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

namespace hotel_automation_system
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();

            NpgsqlConnection v_connection = new NpgsqlConnection("server = localhost; port = 5432;
            Database = hotelAutomationSystem; user ID = postgres; password=muyuka2000");

            private void Form1_Load(object sender, EventArgs e)
            {

            }

            private void customerSelectButton_Click(object sender, EventArgs e)
            {
                if(customerSelectIdTextBox.Text == "")
                {

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        MessageBox.Show("Please enter a customer ID...");
    }
    else
    {
        v_connection.Open();

        string query = "SELECT * FROM \"Musteri\" WHERE \"musteri_ID\" =\" +
customerSelectIdTextBox.Text;

        NpgsqlDataAdapter v_data_adapter = new NpgsqlDataAdapter(query, v_connection);
        DataSet v_data_set = new DataSet();
        v_data_adapter.Fill(v_data_set);
        selectResultDataGridView.DataSource = v_data_set.Tables[0];
        v_connection.Close();
    }
}

private void customerAddButton_Click(object sender, EventArgs e)
{
    if(customerAddIdTextBox.Text == "" || customerAddNameTextBox.Text == "" ||
customerAddSurnameTextBox.Text == "" || customerAddPhoneTextBox.Text == "")
    {
        MessageBox.Show("Please fill in all fields");
    }
    else
    {
        v_connection.Open();

        NpgsqlCommand v_command = new NpgsqlCommand("call
musteriekle(:musteri_ID,:musteri_ad,:musteri_soyad,:musteri_telefon)", v_connection);

        v_command.CommandType = CommandType.Text;
        v_command.Parameters.AddWithValue(":"musteri_ID",
Int32.Parse(customerAddIdTextBox.Text));

        v_command.Parameters.AddWithValue(":"musteri_ad", customerAddNameTextBox.Text);

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        v_command.Parameters.AddWithValue(":musteri_soyad",
customerAddSurnameTextBox.Text);

        v_command.Parameters.AddWithValue(":musteri_telefon",
Int32.Parse(customerAddPhoneTextBox.Text));

        v_command.ExecuteNonQuery();

        v_connection.Close();

        MessageBox.Show("Adding a new customer process is successfully.");
    }
}

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private void customerDeleteButton_Click(object sender, EventArgs e)
{
    if(customerDeleteldTextBox.Text == "")
    {
        MessageBox.Show("Please enter a customer ID to delete.");
    }
    else
    {
        v_connection.Open();

        NpgsqlCommand v_command = new NpgsqlCommand("call musterisil(:musteri_ID)",
v_connection);

        v_command.CommandType = CommandType.Text;

        v_command.Parameters.AddWithValue(":musteri_ID",
Int32.Parse(customerDeleteldTextBox.Text));

        v_command.ExecuteNonQuery();

        v_connection.Close();

        MessageBox.Show("Deleting a customer process is successfully.");
    }
}

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private void customerUpdateButton_Click(object sender, EventArgs e)

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{
    if(customerUpdateIdTextBox.Text == "" || customerUpdateNameTextBox.Text == "" ||
customerUpdateSurnameTextBox.Text == "" || customerUpdatePhoneTextBox.Text == "" ||
customerOldIdTextBox.Text == "")
    {
        MessageBox.Show("Please fill in all fields");
    }
    else
    {
        v_connection.Open();

        NpgsqlCommand v_command = new NpgsqlCommand("call
musteriguncelle(:musteri_ID_old, :musteri_ID_new, :musteri_ad, :musteri_soyad, :musteri_telefon)",
v_connection);

        v_command.CommandType = CommandType.Text;

        v_command.Parameters.AddWithValue(":musteri_ID_old",
Int32.Parse(customerOldIdTextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_new",
Int32.Parse(customerUpdateIdTextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ad",
customerUpdateNameTextBox.Text);

        v_command.Parameters.AddWithValue(":musteri_soyad",
customerUpdateSurnameTextBox.Text);

        v_command.Parameters.AddWithValue(":musteri_telefon",
Int32.Parse(customerUpdatePhoneTextBox.Text));

        v_command.ExecuteNonQuery();

        v_connection.Close();

        MessageBox.Show("Updating a customer process is successfully.");
    }
}

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private void verifyButton_Click(object sender, EventArgs e)
{
    switch(customerAmountNumericUpDown.Value)
    {

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case 1:

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customerRoomId1TextBox.Enabled = true;  
verifyButton.Enabled = false;  
roomNoTextBox.Enabled = true;  
break;
```

case 2:

```
customerRoomId1TextBox.Enabled = true;  
customerRoomId2TextBox.Enabled = true;  
verifyButton.Enabled = false;  
roomNoTextBox.Enabled = true;  
break;
```

case 3:

