing.Size(253, 25);

 this.label1.TabIndex = 0;

 this.label1.Text = "Информация об участках";

 //

 // label2

 //

 this.label2.AutoSize = true;

 this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 12F, System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(204)));

 this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;

 this.label2.Location = new System.Drawing.Point(543, 78);

 this.label2.Name = "label2";

 this.label2.Size = new System.Drawing.Size(385, 25);

 this.label2.TabIndex = 1;

 this.label2.Text = "Информация об строительной технике";

 //

 // informationRegion

 //

 this.informationRegion.ColumnHeadersHeightSizeMode = System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;

 this.informationRegion.Location = new System.Drawing.Point(35, 118);

 this.informationRegion.Name = "informationRegion";

 this.informationRegion.RowHeadersWidth = 51;

 this.informationRegion.RowTemplate.Height = 24;

 this.informationRegion.Size = new System.Drawing.Size(407, 299);

 this.informationRegion.TabIndex = 2;

 //

 // informationConstructionEquipment

 //

 this.informationConstructionEquipment.ColumnHeadersHeightSizeMode = System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;

```

this.informationConstructionEquipment.Location = new System.Drawing.Point(534, 118);
this.informationConstructionEquipment.Name = "informationConstructionEquipment";
this.informationConstructionEquipment.RowHeadersWidth = 51;
this.informationConstructionEquipment.RowTemplate.Height = 24;
this.informationConstructionEquipment.Size = new System.Drawing.Size(407, 299);
this.informationConstructionEquipment.TabIndex = 3;
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(875, 12);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(94, 34);
this.exit.TabIndex = 4;
this.exit.Text = "Выйти";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// addRegion
//
this.addRegion.BackColor = System.Drawing.Color.MediumTurquoise;
this.addRegion.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.addRegion.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.addRegion.Location = new System.Drawing.Point(135, 446);
this.addRegion.Name = "addRegion";
this.addRegion.Size = new System.Drawing.Size(116, 34);
this.addRegion.TabIndex = 5;
this.addRegion.Text = "Добавить";
this.addRegion.UseVisualStyleBackColor = false;
this.addRegion.Click += new System.EventHandler(this.addRegion_Click);
//
// addConstructionEquipment
//
this.addConstructionEquipment.BackColor = System.Drawing.Color.MediumTurquoise;
this.addConstructionEquipment.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.addConstructionEquipment.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.addConstructionEquipment.Location = new System.Drawing.Point(636, 446);
this.addConstructionEquipment.Name = "addConstructionEquipment";
this.addConstructionEquipment.Size = new System.Drawing.Size(208, 34);
this.addConstructionEquipment.TabIndex = 6;
this.addConstructionEquipment.Text = "Добавить технику";
this.addConstructionEquipment.UseVisualStyleBackColor = false;
this.addConstructionEquipment.Click += new System.EventHandler(this.addConstructionEquipment_Click);
//
// GlavStroiUpr
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(981, 538);
this.Controls.Add(this.addConstructionEquipment);
this.Controls.Add(this.addRegion);
this.Controls.Add(this.exit);
this.Controls.Add(this.informationConstructionEquipment);
this.Controls.Add(this.informationRegion);
this.Controls.Add(this.label2);

```

```

this.Controls.Add(this.label1);
this.Name = "GlavStroiUpr";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "GlavStroiUpr";
((System.ComponentModel.ISupportInitialize)(this.informationRegion)).EndInit();
((System.ComponentModel.ISupportInitialize)(this.informationConstructionEquipment)).EndInit();
this.ResumeLayout(false);
this.PerformLayout();

```

```

}

```

```

#endregion

```

```

private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.DataGridView informationRegion;
private System.Windows.Forms.DataGridView informationConstructionEquipment;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button addRegion;
private System.Windows.Forms.Button addConstructionEquipment;

```

```

}

```

```

}

```

12. GlavStroiUpr.cs

```

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;

namespace DPRK
{
    public partial class GlavStroiUpr : Form
    {
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
        string roles;

        public GlavStroiUpr()
        {
            InitializeComponent();

            /// <summary>
            /// Инициализация компонентов, добавление информации об участках.
            /// А также информация об строительной технике
            /// </summary>
            /// <param name="role">Роль вошедшего</param>
            public GlavStroiUpr(string role)
            {
                InitializeComponent();
                roles = role;
                sqlManager.GetList(informationRegion, "[dbo].[Uchastok]", "select * from [dbo].[Information_About_Land_Plots]");
                sqlManager.GetList(informationConstructionEquipment, "[dbo].[Tekhnica_Na_Uchastke]", "select * from [dbo].[Equipment_On_The_Site]");
            }

```



```

/// <summary>
/// Нажатие на кнопку "Добавить" на форме GlavStroiUpr для перехода на форму GlavStroiUprAddUchastok
/// </summary>
private void addRegion_Click(object sender, EventArgs e)
{
    GlavStroiUprAddUchastok glavStroiUprAddUchastok = new GlavStroiUprAddUchastok(roles);
    glavStroiUprAddUchastok.Show();
    this.Hide();
}

/// <summary>
/// Нажатие на кнопку "Добавить технику" на форме GlavStroiUpr для перехода на форму GlavStroiUprAddTechnic.
/// Здесь происходит обнаружение к какому участку мы будем добавлять технику
/// </summary>
private void addConstructionEquipment_Click(object sender, EventArgs e)
{
    string rowValue = informationRegion.Rows[informationRegion.CurrentRow.Index].Cells[1].Value.ToString();
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Uchastok] where [dbo].[Uchastok].[Name] = '{rowValue}'");
    if (dataTable.Rows.Count > 0)
    {
        int idRegion = Convert.ToInt32(dataTable.Rows[0][0]);
        GlavStroiUprAddTechnic stroiUprAddTechnic = new GlavStroiUprAddTechnic(roles, idRegion);
        stroiUprAddTechnic.Show();
        this.Hide();
    }
}

/// <summary>
/// Нажатие на кнопку "Выход" на форме GlavStroiUpr для перехода на форму авторизации или администратора
/// </summary>
/// <param name="sender"></param>
/// <param name="e"></param>
private void exit_Click(object sender, EventArgs e)
{
    if (roles == "Глава строительного управления")
    {
        Login loginForm = new Login();
        loginForm.Show();
    }
    else
    {
        Admin admin = new Admin();
        admin.Show();
    }
    this.Hide();
}
}
}

```

13. GlavStroiUprAddTechnic.Designer.cs

```

namespace DPRK
{
    partial class GlavStroiUprAddTechnic
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;
    }
}

```

```

/// <summary>
/// Clean up any resources being used.
/// </summary>
/// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
protected override void Dispose(bool disposing)
{
    if (disposing && (components != null))
    {
        components.Dispose();
    }
    base.Dispose(disposing);
}

```

#region Windows Form Designer generated code

```

/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.label1 = new System.Windows.Forms.Label();
    this.label2 = new System.Windows.Forms.Label();
    this.nameTechnic = new System.Windows.Forms.ComboBox();
    this.label4 = new System.Windows.Forms.Label();
    this.quantity = new System.Windows.Forms.TextBox();
    this.cancel = new System.Windows.Forms.Button();
    this.confirm = new System.Windows.Forms.Button();
    this.SuspendLayout();
    //
    // label1
    //
    this.label1.AutoSize = true;
    this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label1.Location = new System.Drawing.Point(276, 28);
    this.label1.Name = "label1";
    this.label1.Size = new System.Drawing.Size(256, 29);
    this.label1.TabIndex = 0;
    this.label1.Text = "Добавление техники";
    //
    // label2
    //
    this.label2.AutoSize = true;
    this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label2.Location = new System.Drawing.Point(205, 76);
    this.label2.Name = "label2";
    this.label2.Size = new System.Drawing.Size(206, 20);
    this.label2.TabIndex = 1;
    this.label2.Text = "Наименование техники";
    //
    // nameTechnic
    //
    this.nameTechnic.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
    this.nameTechnic.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
}

```

```
this.nameTechnic.FormattingEnabled = true;
this.nameTechnic.Location = new System.Drawing.Point(209, 99);
this.nameTechnic.Name = "nameTechnic";
this.nameTechnic.Size = new System.Drawing.Size(345, 26);
this.nameTechnic.TabIndex = 2;
this.nameTechnic.SelectedIndexChanged += new System.EventHandler(this.nameTechnic_SelectedIndexChanged);
//
// label4
//
this.label4.AutoSize = true;
this.label4.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label4.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label4.Location = new System.Drawing.Point(205, 147);
this.label4.Name = "label4";
this.label4.Size = new System.Drawing.Size(119, 20);
this.label4.TabIndex = 5;
this.label4.Text = "Количество";
//
// quantity
//
this.quantity.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.quantity.Location = new System.Drawing.Point(209, 170);
this.quantity.Name = "quantity";
this.quantity.Size = new System.Drawing.Size(345, 27);
this.quantity.TabIndex = 6;
this.quantity.KeyPress += new System.Windows.Forms.KeyPressEventHandler(this.quantity_KeyPress);
//
// cancel
//
this.cancel.BackColor = System.Drawing.Color.MediumTurquoise;
this.cancel.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.cancel.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.cancel.Location = new System.Drawing.Point(207, 231);
this.cancel.Name = "cancel";
this.cancel.Size = new System.Drawing.Size(117, 41);
this.cancel.TabIndex = 7;
this.cancel.Text = "Отменить";
this.cancel.UseVisualStyleBackColor = false;
this.cancel.Click += new System.EventHandler(this.cancel_Click);
//
// confirm
//
this.confirm.BackColor = System.Drawing.Color.MediumTurquoise;
this.confirm.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.confirm.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.confirm.Location = new System.Drawing.Point(399, 231);
this.confirm.Name = "confirm";
this.confirm.Size = new System.Drawing.Size(155, 41);
this.confirm.TabIndex = 8;
this.confirm.Text = "Подтвердить";
this.confirm.UseVisualStyleBackColor = false;
this.confirm.Click += new System.EventHandler(this.confirm_Click);
//
// GlavStroiUprAddTechnic
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
```

```

    this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
    this.ClientSize = new System.Drawing.Size(800, 450);
    this.Controls.Add(this.confirm);
    this.Controls.Add(this.cancle);
    this.Controls.Add(this.quantity);
    this.Controls.Add(this.label4);
    this.Controls.Add(this.nameTechnic);
    this.Controls.Add(this.label2);
    this.Controls.Add(this.label1);
    this.Name = "GlavStroiUprAddTechnic";
    this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
    this.Text = "GlavStroiUprAddTechnic";
    this.ResumeLayout(false);
    this.PerformLayout();

}

```

#endregion

```

private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.ComboBox nameTechnic;
private System.Windows.Forms.Label label4;
private System.Windows.Forms.TextBox quantity;
private System.Windows.Forms.Button cancle;
private System.Windows.Forms.Button confirm;
}
}

```

14. GlavStroiUprAddTechnic.cs

```

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;

namespace DPRK
{
    public partial class GlavStroiUprAddTechnic : Form
    {
        int idTechnic;
        int idRegion;
        string roles;
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();

        public GlavStroiUprAddTechnic()
        {
            InitializeComponent();
        }

        /// <summary>
        /// Инициализация компонентов, добавление наименований техники в выпадающей список
        /// </summary>
        /// <param name="role">Роль вошедшего</param>
        /// <param name="idRegional">Номер участка</param>
        public GlavStroiUprAddTechnic(string role, int idRegional)

