Приложение А

Министерство образования и науки Нижегородской области

Государственное бюджетное профессиональное

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«Заволжский автомоторный техникум»

**Листинг**

Автоматизированной информационной системы сдачи машин в аренду

на базе платформы .NET.

Разработал:

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**Листинг программы**

**LoginForm – форма авторизации**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Security.Cryptography;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace CarRental

{

public partial class loginForm : Form

{

public loginForm()

{

InitializeComponent();

}

// Обработчик события для кнопки закрытия приложения

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

{

Application.Exit();

}

// Обработчик события для кнопки отправки данных (вход в систему)

public void sendBtn\_Click(object sender, EventArgs e)

{

String loginUser = loginField.Text;

String pwdUser = pwdField.Text;

// Проверка на пустые поля логина и пароля

if (loginUser == "" || pwdUser == "")

{

MessageBox.Show("Введите логин и пароль", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

loginField.Text = "Login";

pwdField.Text = "Password";

pwdField.PasswordChar = default;

pictureBox3.BackgroundImage = Properties.Resources.padlock;

panel1.BackColor = Color.White;

pwdField.ForeColor = Color.White;

}

else

{

// Проверка роли пользователя

int role = db.CheckUserRole(loginUser, pwdUser);

if (role == 2)

{

// Открытие формы администратора

adminForm a = new adminForm(loginUser);

a.Show();

this.Hide();

}

else if (role == 1)

{

// Открытие формы менеджера

managerForm a = new managerForm(loginUser);

a.Show();

this.Hide();

}

else

{

// Сброс полей ввода при неверных данных

loginField.Text = "Login";

pwdField.Text = "Password";

pwdField.PasswordChar = default;

pictureBox3.BackgroundImage = Properties.Resources.padlock;

panel1.BackColor = Color.White;

pwdField.ForeColor = Color.White;

}

}

}

// Обработчик события нажатия клавиши в поле логина

private void loginField\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!CharCorrectLogin(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

// Проверка корректности символов для логина

private bool CharCorrectLogin(char c)

{

return (c >= 'a' && c <= 'z') ||

(c >= 'A' && c <= 'Z');

}

// Обработчик события нажатия клавиши в поле пароля

private void pwdField\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!CharCorrectLogin(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

// Обработчик события клика по полю логина

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

{

loginField.Text = "";

pictureBox2.BackgroundImage = Properties.Resources.avatar1;

panel.BackColor = Color.FromArgb(92, 96, 255);

loginField.ForeColor = Color.FromArgb(92, 96, 255);

pictureBox3.BackgroundImage = Properties.Resources.padlock;

panel1.BackColor = Color.White;

pwdField.ForeColor = Color.White;

}

// Обработчик события клика по полю пароля

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

{

pwdField.Text = "";

pwdField.PasswordChar = '\*';

pictureBox2.BackgroundImage = Properties.Resources.avatar;

panel.BackColor = Color.White;

loginField.ForeColor = Color.White;

pictureBox3.BackgroundImage = Properties.Resources.padlock1;

panel1.BackColor = Color.FromArgb(92, 96, 255);

pwdField.ForeColor = Color.FromArgb(92, 96, 255);

}

// Обработчик события нажатия мыши на иконку показа пароля

private void pictureBox4\_MouseDown(object sender, MouseEventArgs e)

{

pictureBox4.BackgroundImage = Properties.Resources.show;

pwdField.PasswordChar = default;

}

// Обработчик события отпускания мыши на иконке показа пароля

private void pictureBox4\_MouseUp(object sender, MouseEventArgs e)

{

pictureBox4.BackgroundImage = Properties.Resources.hide;

pwdField.PasswordChar = '\*';

}

// Обработчик события загрузки формы

private void loginForm\_Load(object sender, EventArgs e)

{

pwdField.PasswordChar = default;

}

}

}

**adminForm – Главное меню Администратора.**

using MySql.Data.MySqlClient;

using System;

using System.Collections;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Data.SqlClient;

using System.Drawing;

using System.IO;

using System.Linq;

using System.Net.Sockets;

using System.Runtime.Remoting.Contexts;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Xml.Linq;

using static Mysqlx.Notice.Frame.Types;

using Word = Microsoft.Office.Interop.Word;

namespace CarRental

{

public partial class adminForm : Form

{

private db db;

private static string table = string.Empty;

private DataGridViewRow selectedRow;

public adminForm(string labelLog)

{

db = new db();

InitializeComponent();

this.label1.Text = $"{labelLog}";

dataGridView1.SelectionMode = DataGridViewSelectionMode.FullRowSelect;

dataGridView1.MultiSelect = false;

dataGridView1.CellClick += dataGridView1\_CellClick;

}

private void button8\_Click(object sender, EventArgs e)

{

this.Close();

loginForm loginForm = new loginForm();

loginForm.Show();

}

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

{

DialogResult result = MessageBox.Show("Вы уверены, что хотите выйти?", "Подтверждение выхода", MessageBoxButtons.YesNo, MessageBoxIcon.Question);

if (result == DialogResult.Yes)

{

Application.Exit();

}

}

private void adminForm\_Load(object sender, EventArgs e)

{

button1.BackColor = Color.FromArgb(92, 96, 255);

button1.ForeColor = Color.FromArgb(34, 36, 49);

button4.BackColor = Color.FromArgb(34, 36, 49);

button4.ForeColor = Color.FromArgb(92, 96, 255);

button3.BackColor = Color.FromArgb(34, 36, 49);

button3.ForeColor = Color.FromArgb(92, 96, 255);

button2.BackColor = Color.FromArgb(34, 36, 49);

button2.ForeColor = Color.FromArgb(92, 96, 255);

comboBox1.Items.Clear();

comboBox1.Items.Add("По Марке");

comboBox1.Items.Add("По Модели");

comboBox1.Items.Add("По Году выпуска");

comboBox1.Items.Add("По Гос.Номеру");

comboBox1.Items.Add("По Статусу");

comboBox1.Items.Add("По Цене");

string query = "SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус', price 'Цена за сутки' FROM cars";

table = "cars";

db.MySqlReturnData(query, dataGridView1);

reportBtn.Enabled = false;

}

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

{

button2.BackColor = Color.FromArgb(92, 96, 255);

button2.ForeColor = Color.FromArgb(34, 36, 49);

button4.BackColor = Color.FromArgb(34, 36, 49);

button4.ForeColor = Color.FromArgb(92, 96, 255);

button3.BackColor = Color.FromArgb(34, 36, 49);

button3.ForeColor = Color.FromArgb(92, 96, 255);

button1.BackColor = Color.FromArgb(34, 36, 49);

button1.ForeColor = Color.FromArgb(92, 96, 255);

label2.Text = "Клиенты";

textBox1.Text = "Поиск";

comboBox1.Items.Clear();

comboBox1.Items.Add("По Имени");

comboBox1.Items.Add("По Фамилии");

comboBox1.Items.Add("По Телефону");

comboBox1.Items.Add("По Вод.Удостоверению");

comboBox1.Items.Add("По Паспорту");

string query = "SELECT first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', driver\_license as 'Вод.Удостоверение', passport as 'Паспорт' FROM customers";

table = "customers";

db.MySqlReturnData(query, dataGridView1);

button7.Visible = false;

button8.Visible = false;

button9.Visible = false;

reportBtn.Enabled = false;