```
customerRoomId1TextBox.Enabled = true;  
customerRoomId2TextBox.Enabled = true;  
customerRoomId3TextBox.Enabled = true;  
verifyButton.Enabled = false;  
roomNoTextBox.Enabled = true;  
break;
```

case 4:

```
customerRoomId1TextBox.Enabled = true;  
customerRoomId2TextBox.Enabled = true;  
customerRoomId3TextBox.Enabled = true;  
customerRoomId4TextBox.Enabled = true;  
verifyButton.Enabled = false;  
roomNoTextBox.Enabled = true;  
break;
```

case 5:

```
customerRoomId1TextBox.Enabled = true;  
customerRoomId2TextBox.Enabled = true;  
customerRoomId3TextBox.Enabled = true;  
customerRoomId4TextBox.Enabled = true;
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        customerRoomId5TextBox.Enabled = true;

        verifyButton.Enabled = false;

        roomNoTextBox.Enabled = true;

        break;
    case 6:

        customerRoomId1TextBox.Enabled = true;
        customerRoomId2TextBox.Enabled = true;
        customerRoomId3TextBox.Enabled = true;
        customerRoomId4TextBox.Enabled = true;
        customerRoomId5TextBox.Enabled = true;
        customerRoomId6TextBox.Enabled = true;

        verifyButton.Enabled = false;

        roomNoTextBox.Enabled = true;

        break;
    }
}

private void resetButton_Click(object sender, EventArgs e)
{
    customerRoomId1TextBox.Text = "";
    customerRoomId2TextBox.Text = "";
    customerRoomId3TextBox.Text = "";
    customerRoomId4TextBox.Text = "";
    customerRoomId5TextBox.Text = "";
    customerRoomId6TextBox.Text = "";

    customerRoomId1TextBox.Enabled = false;
    customerRoomId2TextBox.Enabled = false;
    customerRoomId3TextBox.Enabled = false;
    customerRoomId4TextBox.Enabled = false;
    customerRoomId5TextBox.Enabled = false;
    customerRoomId6TextBox.Enabled = false;
}

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breakfastCheckBox.Checked = false;

minibarCheckBox.Checked = false;

swimmingpoolCheckBox.Checked = false;

verifyButton.Enabled = true;

roomNoTextBox.Enabled = false;

customerAmountNumericUpDown.Value = 0;

roomNoTextBox.Text = "";
}

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private void roomRentButton_Click(object sender, EventArgs e)
{
    if(customerAmountNumericUpDown.Value == 0 || roomNoTextBox.Text == "" )
    {
        MessageBox.Show("Please fill in the required fields.");
    }

    else
    {
        v_connection.Open();

        NpgsqlCommand v_command = new NpgsqlCommand("call
odakirala(:oda_No,:musteri_ID_1,:musteri_ID_2,:musteri_ID_3,:musteri_ID_4,:musteri_ID_5,:musteri
_ID_6)", v_connection);

        v_command.CommandType = CommandType.Text;

        if (customerAmountNumericUpDown.Value == 1)
        {
            v_command.Parameters.AddWithValue(":oda_No", Int32.Parse(roomNoTextBox.Text));

            v_command.Parameters.AddWithValue(":musteri_ID_1",
Int32.Parse(customerRoomId1TextBox.Text));

            v_command.Parameters.AddWithValue(":musteri_ID_2", 0);
            v_command.Parameters.AddWithValue(":musteri_ID_3", 0);
            v_command.Parameters.AddWithValue(":musteri_ID_4", 0);

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        v_command.Parameters.AddWithValue(":musteri_ID_5", 0);
        v_command.Parameters.AddWithValue(":musteri_ID_6", 0);
        v_command.ExecuteNonQuery();
    }
    else if(customerAmountNumericUpDown.Value == 2)
    {
        v_command.Parameters.AddWithValue(":oda_No", Int32.Parse(roomNoTextBox.Text));
        v_command.Parameters.AddWithValue(":musteri_ID_1",
Int32.Parse(customerRoomId1TextBox.Text));
        v_command.Parameters.AddWithValue(":musteri_ID_2",
Int32.Parse(customerRoomId2TextBox.Text));
        v_command.Parameters.AddWithValue(":musteri_ID_3", 0);
        v_command.Parameters.AddWithValue(":musteri_ID_4", 0);
        v_command.Parameters.AddWithValue(":musteri_ID_5", 0);
        v_command.Parameters.AddWithValue(":musteri_ID_6", 0);
        v_command.ExecuteNonQuery();
    }
    else if (customerAmountNumericUpDown.Value == 3)
    {
        v_command.Parameters.AddWithValue(":oda_No", Int32.Parse(roomNoTextBox.Text));
        v_command.Parameters.AddWithValue(":musteri_ID_1",
Int32.Parse(customerRoomId1TextBox.Text));
        v_command.Parameters.AddWithValue(":musteri_ID_2",
Int32.Parse(customerRoomId2TextBox.Text));
        v_command.Parameters.AddWithValue(":musteri_ID_3",
Int32.Parse(customerRoomId3TextBox.Text));
        v_command.Parameters.AddWithValue(":musteri_ID_4", 0);
        v_command.Parameters.AddWithValue(":musteri_ID_5", 0);
        v_command.Parameters.AddWithValue(":musteri_ID_6", 0);
        v_command.ExecuteNonQuery();
    }
    else if (customerAmountNumericUpDown.Value == 4)
    {