```

```
{
    InitializeComponent();
    roles = role;
    idRegion = idRegional;
    sqlManager.AddComboBox(nameTechnic, "[dbo].[Stroitelnaya_Tekhnica]", 1);
}

/// <summary>
/// Ограничения ввода в quantity (количество)
/// </summary>
private void quantity_KeyPress(object sender, KeyPressEventArgs e)
{
    if (!Char.IsDigit(e.KeyChar) && e.KeyChar != Convert.ToInt32(Keys.Back) )
    {
        e.Handled = true;
    }
}

/// <summary>
/// Нажатие на кнопку "Отменить" на форме GlavStroiUprAddTechnic для перехода на форму GlavStroiUpr
/// </summary>
private void cancel_Click(object sender, EventArgs e)
{
    GlavStroiUpr glavStroiUpr = new GlavStroiUpr(roles);
    glavStroiUpr.Show();
    this.Hide();
}

/// <summary>
/// Нажатие на кнопку "Подтвердить" для занесения техники на участок в БД
/// </summary>
/// <param name="sender"></param>
/// <param name="e"></param>
private void confirm_Click(object sender, EventArgs e)
{
    if ( nameTechnic.Text == "" )
    {
        MessageBox.Show("Надо выбрать наименование техники.");
    }
    else
    {
        if (quantity.Text == "" || Convert.ToInt32(quantity.Text) < 1)
        {
            MessageBox.Show("Надо ввести количество больше нуля.");
        }
        else
        {
            sqlManager.RequestSql($"@insert into [dbo].[Tekhnica_Na_Uchastke] values
({Convert.ToInt32(quantity.Text)},{idRegion},{idTechnic})");
            GlavStroiUpr glavStroiUpr = new GlavStroiUpr(roles);
            glavStroiUpr.Show();
            this.Hide();
        }
    }
}

/// <summary>
/// Получение номера техники при выборе значения
/// </summary>
private void nameTechnic_SelectedIndexChanged(object sender, EventArgs e)
```

```
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Stroitelnaya_Tekhnica] where
[dbo].[Stroitelnaya_Tekhnica].[Name] = '{nameTechnic.Text}'");
    if (dataTable.Rows.Count > 0)
        idTechnic = Convert.ToInt32(dataTable.Rows[0][0]);
    }
}
}
```

15. GlavStroiUprAddUchastok.Designer.cs

```
namespace DPRK
{
    partial class GlavStroiUprAddUchastok
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }

        #region Windows Form Designer generated code

        /// <summary>
        /// Required method for Designer support - do not modify
        /// the contents of this method with the code editor.
        /// </summary>
        private void InitializeComponent()
        {
            this.label1 = new System.Windows.Forms.Label();
            this.label2 = new System.Windows.Forms.Label();
            this.chief = new System.Windows.Forms.ComboBox();
            this.label3 = new System.Windows.Forms.Label();
            this.confirm = new System.Windows.Forms.Button();
            this.cancel = new System.Windows.Forms.Button();
            this.region = new System.Windows.Forms.TextBox();
            this.SuspendLayout();
            //
            // label1
            //
            this.label1.AutoSize = true;
            this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
            this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
            this.label1.Location = new System.Drawing.Point(292, 26);
            this.label1.Name = "label1";
            this.label1.Size = new System.Drawing.Size(249, 29);
            this.label1.TabIndex = 0;
            this.label1.Text = "Добавление участка";
        }

        #endregion
    }
}
```

```
//
// label2
//
this.label2.AutoSize = true;
this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label2.Location = new System.Drawing.Point(228, 71);
this.label2.Name = "label2";
this.label2.Size = new System.Drawing.Size(215, 20);
this.label2.TabIndex = 1;
this.label2.Text = "Назначение начальника";
//
// chief
//
this.chief.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.chief.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.chief.FormattingEnabled = true;
this.chief.Location = new System.Drawing.Point(232, 94);
this.chief.Name = "chief";
this.chief.Size = new System.Drawing.Size(345, 26);
this.chief.TabIndex = 2;
this.chief.SelectedIndexChanged += new System.EventHandler(this.chief_SelectedIndexChanged);
//
// label3
//
this.label3.AutoSize = true;
this.label3.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label3.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label3.Location = new System.Drawing.Point(228, 136);
this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(162, 20);
this.label3.TabIndex = 3;
this.label3.Text = "Название участка";
//
// confirm
//
this.confirm.BackColor = System.Drawing.Color.MediumTurquoise;
this.confirm.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.confirm.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.confirm.Location = new System.Drawing.Point(428, 206);
this.confirm.Name = "confirm";
this.confirm.Size = new System.Drawing.Size(149, 43);
this.confirm.TabIndex = 5;
this.confirm.Text = "Подтвердить";
this.confirm.UseVisualStyleBackColor = false;
this.confirm.Click += new System.EventHandler(this.confirm_Click);
//
// cancel
//
this.cancel.BackColor = System.Drawing.Color.MediumTurquoise;
this.cancel.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.cancel.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.cancel.Location = new System.Drawing.Point(232, 206);
this.cancel.Name = "cancel";
this.cancel.Size = new System.Drawing.Size(149, 43);
```

```

        this.cancel.TabIndex = 6;
        this.cancel.Text = "Отменить";
        this.cancel.UseVisualStyleBackColor = false;
        this.cancel.Click += new System.EventHandler(this.cancel_Click);
        //
        // region
        //
        this.region.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.region.Location = new System.Drawing.Point(232, 159);
        this.region.Name = "region";
        this.region.Size = new System.Drawing.Size(345, 24);
        this.region.TabIndex = 7;
        //
        // GlavStroiUprAddUchastok
        //
        this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
        this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
        this.ClientSize = new System.Drawing.Size(800, 450);
        this.Controls.Add(this.region);
        this.Controls.Add(this.cancel);
        this.Controls.Add(this.confirm);
        this.Controls.Add(this.label3);
        this.Controls.Add(this.chief);
        this.Controls.Add(this.label2);
        this.Controls.Add(this.label1);
        this.Name = "GlavStroiUprAddUchastok";
        this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
        this.Text = "GlavStroiUprAddUchastok";
        this.ResumeLayout(false);
        this.PerformLayout();

    }

#endregion

    private System.Windows.Forms.Label label1;
    private System.Windows.Forms.Label label2;
    private System.Windows.Forms.ComboBox chief;
    private System.Windows.Forms.Label label3;
    private System.Windows.Forms.Button confirm;
    private System.Windows.Forms.Button cancel;
    private System.Windows.Forms.TextBox region;
}

```

16. GlavStroiUprAddUchastok.cs

```

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;

namespace DPRK
{
    public partial class GlavStroiUprAddUchastok : Form

```



```
{
    Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
    string role;
    int idChief;
    public GlavStroiUprAddUchastok()
    {
        InitializeComponent();
    }

    /// <summary>
    /// Инициализация компонентов и добавления в выпадающий список всех начальников участка
    /// </summary>
    /// <param name="roles">Роль вошедшего</param>
    public GlavStroiUprAddUchastok(string roles)
    {
        InitializeComponent();
        role = roles;
        sqlManager.AddComboBox(chief, "[dbo].[Full_Name_Chief]", 1);
        if (chief.Items.Count > 0)
        {
            chief.SelectedIndex = 0;
        }
    }

    /// <summary>
    /// Нажатие на кнопку "Подтвердить" для создания участка в БД
    /// </summary>
    private void confirm_Click(object sender, EventArgs e)
    {
        if (region.Text.Replace(" ", string.Empty).Length < 1 || region.Text == "")
        {
            MessageBox.Show("Вы не ввели название участка");
        }
        else
        {
            {
                if (chief.Text != "")
                {
                    if (sqlManager.RequestSql($"insert into [dbo].[Uchastok] values ({idChief},{region.Text})") == "")
                    {
                        exit_Employee();
                    }
                    else
                    {
                        MessageBox.Show("Участок с таким наименованием уже существует.");
                    }
                }
                else
                {
                    MessageBox.Show("Выберете начальника.");
                }
            }
        }
    }
}

/// <summary>
/// Получение номера начальника участка
/// </summary>
private void chief_SelectedIndexChanged(object sender, EventArgs e)
{

```

```

        DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Full_Name_Chief] where
[dbo].[Full_Name_Chief].[ФИО] = '{chief.Text}');
        if (dataTable.Rows.Count > 0)
            idChief = Convert.ToInt32(dataTable.Rows[0][0]);
    }

    /// <summary>
    /// Нажатие на кнопку "Отменить" на форме GlavStroiUprAddUchastok для перехода на менеджера
    /// или главы строительного управления
    /// </summary>
    private void cancel_Click(object sender, EventArgs e)
    {
        exit_Employee();
    }

    /// <summary>
    /// Метод для перехода по формам в зависимости от роли
    /// </summary>
    void exit_Employee()
    {
        switch (role)
        {
            case "Менеджер по работе с клиентами":
                ManagerRegObj managerRegObj = new ManagerRegObj(role);
                managerRegObj.Show();
                break;

            case "Глава строительного управления":
                GlavStroiUpr glavStroiUpr = new GlavStroiUpr(role);
                glavStroiUpr.Show();
                break;

            case "Администратор Менеджер информационной системы":
                ManagerRegObj managerRegObj2 = new ManagerRegObj(role);
                managerRegObj2.Show();
                break;

            default:
                GlavStroiUpr glavStroiUpr2 = new GlavStroiUpr(role);
                glavStroiUpr2.Show();
                this.Hide();
                break;
        }
        this.Hide();
    }
}
}

```

17. HRmanager.Designer.cs

```

namespace DPRK
{
    partial class HRmanager
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
    }
}

```

```

/// </summary>
/// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
protected override void Dispose(bool disposing)
{
    if (disposing && (components != null))
    {
        components.Dispose();
    }
    base.Dispose(disposing);
}

```

#region Windows Form Designer generated code

```

/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.label1 = new System.Windows.Forms.Label();
    this.label2 = new System.Windows.Forms.Label();
    this.surName = new System.Windows.Forms.TextBox();
    this.label3 = new System.Windows.Forms.Label();
    this.name = new System.Windows.Forms.TextBox();
    this.label4 = new System.Windows.Forms.Label();
    this.login = new System.Windows.Forms.TextBox();
    this.label5 = new System.Windows.Forms.Label();
    this.patronymic = new System.Windows.Forms.TextBox();
    this.phoneNumber = new System.Windows.Forms.MaskedTextBox();
    this.label6 = new System.Windows.Forms.Label();
    this.label7 = new System.Windows.Forms.Label();
    this.password = new System.Windows.Forms.TextBox();
    this.label8 = new System.Windows.Forms.Label();
    this.label9 = new System.Windows.Forms.Label();
    this.post = new System.Windows.Forms.ComboBox();
    this.role = new System.Windows.Forms.ComboBox();
    this.exit = new System.Windows.Forms.Button();
    this.add = new System.Windows.Forms.Button();
    this.SuspendLayout();
    //
    // label1
    //
    this.label1.AutoSize = true;
    this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label1.Location = new System.Drawing.Point(234, 33);
    this.label1.Name = "label1";
    this.label1.Size = new System.Drawing.Size(294, 29);
    this.label1.TabIndex = 0;
    this.label1.Text = "Добавление сотрудника";
    //
    // label2
    //
    this.label2.AutoSize = true;
    this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label2.Location = new System.Drawing.Point(72, 76);
    this.label2.Name = "label2";
}

