Федеральное государственное бюджетное образовательное учреждение высшего образования
«Саратовский государственный технический университет имени Гагарина Ю. А.»

Кафедра
«Прикладные информационные технологии»

ОТЧЕТ
по лабораторной работе №3

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```
using System;
using System.Drawing;
using System.Drawing.Printing;
using System.Text.RegularExpressions;
using System.Windows.Forms;

namespace Lab_3
{
    public partial class Form1 : Form
    {
        private String fileName;
        private bool[] checks = new bool[6];
        protected Image image;
        public String documentContents;
        Regex regex = new Regex("[0-9]{2}.[0-9]{2}.[0-9]{4}");
        public Form1()
        {
            InitializeComponent();
            for (int i = 0; i < checks.Length; i++)
            {
                checks[i] = false;
            }
        }

        private void TxtName_Leave(object sender, EventArgs e)
        {
            if (txtName.Text.Length > 0)
            {
                errorProvider1.SetError(txtName, "");
                checks[0] = true;
            }
            else
            {
                errorProvider1.SetError(txtName, "error!");
            }
            enablePanel();
        }

        private void TxtAdress_Leave(object sender, EventArgs e)
        {
            if (txtAdress.Text.Length > 0)
            {
                errorProvider1.SetError(txtAdress, "");
                checks[1] = true;
            }
            else
            {
                errorProvider1.SetError(txtAdress, "error!");
            }
            enablePanel();
        }

        private void TxtTitle_Leave(object sender, EventArgs e)
        {
            if (txtTitle.Text.Length > 0)
            {
                errorProvider1.SetError(txtTitle, "");
                checks[2] = true;
            }
            else
            {
                errorProvider1.SetError(txtTitle, "error!");
            }
            enablePanel();
        }

        private void TxtPerson_Leave(object sender, EventArgs e)
        {
            if (txtPerson.Text.Length > 0)
            {
                errorProvider1.SetError(txtPerson, "");
                checks[4] = true;
            }
            else
            {
                errorProvider1.SetError(txtPerson, "error!");
            }
            enablePanel();
        }

        private void TxtPhone_Leave(object sender, EventArgs e)
        {
            int Num;
            if (int.TryParse(txtNumber.Text, out Num))
            {
                errorProvider1.SetError(txtNumber, "");
                checks[3] = true;

            }
            else errorProvider1.SetError(txtNumber, "error!");
            enablePanel();
        }

        private void TxtDate_Leave(object sender, EventArgs e)
        {
            DateTime date = new DateTime();
            if (DateTime.TryParse(txtDate.Text, out date))
            {
                errorProvider1.SetError(txtDate, "");
                checks[5] = true;
            }
            else
            {
                txtDate.Text = DateTime.Now.ToShortDateString();
                checks[5] = true;
            }
            string str = "";
            for (int i = 0; i < checks.Length; i++)
            {
                str += i.ToString() + checks[i].ToString() + ", ";
            }
            enablePanel();
        }

        private void btnColour_Click(object sender, EventArgs e)
        {
            if (colorDialog1.ShowDialog() == DialogResult.OK) this.richTextBox1.ForeColor = 
colorDialog1.Color;
        }

        private void btnOpen_Click(object sender, EventArgs e)
        {
            openFileDialog1.Filter = "Image Files(*.BMP;*JPG;*.GIF)|*.BMP;*JPG;*.GIF|All files(*.*)|
*.*";
            if (openFileDialog1.ShowDialog() == DialogResult.OK)
            {
                fileName = openFileDialog1.FileName;
                image = Image.FromFile(fileName);
            }
        }

        private void btnFont_Click(object sender, EventArgs e)
        {
            if (fontDialog1.ShowDialog() == DialogResult.OK) this.richTextBox1.Font = 
fontDialog1.Font;
        }

        private void btnExit_Click(object sender, EventArgs e)
        {
            this.Close();
        }

        protected void printDocument1_PrintPage(object sender, 
System.Drawing.Printing.PrintPageEventArgs e)
```

```
        {
            e.Graphics.DrawImage(image, new Point(0, richTextBox1.Font.Height));
        }

        private void btnPrint_Click(object sender, EventArgs e)
        {
            PrintPreviewDialog printDialog = new PrintPreviewDialog();
            PrintDocument printDocument = new PrintDocument();
            printDialog.Document = printDocument;
            printDocument.PrintPage += PrintDocument_PrintPage;
            DialogResult result = printDialog.ShowDialog();
            if (result == DialogResult.OK)
            {
                printDocument.Print();
                printDialog.Close();
            }
        }