}

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

{

button1.BackColor = Color.FromArgb(92, 96, 255);

button1.ForeColor = Color.FromArgb(34, 36, 49);

button4.BackColor = Color.FromArgb(34, 36, 49);

button4.ForeColor = Color.FromArgb(92, 96, 255);

button3.BackColor = Color.FromArgb(34, 36, 49);

button3.ForeColor = Color.FromArgb(92, 96, 255);

button2.BackColor = Color.FromArgb(34, 36, 49);

button2.ForeColor = Color.FromArgb(92, 96, 255);

label2.Text = "Машины";

textBox1.Text = "Поиск";

comboBox1.Items.Clear();

comboBox1.Items.Add("По Марке");

comboBox1.Items.Add("По Модели");

comboBox1.Items.Add("По Году выпуска");

comboBox1.Items.Add("По Гос.Номеру");

comboBox1.Items.Add("По Статусу");

comboBox1.Items.Add("По Цене");

string query = "SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус' , price 'Цена за сутки' FROM cars";

table = "cars";

db.MySqlReturnData(query, dataGridView1);

button7.Visible = true;

button8.Visible = true;

button9.Visible = true;

reportBtn.Enabled = false;

}

private void button3\_Click(object sender, EventArgs e)

{

button3.BackColor = Color.FromArgb(92, 96, 255);

button3.ForeColor = Color.FromArgb(34, 36, 49);

button4.BackColor = Color.FromArgb(34, 36, 49);

button4.ForeColor = Color.FromArgb(92, 96, 255);

button2.BackColor = Color.FromArgb(34, 36, 49);

button2.ForeColor = Color.FromArgb(92, 96, 255);

button1.BackColor = Color.FromArgb(34, 36, 49);

button1.ForeColor = Color.FromArgb(92, 96, 255);

textBox1.Text = "Поиск";

label2.Text = "Сотрудники";

comboBox1.Items.Clear();

comboBox1.Items.Add("По Имени");

comboBox1.Items.Add("По Фамилии");

comboBox1.Items.Add("По Телефону");

comboBox1.Items.Add("По Роле");

comboBox1.Items.Add("По Логину");

comboBox1.Items.Add("По Паролю");

string query = "SELECT employee.firstName as 'Имя', employee.lastName as 'Фамилия', employee.phone as 'Телефон', role.name as 'Роль', employee.employeeLogin as 'Логин', employee.employeePass as 'Пароль' FROM employee JOIN role ON employee.Role\_id=role.Role\_id";

table = "employee";

db.MySqlReturnData(query, dataGridView1);

button7.Visible = true;

button8.Visible = true;

button9.Visible = true;

reportBtn.Enabled = false;

}

private void button4\_Click(object sender, EventArgs e)

{

button4.BackColor = Color.FromArgb(92, 96, 255);

button4.ForeColor = Color.FromArgb(34, 36, 49);

button3.BackColor = Color.FromArgb(34, 36, 49);

button3.ForeColor = Color.FromArgb(92, 96, 255);

button2.BackColor = Color.FromArgb(34, 36, 49);

button2.ForeColor = Color.FromArgb(92, 96, 255);

button1.BackColor = Color.FromArgb(34, 36, 49);

button1.ForeColor = Color.FromArgb(92, 96, 255);

textBox1.Text = "Поиск";

label2.Text = "Аренды";

comboBox1.Items.Clear();

comboBox1.Items.Add("По имени");

comboBox1.Items.Add("По фамилии");

comboBox1.Items.Add("По телефону");

comboBox1.Items.Add("По марке");

comboBox1.Items.Add("По моделе");;

comboBox1.Items.Add("По дате взятия");

comboBox1.Items.Add("По дате возврата");

comboBox1.Items.Add("По сумме");

string query = "Select make as 'Марка', model as 'Модель', first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', rental\_date as 'Дата взятия', return\_date as 'Дата возврата', total\_amount as 'Сумма' FROM carrental.rentals inner join customers on rentals.customer\_id = customers.customer\_id inner join cars on cars.car\_id = rentals.car\_id; ";

table = "rentals";

db.MySqlReturnData(query, dataGridView1);

button7.Visible = false;

button8.Visible = false;

button9.Visible = false;

reportBtn.Enabled = true;

}

private void button5\_Click(object sender, EventArgs e)

{

if (table == "cars")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Год выпуска"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Гос.Номер"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Статус"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Цена"], System.ComponentModel.ListSortDirection.Descending);

}

}

else if (table == "customers")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Вод.Удостоверение"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Паспорт"], System.ComponentModel.ListSortDirection.Descending);

}

}

else if (table == "employee")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Логин"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Пароль"], System.ComponentModel.ListSortDirection.Descending);

}

}

else if (table == "rentals")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Дата взятия"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 6)

{

dataGridView1.Sort(dataGridView1.Columns["Дата возврата"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 7)

{

dataGridView1.Sort(dataGridView1.Columns["Сумма"], System.ComponentModel.ListSortDirection.Descending);

}

}

}

private void button6\_Click(object sender, EventArgs e)

{

if (table == "cars")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Год выпуска"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Гос.Номер"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Статус"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Цена"], System.ComponentModel.ListSortDirection.Ascending);

}

}

else if (table == "customers")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Вод.Удостоверение"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Паспорт"], System.ComponentModel.ListSortDirection.Ascending);

}

}

else if (table == "employee")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Роль"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Логин"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Пароль"], System.ComponentModel.ListSortDirection.Ascending);

}

}

else if (table == "rentals")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Дата взятия"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 6)

{

dataGridView1.Sort(dataGridView1.Columns["Дата возврата"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 7)

{

dataGridView1.Sort(dataGridView1.Columns["Сумма"], System.ComponentModel.ListSortDirection.Ascending);

}

}

}

private void button7\_Click(object sender, EventArgs e)

{

if (table == "customers")

{

addCustomer addCustomer = new addCustomer();

addCustomer.ShowDialog();

}

else if (table == "cars")

{

addCar addCar = new addCar();

addCar.ShowDialog();

}

else if (table == "employee")

{

addEmployee addEmployee = new addEmployee();

addEmployee.ShowDialog();

}

else if (table == "rentals")

{

MessageBox.Show("Нет прав доустпа!");

}

LoadData();

}

private void LoadData()

{

using (MySqlConnection connection = new MySqlConnection(db.connect))

{

connection.Open();

string query = "";

if (table == "customers")

{

query = "SELECT first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', driver\_license as 'Вод.Удостоверение', passport as 'Паспорт' FROM customers";

}

else if (table == "cars")

{

query = "SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус' , price 'Цена за сутки' FROM cars";

}

else

{

query = "SELECT employee.firstName as 'Имя', employee.lastName as 'Фамилия', employee.phone as 'Телефон', role.name as 'Роль', employee.employeeLogin as 'Логин', employee.employeePass as 'Пароль' FROM employee JOIN role ON employee.Role\_id=role.Role\_id";

}

MySqlCommand command = new MySqlCommand(query, connection);

MySqlDataAdapter adapter = new MySqlDataAdapter(command);

DataTable dataTable = new DataTable();

adapter.Fill(dataTable);

dataGridView1.DataSource = dataTable;

}

}

private void button8\_Click\_1(object sender, EventArgs e)

{

if (dataGridView1.SelectedRows.Count > 0)

{

DataGridViewRow selectedRow = dataGridView1.SelectedRows[0];

bool isEmptyRow = true;

foreach (DataGridViewCell cell in selectedRow.Cells)

{

if (cell.Value != null && !string.IsNullOrWhiteSpace(cell.Value.ToString()))

{

isEmptyRow = false;

break;

}

}

if (isEmptyRow)

{

MessageBox.Show("Выбранная строка пуста и не может быть отредактирована.");

return;