```

```
this.label2.Size = new System.Drawing.Size(87, 20);
this.label2.TabIndex = 1;
this.label2.Text = "Фамилия";
//
// surName
//
this.surName.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.surName.Location = new System.Drawing.Point(76, 99);
this.surName.Name = "surName";
this.surName.Size = new System.Drawing.Size(180, 24);
this.surName.TabIndex = 2;
this.surName.KeyPress += new System.Windows.Forms.KeyPressEventHandler(this.surName_KeyPress);
//
// label3
//
this.label3.AutoSize = true;
this.label3.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label3.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label3.Location = new System.Drawing.Point(76, 137);
this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(42, 20);
this.label3.TabIndex = 3;
this.label3.Text = "Имя";
//
// name
//
this.name.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.name.Location = new System.Drawing.Point(76, 160);
this.name.Name = "name";
this.name.Size = new System.Drawing.Size(180, 24);
this.name.TabIndex = 4;
this.name.KeyPress += new System.Windows.Forms.KeyPressEventHandler(this.name_KeyPress);
//
// label4
//
this.label4.AutoSize = true;
this.label4.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label4.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label4.Location = new System.Drawing.Point(76, 262);
this.label4.Name = "label4";
this.label4.Size = new System.Drawing.Size(59, 20);
this.label4.TabIndex = 5;
this.label4.Text = "Логин";
//
// login
//
this.login.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.login.Location = new System.Drawing.Point(76, 285);
this.login.Name = "login";
this.login.Size = new System.Drawing.Size(180, 24);
this.login.TabIndex = 6;
//
// label5
//
this.label5.AutoSize = true;
```

```

        this.label5.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.label5.ForeColor = System.Drawing.Color.MediumTurquoise;
        this.label5.Location = new System.Drawing.Point(76, 200);
        this.label5.Name = "label5";
        this.label5.Size = new System.Drawing.Size(91, 20);
        this.label5.TabIndex = 7;
        this.label5.Text = "Отчество";
        //
        // patronymic
        //
        this.patronymic.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.patronymic.Location = new System.Drawing.Point(76, 225);
        this.patronymic.Name = "patronymic";
        this.patronymic.Size = new System.Drawing.Size(180, 24);
        this.patronymic.TabIndex = 8;
        this.patronymic.KeyPress += new System.Windows.Forms.KeyPressEventHandler(this.patronymic_KeyPress);
        //
        // phoneNumber
        //
        this.phoneNumber.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.phoneNumber.Location = new System.Drawing.Point(332, 99);
        this.phoneNumber.Mask = "(000) 000-00-00";
        this.phoneNumber.Name = "phoneNumber";
        this.phoneNumber.ResetOnSpace = false;
        this.phoneNumber.Size = new System.Drawing.Size(429, 24);
        this.phoneNumber.TabIndex = 9;
        //
        // label6
        //
        this.label6.AutoSize = true;
        this.label6.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.label6.ForeColor = System.Drawing.Color.MediumTurquoise;
        this.label6.Location = new System.Drawing.Point(337, 76);
        this.label6.Name = "label6";
        this.label6.Size = new System.Drawing.Size(155, 20);
        this.label6.TabIndex = 10;
        this.label6.Text = "Номер телефона";
        //
        // label7
        //
        this.label7.AutoSize = true;
        this.label7.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.label7.ForeColor = System.Drawing.Color.MediumTurquoise;
        this.label7.Location = new System.Drawing.Point(337, 262);
        this.label7.Name = "label7";
        this.label7.Size = new System.Drawing.Size(72, 20);
        this.label7.TabIndex = 11;
        this.label7.Text = "Пароль";
        //
        // password
        //
        this.password.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.password.Location = new System.Drawing.Point(332, 285);
        this.password.Name = "password";

```

```

this.password.Size = new System.Drawing.Size(429, 24);
this.password.TabIndex = 12;
//
// label8
//
this.label8.AutoSize = true;
this.label8.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label8.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label8.Location = new System.Drawing.Point(337, 137);
this.label8.Name = "label8";
this.label8.Size = new System.Drawing.Size(103, 20);
this.label8.TabIndex = 13;
this.label8.Text = "Должность";
//
// label9
//
this.label9.AutoSize = true;
this.label9.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label9.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label9.Location = new System.Drawing.Point(337, 200);
this.label9.Name = "label9";
this.label9.Size = new System.Drawing.Size(50, 20);
this.label9.TabIndex = 14;
this.label9.Text = "Роль";
//
// post
//
this.post.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.post.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.post.FormattingEnabled = true;
this.post.Location = new System.Drawing.Point(332, 158);
this.post.Name = "post";
this.post.Size = new System.Drawing.Size(429, 26);
this.post.TabIndex = 15;
this.post.SelectedIndexChanged += new System.EventHandler(this.post_SelectedIndexChanged);
//
// role
//
this.role.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.role.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.role.FormattingEnabled = true;
this.role.Location = new System.Drawing.Point(332, 223);
this.role.Name = "role";
this.role.Size = new System.Drawing.Size(429, 26);
this.role.TabIndex = 16;
this.role.SelectedIndexChanged += new System.EventHandler(this.role_SelectedIndexChanged);
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.exit.Location = new System.Drawing.Point(76, 342);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(180, 32);
this.exit.TabIndex = 17;

```

```

this.exit.Text = "Выйти";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// add
//
this.add.BackColor = System.Drawing.Color.MediumTurquoise;
this.add.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.add.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.add.Location = new System.Drawing.Point(332, 342);
this.add.Name = "add";
this.add.Size = new System.Drawing.Size(180, 32);
this.add.TabIndex = 18;
this.add.Text = "Добавить";
this.add.UseVisualStyleBackColor = false;
this.add.Click += new System.EventHandler(this.add_Click);
//
// HRmanager
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(789, 518);
this.Controls.Add(this.add);
this.Controls.Add(this.exit);
this.Controls.Add(this.role);
this.Controls.Add(this.post);
this.Controls.Add(this.label9);
this.Controls.Add(this.label8);
this.Controls.Add(this.password);
this.Controls.Add(this.label7);
this.Controls.Add(this.label6);
this.Controls.Add(this.phoneNumber);
this.Controls.Add(this.patronymic);
this.Controls.Add(this.label5);
this.Controls.Add(this.login);
this.Controls.Add(this.label4);
this.Controls.Add(this.name);
this.Controls.Add(this.label3);
this.Controls.Add(this.surName);
this.Controls.Add(this.label2);
this.Controls.Add(this.label1);
this.Name = "HRmanager";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "HRmanager";
this.ResumeLayout(false);
this.PerformLayout();

}

#endregion

private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.TextBox surName;
private System.Windows.Forms.Label label3;
private System.Windows.Forms.TextBox name;
private System.Windows.Forms.Label label4;
private System.Windows.Forms.TextBox login;
private System.Windows.Forms.Label label5;
private System.Windows.Forms.TextBox patronymic;

```

```

private System.Windows.Forms.MaskedTextBox phoneNumber;
private System.Windows.Forms.Label label6;
private System.Windows.Forms.Label label7;
private System.Windows.Forms.TextBox password;
private System.Windows.Forms.Label label8;
private System.Windows.Forms.Label label9;
private System.Windows.Forms.ComboBox post;
private System.Windows.Forms.ComboBox role;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button add;
}
}

```

18. HRmanager.cs

```

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace DPRK
{
    public partial class HRmanager : Form
    {
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
        int idRole;
        int idPost;
        string rolEnterEmployee;
        public HRmanager()
        {
            InitializeComponent();

            /// <summary>
            /// Инициализация компонентов, занесение в выпадающие списки должностей, роль
            /// </summary>
            /// <param name="roleEnter">Роль вошедшего</param>
            public HRmanager(string roleEnter)
            {
                InitializeComponent();
                sqlManager.AddComboBox(post, "[dbo].[Dolznost]", 1);
                sqlManager.AddComboBox(role, "[dbo].[Role]", 1);

                post.SelectedIndex = 0;
                role.SelectedIndex = 0;
                rolEnterEmployee = roleEnter;
            }

            private void exit_Click(object sender, EventArgs e)
            {
                if (rolEnterEmployee == "HR менеджер")
                {
                    Login loginForm = new Login();
                    loginForm.Show();
                }
            }
        }
    }
}

```



```

    }
    else
    {
        Admin admin = new Admin();
        admin.Show();
    }
    this.Hide();
}

```

/// <summary>
 /// Нажатие на кнопку "Добавить" для создания сотрудника в БД, и занесения сотрудника в бригады если он имеет такую роль

/// </summary>

```
private void add_Click(object sender, EventArgs e)
```

```

{
    string nameStr = name.Text;
    string surnameStr = surName.Text;
    string patronymicStr = patronymic.Text;

    if (patronymicStr != "")
    {
        patronymicStr = patronymic.Text.Substring(0, 1).ToUpper() + patronymic.Text.Substring(1).ToLower();
    }
}

```

```

if (nameStr != "")
{
    nameStr = name.Text.Substring(0, 1).ToUpper() + name.Text.Substring(1).ToLower();
}

```

```

if (surnameStr != "")
{
    surnameStr = surName.Text.Substring(0, 1).ToUpper() + surName.Text.Substring(1).ToLower();
}

```

```

string loginStr = login.Text;
string passwordStr = password.Text;
string phone;
if (phoneNumber.Text.Length == 15)
{
    phone = $"8 {phoneNumber.Text}";
}
else
{
    phone = "";
}

```

```

if (nameStr == "" || surnameStr == "" || loginStr == "" || passwordStr == "")
{
    MessageBox.Show("Поля: Фамилия, Имя, Логин, Пароль обязательны для заполнения.");
}
else
{
    if (loginStr.Length < 6 || passwordStr.Length < 6)
    {
        MessageBox.Show("Логин и пароль должны содержать не менее 6 символов.");
    }
    else
    {
        if (loginStr.Length <= 25 || passwordStr.Length <= 25)
        {

```

/// <summary>

```

/// Удаление значений из полей после успешной регистрации
/// </summary>
void Delet_Value_Fields()
{
    surName.Text = "";
    name.Text = "";
    patronymic.Text = "";
    login.Text = "";
    password.Text = "";
    phoneNumber.Text = "";
}

/// <summary>
/// Проверка строки на числа, спец символы
/// </summary>
/// <param name="value">Строка для проверки</param>
/// <returns>Логическое выражение говорящее есть ли в строку спец символы и(или) числа</returns>
bool CorrectFullName(string value)
{
    for (int i = 0; i <= value.Length-1; i++)
    {
        if (Char.IsDigit(value[i]))
        {
            return false;
        }

        if (Char.IsSymbol(value[i]))
        {
            return false;
        }
    }

    if (Regex.Match(value, "[\\!\\@\\#\\%\\$\\^\\.:\\?\\&\\*\\(\\)\\{\\}\\|\\/\\|\\.|,\\|-\\|_\\|=\\|+\\|;\\|`\\|~\\|<\\|>]").Success)
    {
        return false;
    }
    return true;
}

/// <summary>
/// Получение номера должности
/// </summary>
private void post_SelectedIndexChanged(object sender, EventArgs e)
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Dolznost] where [dbo].[Dolznost].[Name] = '{post.Text}'");
    if (dataTable.Rows.Count > 0)
        idPost = Convert.ToInt32(dataTable.Rows[0][0]);
}

/// <summary>
/// Получение номера роли
/// </summary>
private void role_SelectedIndexChanged(object sender, EventArgs e)
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Role] where [dbo].[Role].[Name] = '{role.Text}'");
    if (dataTable.Rows.Count > 0)
        idRole = Convert.ToInt32(dataTable.Rows[0][0]);
}