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        v_command.Parameters.AddWithValue(":oda_No", Int32.Parse(roomNoTextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_1",
Int32.Parse(customerRoomId1TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_2",
Int32.Parse(customerRoomId2TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_3",
Int32.Parse(customerRoomId3TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_4",
Int32.Parse(customerRoomId4TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_5", 0);
        v_command.Parameters.AddWithValue(":musteri_ID_6", 0);
        v_command.ExecuteNonQuery();
    }
    else if (customerAmountNumericUpDown.Value == 5)
    {
        v_command.Parameters.AddWithValue(":oda_No", Int32.Parse(roomNoTextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_1",
Int32.Parse(customerRoomId1TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_2",
Int32.Parse(customerRoomId2TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_3",
Int32.Parse(customerRoomId3TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_4",
Int32.Parse(customerRoomId4TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_5",
Int32.Parse(customerRoomId5TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_6", 0);
        v_command.ExecuteNonQuery();
    }
    else if (customerAmountNumericUpDown.Value == 6)
    {
        v_command.Parameters.AddWithValue(":oda_No", Int32.Parse(roomNoTextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_1",
Int32.Parse(customerRoomId1TextBox.Text));

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```
        v_command.Parameters.AddWithValue(":musteri_ID_2",
Int32.Parse(customerRoomId2TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_3",
Int32.Parse(customerRoomId3TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_4",
Int32.Parse(customerRoomId4TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_5",
Int32.Parse(customerRoomId5TextBox.Text));

        v_command.Parameters.AddWithValue(":musteri_ID_6",
Int32.Parse(customerRoomId6TextBox.Text));

        v_command.ExecuteNonQuery();
    }
}
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v_connection.Close();
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```
MessageBox.Show("Renting a room process is successfully.");
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```
customerRoomId1TextBox.Text = "";
customerRoomId2TextBox.Text = "";
customerRoomId3TextBox.Text = "";
customerRoomId4TextBox.Text = "";
customerRoomId5TextBox.Text = "";
customerRoomId6TextBox.Text = "";

customerRoomId1TextBox.Enabled = false;
customerRoomId2TextBox.Enabled = false;
customerRoomId3TextBox.Enabled = false;
customerRoomId4TextBox.Enabled = false;
customerRoomId5TextBox.Enabled = false;
customerRoomId6TextBox.Enabled = false;

breakfastCheckBox.Checked = false;
minibarCheckBox.Checked = false;
swimmingpoolCheckBox.Checked = false;
verifyButton.Enabled = true;
roomNoTextBox.Enabled = false;
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    }

}

private void roomExitButton_Click(object sender, EventArgs e)
{
    if(roomExitTextBox.Text == "")
    {
        MessageBox.Show("Please fill the room ID field.");
    }

    else
    {
        v_connection.Open();

        NpgsqlCommand v_command = new NpgsqlCommand("call odasil(:oda_No)",
v_connection);

        v_command.CommandType = CommandType.Text;
        v_command.Parameters.AddWithValue(":oda_No", Int32.Parse(roomExitTextBox.Text));
        v_command.ExecuteNonQuery();
        v_connection.Close();

        MessageBox.Show("Exiting a room process is successfully.");
    }

    roomExitTextBox.Text = "";
}

private void selectAllCustomersButton_Click(object sender, EventArgs e)
{
    v_connection.Open();

    string query = "SELECT * FROM public.\"Musteri\"";

    NpgsqlDataAdapter v_data_adapter = new NpgsqlDataAdapter(query, v_connection);

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        DataSet v_data_set = new DataSet();  
        v_data_adapter.Fill(v_data_set);  
        selectResultDataGridView.DataSource = v_data_set.Tables[0];  
        v_connection.Close();  
  
    }  
  
}  
  
}
```