}

if (table == "customers")

{

editCustomer editCustomer = new editCustomer(selectedRow);

if (editCustomer.ShowDialog() == DialogResult.OK)

{

LoadData();

}

}

else if (table == "cars")

{

editCar editCar = new editCar(selectedRow);

if (editCar.ShowDialog() == DialogResult.OK)

{

LoadData();

}

}

else if (table == "employee")

{

editEmployee editEmployee = new editEmployee(selectedRow);

if (editEmployee.ShowDialog() == DialogResult.OK)

{

LoadData();

}

}

}

else

{

MessageBox.Show("Выберите строку для редактирования");

}

}

private void textBox1\_TextChanged\_1(object sender, EventArgs e)

{

string txt = textBox1.Text;

string query = "";

if (table == "cars") { query = $"SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус', price 'Цена за сутки' FROM cars WHERE make LIKE '%{txt}%' OR model LIKE '%{txt}%' OR license\_plate LIKE '%{txt}%' OR status LIKE '%{txt}%' OR year LIKE '%{txt}%' OR price LIKE '%{txt}%'"; }

else if (table == "customers") { query = $"SELECT first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', driver\_license as 'Вод.Удостоверение', passport as 'Паспорт' FROM customers WHERE first\_name LIKE '%{txt}%' OR last\_name LIKE '%{txt}%' OR phone LIKE '%{txt}%' OR driver\_license LIKE '%{txt}%' OR passport LIKE '%{txt}%'"; }

else if (table == "employee") { query = $"SELECT firstName as 'Имя', lastName as 'Фамилия', phone as 'Телефон', Role\_id as 'Роль', employeeLogin as 'Логин', employeePass as 'Пароль' FROM employee WHERE firstName LIKE '%{txt}%' OR lastName LIKE '%{txt}%' OR phone LIKE '%{txt}%' OR employeeLogin LIKE '%{txt}%' OR employeePass LIKE '%{txt}%' OR Role\_id LIKE '%{txt}%'"; }

else if (table == "rentals") { query = $"SELECT customers.passport as 'Клиент', cars.license\_plate as 'Машина', rentals.rental\_date as 'Дата взятия', employee.employeeLogin as 'Менеджер',rentals.return\_date as 'Дата возвращения', rentals.total\_amount as 'Сумма' FROM rentals JOIN customers ON rentals.customer\_id = customers.customer\_id JOIN cars ON rentals.car\_id = cars.car\_id JOIN employee ON rentals.employee\_id = employee.employee\_id;"; }

db.MySqlReturnData(query, dataGridView1);

}

private void pictureBox4\_Click(object sender, EventArgs e)

{

textBox1.Text = string.Empty;

}

private void textBox1\_Click(object sender, EventArgs e)

{

textBox1.Text = string.Empty;

}

private void dataGridView1\_CellClick(object sender, DataGridViewCellEventArgs e)

{

if (e.RowIndex >= 0)

{

selectedRow = dataGridView1.Rows[e.RowIndex];

}

}

private void DeleteRowFromDatabase(DataGridViewRow row)

{

int id = Convert.ToInt32(row.Cells["Логин"].Value);

}

private void button9\_Click(object sender, EventArgs e)

{

if (dataGridView1.SelectedRows.Count > 0)

{

var selectedRow = dataGridView1.SelectedRows[0];

bool isEmpty = true;

foreach (DataGridViewCell cell in selectedRow.Cells)

{

if (cell.Value != null && !string.IsNullOrWhiteSpace(cell.Value.ToString()))

{

isEmpty = false;

break;

}

}

if (isEmpty)

{

MessageBox.Show("Выбранная строка пуста и не может быть удалена.", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

return;

}

if (table == "cars")

{

if (IsDataUsedInRentals(selectedRow))

{

MessageBox.Show("Данные из выбранной строки используются в других таблицах и не могут быть удалены.", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

return;

}

}

var result = MessageBox.Show("Вы уверены, что хотите удалить выбранную строку?", "Подтверждение удаления", MessageBoxButtons.YesNo, MessageBoxIcon.Question);

if (result == DialogResult.Yes)

{

dataGridView1.Rows.Remove(selectedRow);

}

}

else

{

MessageBox.Show("Пожалуйста, выберите строку для удаления.", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

}

}

private bool IsDataUsedInRentals(DataGridViewRow row)

{

string carId = row.Cells["Модель"].Value?.ToString();

if (carId != null)

{

using (MySqlConnection conn = new MySqlConnection(db.connect))

{

try

{

conn.Open();

string query = "SELECT COUNT(\*) FROM carrental.rentals INNER JOIN cars ON cars.car\_id = rentals.car\_id WHERE cars.model = @carId;";

MySqlCommand cmd = new MySqlCommand(query, conn);

cmd.Parameters.AddWithValue("@carId", carId);

int count = Convert.ToInt32(cmd.ExecuteScalar());

return count > 0;

}

catch (Exception ex)

{

MessageBox.Show("Ошибка при проверке данных: " + ex.Message, "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

return true;

}

}

}

return false;

}

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

{

if (selectedRow != null)

{

CreateWordReport(selectedRow);

}

else

{

MessageBox.Show("Пожалуйста, выберите строку.");

}

}

private void CreateWordReport(DataGridViewRow row)

{

string templatePath = Directory.GetCurrentDirectory() + @"\template\template1.docx";

Word.Application wordApp = new Word.Application();

Word.Document doc = wordApp.Documents.Add(templatePath);

try

{

foreach (DataGridViewCell cell in row.Cells)

{

string bookmarkName = cell.OwningColumn.HeaderText.Replace(" ", "\_");

if (doc.Bookmarks.Exists(bookmarkName))

{

doc.Bookmarks[bookmarkName].Range.Text = cell.Value.ToString();

}

}

wordApp.Visible = true;

}

catch (Exception ex)

{

MessageBox.Show(ex.Message);

}

finally

{

doc = null;

wordApp = null;

}

}

}

}

**managerForm – Главная форма менеджера.**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.IO;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using Word = Microsoft.Office.Interop.Word;

namespace CarRental

{

public partial class managerForm : Form

{

private db db;

private static string table = string.Empty;

private DataGridViewRow selectedRow;

public managerForm(string labelLog)

{

db = new db();

InitializeComponent();

this.label1.Text = $"{labelLog}";

dataGridView1.SelectionMode = DataGridViewSelectionMode.FullRowSelect;

dataGridView1.MultiSelect = false;

dataGridView1.CellClick += dataGridView1\_CellClick;

}

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

{

button7.Visible = false;

button8.Visible = false;

button9.Visible = false;

button1.BackColor = Color.FromArgb(92, 96, 255);

button1.ForeColor = Color.FromArgb(34, 36, 49);

button4.BackColor = Color.FromArgb(34, 36, 49);

button4.ForeColor = Color.FromArgb(92, 96, 255);

button2.BackColor = Color.FromArgb(34, 36, 49);

button2.ForeColor = Color.FromArgb(92, 96, 255);

label2.Text = "Машины";

textBox1.Text = "Поиск";

comboBox1.Items.Clear();

comboBox1.Items.Add("По Марке");

comboBox1.Items.Add("По Модели");

comboBox1.Items.Add("По Году выпуска");

comboBox1.Items.Add("По Гос.Номеру");

comboBox1.Items.Add("По Статусу");

comboBox1.Items.Add("По Цене");

string query = "SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус' , price 'Цена за сутки' FROM cars";

table = "cars";

db.MySqlReturnData(query, dataGridView1);