        private void PrintDocument_PrintPage(object sender, PrintPageEventArgs e)
        {
            e.Graphics.DrawString(richTextBox1.Text, richTextBox1.Font, new
SolidBrush(richTextBox1.ForeColor), new Point(0, 0));
            if (openFileDialog1.FileName != "openFileDialog1")
            {
                e.Graphics.DrawImage(image, new Point(0, richTextBox1.Font.Height + 30));
            }
            else
            {
                e.Graphics.DrawImage(Image.FromFile("screevvfa74633nshot.png"), new Point(0,
richTextBox1.Font.Height + 30));
            }
        }

        private void enablePanel()
        {
            int ch = 0;
            for (int i = 0; i < checks.Length; i++)
                if (checks[i] == true) ch++;
            if (ch == checks.Length) panel1.Enabled = true;
        }

        void PrintPageHandler(object sender, PrintPageEventArgs e)
        {
            e.Graphics.DrawString(richTextBox1.Text, richTextBox1.Font, new
SolidBrush(richTextBox1.ForeColor), new Point(0, 0));
        }
    }
}
```

```
using System;
using System.Windows.Forms;

namespace Lab_3
{
    public partial class Form2 : Form
    {
        public int counter = 0;
        Form3 f3;
        public Form2()
        {
            InitializeComponent();
        }

        private void WindowMember_Click(object sender, EventArgs e)
        {
            ToolStripItemCollection itemCol = окноToolStripMenuItem.DropDownItems;
            foreach (ToolStripItem item in itemCol)
            {
                if (item.Equals(sender))
                {
                    foreach (Form3 f in MdiChildren)
                    {
                        if (sender.Equals(f.stripItem))
                        {
                            f.Activate();
                        }
                    }
                }
            }
        }

        private void createProduct_Click(object sender, EventArgs e)
        {
            Form f1;
            counter++;
            ToolStripMenuItem newItem = new ToolStripMenuItem(Convert.ToString(counter) + " Name of
the product");
            f1 = new Form3("Name of the product", окноToolStripMenuItem, newItem, this);
            f1.MdiParent = this;
            f1.Show();
            окноToolStripMenuItem.DropDownItems.Add(newItem);
            newItem.Click += WindowMember_Click;
        }

        private void Form2_Load(object sender, EventArgs e)
        {
            toolStripStatusLabel1.Text = DateTime.Now.ToLongDateString();
        }

        private void createHotel_Click(object sender, EventArgs e)
        {
            counter++;
            ToolStripMenuItem newItem = new ToolStripMenuItem(Convert.ToString(counter) + " Name of
the hostel");
            f3 = new Form3("Name of the hotel", окноToolStripMenuItem, newItem, this);
            f3.MdiParent = this;
            f3.Show();
            окноToolStripMenuItem.DropDownItems.Add(newItem);
            newItem.Click += WindowMember_Click;
        }

        private void organizationCreate_Click(object sender, EventArgs e)
        {
            counter++;
            ToolStripMenuItem newItem = new ToolStripMenuItem(Convert.ToString(counter) + " Name of
the organistion");
            f3 = new Form3("Name of the organisation", окноToolStripMenuItem, newItem, this);
            f3.MdiParent = this;
            f3.Show();
            окноToolStripMenuItem.DropDownItems.Add(newItem);
            newItem.Click += WindowMember_Click;
        }

        private void cascad_Click(object sender, EventArgs e)
        {
            foreach (var f in MdiChildren)
            {

                if (f.WindowState == FormWindowState.Minimized)
                {
                    f.WindowState = FormWindowState.Normal;
                    f.Show();
                }



            }
            this.LayoutMdi(MdiLayout.Cascade);
        }

        private void mosaic_Click(object sender, EventArgs e)
        {
            foreach (var f in MdiChildren)
            {

                if (f.WindowState == FormWindowState.Minimized)
                {
                    f.WindowState = FormWindowState.Normal;
                    f.Show();
                }


            }
            LayoutMdi(MdiLayout.TileVertical);
        }

        private void leftEdge_Click(object sender, EventArgs e)
        {
            Form activeChild = this.ActiveMdiChild;
            if (activeChild != null)
            {
                try
                {
                    RichTextBox theBox = (RichTextBox)activeChild.ActiveControl;
                    if (theBox != null)
                    {
                        theBox.SelectionAlignment = HorizontalAlignment.Left;
                    }
                }
                catch
                {
                    MessageBox.Show("You need to select a RichTextBox.");
                }
            }
        }

        private void center_Click(object sender, EventArgs e)
        {
            Form activeChild = this.ActiveMdiChild;
            if (activeChild != null)
            {
                try
                {
                    RichTextBox theBox = (RichTextBox)activeChild.ActiveControl;
                    if (theBox != null)
                    {
                        theBox.SelectionAlignment = HorizontalAlignment.Center;
                    }
                }
                catch
                {
                    MessageBox.Show("You need to select a RichTextBox.");
                }
            }
        }

        private void rightEdge_Click(object sender, EventArgs e)
        {
            Form activeChild = this.ActiveMdiChild;
            if (activeChild != null)
            {
                try
                {
                    RichTextBox theBox = (RichTextBox)activeChild.ActiveControl;
                    if (theBox != null)
                    {
                        theBox.SelectionAlignment = HorizontalAlignment.Right;
                    }
                }
                catch
                {
                    MessageBox.Show("You need to select a RichTextBox.");
                }
            }