```

```
/// <summary>
/// Ограничения ввода Фамилии
/// </summary>
private void surName_KeyPress(object sender, KeyPressEventArgs e)
{
    if (!Char.IsLetter(e.KeyChar) && e.KeyChar != Convert.ToInt32(Keys.Back))
    {
        e.Handled = true;
    }
}
```

```
/// <summary>
/// Ограничения ввода Имя
/// </summary>
private void name_KeyPress(object sender, KeyPressEventArgs e)
{
    if (!Char.IsLetter(e.KeyChar) && e.KeyChar != Convert.ToInt32(Keys.Back))
    {
        e.Handled = true;
    }
}
```

```
/// <summary>
/// Ограничения ввода Отчество
/// </summary>
private void patronymic_KeyPress(object sender, KeyPressEventArgs e)
{
    if (!Char.IsLetter(e.KeyChar) && e.KeyChar != Convert.ToInt32(Keys.Back))
    {
        e.Handled = true;
    }
}
```

19. Login.Designer.cs

```
namespace DPRK
{
    partial class Login
    {
        /// <summary>
        /// Обязательная переменная конструктора.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Освободить все используемые ресурсы.
        /// </summary>
        /// <param name="disposing">истинно, если управляемый ресурс должен быть удален; иначе ложно.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }
    }
}
```

#region Код, автоматически созданный конструктором форм Windows

```

/// <summary>
/// Требуемый метод для поддержки конструктора — не изменяйте
/// содержимое этого метода с помощью редактора кода.
/// </summary>
private void InitializeComponent()
{
    System.ComponentModel.ComponentResourceManager resources = new
System.ComponentModel.ComponentResourceManager(typeof(Login));
    this.pictureBox1 = new System.Windows.Forms.PictureBox();
    this.loginTx = new System.Windows.Forms.TextBox();
    this.label1 = new System.Windows.Forms.Label();
    this.label2 = new System.Windows.Forms.Label();
    this.password = new System.Windows.Forms.TextBox();
    this.exit = new System.Windows.Forms.Button();
    this.enter = new System.Windows.Forms.Button();
    ((System.ComponentModel.ISupportInitialize)(this.pictureBox1)).BeginInit();
    this.SuspendLayout();
    //
    // pictureBox1
    //
    this.pictureBox1.Image = ((System.Drawing.Image)(resources.GetObject("pictureBox1.Image")));
    this.pictureBox1.Location = new System.Drawing.Point(-3, 12);
    this.pictureBox1.Name = "pictureBox1";
    this.pictureBox1.Size = new System.Drawing.Size(801, 112);
    this.pictureBox1.SizeMode = System.Windows.Forms.PictureBoxSizeMode.Zoom;
    this.pictureBox1.TabIndex = 0;
    this.pictureBox1.TabStop = false;
    //
    // loginTx
    //
    this.loginTx.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.loginTx.Location = new System.Drawing.Point(282, 167);
    this.loginTx.Name = "loginTx";
    this.loginTx.Size = new System.Drawing.Size(235, 27);
    this.loginTx.TabIndex = 1;
    //
    // label1
    //
    this.label1.AutoSize = true;
    this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label1.Location = new System.Drawing.Point(278, 144);
    this.label1.Name = "label1";
    this.label1.Size = new System.Drawing.Size(59, 20);
    this.label1.TabIndex = 2;
    this.label1.Text = "Логин";
    //
    // label2
    //
    this.label2.AutoSize = true;
    this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label2.Location = new System.Drawing.Point(278, 212);
    this.label2.Name = "label2";
    this.label2.Size = new System.Drawing.Size(72, 20);
    this.label2.TabIndex = 3;

```

```

this.label2.Text = "Пароль";
//
// password
//
this.password.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.password.Location = new System.Drawing.Point(280, 235);
this.password.Name = "password";
this.password.PasswordChar = '*';
this.password.Size = new System.Drawing.Size(237, 27);
this.password.TabIndex = 4;
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(280, 281);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(97, 44);
this.exit.TabIndex = 5;
this.exit.Text = "Выход";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// enter
//
this.enter.BackColor = System.Drawing.Color.MediumTurquoise;
this.enter.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.enter.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.enter.Location = new System.Drawing.Point(414, 281);
this.enter.Name = "enter";
this.enter.Size = new System.Drawing.Size(103, 44);
this.enter.TabIndex = 6;
this.enter.Text = "Войти";
this.enter.UseVisualStyleBackColor = false;
this.enter.Click += new System.EventHandler(this.enter_Click);
//
// Login
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(800, 450);
this.Controls.Add(this.enter);
this.Controls.Add(this.exit);
this.Controls.Add(this.password);
this.Controls.Add(this.label2);
this.Controls.Add(this.label1);
this.Controls.Add(this.loginTx);
this.Controls.Add(this.pictureBox1);
this.Name = "Login";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "Form1";
((System.ComponentModel.ISupportInitialize)(this.pictureBox1)).EndInit();
this.ResumeLayout(false);
this.PerformLayout();
}

```

```
#endregion
```

```
private System.Windows.Forms.PictureBox pictureBox1;
private System.Windows.Forms.TextBox loginTx;
private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.TextBox password;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button enter;
}
}
```

20. Login.cs

```
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;
```

```
namespace DPRK
```

```
{
    public partial class Login : Form
    {
```

```
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
        public Login()
        {
            InitializeComponent();
        }
```

```
        /// <summary>
        /// Нажатие на кнопку "Выход" для полного выхода из программы
        /// </summary>
        private void exit_Click(object sender, EventArgs e)
        {
            Application.Exit();
        }
```

```
        /// <summary>
        /// Нажатие на кнопку "Войти" для авторизации пользователя
        /// </summary>
        /// <param name="sender"></param>
        /// <param name="e"></param>
        private void enter_Click(object sender, EventArgs e)
        {
            if (loginTx.Text == "" || password.Text == "")
            {
                MessageBox.Show("Все поля должны быть заполнены.");
            }
            else
            {
                if (loginTx.Text.Length < 6 || password.Text.Length < 6)
                {
                    MessageBox.Show("Логин и пароль должны быть не менее 6 символов.");
                }
            }
        }
```

```

else
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Autarization]('{loginTx.Text}','{password.Text}')");
    if (dataTable.Rows.Count > 0)
    {
        string role = dataTable.Rows[0][2].ToString();
        switch (role)
        {
            case "Администратор информационной системы":
                Admin admin = new Admin();
                admin.Show();
                this.Hide();
                break;

            case "Глава строительного управления":
                GlavStroiUpr glavStroiUpr = new GlavStroiUpr(role);
                glavStroiUpr.Show();
                this.Hide();
                break;

            case "Начальник участка":
                int idEmployer = Convert.ToInt32(dataTable.Rows[0][3]);
                NachUchastka nachUchastka = new NachUchastka(role,idEmployer);
                nachUchastka.Show();
                this.Hide();
                break;

            case "Бригадир":
                int idEmployee = Convert.ToInt32(dataTable.Rows[0][3]);
                int idForeman = Convert.ToInt32(sqlManager.ReturnTable($"select * from [dbo].[Brigadir] where [dbo].[Brigadir].[ID_Sotrudnica] = {idEmployee}").Rows[0][0]);
                BrigadirAddRabochih brigadirAddRabochih = new BrigadirAddRabochih(role,idForeman);
                brigadirAddRabochih.Show();
                this.Hide();
                break;

            case "Менеджер по работе с клиентами":
                ManagerRegObj managerRegObj = new ManagerRegObj(role);
                managerRegObj.Show();
                this.Hide();
                break;

            case "HR менеджер":
                HRmanager HRmanager = new HRmanager(role);
                HRmanager.Show();
                this.Hide();
                break;
        }
    }
}
else
{
    MessageBox.Show("Авторизация не пройдена.");
}
}
}
}
}

```


21. ManagerAtributsInfo.Designer.cs

namespace DPRK

```
{
    partial class ManagerAtributsInfo
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }

        #region Windows Form Designer generated code

        /// <summary>
        /// Required method for Designer support - do not modify
        /// the contents of this method with the code editor.
        /// </summary>
        private void InitializeComponent()
        {
            this.label1 = new System.Windows.Forms.Label();
            this.attributeValue = new System.Windows.Forms.DataGridView();
            this.label2 = new System.Windows.Forms.Label();
            this.atributic = new System.Windows.Forms.ComboBox();
            this.label3 = new System.Windows.Forms.Label();
            this.value = new System.Windows.Forms.TextBox();
            this.add = new System.Windows.Forms.Button();
            this.delete = new System.Windows.Forms.Button();
            this.exit = new System.Windows.Forms.Button();
            this.confirm = new System.Windows.Forms.Button();
            ((System.ComponentModel.ISupportInitialize)(this.attributeValue)).BeginInit();
            this.SuspendLayout();
            //
            // label1
            //
            this.label1.AutoSize = true;
            this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
            this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
            this.label1.Location = new System.Drawing.Point(143, 23);
            this.label1.Name = "label1";
            this.label1.Size = new System.Drawing.Size(322, 29);
            this.label1.TabIndex = 1;
            this.label1.Text = "Информация об атрибутах";
            //
            // attributeValue
            //
```

```
this.attributeValue.ColumnHeadersHeightSizeMode =
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;
this.attributeValue.Location = new System.Drawing.Point(501, 61);
this.attributeValue.Name = "attributeValue";
this.attributeValue.RowHeadersWidth = 51;
this.attributeValue.RowTemplate.Height = 24;
this.attributeValue.Size = new System.Drawing.Size(578, 377);
this.attributeValue.TabIndex = 2;
//
// label2
//
this.label2.AutoSize = true;
this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label2.Location = new System.Drawing.Point(35, 61);
this.label2.Name = "label2";
this.label2.Size = new System.Drawing.Size(79, 20);
this.label2.TabIndex = 3;
this.label2.Text = "Атрибут";
//
// attributic
//
this.attributic.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.attributic.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.attributic.FormattingEnabled = true;
this.attributic.Location = new System.Drawing.Point(39, 85);
this.attributic.Name = "attributic";
this.attributic.Size = new System.Drawing.Size(412, 26);
this.attributic.TabIndex = 4;
//
// label3
//
this.label3.AutoSize = true;
this.label3.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label3.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label3.Location = new System.Drawing.Point(35, 127);
this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(91, 20);
this.label3.TabIndex = 5;
this.label3.Text = "Значение";
//
// value
//
this.value.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.value.Location = new System.Drawing.Point(39, 150);
this.value.Name = "value";
this.value.Size = new System.Drawing.Size(412, 24);
this.value.TabIndex = 6;
//
// add
//
this.add.BackColor = System.Drawing.Color.MediumTurquoise;
this.add.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.add.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.add.Location = new System.Drawing.Point(39, 205);
this.add.Name = "add";
```

```
this.add.Size = new System.Drawing.Size(202, 50);
this.add.TabIndex = 7;
this.add.Text = "Добавить";
this.add.UseVisualStyleBackColor = false;
this.add.Click += new System.EventHandler(this.add_Click);
//
// delete
//
this.delete.BackColor = System.Drawing.Color.MediumTurquoise;
this.delete.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.delete.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.delete.Location = new System.Drawing.Point(259, 205);
this.delete.Name = "delete";
this.delete.Size = new System.Drawing.Size(192, 50);
this.delete.TabIndex = 8;
this.delete.Text = "Удалить";
this.delete.UseVisualStyleBackColor = false;
this.delete.Click += new System.EventHandler(this.delete_Click);
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.exit.Location = new System.Drawing.Point(259, 273);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(192, 54);
this.exit.TabIndex = 9;
this.exit.Text = "Выйти";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// confirm
//
this.confirm.BackColor = System.Drawing.Color.MediumTurquoise;
this.confirm.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.confirm.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F);
this.confirm.Location = new System.Drawing.Point(39, 273);
this.confirm.Name = "confirm";
this.confirm.Size = new System.Drawing.Size(202, 54);
this.confirm.TabIndex = 10;
this.confirm.Text = "Подтвердить";
this.confirm.UseVisualStyleBackColor = false;
this.confirm.Click += new System.EventHandler(this.confirm_Click);
//
// ManagerAtributsInfo
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(1116, 450);
this.Controls.Add(this.confirm);
this.Controls.Add(this.exit);
this.Controls.Add(this.delete);
this.Controls.Add(this.add);
this.Controls.Add(this.value);
this.Controls.Add(this.label3);
this.Controls.Add(this.atributic);
this.Controls.Add(this.label2);
this.Controls.Add(this.attributeValue);
this.Controls.Add(this.label1);
```

```

this.Name = "ManagerAtributsInfo";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "ManagerAtributsInfo";
((System.ComponentModel.ISupportInitialize)(this.attributeValue)).EndInit();
this.ResumeLayout(false);
this.PerformLayout();