}

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

{

button7.Visible = true;

button8.Visible = true;

button9.Visible = false;

button2.BackColor = Color.FromArgb(92, 96, 255);

button2.ForeColor = Color.FromArgb(34, 36, 49);

button4.BackColor = Color.FromArgb(34, 36, 49);

button4.ForeColor = Color.FromArgb(92, 96, 255);

button1.BackColor = Color.FromArgb(34, 36, 49);

button1.ForeColor = Color.FromArgb(92, 96, 255);

label2.Text = "Клиенты";

textBox1.Text = "Поиск";

comboBox1.Items.Clear();

comboBox1.Items.Add("По Имени");

comboBox1.Items.Add("По Фамилии");

comboBox1.Items.Add("По Телефону");

comboBox1.Items.Add("По Вод.Удостоверению");

comboBox1.Items.Add("По Паспорту");

string query = "SELECT first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', driver\_license as 'Вод.Удостоверение', passport as 'Паспорт' FROM customers";

table = "customers";

db.MySqlReturnData(query, dataGridView1);

}

private void dataGridView1\_CellClick(object sender, DataGridViewCellEventArgs e)

{

if (e.RowIndex >= 0)

{

dataGridView1.Rows[e.RowIndex].Selected = true;

}

}

private void LoadData()

{

using (MySqlConnection connection = new MySqlConnection(db.connect))

{

connection.Open();

string query = "";

if (table == "customers")

{

query = "SELECT first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', driver\_license as 'Вод.Удостоверение', passport as 'Паспорт' FROM customers";

}

else if (table == "cars")

{

query = "SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус' , price 'Цена за сутки' FROM cars";

}else if (table == "rentals")

{

query = "Select make as 'Марка', model as 'Модель', first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', rental\_date as 'Дата взятия', return\_date as 'Дата возврата', total\_amount as 'Сумма' FROM carrental.rentals inner join customers on rentals.customer\_id = customers.customer\_id inner join cars on cars.car\_id = rentals.car\_id; ";

}

MySqlCommand command = new MySqlCommand(query, connection);

MySqlDataAdapter adapter = new MySqlDataAdapter(command);

DataTable dataTable = new DataTable();

adapter.Fill(dataTable);

dataGridView1.DataSource = dataTable;

}

}

private void button4\_Click(object sender, EventArgs e)

{

button7.Visible = true;

button8.Visible = true;

button9.Visible = true;

button4.BackColor = Color.FromArgb(92, 96, 255);

button4.ForeColor = Color.FromArgb(34, 36, 49);

button2.BackColor = Color.FromArgb(34, 36, 49);

button2.ForeColor = Color.FromArgb(92, 96, 255);

button1.BackColor = Color.FromArgb(34, 36, 49);

button1.ForeColor = Color.FromArgb(92, 96, 255);

textBox1.Text = "Поиск";

label2.Text = "Аренды";

comboBox1.Items.Clear();

comboBox1.Items.Add("По имени");

comboBox1.Items.Add("По фамилии");

comboBox1.Items.Add("По телефону");

comboBox1.Items.Add("По марке");

comboBox1.Items.Add("По моделе"); ;

comboBox1.Items.Add("По дате взятия");

comboBox1.Items.Add("По дате возврата");

comboBox1.Items.Add("По сумме");

string query = "Select make as 'Марка', model as 'Модель', first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', rental\_date as 'Дата взятия', return\_date as 'Дата возврата', total\_amount as 'Сумма' FROM carrental.rentals inner join customers on rentals.customer\_id = customers.customer\_id inner join cars on cars.car\_id = rentals.car\_id; ";

table = "rentals";

db.MySqlReturnData(query, dataGridView1);

}

private void textBox1\_TextChanged(object sender, EventArgs e)

{

string txt = textBox1.Text;

string query = "";

if (table == "cars") { query = $"SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус', price 'Цена за сутки' FROM cars WHERE make LIKE '%{txt}%' OR model LIKE '%{txt}%' OR license\_plate LIKE '%{txt}%' OR status LIKE '%{txt}%' OR year LIKE '%{txt}%' OR price LIKE '%{txt}%'"; }

else if (table == "customers") { query = $"SELECT first\_name as 'Имя', last\_name as 'Фамилия', phone as 'Телефон', driver\_license as 'Вод.Удостоверение', passport as 'Паспорт' FROM customers WHERE first\_name LIKE '%{txt}%' OR last\_name LIKE '%{txt}%' OR phone LIKE '%{txt}%' OR driver\_license LIKE '%{txt}%' OR passport LIKE '%{txt}%'"; }

else if (table == "rentals") { query = $"SELECT customers.passport as 'Клиент', cars.license\_plate as 'Машина', rentals.rental\_date as 'Дата взятия', employee.employeeLogin as 'Менеджер',rentals.return\_date as 'Дата возвращения', rentals.total\_amount as 'Сумма' FROM rentals JOIN customers ON rentals.customer\_id = customers.customer\_id JOIN cars ON rentals.car\_id = cars.car\_id JOIN employee ON rentals.employee\_id = employee.employee\_id;"; }

db.MySqlReturnData(query, dataGridView1);

}

private void button7\_Click(object sender, EventArgs e)

{

if (table == "customers")

{

addCustomer addCustomer = new addCustomer();

addCustomer.ShowDialog();

}

else if (table == "rentals")

{

addRental addRental = new addRental();

addRental.ShowDialog();

}

LoadData();

}

private void button8\_Click(object sender, EventArgs e)

{

if (dataGridView1.SelectedRows.Count > 0)

{

DataGridViewRow selectedRow = dataGridView1.SelectedRows[0];

bool isEmptyRow = true;

foreach (DataGridViewCell cell in selectedRow.Cells)

{

if (cell.Value != null && !string.IsNullOrWhiteSpace(cell.Value.ToString()))

{

isEmptyRow = false;

break;

}

}

if (isEmptyRow)

{

MessageBox.Show("Выбранная строка пуста и не может быть отредактирована.");

return;

}

if (table == "customers")

{

editCustomer editCustomer = new editCustomer(selectedRow);

if (editCustomer.ShowDialog() == DialogResult.OK)

{

LoadData();

}

}

else

{

DataRow selectedRows = ((DataRowView)dataGridView1.SelectedRows[0].DataBoundItem).Row;

editRental editRental = new editRental(selectedRows);

if (editRental.ShowDialog() == DialogResult.OK)

{

LoadData();

}

}

}

else

{

MessageBox.Show("Выберите строку для редактирования");

}

}

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

{

this.Close();

loginForm loginForm = new loginForm();

loginForm.Show();

}

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

{

DialogResult result = MessageBox.Show("Вы уверены, что хотите выйти?", "Подтверждение выхода", MessageBoxButtons.YesNo, MessageBoxIcon.Question);

if (result == DialogResult.Yes)

{

Application.Exit();

}

}

private void pictureBox4\_Click(object sender, EventArgs e)

{

textBox1.Text = string.Empty;

}

private void textBox1\_Click(object sender, EventArgs e)

{

textBox1.Text = string.Empty;

}

private void managerForm\_Load(object sender, EventArgs e)