        }

        private void timer1_Tick(object sender, EventArgs e)
        {
            toolStripStatusLabel2.Text = DateTime.Now.ToLongTimeString();
        }
    }
}
```

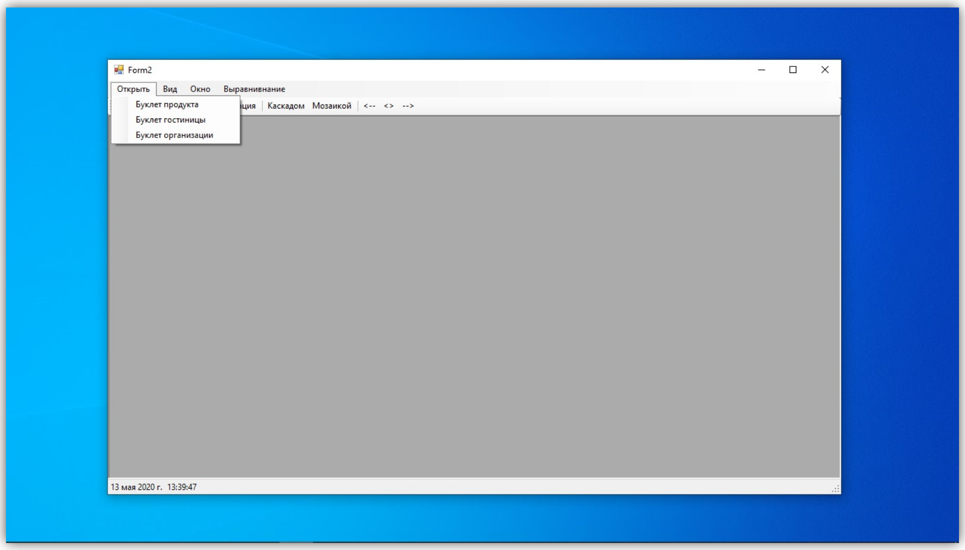

Рис. 1. Пункт меню «Открыть».

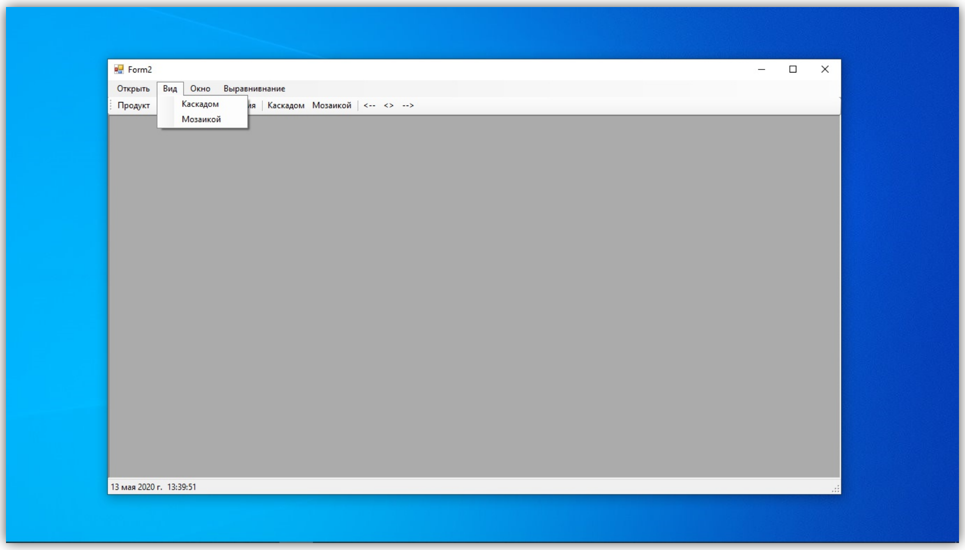