```

```

}

```

```

#endregion
private System.Windows.Forms.Label label1;
private System.Windows.Forms.DataGridView attributeValue;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.ComboBox atributic;
private System.Windows.Forms.Label label3;
private System.Windows.Forms.TextBox value;
private System.Windows.Forms.Button add;
private System.Windows.Forms.Button delete;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button confirm;
}

```

```

}

```

22. ManagerAtributsInfo.cs

```

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;

```

```

namespace DPRK

```

```

{
    public partial class ManagerAtributsInfo : Form
    {
        int [] informObject;
        string role;
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
        public ManagerAtributsInfo()
        {
            InitializeComponent();
        }
    }

```

```

/// <summary>

```

```

/// Инициализация компонентов. Заполнение выпадающего списка атрибутов.

```

```

/// Создание колонок для таблице с атрибутами и значением

```

```

/// </summary>

```

```

/// <param name="informationObject">Массив с данными из формы ManagerRegObj</param>

```

```

/// <param name="roles">Роль вошедшего</param>

```

```

public ManagerAtributsInfo(int [] informationObject,string roles)

```

```

{

```

```

    InitializeComponent();

```

```

    informObject = informationObject;

```

```

    role = roles;

```

```

    sqlManager.AddComboBox(atributic, "[dbo].[Unicalnie_Atributi]", 1);

```

```

    if (atributic.Items.Count > 0)

```

```

    {

```

```
        atributic.SelectedIndex = 0;
    }
    attributeValue.Columns.Add("attributDG", "Атрибут");
    attributeValue.Columns.Add("valueDG", "Значение");
}

/// <summary>
/// Нажатие на кнопку "Добавить" для создания объекта, договора с заказчиком (в БД) и занесение специальных
атрибутов в БД
/// </summary>
private void confirm_Click(object sender, EventArgs e)
{
    if (attributeValue.Rows.Count > 1)
    {
        sqlManager.RequestSql($"insert into [dbo].[Stroitelnyy_Object] values
({informObject[0]},{informObject[1]},'Выполняется')");
        int numberOfRows = sqlManager.Number_Records("[dbo].[Stroitelnyy_Object]");
        int objectNumber = Convert.ToInt32(sqlManager.ReturnTable("select * from
[dbo].[Stroitelnyy_Object]").Rows[numberOfRows - 1][0]);
        sqlManager.RequestSql($"insert into [dbo].[Dogovor] values
('{DateTime.Now}',{objectNumber},{informObject[2]})");
        for (int i = 0; i < attributeValue.Rows.Count - 1; i++)
        {
            DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Unicalnie_Atributi] where
[dbo].[Unicalnie_Atributi].[Name] = '{attributeValue.Rows[i].Cells[0].Value}'");
            int attributeNumber = Convert.ToInt32(dataTable.Rows[0][0]);
            string valueDataGrid = attributeValue.Rows[i].Cells[1].Value.ToString();
            sqlManager.RequestSql($"insert into [dbo].[Perechen_Atributuv] values
({objectNumber},{attributeNumber},{valueDataGrid})");
        }
        ManagerRegObj managerRegObj = new ManagerRegObj(role);
        managerRegObj.Show();
        this.Hide();
    }
    else
    {
        MessageBox.Show("Добавьте атрибутов для этого объекта.");
    }
}

/// <summary>
/// Нажатие на кнопку "Выйти" на форме ManagerAtributsInfo для перехода на форму ManagerRegObj
/// </summary>
private void exit_Click(object sender, EventArgs e)
{
    ManagerRegObj managerRegObj = new ManagerRegObj(role);
    managerRegObj.Show();
    this.Hide();
}

/// <summary>
/// Добавления названия атрибута и его значения в визуальную таблицу на форме.
/// </summary>
private void add_Click(object sender, EventArgs e)
{
    if (atributic.Text != "")
    {
        if (value.Text.Replace(" ", string.Empty).Length < 1)
        {
            MessageBox.Show("Вы не ввели значение для атрибута ");
        }
    }
}
```

```
    }  
    else  
    {  
        if (value.Text.Length > 50)  
        {  
            MessageBox.Show("Значение должно быть не более 50 символов");  
        }  
        else  
        {  
            int rowNumber = attributeValue.Rows.Add();  
            attributeValue.Rows[rowNumber].Cells[0].Value = atributic.Text;  
            attributeValue.Rows[rowNumber].Cells[1].Value = value.Text;  
        }  
    }  
}  
else  
{  
    MessageBox.Show("Вы не выбрали атрибут.");  
}  
}
```

```
/// <summary>  
/// Удаление строки из визуальной таблице на форме ManagerAtributsInfo  
/// </summary>  
private void delete_Click(object sender, EventArgs e)  
{  
    int ind = attributeValue.SelectedCells[0].RowIndex;  
    attributeValue.Rows.RemoveAt(ind);  
}
```

```
}  
}
```

23. ManagerRegObj.Designer.cs

namespace DPRK

```
{  
    partial class ManagerRegObj  
    {  
        /// <summary>  
        /// Required designer variable.  
        /// </summary>  
        private System.ComponentModel.IContainer components = null;  
  
        /// <summary>  
        /// Clean up any resources being used.  
        /// </summary>  
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>  
        protected override void Dispose(bool disposing)  
        {  
            if (disposing && (components != null))  
            {  
                components.Dispose();  
            }  
            base.Dispose(disposing);  
        }  
    }  
}
```

#region Windows Form Designer generated code

```
/// <summary>  
/// Required method for Designer support - do not modify
```

```

/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.label1 = new System.Windows.Forms.Label();
    this.label2 = new System.Windows.Forms.Label();
    this.tipObject = new System.Windows.Forms.ComboBox();
    this.label3 = new System.Windows.Forms.Label();
    this.regionObject = new System.Windows.Forms.ComboBox();
    this.label4 = new System.Windows.Forms.Label();
    this.customer = new System.Windows.Forms.ComboBox();
    this.exit = new System.Windows.Forms.Button();
    this.farther = new System.Windows.Forms.Button();
    this.addRegion = new System.Windows.Forms.Button();
    this.addCustomer = new System.Windows.Forms.Button();
    this.SuspendLayout();
    //
    // label1
    //
    this.label1.AutoSize = true;
    this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label1.Location = new System.Drawing.Point(232, 27);
    this.label1.Name = "label1";
    this.label1.Size = new System.Drawing.Size(301, 29);
    this.label1.TabIndex = 0;
    this.label1.Text = "Информация об объекте";
    //
    // label2
    //
    this.label2.AutoSize = true;
    this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label2.Location = new System.Drawing.Point(233, 76);
    this.label2.Name = "label2";
    this.label2.Size = new System.Drawing.Size(114, 20);
    this.label2.TabIndex = 1;
    this.label2.Text = "Тип объекта";
    //
    // tipObject
    //
    this.tipObject.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
    this.tipObject.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.tipObject.FormattingEnabled = true;
    this.tipObject.Location = new System.Drawing.Point(237, 99);
    this.tipObject.Name = "tipObject";
    this.tipObject.Size = new System.Drawing.Size(410, 26);
    this.tipObject.TabIndex = 2;
    this.tipObject.SelectedIndexChanged += new System.EventHandler(this.tipObject_SelectedIndexChanged);
    //
    // label3
    //
    this.label3.AutoSize = true;
    this.label3.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label3.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label3.Location = new System.Drawing.Point(233, 141);

```

```

this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(153, 20);
this.label3.TabIndex = 3;
this.label3.Text = "Участок объекта";
//
// regionObject
//
this.regionObject.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.regionObject.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.regionObject.FormattingEnabled = true;
this.regionObject.Location = new System.Drawing.Point(237, 164);
this.regionObject.Name = "regionObject";
this.regionObject.Size = new System.Drawing.Size(296, 26);
this.regionObject.TabIndex = 4;
this.regionObject.SelectedIndexChanged += new System.EventHandler(this.regionObject_SelectedIndexChanged);
//
// label4
//
this.label4.AutoSize = true;
this.label4.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label4.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label4.Location = new System.Drawing.Point(233, 212);
this.label4.Name = "label4";
this.label4.Size = new System.Drawing.Size(88, 20);
this.label4.TabIndex = 5;
this.label4.Text = "Заказчик";
//
// customer
//
this.customer.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.customer.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.customer.FormattingEnabled = true;
this.customer.Location = new System.Drawing.Point(237, 235);
this.customer.Name = "customer";
this.customer.Size = new System.Drawing.Size(296, 26);
this.customer.TabIndex = 6;
this.customer.SelectedIndexChanged += new System.EventHandler(this.customer_SelectedIndexChanged);
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(237, 282);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(84, 40);
this.exit.TabIndex = 7;
this.exit.Text = "Выход";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// farther
//
this.farther.BackColor = System.Drawing.Color.MediumTurquoise;
this.farther.FlatStyle = System.Windows.Forms.FlatStyle.Flat;