{

button1.BackColor = Color.FromArgb(92, 96, 255);

button1.ForeColor = Color.FromArgb(34, 36, 49);

button4.BackColor = Color.FromArgb(34, 36, 49);

button4.ForeColor = Color.FromArgb(92, 96, 255);

button2.BackColor = Color.FromArgb(34, 36, 49);

button2.ForeColor = Color.FromArgb(92, 96, 255);

comboBox1.Items.Clear();

comboBox1.Items.Add("По Марке");

comboBox1.Items.Add("По Модели");

comboBox1.Items.Add("По Году выпуска");

comboBox1.Items.Add("По Гос.Номеру");

comboBox1.Items.Add("По Статусу");

comboBox1.Items.Add("По Цене");

string query = "SELECT make as 'Марка', model as 'Модель', year as 'Год выпуска', license\_plate as 'Гос.Номер', status as 'Статус', price 'Цена за сутки' FROM cars";

table = "cars";

db.MySqlReturnData(query, dataGridView1);

button7.Visible = false;

button8.Visible = false;

button9.Visible = false;

}

private void button6\_Click(object sender, EventArgs e)

{

if (table == "cars")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Год выпуска"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Гос.Номер"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Статус"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Цена"], System.ComponentModel.ListSortDirection.Ascending);

}

}

else if (table == "customers")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Вод.Удостоверение"], System.ComponentModel.ListSortDirection.Ascending);

}

else if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Паспорт"], System.ComponentModel.ListSortDirection.Ascending);

}

}

else if (table == "rentals")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Дата взятия"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 6)

{

dataGridView1.Sort(dataGridView1.Columns["Дата возврата"], System.ComponentModel.ListSortDirection.Ascending);

}

if (comboBox1.SelectedIndex == 7)

{

dataGridView1.Sort(dataGridView1.Columns["Сумма"], System.ComponentModel.ListSortDirection.Ascending);

}

}

}

private void button5\_Click(object sender, EventArgs e)

{

if (table == "cars")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Год выпуска"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Гос.Номер"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Статус"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Цена"], System.ComponentModel.ListSortDirection.Descending);

}

}

else if (table == "customers")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Вод.Удостоверение"], System.ComponentModel.ListSortDirection.Descending);

}

else if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Паспорт"], System.ComponentModel.ListSortDirection.Descending);

}

}

else if (table == "rentals")

{

if (comboBox1.SelectedIndex == 0)

{

dataGridView1.Sort(dataGridView1.Columns["Марка"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 1)

{

dataGridView1.Sort(dataGridView1.Columns["Модель"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 2)

{

dataGridView1.Sort(dataGridView1.Columns["Имя"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 3)

{

dataGridView1.Sort(dataGridView1.Columns["Фамилия"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 4)

{

dataGridView1.Sort(dataGridView1.Columns["Телефон"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 5)

{

dataGridView1.Sort(dataGridView1.Columns["Дата взятия"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 6)

{

dataGridView1.Sort(dataGridView1.Columns["Дата возврата"], System.ComponentModel.ListSortDirection.Descending);

}

if (comboBox1.SelectedIndex == 7)

{

dataGridView1.Sort(dataGridView1.Columns["Сумма"], System.ComponentModel.ListSortDirection.Descending);

}

}

}

private void button9\_Click(object sender, EventArgs e)

{

if (selectedRow != null)

{

CreateWordReport(selectedRow);

}

else

{

MessageBox.Show("Пожалуйста, выберите строку.");

}

}

private void CreateWordReport(DataGridViewRow row)

{

string templatePath = Directory.GetCurrentDirectory() + @"\template\template.docx";

Word.Application wordApp = new Word.Application();

Word.Document doc = wordApp.Documents.Add(templatePath);

try

{

foreach (DataGridViewCell cell in row.Cells)

{

string bookmarkName = cell.OwningColumn.HeaderText.Replace(" ", "\_");

if (doc.Bookmarks.Exists(bookmarkName))

{

doc.Bookmarks[bookmarkName].Range.Text = cell.Value.ToString();

}

}

wordApp.Visible = true;

}

catch (Exception ex)

{

MessageBox.Show(ex.Message);

}

finally

{

doc = null;

wordApp = null;

}

}

private void dataGridView1\_CellClick\_1(object sender, DataGridViewCellEventArgs e)

{

if (e.RowIndex >= 0)

{

selectedRow = dataGridView1.Rows[e.RowIndex];

}

}

}

}

**editEmployee – Форма редактирования сотрудников.**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Runtime.Remoting.Contexts;

using System.Security.Cryptography;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace CarRental

{

public partial class editEmployee : Form

{

private DataGridViewRow selectedRow;

public int des1;

string connect = db.connect;

private db db;

public editEmployee(DataGridViewRow row)

{

db = new db();

selectedRow = row;

InitializeComponent();

LoadData();

}

private void LoadData()

{

textBox1.Text = selectedRow.Cells["Имя"].Value.ToString();

textBox2.Text = selectedRow.Cells["Фамилия"].Value.ToString();

maskedTextBox1.Text = selectedRow.Cells["Телефон"].Value.ToString();

comboBox1.SelectedItem = selectedRow.Cells["Роль"].Value.ToString();

textBox3.Text = selectedRow.Cells["Логин"].Value.ToString();

textBox4.Text = selectedRow.Cells["Пароль"].Value.ToString();

}

public static string GetHashPass(string password)

{

byte[] bytesPass = Encoding.UTF8.GetBytes(password);

SHA256Managed hashstring = new SHA256Managed();

byte[] hash = hashstring.ComputeHash(bytesPass);

string hashPasswd = string.Empty;

foreach (byte x in hash)

{

hashPasswd += String.Format("{0:x2}", x);

}

hashstring.Dispose();

return hashPasswd;

}

private void UpdateDatabase(object role, string firstName, string lastName, string phone, string employeeLogin, string employeePass)

{

DataTable Rooms = new DataTable();

using (MySqlConnection coon = new MySqlConnection(connect))

{

MySqlCommand cmd = new MySqlCommand();

cmd.Connection = coon;

cmd.CommandText = $@"select Role\_id from `role` where name = '{role}'";

MySqlDataAdapter adapter = new MySqlDataAdapter(cmd);

adapter.Fill(Rooms);

}

for (int i = 0; i < Rooms.Rows.Count; i++)

{

des1 = Convert.ToInt32(Rooms.Rows[i]["Role\_id"]);

}

using (MySqlConnection connection = new MySqlConnection(db.connect))

{

connection.Open();

MySqlCommand command = new MySqlCommand($"UPDATE employee SET Role\_id = {des1}, firstName = @firstName, lastName = @lastName, phone = @phone, employeeLogin = @employeeLogin, employeePass = @employeePass WHERE employeePass = @employeePass", connection);

command.Parameters.AddWithValue(Convert.ToString(des1), role);

command.Parameters.AddWithValue("@firstName", firstName);

command.Parameters.AddWithValue("@lastName", lastName);

command.Parameters.AddWithValue("@phone", phone);

command.Parameters.AddWithValue("@employeeLogin", employeeLogin);

command.Parameters.AddWithValue("@employeePass", employeePass);

command.ExecuteNonQuery();

}

}

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

{

if (textBox1.Text != "" && textBox2.Text != "" && textBox4.Text != "" && textBox4.Text != "" && maskedTextBox1.Text != "" && comboBox1.Text != "")

{

UpdateDatabase(comboBox1.SelectedItem, textBox1.Text, textBox2.Text, maskedTextBox1.Text, textBox3.Text, textBox4.Text);

DialogResult = DialogResult.OK;

Close();

}

else

{

MessageBox.Show("Заполните все поля");

}

}

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

{

this.Close();

}

private void textBox1\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox2\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox3\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectEng(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox1\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox1.Text))

textBox1.Text = char.ToUpper(textBox1.Text[0]) + textBox1.Text.Substring(1);