Рис. 2. Пункт меню «Вид».

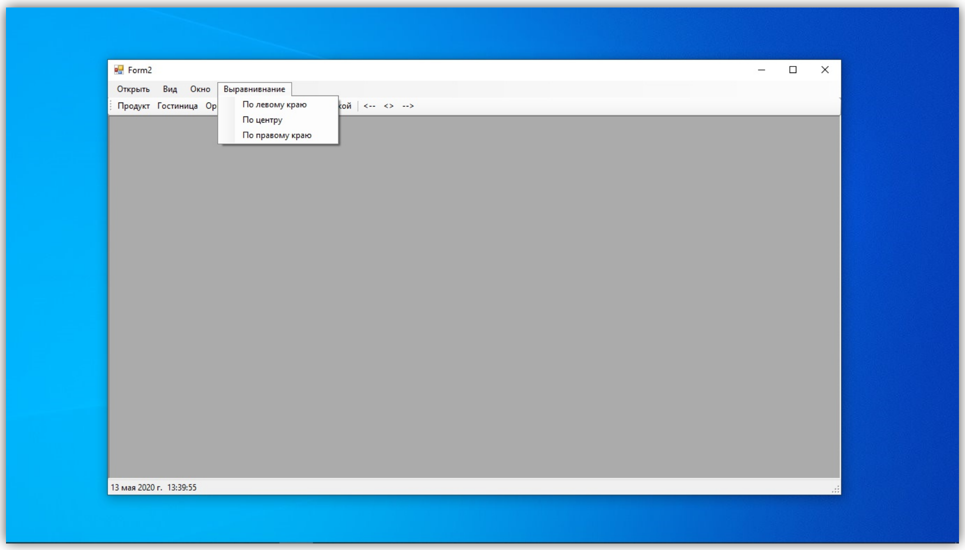

Рис. 3. Пункт меню «Выравнивание».

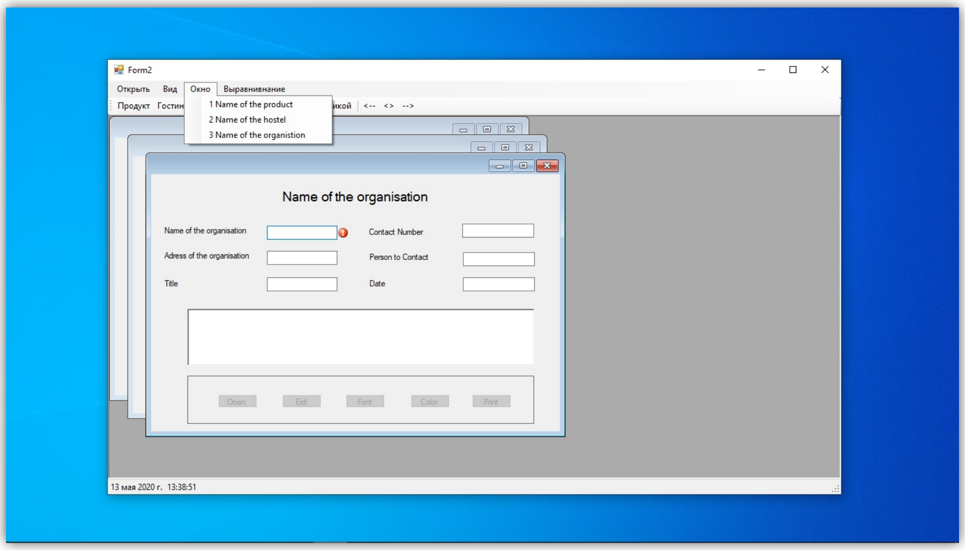

Рис. 4. Расположение окон каскадом.

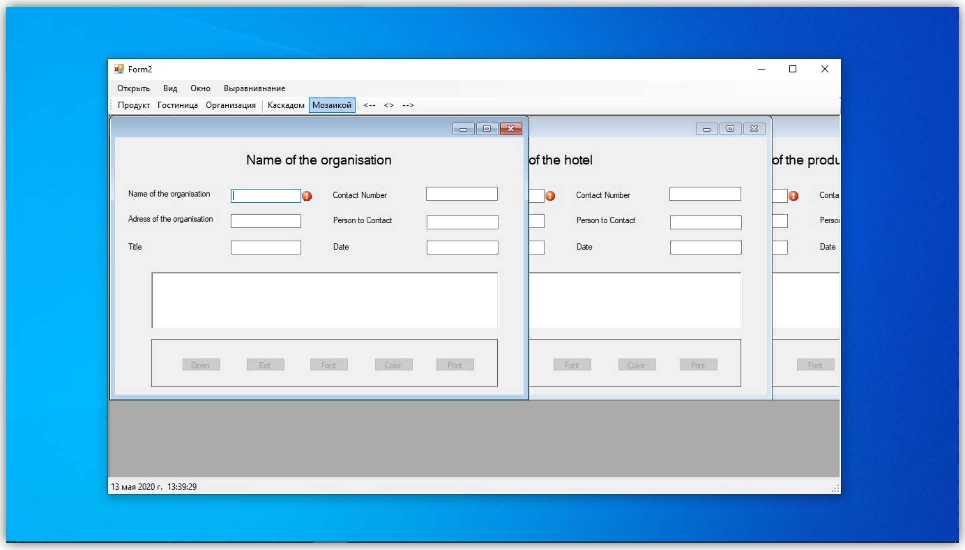

Рис. 5. Расположение окон мозаикой