```



```

        this.farther.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.farther.Location = new System.Drawing.Point(435, 282);
        this.farther.Name = "farther";
        this.farther.Size = new System.Drawing.Size(98, 40);
        this.farther.TabIndex = 8;
        this.farther.Text = "Дальше";
        this.farther.UseVisualStyleBackColor = false;
        this.farther.Click += new System.EventHandler(this.farther_Click);
        //
        // addRegion
        //
        this.addRegion.BackColor = System.Drawing.Color.MediumTurquoise;
        this.addRegion.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
        this.addRegion.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.addRegion.Location = new System.Drawing.Point(549, 164);
        this.addRegion.Name = "addRegion";
        this.addRegion.Size = new System.Drawing.Size(37, 26);
        this.addRegion.TabIndex = 9;
        this.addRegion.Text = "+";
        this.addRegion.UseVisualStyleBackColor = false;
        this.addRegion.Click += new System.EventHandler(this.addRegion_Click);
        //
        // addCustomer
        //
        this.addCustomer.BackColor = System.Drawing.Color.MediumTurquoise;
        this.addCustomer.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
        this.addCustomer.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.addCustomer.Location = new System.Drawing.Point(549, 234);
        this.addCustomer.Name = "addCustomer";
        this.addCustomer.Size = new System.Drawing.Size(37, 26);
        this.addCustomer.TabIndex = 10;
        this.addCustomer.Text = "+";
        this.addCustomer.UseVisualStyleBackColor = false;
        this.addCustomer.Click += new System.EventHandler(this.addCustomer_Click);
        //
        // ManagerRegObj
        //
        this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
        this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
        this.ClientSize = new System.Drawing.Size(800, 450);
        this.Controls.Add(this.addCustomer);
        this.Controls.Add(this.addRegion);
        this.Controls.Add(this.farther);
        this.Controls.Add(this.exit);
        this.Controls.Add(this.customer);
        this.Controls.Add(this.label4);
        this.Controls.Add(this.regionObject);
        this.Controls.Add(this.label3);
        this.Controls.Add(this.tipObject);
        this.Controls.Add(this.label2);
        this.Controls.Add(this.label1);
        this.Name = "ManagerRegObj";
        this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
        this.Text = "ManagerRegObj";
        this.ResumeLayout(false);
        this.PerformLayout();

```

```

    }

    #endregion

    private System.Windows.Forms.Label label1;
    private System.Windows.Forms.Label label2;
    private System.Windows.Forms.ComboBox tipObject;
    private System.Windows.Forms.Label label3;
    private System.Windows.Forms.ComboBox regionObject;
    private System.Windows.Forms.Label label4;
    private System.Windows.Forms.ComboBox customer;
    private System.Windows.Forms.Button exit;
    private System.Windows.Forms.Button farther;
    private System.Windows.Forms.Button addRegion;
    private System.Windows.Forms.Button addCustomer;
}
}

```

24. ManagerRegObj.cs

```

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;

namespace DPRK
{
    public partial class ManagerRegObj : Form
    {
        string roles;
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
        int idTipObject;
        int idRegionObject;
        int idCustomer;

        public ManagerRegObj()
        {
            InitializeComponent();

            /// <summary>
            /// Инициализация объектов. Заполнение выпадающих списков (тип объекта,участок объекта, заказчик)
            /// </summary>
            /// <param name="roleEnter">Роль вошедшего</param>
            public ManagerRegObj(string roleEnter)
            {
                InitializeComponent();
                roles = roleEnter;
                sqlManager.AddComboBox(tipObject, "[dbo].[Tip_Obyekta]", 1);
                sqlManager.AddComboBox(regionObject, "[dbo].[Uchastok]", 2);
                sqlManager.AddComboBox(customer, "[dbo].[Zakazchik]", 1);

                tipObject.SelectedIndex = 0;
                if (regionObject.Items.Count > 0)
                    regionObject.SelectedIndex = 0;
                if (customer.Items.Count > 0)

```

```
customer.SelectedIndex = 0;

}

/// <summary>
/// Кнопка со знаком "+" около выпадающего списка с участками объекта для перехода на форму
GlavStroiUprAddUchastok
/// для регистрации нового участка
/// </summary>
private void addRegion_Click(object sender, EventArgs e)
{
    GlavStroiUprAddUchastok glavStroiUprAddUchastok = new GlavStroiUprAddUchastok(roles);
    glavStroiUprAddUchastok.Show();
    this.Hide();
}

/// <summary>
/// Кнопка со знаком "+" около выпадающего списка с заказчиками для перехода на форму ManagerRegZakaz
/// для регистрации заказчика
/// </summary>
private void addCustomer_Click(object sender, EventArgs e)
{
    ManagerRegZakaz managerRegZakaz = new ManagerRegZakaz(roles);
    managerRegZakaz.Show();
    this.Hide();
}

/// <summary>
/// Нажатие на кнопку "Дальше" на форме ManagerRegObj для перехода на форму ManagerAtributsInfo и
/// передачей массива с данными из данной формы
/// </summary>
private void farther_Click(object sender, EventArgs e)
{
    if (regionObject.Text != "" && customer.Text != "")
    {
        int[] informationObject = new int[] { idTipObject, idRegionObject, idCustomer };
        ManagerAtributsInfo managerAtributsInfo = new ManagerAtributsInfo(informationObject, roles);
        managerAtributsInfo.Show();
        this.Hide();
    }
    else
    {
        MessageBox.Show("Вы не выбрали участок и(ли) заказчика.");
    }
}

/// <summary>
/// Нажатие на кнопку "Выход" на форме ManagerRegObj для перехода на окно авторизации или окно
администратора
/// </summary>
private void exit_Click(object sender, EventArgs e)
{
    if (roles == "Менеджер по работе с клиентами")
    {
        Login loginForm = new Login();
        loginForm.Show();
    }
    else
    {
        Admin admin = new Admin();
    }
}
```

```

        admin.Show();
    }
    this.Hide();
}

/// <summary>
/// Получение номера выбранного типа объекта
/// </summary>
private void tipObject_SelectedIndexChanged(object sender, EventArgs e)
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Tip_Obyekta] where [dbo].[Tip_Obyekta].[Name] = '{tipObject.Text}'");
    if (dataTable.Rows.Count > 0)
        idTipObject = Convert.ToInt32(dataTable.Rows[0][0]);
}

/// <summary>
/// Получение номера выбранного участка объекта
/// </summary>
private void regionObject_SelectedIndexChanged(object sender, EventArgs e)
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Uchastok] where [dbo].[Uchastok].[Name] = '{regionObject.Text}'");
    if (dataTable.Rows.Count > 0)
        idRegionObject = Convert.ToInt32(dataTable.Rows[0][0]);
}

/// <summary>
/// Получение номера выбранного заказчика
/// </summary>
private void customer_SelectedIndexChanged(object sender, EventArgs e)
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Zakazchik] where [dbo].[Zakazchik].[Name] = '{customer.Text}'");
    if (dataTable.Rows.Count > 0)
        idCustomer = Convert.ToInt32(dataTable.Rows[0][0]);
}
}
}

```

25. ManagerRegZakaz.Designer.cs

```

namespace DPRK
{
    partial class ManagerRegZakaz
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {

```

```

        components.Dispose();
    }
    base.Dispose(disposing);
}

```

#region Windows Form Designer generated code

```

/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.label1 = new System.Windows.Forms.Label();
    this.label2 = new System.Windows.Forms.Label();
    this.name = new System.Windows.Forms.TextBox();
    this.label3 = new System.Windows.Forms.Label();
    this.label4 = new System.Windows.Forms.Label();
    this.inn = new System.Windows.Forms.TextBox();
    this.exit = new System.Windows.Forms.Button();
    this.farther = new System.Windows.Forms.Button();
    this.phoneNumber = new System.Windows.Forms.MaskedTextBox();
    this.SuspendLayout();
    //
    // label1
    //
    this.label1.AutoSize = true;
    this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label1.Location = new System.Drawing.Point(223, 38);
    this.label1.Name = "label1";
    this.label1.Size = new System.Drawing.Size(312, 29);
    this.label1.TabIndex = 0;
    this.label1.Text = "Информация о заказчике";
    //
    // label2
    //
    this.label2.AutoSize = true;
    this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label2.Location = new System.Drawing.Point(224, 91);
    this.label2.Name = "label2";
    this.label2.Size = new System.Drawing.Size(111, 18);
    this.label2.TabIndex = 1;
    this.label2.Text = "Наименование";
    //
    // name
    //
    this.name.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.name.Location = new System.Drawing.Point(227, 113);
    this.name.Name = "name";
    this.name.Size = new System.Drawing.Size(308, 24);
    this.name.TabIndex = 2;
    //
    // label3
    //
    this.label3.AutoSize = true;

```

```
this.label3.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label3.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label3.Location = new System.Drawing.Point(225, 151);
this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(129, 18);
this.label3.TabIndex = 3;
this.label3.Text = "Номер телефона";
//
// label4
//
this.label4.AutoSize = true;
this.label4.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label4.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label4.Location = new System.Drawing.Point(225, 212);
this.label4.Name = "label4";
this.label4.Size = new System.Drawing.Size(92, 18);
this.label4.TabIndex = 5;
this.label4.Text = "Номер ИИИ";
//
// inn
//
this.inn.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.inn.Location = new System.Drawing.Point(227, 233);
this.inn.Name = "inn";
this.inn.Size = new System.Drawing.Size(308, 24);
this.inn.TabIndex = 6;
this.inn.KeyPress += new System.Windows.Forms.KeyPressEventHandler(this.inn_KeyPress);
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(228, 284);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(89, 34);
this.exit.TabIndex = 7;
this.exit.Text = "Выход";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// farther
//
this.farther.BackColor = System.Drawing.Color.MediumTurquoise;
this.farther.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.farther.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.farther.Location = new System.Drawing.Point(420, 284);
this.farther.Name = "farther";
this.farther.Size = new System.Drawing.Size(115, 34);
this.farther.TabIndex = 8;
this.farther.Text = "Дальше";
this.farther.UseVisualStyleBackColor = false;
this.farther.Click += new System.EventHandler(this.farther_Click);
//
// phoneNumber
```

```
//
this.phoneNumber.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.phoneNumber.Location = new System.Drawing.Point(227, 172);
this.phoneNumber.Mask = "(000) 000-00-00";
this.phoneNumber.Name = "phoneNumber";
this.phoneNumber.ResetOnSpace = false;
this.phoneNumber.Size = new System.Drawing.Size(308, 24);
this.phoneNumber.TabIndex = 9;
//
// ManagerRegZakaz
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(800, 450);
this.Controls.Add(this.phoneNumber);
this.Controls.Add(this.farther);
this.Controls.Add(this.exit);
this.Controls.Add(this.inn);
this.Controls.Add(this.label4);
this.Controls.Add(this.label3);
this.Controls.Add(this.name);
this.Controls.Add(this.label2);
this.Controls.Add(this.label1);
this.Name = "ManagerRegZakaz";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "ManagerRegZakaz";
this.ResumeLayout(false);
this.PerformLayout();

}

#endregion

private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.TextBox name;
private System.Windows.Forms.Label label3;
private System.Windows.Forms.Label label4;
private System.Windows.Forms.TextBox inn;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button farther;
private System.Windows.Forms.MaskedTextBox phoneNumber;
}
}
```

26. ManagerRegZakaz.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Text.RegularExpressions;
using System.Threading.Tasks;
using System.Windows.Forms;
```

```
namespace DPRK
{
```

```
public partial class ManagerRegZakaz : Form
{
    Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
    string roleEnter;

    public ManagerRegZakaz()
    {
        InitializeComponent();
    }

    /// <summary>
    /// Инициализация компонент
    /// </summary>
    /// <param name="roles">Переданная роль под которой зашел сотрудник</param>
    public ManagerRegZakaz(string roles)
    {
        InitializeComponent();
        roleEnter = roles;
    }