}

private void textBox2\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox2.Text))

textBox2.Text = char.ToUpper(textBox2.Text[0]) + textBox2.Text.Substring(1);

}

}

}

edit**Car – Форма редактирования машин.**

using MySql.Data.MySqlClient;

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 CarRental

{

public partial class editCar : Form

{

private db db;

string connect = db.connect;

private DataGridViewRow selectedRow;

public editCar(DataGridViewRow row)

{

db = new db();

selectedRow = row;

InitializeComponent();

LoadData();

}

private void LoadData()

{

textBox1.Text = selectedRow.Cells["Марка"].Value.ToString();

textBox2.Text = selectedRow.Cells["Модель"].Value.ToString();

textBox3.Text = selectedRow.Cells["Год выпуска"].Value.ToString();

maskedTextBox1.Text = selectedRow.Cells["Гос.Номер"].Value.ToString();

textBox4.Text = selectedRow.Cells["Цена за сутки"].Value.ToString();

}

private void UpdateDatabase(string make, string model, string year, string license\_plate, string price)

{

using (MySqlConnection connection = new MySqlConnection(db.connect))

{

connection.Open();

MySqlCommand command = new MySqlCommand("UPDATE cars SET make = @make, model = @model, year = @year, license\_plate = @license\_plate, status = @status, price = @price WHERE license\_plate = @license\_plate", connection);

command.Parameters.AddWithValue("@make", make);

command.Parameters.AddWithValue("@model", model);

command.Parameters.AddWithValue("@year", year);

command.Parameters.AddWithValue("@license\_plate", license\_plate);

command.Parameters.AddWithValue("@price", price);

command.ExecuteNonQuery();

}

}

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

{

if (textBox1.Text != "" && textBox2.Text != "" && textBox3.Text != "" && maskedTextBox1.Text != "" && textBox4.Text != "")

{

UpdateDatabase(textBox1.Text, textBox2.Text, textBox3.Text, maskedTextBox1.Text, textBox4.Text);

DialogResult = DialogResult.OK;

Close();

textBox1.Text = "";

textBox2.Text = "";

textBox3.Text = "";

maskedTextBox1.Text = "";

textBox4.Text = "";

}

else

{

MessageBox.Show("Заполните все поля");

}

}

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

{

this.Close();

}

private void textBox1\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectEng(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox2\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectEng(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox3\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectNum(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox4\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectNum(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox1\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox1.Text))

textBox1.Text = char.ToUpper(textBox1.Text[0]) + textBox1.Text.Substring(1);

}

private void textBox2\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox2.Text))

textBox2.Text = char.ToUpper(textBox2.Text[0]) + textBox2.Text.Substring(1);

}

}

}

**editCustomer - Форма редактирования клиентов.**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Data.SqlClient;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using static System.Windows.Forms.VisualStyles.VisualStyleElement;

namespace CarRental

{

public partial class editCustomer : Form

{

private db db;

string connect = db.connect;

private DataGridViewRow selectedRow;

public editCustomer(DataGridViewRow row)

{

db = new db();

selectedRow = row;

InitializeComponent();

LoadData();

}

private void LoadData()

{

textBox1.Text = selectedRow.Cells["Имя"].Value.ToString();

textBox2.Text = selectedRow.Cells["Фамилия"].Value.ToString();

maskedTextBox1.Text = selectedRow.Cells["Телефон"].Value.ToString();

maskedTextBox2.Text = selectedRow.Cells["Вод.Удостоверение"].Value.ToString();

maskedTextBox3.Text = selectedRow.Cells["Паспорт"].Value.ToString();

}

private void editCustomer\_Load(object sender, EventArgs e)

{

}

private void UpdateDatabase(string firstName, string lastName, string phone, string driverLicense, string passport)

{

using (MySqlConnection connection = new MySqlConnection(db.connect))

{

connection.Open();

MySqlCommand command = new MySqlCommand("UPDATE customers SET first\_name = @firstName, last\_name = @lastName, phone = @phone, driver\_license = @driverLicense WHERE passport = @passport", connection);

command.Parameters.AddWithValue("@firstName", firstName);

command.Parameters.AddWithValue("@lastName", lastName);

command.Parameters.AddWithValue("@phone", phone);

command.Parameters.AddWithValue("@driverLicense", driverLicense);

command.Parameters.AddWithValue("@passport", passport);

command.ExecuteNonQuery();

}

}

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

{

if (textBox1.Text != "" && textBox2.Text != "" && maskedTextBox1.Text != "" && maskedTextBox2.Text != "" && maskedTextBox3.Text != "")

{

UpdateDatabase(textBox1.Text, textBox2.Text, maskedTextBox1.Text, maskedTextBox2.Text, maskedTextBox3.Text);

DialogResult = DialogResult.OK;

Close();

textBox1.Text = "";

textBox2.Text = "";

maskedTextBox1.Text = "";

maskedTextBox2.Text = "";

maskedTextBox3.Text = "";

}

else

{

MessageBox.Show("Заполните все поля");

}

}

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

{

this.Close();

}

private void textBox1\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox2\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox1\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox1.Text))

textBox1.Text = char.ToUpper(textBox1.Text[0]) + textBox1.Text.Substring(1);

}

private void textBox2\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox2.Text))

textBox2.Text = char.ToUpper(textBox2.Text[0]) + textBox2.Text.Substring(1);

}

}

}

**addCar – Форма добавления машин.**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Runtime.Remoting.Contexts;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using static System.Windows.Forms.VisualStyles.VisualStyleElement;

namespace CarRental

{

public partial class addCar : Form

{

private db db;

string connect = db.connect;

public addCar()

{

db = new db();

InitializeComponent();

}

private void button1\_Click\_1(object sender, EventArgs e)

{

if (textBox1.Text != "" && textBox2.Text != "" && textBox3.Text != "" && maskedTextBox1.Text != "" && comboBox1.Text != "" && textBox4.Text != "")

{

MySqlConnection con = new MySqlConnection(connect);

con.Open();

MySqlCommand cmd = new MySqlCommand($@"Insert Into cars(make,model,year,license\_plate,status,price)Values ('{textBox1.Text}','{textBox2.Text}','{textBox3.Text}','{maskedTextBox1.Text}','{comboBox1.Text}','{textBox4.Text}')", con);

cmd.ExecuteNonQuery();

con.Close();

MessageBox.Show("Машина добавлена");

textBox1.Text = "";

textBox2.Text = "";

textBox3.Text = "";

maskedTextBox1.Text = "";

comboBox1.Text = "";

textBox4.Text = "";

DialogResult = DialogResult.OK;

}

else

{

MessageBox.Show("Заполните все поля");

}

}

private void button2\_Click\_1(object sender, EventArgs e)

{

this.Close();

}

private void textBox1\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox1.Text))

textBox1.Text = char.ToUpper(textBox1.Text[0]) + textBox1.Text.Substring(1);

}

private void textBox2\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox2.Text))

textBox2.Text = char.ToUpper(textBox2.Text[0]) + textBox2.Text.Substring(1);

}

private void textBox3\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectNum(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox1\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectEng(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox2\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectEng(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox4\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectNum(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

}

}

**addCustomer – Форма добавления клиентов.**

using MySql.Data.MySqlClient;

using System;

using System.Collections;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Runtime.Remoting.Contexts;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace CarRental

{

public partial class addCustomer : Form

{

private db db;

string connect = db.connect;

public addCustomer()

{

db = new db();

InitializeComponent();

}

private void textBox2\_KeyPress\_1(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox1\_KeyPress\_1(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void button1\_Click\_1(object sender, EventArgs e)