    /// <summary>
    /// Нажатие на кнопку "Выход" на форме ManagerRegZakaz для перехода на форму менеджера по работе с
    клиентами или
    /// Главы строительного управления
    /// </summary>
    private void exit_Click(object sender, EventArgs e)
    {
        switch (roleEnter)
        {
            case "Менеджер по работе с клиентами":
                ManagerRegObj managerRegObj = new ManagerRegObj(roleEnter);
                managerRegObj.Show();
                break;

            case "Глава строительного управления":
                GlavStroiUpr glavStroiUpr = new GlavStroiUpr(roleEnter);
                glavStroiUpr.Show();
                break;

            default:
                ManagerRegObj managerRegObject = new ManagerRegObj(roleEnter);
                managerRegObject.Show();
                break;
        }
        this.Hide();
    }

    /// <summary>
    /// Нажатие на кнопку "Дальше" на форме ManagerRegZakaz для создания заказчика и переходом на форму
    ManagerRegObj
    /// </summary>
    private void farther_Click(object sender, EventArgs e)
    {
        if (name.Text.Length > 50 || name.Text.Length < 1 || name.Text.Replace(" ", string.Empty).Length < 1)
        {
            MessageBox.Show("Наименование не может быть пустым и больше 50 знаков.");
        }
        else
    }
```



```

{
    if (phoneNumber.Text.Length != 15)
    {
        MessageBox.Show("Ведите номер телефона.");
    }
    else
    {
        if (inn.Text.Length != 10 && inn.Text.Length != 12)
        {
            MessageBox.Show("В ИНН 10 или 12 цифр.");
        }
        else
        {
            if (sqlManager.Number_Records($"@[dbo].[Zakazchik] where [dbo].[Zakazchik].[INN_Number] = '{inn.Text}'") == 0)
            {
                if (sqlManager.Number_Records($"@[dbo].[Zakazchik] where [dbo].[Zakazchik].[Name] = '{name.Text}'") == 0)
                {
                    {
                        sqlManager.RequestSql($"insert into [dbo].[Zakazchik] values ('{name.Text}','{inn.Text}','8{phoneNumber.Text}')");
                        ManagerRegObj managerRegObj = new ManagerRegObj(roleEnter);
                        managerRegObj.Show();
                        this.Hide();
                    }
                    else
                    {
                        {
                            MessageBox.Show("Такое название заказчика уже существует.");
                        }
                    }
                }
                else
                {
                    {
                        MessageBox.Show("Такой ИНН уже существует.");
                    }
                }
            }
        }
    }
}
}
}

```

```

/// <summary>

```

```

/// Ограничения ввода ИНН

```

```

/// </summary>

```

```

private void inn_KeyPress(object sender, KeyPressEventArgs e)

```

```

{

```

```

    if (!Char.IsDigit(e.KeyChar) && e.KeyChar != Convert.ToInt32(Keys.Back))

```

```

    {

```

```

        e.Handled = true;

```

```

    }

```

```

}

```

```

}

```

```

}

```

27. NachUchastka.Designer.cs

```

namespace DPRK

```

```

{

```

```

    partial class NachUchastka

```

```

    {

```

```

        /// <summary>

```

```

        /// Required designer variable.

```

```

/// </summary>
private System.ComponentModel.IContainer components = null;

/// <summary>
/// Clean up any resources being used.
/// </summary>
/// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
protected override void Dispose(bool disposing)
{
    if (disposing && (components != null))
    {
        components.Dispose();
    }
    base.Dispose(disposing);
}

#region Windows Form Designer generated code

/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
private void InitializeComponent()
{
    this.label1 = new System.Windows.Forms.Label();
    this.tipObject = new System.Windows.Forms.ComboBox();
    this.add = new System.Windows.Forms.Button();
    this.exit = new System.Windows.Forms.Button();
    this.generateReport = new System.Windows.Forms.Button();
    this.informationRegion = new System.Windows.Forms.DataGridView();
    ((System.ComponentModel.ISupportInitialize)(this.informationRegion)).BeginInit();
    this.SuspendLayout();
    //
    // label1
    //
    this.label1.AutoSize = true;
    this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
    this.label1.Location = new System.Drawing.Point(43, 30);
    this.label1.Name = "label1";
    this.label1.Size = new System.Drawing.Size(114, 20);
    this.label1.TabIndex = 0;
    this.label1.Text = "Тип объекта";
    //
    // tipObject
    //
    this.tipObject.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
    this.tipObject.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
    this.tipObject.FormattingEnabled = true;
    this.tipObject.Location = new System.Drawing.Point(47, 63);
    this.tipObject.Name = "tipObject";
    this.tipObject.Size = new System.Drawing.Size(383, 26);
    this.tipObject.TabIndex = 1;
    //
    // add
    //
    this.add.BackColor = System.Drawing.Color.MediumTurquoise;
    this.add.FlatStyle = System.Windows.Forms.FlatStyle.Flat;

```

```

        this.add.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.add.Location = new System.Drawing.Point(47, 110);
        this.add.Name = "add";
        this.add.Size = new System.Drawing.Size(177, 41);
        this.add.TabIndex = 2;
        this.add.Text = "Добавить";
        this.add.UseVisualStyleBackColor = false;
        this.add.Click += new System.EventHandler(this.add_Click);
        //
        // exit
        //
        this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
        this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
        this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.exit.Location = new System.Drawing.Point(244, 110);
        this.exit.Name = "exit";
        this.exit.Size = new System.Drawing.Size(186, 41);
        this.exit.TabIndex = 3;
        this.exit.Text = "Выйти";
        this.exit.UseVisualStyleBackColor = false;
        this.exit.Click += new System.EventHandler(this.exit_Click);
        //
        // generateReport
        //
        this.generateReport.BackColor = System.Drawing.Color.MediumTurquoise;
        this.generateReport.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
        this.generateReport.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F,
System.Drawing.FontStyle.Regular, System.Drawing.GraphicsUnit.Point, ((byte)(204)));
        this.generateReport.Location = new System.Drawing.Point(47, 169);
        this.generateReport.Name = "generateReport";
        this.generateReport.Size = new System.Drawing.Size(383, 41);
        this.generateReport.TabIndex = 4;
        this.generateReport.Text = "Сгенерировать отчет";
        this.generateReport.UseVisualStyleBackColor = false;
        this.generateReport.Click += new System.EventHandler(this.generateReport_Click);
        //
        // informationRegion
        //
        this.informationRegion.ColumnHeadersHeightSizeMode =
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;
        this.informationRegion.Location = new System.Drawing.Point(463, 63);
        this.informationRegion.Name = "informationRegion";
        this.informationRegion.RowHeadersWidth = 51;
        this.informationRegion.RowTemplate.Height = 24;
        this.informationRegion.Size = new System.Drawing.Size(394, 287);
        this.informationRegion.TabIndex = 5;
        //
        // NachUchastka
        //
        this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
        this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
        this.ClientSize = new System.Drawing.Size(929, 450);
        this.Controls.Add(this.informationRegion);
        this.Controls.Add(this.generateReport);
        this.Controls.Add(this.exit);
        this.Controls.Add(this.add);
        this.Controls.Add(this.tipObject);
        this.Controls.Add(this.label1);

```

```

this.Name = "NachUchastka";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "NachUchastka";
((System.ComponentModel.ISupportInitialize)(this.informationRegion)).EndInit();
this.ResumeLayout(false);
this.PerformLayout();

}

#endregion

private System.Windows.Forms.Label label1;
private System.Windows.Forms.ComboBox tipObject;
private System.Windows.Forms.Button add;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button generateReport;
private System.Windows.Forms.DataGridView informationRegion;
}
}

```

28. NachUchastka.cs

```

using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Globalization;
using System.Linq;
using System.Reflection;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace DPRK
{
    public partial class NachUchastka : Form
    {
        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();
        string roles;
        int idEmployee;
        public NachUchastka()
        {
            InitializeComponent();

            /// <summary>
            /// Инициализация компонентов.
            /// Занесение в комбобокс первичных данных в зависимости от роли.
            /// </summary>
            /// <param name="role">Роль вошедшего</param>
            /// <param name="idEmployee">Номер сотрудника</param>
            public NachUchastka(string role, int idEmployee)
            {
                InitializeComponent();
                roles = role;
                idEmployee = idEmployee;

                if (role != "Администратор информационной системы")
                {
                    sqlManager.AddComboBox(tipObject, $"[dbo].[Information_Object_Uchastci_ComboBox] ({idEmployee}) ", 0);
                }
            }
        }
    }
}

```

```

        sqlManager.GetList(informationRegion, "[dbo].[Raboti_Na_Objekte]", $"select * from
[dbo].[Information_Uchastoc_Worcing] ({idEmployee})");
    }
    else
    {
        label1.Text = "Выберете начальника участка";
        sqlManager.AddComboBox(tipObject, "[dbo].[Chief_Uchastca]", 0);
        add.Text = "Выбрать";
        generateReport.Enabled = false;
    }
    if (tipObject.Items.Count > 0)
    {
        tipObject.SelectedIndex = 0;
    }
}

/// <summary>
/// Нажатие на кнопку "Выйти" на форме NachUchastka для перехода на форму администратора или авторизации
/// </summary>
private void exit_Click(object sender, EventArgs e)
{
    if (roles == "Начальник участка")
    {
        Login loginForm = new Login();
        loginForm.Show();
    }
    else
    {
        Admin admin = new Admin();
        admin.Show();
    }
    this.Hide();
}

/// <summary>
/// Нажатие на кнопку "Сгенерировать отчет".
/// Забираем данные котрые сошлись в результате выполнения запроса.
/// Формируем массивы название, номера сдачи работы.Берется название участка, и формируется название из
типа и сроке выполнения работы.
/// </summary>
private void generateReport_Click(object sender, EventArgs e)
{
    if (tipObject.Text != "")
    {
        string tipObjecta = tipObject.Text;
        string [] tipObj = tipObjecta.Split(new char[] {','});
        string[] dateTime = tipObj[1].Split(new char[] { ' ' });

        string sqlRequest = $"[dbo].[Information_Submission_Working_Date] ({idEmployee},{tipObjecta})";
        DataTable dataTable = sqlManager.ReturnTable($"select * from {sqlRequest}");

        int numberMatches = dataTable.Rows.Count;

        if (numberMatches > 0)
        {
            int[] idSubmissionWorking = new int[numberMatches];
            string[] title = new string[numberMatches];
            string region = "";
            for (int i = 0; i < numberMatches; i++)
            {

```

```

idSubmissionWorking[i] = Convert.ToInt32(dataTable.Rows[i][0]);

string date = DateTime.Parse(dataTable.Rows[i][3].ToString(), CultureInfo.GetCultureInfo("ru-ru")).Date.ToShortDateString();

title[i] = $"{dataTable.Rows[i][1]}-{dataTable.Rows[i][2]}- Срок выполнения: ( {date} )";
region = dataTable.Rows[0][4].ToString();
}

region = dataTable.Rows[0][4].ToString();

Class.WordManager.WordDocGeneration wordDoc = new Class.WordManager.WordDocGeneration();
string patch = wordDoc.addFile(tipObj[0]+" "+dateTime[0], idSubmissionWorking, title,region);

if (patch != "Закройте файл.")
{
    System.Diagnostics.Process.Start(patch);
}
else
{
    MessageBox.Show(patch);
}
else
{
    MessageBox.Show("С данным объектом еще не происходили действия бригадами.");
}
else
{
    MessageBox.Show("Выберите тип объекта.");
}
}

/// <summary>
/// Кнопка для перехода на форму NachUchastkaAddRabotiNaObj в котрый мы будеим задавать вид работы,
бригаду и срок выполнения.
/// А если мы зашли из под админестратор то сначала мы выберем нажатием этой кнопки ачальника участка и
далее все теже самые действия описанные выше.
/// </summary>
private void add_Click(object sender, EventArgs e)
{
    if (idEmployee != 0)
    {
        if (tipObject.Text != "")
        {
            DataTable dataTable = sqlManager.ReturnTable($"{@"select * from [dbo].[Information_Object_Uchastci_Search]
({idEmployee},{tipObject.Text}");");
            if (dataTable.Rows.Count > 0)
            {
                int idObjectComboBox = Convert.ToInt32(dataTable.Rows[0][1]);
                NachUchastkaAddRabotiNaObj nachUchastkaAddRabotiNaObj = new NachUchastkaAddRabotiNaObj(roles,
idObjectComboBox, idEmployee);
                nachUchastkaAddRabotiNaObj.Show();
                this.Hide();
            }
        }
        else
        {
            MessageBox.Show("Выбирете тип объекта.");
        }
    }
}

```

29. NachUchastkaAddRabotiNaObj.Designer.cs

```
{
partial class NachUchastkaAddRabotiNaObj
{
    /// <summary>
    /// Required designer variable.
    /// </summary>
    private System.ComponentModel.IContainer components = null;

    /// <summary>
    /// Clean up any resources being used.
    /// </summary>
    /// <param name="disposing">true if managed resources should be disposed; otherwise, false.</param>
    protected override void Dispose(bool disposing)
    {
        if (disposing && (components != null))
        {
            components.Dispose();
        }
        base.Dispose(disposing);
    }
}

#region Windows Form Designer generated code

    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>
    private void InitializeComponent()
    {
        this.label1 = new System.Windows.Forms.Label();
        this.label2 = new System.Windows.Forms.Label();
        this.vidWork = new System.Windows.Forms.ComboBox();
    }
}
```

```
this.label3 = new System.Windows.Forms.Label();
this.brigade = new System.Windows.Forms.ComboBox();
this.completionDate = new System.Windows.Forms.DateTimePicker();
this.label4 = new System.Windows.Forms.Label();
this.exit = new System.Windows.Forms.Button();
this.confirm = new System.Windows.Forms.Button();
this.SuspendLayout();
//
// label1
//
this.label1.AutoSize = true;
this.label1.Font = new System.Drawing.Font("Microsoft Sans Serif", 13.8F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label1.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label1.Location = new System.Drawing.Point(230, 26);
this.label1.Name = "label1";
this.label1.Size = new System.Drawing.Size(301, 29);
this.label1.TabIndex = 0;
this.label1.Text = "Информация об объекте";
//
// label2
//
this.label2.AutoSize = true;
this.label2.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label2.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label2.Location = new System.Drawing.Point(231, 74);
this.label2.Name = "label2";
this.label2.Size = new System.Drawing.Size(110, 20);
this.label2.TabIndex = 1;
this.label2.Text = "Вид работы";
//
// vidWork
//
this.vidWork.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
this.vidWork.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.vidWork.FormattingEnabled = true;
this.vidWork.Location = new System.Drawing.Point(235, 98);
this.vidWork.Name = "vidWork";
this.vidWork.Size = new System.Drawing.Size(296, 26);
this.vidWork.TabIndex = 2;
this.vidWork.SelectedIndexChanged += new System.EventHandler(this.vidWork_SelectedIndexChanged);
//
// label3
//
this.label3.AutoSize = true;
this.label3.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label3.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label3.Location = new System.Drawing.Point(231, 138);
this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(140, 20);
this.label3.TabIndex = 3;
this.label3.Text = "Выбор бригады";
//
// brigade
//
this.brigade.DropDownStyle = System.Windows.Forms.ComboBoxStyle.DropDownList;
```



```
this.brigade.Font = new System.Drawing.Font("Microsoft Sans Serif", 9F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.brigade.FormattingEnabled = true;
this.brigade.Location = new System.Drawing.Point(235, 161);
this.brigade.Name = "brigade";
this.brigade.Size = new System.Drawing.Size(296, 26);
this.brigade.TabIndex = 4;
this.brigade.SelectedIndexChanged += new System.EventHandler(this.brigade_SelectedIndexChanged);
//
// completionDate
//
this.completionDate.Location = new System.Drawing.Point(235, 227);
this.completionDate.Name = "completionDate";
this.completionDate.Size = new System.Drawing.Size(296, 22);
this.completionDate.TabIndex = 5;
//
// label4
//
this.label4.AutoSize = true;
this.label4.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.label4.ForeColor = System.Drawing.Color.MediumTurquoise;
this.label4.Location = new System.Drawing.Point(231, 204);
this.label4.Name = "label4";
this.label4.Size = new System.Drawing.Size(224, 20);
this.label4.TabIndex = 6;
this.label4.Text = "Срок выполнения работы";
//
// exit
//
this.exit.BackColor = System.Drawing.Color.MediumTurquoise;
this.exit.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.exit.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.exit.Location = new System.Drawing.Point(235, 289);
this.exit.Name = "exit";
this.exit.Size = new System.Drawing.Size(136, 36);
this.exit.TabIndex = 7;
this.exit.Text = "Отменить";
this.exit.UseVisualStyleBackColor = false;
this.exit.Click += new System.EventHandler(this.exit_Click);
//
// confirm
//
this.confirm.BackColor = System.Drawing.Color.MediumTurquoise;
this.confirm.FlatStyle = System.Windows.Forms.FlatStyle.Flat;
this.confirm.Font = new System.Drawing.Font("Microsoft Sans Serif", 10.2F, System.Drawing.FontStyle.Regular,
System.Drawing.GraphicsUnit.Point, ((byte)(204)));
this.confirm.Location = new System.Drawing.Point(385, 289);
this.confirm.Name = "confirm";
this.confirm.Size = new System.Drawing.Size(146, 36);
this.confirm.TabIndex = 8;
this.confirm.Text = "Подтвердить";
this.confirm.UseVisualStyleBackColor = false;
this.confirm.Click += new System.EventHandler(this.confirm_Click);
//
// NachUchastkaAddRabotiNaObj
//
this.AutoScaleDimensions = new System.Drawing.SizeF(8F, 16F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
```

```

this.ClientSize = new System.Drawing.Size(800, 450);
this.Controls.Add(this.confirm);
this.Controls.Add(this.exit);
this.Controls.Add(this.label4);
this.Controls.Add(this.completionDate);
this.Controls.Add(this.brigade);
this.Controls.Add(this.label3);
this.Controls.Add(this.vidWork);
this.Controls.Add(this.label2);
this.Controls.Add(this.label1);
this.Name = "NachUchastkaAddRabotiNaObj";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
this.Text = "NachUchastkaAddRabotiNaObj";
this.ResumeLayout(false);
this.PerformLayout();

}

```

```

#endregion

```

```

private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.ComboBox vidWork;
private System.Windows.Forms.Label label3;
private System.Windows.Forms.ComboBox brigade;
private System.Windows.Forms.DateTimePicker completionDate;
private System.Windows.Forms.Label label4;
private System.Windows.Forms.Button exit;
private System.Windows.Forms.Button confirm;
}
}

```

30. NachUchastkaAddRabotiNaObj.cs

```

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;

namespace DPRK
{
    public partial class NachUchastkaAddRabotiNaObj : Form
    {
        string roles;
        int idObjects;
        int idEmployers;

        int idVidWorking;
        int idBrigade;
        int idRaboti;

        Class.SQL.SQLManager sqlManager = new Class.SQL.SQLManager();

        public NachUchastkaAddRabotiNaObj()
        {
            InitializeComponent();

```

```

}

/// <summary>
/// Инициализация компонентов. Добавления в выпадающий список вид работы и доступные бригады.
/// Задание минимальной даты в календаре.
/// </summary>
/// <param name="role">Роль вошедшего</param>
/// <param name="idObject">Номер тип объекта </param>
/// <param name="idEmployer">Номер сотрудника</param>
public NachUchastkaAddRabotiNaObj(string role,int idObject,int idEmployer)
{
    InitializeComponent();
    completionDate.MinDate = DateTime.Now;
    roles = role;
    idObjects = idObject;
    idEmployers = idEmployer;

    sqlManager.AddComboBox(brigade, "[dbo].[Employee_Brigad]", 1);
    sqlManager.AddComboBox(vidWork, "[dbo].[Vid_Rabot]", 1);
}

/// <summary>
/// Нажатие на кнопку "Отменить" на форме NachUchastkaAddRabotiNaObj для перехода в NachUchastka
/// </summary>
private void exit_Click(object sender, EventArgs e)
{
    if (roles == "Администратор информационной системы")
    {
        idEmployers = 0;
    }
    NachUchastka nachUchastka = new NachUchastka(roles,idEmployers);
    nachUchastka.Show();
    this.Hide();
}

/// <summary>
/// Нажатие на кнопку "Подтвердить" на форме NachUchastkaAddRabotiNaObj для перехода в NachUchastka и
занесением данных в БД что в последствии сформирует работу на объекте "
/// </summary>
private void confirm_Click(object sender, EventArgs e)
{
    if (vidWork.Text != "" && brigade.Text != "")
    {
        string date = completionDate.Value.ToShortDateString();
        DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Rabota_Brigadi] where
[dbo].[Rabota_Brigadi].[ID_Brigadira] = {idBrigade} and [dbo].[Rabota_Brigadi].[ID_Vida] = {idVidWorking}");
        if (dataTable.Rows.Count == 0)
        {
            sqlManager.RequestSql($"insert into [dbo].[Rabota_Brigadi] values ({idBrigade},{idVidWorking})");
            idRaboti = Convert.ToInt32(sqlManager.ReturnTable("select max([dbo].[Rabota_Brigadi].[ID_Raboti]) from
[dbo].[Rabota_Brigadi]").Rows[0][0]);
        }
        else
        {
            idRaboti = Convert.ToInt32(dataTable.Rows[0][0]);
        }
        Random random = new Random();
        int ran = random.Next(0, 5);
        sqlManager.RequestSql($"insert into [dbo].[Raboti_Na_Objekte] values ({idObjects},{idRaboti},'Работа
выполняется',{date},{ran})");
    }
}

```

```
        if (roles == "Администратор информационной системы")
        {
            idEmployers = 0;
        }
        NachUchastka nachUchastka = new NachUchastka(roles, idEmployers);
        nachUchastka.Show();
        this.Hide();
    }
    else
    {
        MessageBox.Show("Поля вид работы, бригада, срок выполнения работы должны быть заполнены.");
    }
}

/// <summary>
/// Получение номера вида работы
/// </summary>
private void vidWork_SelectedIndexChanged(object sender, EventArgs e)
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Vid_Rabot] where [dbo].[Vid_Rabot].[Name] = '{vidWork.Text}'");
    if (dataTable.Rows.Count > 0)
        idVidWorking = Convert.ToInt32(dataTable.Rows[0][0]);
}

/// <summary>
/// Получение номера бригады
/// </summary>
private void brigade_SelectedIndexChanged(object sender, EventArgs e)
{
    DataTable dataTable = sqlManager.ReturnTable($"select * from [dbo].[Seartch_Brigadir_Search] ('{brigade.Text}')");
    if (dataTable.Rows.Count > 0)
        idBrigade = Convert.ToInt32(dataTable.Rows[0][0]);
}
}
```