{

if (textBox1.Text != "" && textBox2.Text != "" && maskedTextBox1.Text != "" && maskedTextBox2.Text != "" && maskedTextBox3.Text != "")

{

MySqlConnection con = new MySqlConnection(connect);

con.Open();

MySqlCommand cmd = new MySqlCommand($@"Insert Into customers(first\_name,last\_name,phone,driver\_license,passport)Values ('{textBox1.Text}','{textBox2.Text}','{maskedTextBox1.Text}','{maskedTextBox2.Text}','{maskedTextBox3.Text}')", con);

cmd.ExecuteNonQuery();

con.Close();

MessageBox.Show("Клиент добавлен");

textBox1.Text = "";

textBox2.Text = "";

maskedTextBox1.Text = "";

maskedTextBox2.Text = "";

maskedTextBox3.Text = "";

DialogResult = DialogResult.OK;

}

else

{

MessageBox.Show("Заполните все поля");

}

}

private void button2\_Click\_1(object sender, EventArgs e)

{

this.Close();

}

private void textBox1\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox2.Text))

textBox1.Text = char.ToUpper(textBox1.Text[0]) + textBox1.Text.Substring(1);

}

private void textBox2\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox2.Text))

textBox2.Text = char.ToUpper(textBox2.Text[0]) + textBox2.Text.Substring(1);

}

private void textBox1\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox2\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

}

}

**addEmployee – Форма добавления сотрудников.**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Runtime.Remoting.Contexts;

using System.Security.Cryptography;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using static System.Windows.Forms.VisualStyles.VisualStyleElement;

namespace CarRental

{

public partial class addEmployee : Form

{

private db db;

public int des1;

string connect = db.connect;

public addEmployee()

{

db = new db();

InitializeComponent();

db = new db();

}

private void addEmployee\_Load(object sender, EventArgs e)

{

DataTable Rooms = new DataTable();

using (MySqlConnection coon = new MySqlConnection(connect))

{

MySqlCommand cmd = new MySqlCommand();

cmd.Connection = coon;

cmd.CommandText = "select name from `role`";

MySqlDataAdapter adapter = new MySqlDataAdapter(cmd);

adapter.Fill(Rooms);

}

for (int i = 0; i < Rooms.Rows.Count; i++)

{

comboBox1.Items.Add(Rooms.Rows[i]["name"]);

}

}

private void button1\_Click\_1(object sender, EventArgs e)

{

string password = GetHashPass(textBox4.Text.ToString());

if (textBox1.Text != "" && textBox2.Text != "" && textBox4.Text != "" && textBox4.Text != "" && maskedTextBox1.Text != "" && comboBox1.Text != "")

{

string role = comboBox1.Text;

DataTable Rooms = new DataTable();

using (MySqlConnection coon = new MySqlConnection(connect))

{

MySqlCommand cmd = new MySqlCommand();

cmd.Connection = coon;

cmd.CommandText = $@"select Role\_id from `role` where name = '{role}'";

MySqlDataAdapter adapter = new MySqlDataAdapter(cmd);

adapter.Fill(Rooms);

}

for (int i = 0; i < Rooms.Rows.Count; i++)

{

des1 = Convert.ToInt32(Rooms.Rows[i]["Role\_id"]);

}

string sqlQuery = $@"Insert Into employee(Role\_id,firstName,lastName,phone,employeeLogin,employeePass) Values ('{des1}','{textBox1.Text}','{textBox2.Text}','{maskedTextBox1.Text}','{textBox3.Text}','{password}')";

using (MySqlConnection con = new MySqlConnection())

{

con.ConnectionString = connect;

con.Open();

MySqlCommand cmd = new MySqlCommand(sqlQuery, con);

int res = cmd.ExecuteNonQuery();

if (res == 1)

{

MessageBox.Show("Пользователь добавлен");

}

else

{

MessageBox.Show("Пользователь не добавлен");

}

textBox2.Text = null;

comboBox1.Text = null;

textBox3.Text = null;

textBox1.Text = null;

textBox4.Text = null;

maskedTextBox1.Text = null;

DialogResult = DialogResult.OK;

}

}

else

{

MessageBox.Show("Заполните все поля");

}

}

private void button2\_Click\_1(object sender, EventArgs e)

{

this.Close();

}

public static string GetHashPass(string password)

{

byte[] bytesPass = Encoding.UTF8.GetBytes(password);

SHA256Managed hashstring = new SHA256Managed();

byte[] hash = hashstring.ComputeHash(bytesPass);

string hashPasswd = string.Empty;

foreach (byte x in hash)

{

hashPasswd += String.Format("{0:x2}", x);

}

hashstring.Dispose();

return hashPasswd;

}

public string CreatePassword(int length)

{

const string valid = "abcdefghijklmnopqrstuvwxyz\_-ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890";

StringBuilder res = new StringBuilder();

Random rnd = new Random();

while (0 < length--)

{

res.Append(valid[rnd.Next(valid.Length)]);

}

return res.ToString();

}

private void button3\_Click(object sender, EventArgs e)

{

textBox4.Text = CreatePassword(15);

}

private void textBox1\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox2\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectRus(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox3\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectEng(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox4\_KeyPress(object sender, KeyPressEventArgs e)

{

if (!db.CharCorrectEng(e.KeyChar) && !char.IsControl(e.KeyChar))

{

e.Handled = true;

}

}

private void textBox1\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox1.Text))

textBox1.Text = char.ToUpper(textBox1.Text[0]) + textBox1.Text.Substring(1);

}

private void textBox2\_Leave(object sender, EventArgs e)

{

if (!string.IsNullOrEmpty(textBox2.Text))

textBox2.Text = char.ToUpper(textBox2.Text[0]) + textBox2.Text.Substring(1);

}

}

}

**addRental – Форма создания аренды.**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Data.SqlClient;

using System.Drawing;

using System.Globalization;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace CarRental

{

public partial class addRental : Form

{

private db db;

private System.Windows.Forms.Timer rentalCheckTimer;

public addRental()

{

db = new db();

InitializeComponent();

LoadComboBoxes();

dateTimePickerReturnDate.MinDate = DateTime.Now.AddDays(1);

dateTimePickerReturnDate.MaxDate = DateTime.Now.AddYears(2);

rentalCheckTimer = new System.Windows.Forms.Timer();

rentalCheckTimer.Interval = 60000;

rentalCheckTimer.Tick += new EventHandler(CheckRentals);

rentalCheckTimer.Start();

}

string connectionString = db.connect;

private void LoadComboBoxes()

{

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

string queryMake = "SELECT DISTINCT make FROM cars WHERE status = 'Свободна'";

MySqlDataAdapter adapterMake = new MySqlDataAdapter(queryMake, connection);

DataTable dataTableMake = new DataTable();

adapterMake.Fill(dataTableMake);

comboBoxMake.DataSource = dataTableMake;

comboBoxMake.DisplayMember = "make";

string queryCustomers = "SELECT customer\_id, last\_name, phone FROM customers";

MySqlDataAdapter adapterCustomers = new MySqlDataAdapter(queryCustomers, connection);

DataTable dataTableCustomers = new DataTable();

adapterCustomers.Fill(dataTableCustomers);

comboBoxCustomer.DataSource = dataTableCustomers;

comboBoxCustomer.DisplayMember = "last\_name";

comboBoxCustomer.ValueMember = "customer\_id";

}

}

private void CheckRentals(object sender, EventArgs e)

{

string connectionString = db.connect;

string query = "UPDATE cars SET status = 'Свободна' WHERE car\_id IN (SELECT car\_id FROM rentals WHERE return\_date < NOW() AND status = 'Занята')";

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

MySqlCommand command = new MySqlCommand(query, connection);

connection.Open();

command.ExecuteNonQuery();

}

}

private void CalculateTotalAmount()

{

if (comboBoxModel.SelectedItem == null || dateTimePickerRentalDate.Value == null || dateTimePickerReturnDate.Value == null)

{

return;

}

DateTime rentalDate = dateTimePickerRentalDate.Value;

DateTime returnDate = dateTimePickerReturnDate.Value;

int days = (returnDate - rentalDate).Days;

string selectedModel = comboBoxModel.Text;

string connectionString = db.connect;

string queryPrice = "SELECT price FROM cars WHERE model = @model";

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

MySqlCommand command = new MySqlCommand(queryPrice, connection);

command.Parameters.AddWithValue("@model", selectedModel);

connection.Open();

object result = command.ExecuteScalar();

decimal pricePerDay;

if (result != null && result != DBNull.Value)

{

pricePerDay = Convert.ToDecimal(result);

}

else

{

pricePerDay = 0;

}

decimal totalAmount = pricePerDay \* days;

textBoxTotalAmount.Text = totalAmount.ToString("C");

}

}

private int GetCarId(string make, string model)

{

string connectionString = db.connect;

string query = "SELECT car\_id FROM cars WHERE make = @make AND model = @model";

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

MySqlCommand command = new MySqlCommand(query, connection);

command.Parameters.AddWithValue("@make", make);

command.Parameters.AddWithValue("@model", model);

connection.Open();

return (int)command.ExecuteScalar();

}

}

private void comboBoxMake\_SelectedIndexChanged\_1(object sender, EventArgs e)

{

string selectedMake = comboBoxMake.Text;

string queryModel = "SELECT model FROM cars WHERE make = @make AND status = 'Свободна'";

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

MySqlCommand command = new MySqlCommand(queryModel, connection);

command.Parameters.AddWithValue("@make", selectedMake);

MySqlDataAdapter adapterModel = new MySqlDataAdapter(command);

DataTable dataTableModel = new DataTable();

adapterModel.Fill(dataTableModel);

comboBoxModel.DataSource = dataTableModel;

comboBoxModel.DisplayMember = "model";

}

}

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

{

if (comboBoxModel.Text != "" && comboBoxCustomer.Text != "" && comboBoxMake.Text != "" && dateTimePickerRentalDate.Text != "" && dateTimePickerReturnDate.Text != "" && textBoxTotalAmount.Text != "")

{

string connectionString = db.connect;

string query = "INSERT INTO rentals (customer\_id, car\_id, rental\_date, return\_date, total\_amount) VALUES (@customer\_id, @car\_id, @rental\_date, @return\_date, @total\_amount)";

using (MySqlConnection connection = new MySqlConnection(connectionString))

{

MySqlCommand command = new MySqlCommand(query, connection);

command.Parameters.AddWithValue("@customer\_id", comboBoxCustomer.SelectedValue);

command.Parameters.AddWithValue("@car\_id", GetCarId(comboBoxMake.Text, comboBoxModel.Text));

command.Parameters.AddWithValue("@rental\_date", dateTimePickerRentalDate.Value);

command.Parameters.AddWithValue("@return\_date", dateTimePickerReturnDate.Value);

command.Parameters.AddWithValue("@total\_amount", decimal.Parse(textBoxTotalAmount.Text, NumberStyles.Currency));

connection.Open();

command.ExecuteNonQuery();

string updateStatusQuery = "UPDATE cars SET status = 'Занята' WHERE car\_id = @car\_id";

MySqlCommand updateStatusCommand = new MySqlCommand(updateStatusQuery, connection);

updateStatusCommand.Parameters.AddWithValue("@car\_id", GetCarId(comboBoxMake.Text, comboBoxModel.Text));

updateStatusCommand.ExecuteNonQuery();

}

this.Close();

}

else

{

MessageBox.Show("Заполните все поля");

}

}

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

{

this.Close();

}

private void dateTimePickerReturnDate\_ValueChanged\_1(object sender, EventArgs e)

{

CalculateTotalAmount();

}

private void comboBoxCustomer\_SelectedIndexChanged(object sender, EventArgs e)

{

if (comboBoxCustomer.SelectedIndex != -1)

{

DataRowView selectedRow = comboBoxCustomer.SelectedItem as DataRowView;

if (selectedRow != null)

{

textPhone.Text = selectedRow["phone"].ToString();

}

}

}

}

}

**db – Вспомогательный класс.**

using MySql.Data.MySqlClient;

using System;

using System.Collections.Generic;

using System.Data;

using System.Data.SqlClient;

using System.Linq;

using System.Security.Cryptography;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace CarRental

{

internal class db

{

public static string connect = @"server=localhost;port=3306;username=root;password=root;database=carRental";

MySqlConnection connection = new MySqlConnection(connect);

public DataTable MySqlReturnData(string query,DataGridView grid)

{

try

{

using (MySqlConnection myCon = new MySqlConnection(connect))

{

myCon.Open();

if (myCon.State != ConnectionState.Open)

{

MessageBox.Show("Не удалось установить подключение", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Warning);

return null;

}

using (MySqlDataAdapter sda = new MySqlDataAdapter(query, myCon))

{

DataTable dt = new DataTable();

sda.Fill(dt);

grid.DataSource = dt;

return dt;

}

}

}

catch (MySqlException e)

{

MessageBox.Show($"Возникла ошибка при выполнении запроса : {e.Message}", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

return null;

}

catch (Exception e)

{

MessageBox.Show($"Произошла ошибка : {e.Message}", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

return null;

}

}

static public int CheckUserRole(string login, string password)

{

int role = -1;

string hashPassword = string.Empty;

MySqlConnection con = new MySqlConnection(connect);

con.Open();

MySqlCommand cmd = new MySqlCommand($"Select \* From employee Where employeeLogin = '{login}'", con);

MySqlDataAdapter da = new MySqlDataAdapter(cmd);

DataTable dt = new DataTable();

da.Fill(dt);

hashPassword = GetHashPass(password);

try

{

if (password == dt.Rows[0].ItemArray.GetValue(6).ToString())

{

if (Convert.ToInt32(dt.Rows[0].ItemArray.GetValue(1)) == 2)

{

role = 1;

}

if (Convert.ToInt32(dt.Rows[0].ItemArray.GetValue(1)) == 1)

{

role = 2;

}

}

}

catch (System.Exception) {

MessageBox.Show("Неправильный логин или пароль", "Ошибка", MessageBoxButtons.OK, MessageBoxIcon.Error);

}

return role;

}

public static string GetHashPass(string password)

{

byte[] bytesPass = Encoding.UTF8.GetBytes(password);

SHA256Managed hashstring = new SHA256Managed();

byte[] hash = hashstring.ComputeHash(bytesPass);

string hashPasswd = string.Empty;

foreach (byte x in hash)

{

hashPasswd += String.Format("{0:x2}", x);

}

hashstring.Dispose();

return hashPasswd;

}

public bool CharCorrectEng(char c)

{

return (c >= 'a' && c <= 'z') ||

(c >= 'A' && c <= 'Z');

}

public bool CharCorrectRus(char c)

{

return (c >= 'а' && c <= 'я') ||

(c >= 'А' && c <= 'Я');

}

public bool CharCorrectNum(char c)

{

return (c >= '0' && c <= '9');

}

}

}